ANSI STANDARDS ACTION

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American National Standards

Call for comment on proposals listed

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

Ordering Instructions for "Call-for-Comment" Listings

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

Comments should be addressed to the organization indicated, with a copy to the Board of Standards Review, American National Standards Institute, 25 West 43rd Street, New York, NY 10036. Fax: 212-840-2298; e-mail: psa@ansi.org

Standard for consumer products

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

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

Addenda

BSR/ASHRAE/ICC/USGBC/IES Addendum aq to BSR/ASHRAE/ICC/USGBC/IES Standard 189.1-202x, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1 -2017)

This independent substantive change to Addendum aq offers improvements to the code-intended language used in the Greenfield Site provisions. It also provides more specific wording about where on the project site the requirements are applicable.

Click here to view these changes in full

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

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

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The first public review of this addendum added a reference to Standard 62.1 Section 7, Construction and System Startup, which includes several requirements that support good indoor air quality. Subsequently, Section 10 requirements already covered via reference to 62.1 were deleted from the text. This second public review ISC reinstates one of the previously deleted requirements (the IAQ Construction Management Plan) with additional steps beyond what is stated in Standard 62.1.

Click here to view these changes in full

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This independent substantive change to Addendum bc modifies the original proposal to increase the threshold for building projects that must perform energy modeling for compliance with Section 7.5. Under this proposal, building projects greater than 25,000 square feet would be expected to perform a simulation per Standard 209, an increase from the original 10,000 square feet. A new exception has also been included to provide flexibility for modelers without the specified credentials.

Click here to view these changes in full

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This addendum revises the requirements in Section 6.3.2 for multiple showerhead installations designed to support water use reduction.

Click here to view these changes in full

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

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This addendum modifies the landscape design requirements in Section 6 to simplify and clarify that they are intended only for irrigated areas with the objective of reducing water consumption. This proposal also substitutes the term "adapted plants" with more enforceable language: "rainfall-ETc compatible plants and native plants."

Click here to view these changes in full

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This independent substantive change to Addendum bo was created to provide clarification to the first public review draft in which new language had not been appropriately underlined.

Click here to view these changes in full

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This addendum adds an alternative compliance path for health care facilities that meet the requirements of ANSI/ASHRAE/ASHE Standard 189.3, Design, Construction, and Operation of Sustainable High-Performance Health Care Facilities. This comes in response to a CMP submitted by SSPC 189.3 with the goal of providing health care facilities the option of using 189.3 to comply with Standard 189.1/IgCC.

Click here to view these changes in full

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This addendum removes the JO (jurisdictional option) designation from Section 8.3.1.3b, which requires ozone removal when outdoor air concentrations are expected to be elevated. Given the serious health impacts of elevated ozone concentrations and the ease of removing ozone from air, this requirement is more appropriate as a core requirement of the standard than as a jurisdictional option.

Click here to view these changes in full

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This addendum removes ANSI/BIFMA e3 from the list of standards for acceptable for compliance with Section 9.4.1.4.3. The ANSI/BIFMA e3 standard is a furniture sustainability standard and not directly applicable to the materials and resources referenced in Section 9 of Standard 189.1.

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This addendum adds a jurisdictional option for new buildings with less than 100,000 ft² of conditioned floor area that are not highrise to have air tightness verified using a whole-building air-leakage test. It also updates references to Standard 90.1 to reflect the 2019 version of that standard.

Click here to view these changes in full

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

ASME (American Society of Mechanical Engineers)

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

Revision

BSR/ASME B16.36-202x, Orifice Flanges (revision of ANSI/ASME B16.36-2015)

This Standard covers pressure-temperature ratings, materials, dimensions, tolerances, testing, and making of flanges (similar to those covered in ASME B16.5) that have orifice pressure-differential connections.

Click here to view these changes in full

Send comments (with optional copy to psa@ansi.org) to: Andres Carrion, CarrionA@asme.org

ASME (American Society of Mechanical Engineers)

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

Revision

BSR/ASME B16.48-202x, Line Blanks (revision of ANSI/ASME B16.48-2015)

This Standard covers pressure–temperature ratings, materials, dimensions, tolerances, marking, and testing for operating line blanks in sizes NPS 1/2 through NPS 24 for installation between ASME B16.5 flanges in the 150, 300, 600, 900, 1500, and 2500 pressure classes.

Click here to view these changes in full

Send comments (with optional copy to psa@ansi.org) to: Andres Carrion, CarrionA@asme.org

ASME (American Society of Mechanical Engineers)

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

Revision

BSR/ASME B31G-202x, Manual for Determining the Remaining Strength of Corroded Pipelines (revision of ANSI/ASME B31G-2012 (R2017))

This document is intended solely for the purpose of providing guidance in the evaluation of metal loss in pressurized pipelines and piping systems.

Click here to view these changes in full

Send comments (with optional copy to psa@ansi.org) to: Ray Rahaman, rahamanr@asme.org

NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 ph: (734) 827-5643 www.nsf.org

Revision

BSR/NSF 42-202x (i104r1), Drinking Water Treatment Units - Aesthetic Effects (revision of ANSI/NSF 42-2019)

It is the purpose of this Standard to establish minimum requirements for materials, design and construction, and performance of drinking water treatment systems that are designed to reduce specific aesthetic-related (non-health effects) contaminants in public or private water supplies. This Standard also specifies the minimum product literature and labeling information that a manufacturer shall supply to authorized representatives and system owners as well as the minimum service-related obligations that the manufacturer shall extend to system owners.

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

NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 ph: (734) 827-5643 www.nsf.org

Revision

BSR/NSF 53-202x (i122r1), Drinking Water Treatment Units - Health Effects (revision of ANSI/NSF 53-2019)

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

Click here to view these changes in full

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

NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 ph: (734) 827-5643 www.nsf.org

Revision

BSR/NSF 244-202x (i8r1), Supplemental Microbiological Water Treatment Systems - Filtration (revision of ANSI/NSF 244-2019)

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

Click here to view these changes in full Send comments (with optional copy to psa@ansi.org) to: mleslie@nsf.org

NSF (NSF International)

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

Revision

BSR/NSF 350-202x (i49r1), Onsite Residential and Commercial Water Reuse Treatment Systems (revision of ANSI/NSF 350-2019)

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

Click here to view these changes in full

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

NSF (NSF International)

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

Revision

BSR/NSF 350-202x (i55r1), Onsite Residential and Commercial Water Reuse Treatment Systems (revision of ANSI/NSF 350-2019)

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

Click here to view these changes in full

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

NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 ph: (734) 827-5643 www.nsf.org

Revision

BSR/NSF 401-202x (i16), Drinking Water Treatment Units - Emerging Compounds / Incidental Contaminants (revision of ANSI/NSF 401-2019)

The purpose of this Standard is to establish minimum requirements for materials, design and construction, and performance of drinking water treatment systems that are designed to reduce emerging compounds in public or private water supplies, such as pharmaceutical, personal care products (PPCPs), and endocrine disrupting compounds (EDCs).

Click here to view these changes in full

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

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201 ph: (703) 907-7706 www.tiaonline.org

Addenda

BSR/TIA 568.2-D-2-202x, Balanced Twisted-Pair Telecommunications Cabling and Components Standard - Addendum 2: Power Delivery Over Balanced Twisted-Pair Cabling (addenda to ANSI/TIA 568.2-D-2018)

This document will be an addendum to TIA 568.2-D. The proposed addendum will provide normative requirements for supporting the delivery of power over installations balanced copper cabling, intended to supplement the material in TIA TSB-184-A. Requirements to include options for specific prescriptive requirements, partially engineered solutions, and completely engineered solutions which allow widely varying techniques but adhere to strict end requirements.

Click here to view these changes in full

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

UL (Underwriters Laboratories)

171 Nepean Street, Suite 400, Ottawa, ON K2P 0B4 Canada ph: (613) 755-2729 https://ul.org/

Revision

BSR/UL 13-202x, Standard for Safety for Power-Limited Circuit Cables (revision of ANSI/UL 13-2019)

(1) Add a continuity test to Section 23 Impact Test for Type PLTC Cable Marked "-ER".

Click here to view these changes in full

Send comments (with optional copy to psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 ph: (919) 549-1053 https://ul.org/

Revision

BSR/UL 360-202X, Standard for Liquid-Tight Flexible Metal Conduit (revision of ANSI/UL 360-2019)

(1) Introduction of a range for the specific gravity of copper sulfate solution.

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UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 ph: (919) 316-5147 https://ul.org/

Revision

BSR/UL 412-202X, Standard for Safety for Refrigeration Unit Coolers (revision of ANSI/UL 412-2011)

(1) Proposed revision to replace the references to the Standard for Power Conversion Equipment, UL 508C, with reference to the Standard for Adjustable Speed Electric Power Drive Systems, UL 61800-5-1.

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Send comments (with optional copy to psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

UL (Underwriters Laboratories)

333 Pfingsten Road, Northbrook, IL 60062-2096 ph: (847) 664-2023 https://ul.org/

Revision

BSR/UL 923-202x, Standard for Safety for Microwave Cooking Appliances (revision of ANSI/UL 923-2019)

This proposal for UL 923 covers: (1) Child-resistant oven door; (2) Withdrawal and replacement of 508C with UL 61800-5-1.

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Send comments (with optional copy to psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

UL (Underwriters Laboratories)

333 Pfingsten Road, Northbrook, IL 60062-2096 ph: (847) 664-2850 https://ul.org/

Revision

BSR/UL 962A-202x, Standard for Safety for Furniture Power Distribution Units (revision of ANSI/UL 962A-2020)

(1) Enclosure cap or cover over the reset actuator (i.e., stem) of a supplementary protector; (2) Correction to Clauses 53.24 and 53.25 to add clarification for marked electrical rating.

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Send comments (with optional copy to psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 ph: (919) 549-1851 https://ul.org/

Revision

BSR/UL 1203-202x, Standard for Safety for Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations (revision of ANSI/UL 1203-2020)

This proposal for UL 1203 covers: (1) Revisions to add details for the construction and testing of blanking elements (close-up plugs) and thread adapters; (2) Revision to align the terms used in UL 1203 with the defined terms in NFPA 70 for explosion-proof and dust-ignition-proof types of protection.

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UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 ph: (919) 549-1479 https://ul.org/

Revision

BSR/UL 1564-202x, Standard for Safety for Industrial Battery Chargers (revision of ANSI/UL 1564-2013 (R2017))

This recirculation proposal provides revisions to the UL 1564 proposal dated 8-23-19.

Click here to view these changes in full

Send comments (with optional copy to psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 ph: (919) 549-1851 https://ul.org/

Revision

BSR/UL 2225-202x, Standard for Safety for Cables and Cable-Fittings for Use in Hazardous (Classified) Locations (revision of ANSI/UL 2225-2020)

This proposal for UL 2225 covers revisions to the proposal document dated May 1, 2020 per comments received.

Click here to view these changes in full

Send comments (with optional copy to psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

UL (Underwriters Laboratories)

171 Nepean Street, Suite 400, Ottawa, ON K2P 0B4 Canada ph: (613) 755-2729 https://ul.org/

Revision

BSR/UL 2250-202X, Standard for Safety for Instrumentation Tray Cable (revision of ANSI/UL 2250-2017)

(1) Add a continuity test to Section 32 Impact Test for Type ITC Cable Marked "-ER".

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Send comments (with optional copy to psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 ph: (919) 549-1479 https://ul.org/

Revision

BSR/UL 61810-1-202x, Standard for Electromechanical Elementary Relays - Part 1: General Requirements (revision of ANSI/UL 61810-1-2015)

The following is proposed: Adoption of Amendment 1 of IEC 61810-1. This update will maintain the harmonization of UL 61810-1 Edition 1 with IEC 61810-1, Edition 4, Amendment 1.

Click here to view these changes in full

Send comments (with optional copy to psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

Comment Deadline: August 10, 2020

AAMI (Association for the Advancement of Medical Instrumentation)

901 N. Glebe Road, Suite 300, Arlington, VA 22203 ph: (703) 647-2779 www.aami.org

New Standard

BSR/AAMI 2700-2-1-202x, Medical Devices and Medical Systems - Essential Safety and Performance Requirements for Equipment Comprising the Patient-Centric Integrated Clinical Environment (ICE) - Part 2-1: Particular Requirements or Forensic Data Logging (new standard)

This document provides general functional, performance, and interoperability requirements of ICE Data logging systems including the recording and storage of data in support of forensic analysis of ICE systems. Data logs, data logging, and data loggers can play an important role in maintaining and improving the basic safety and essential performance of integrated clinical environments by enabling the forensic assessment of the ICE system and its components.

Single copy price: Free

Obtain an electronic copy from: wvargas@aami.org Order from: Wil Vargas, (703) 647-2779, wvargas@aami.org Send comments (with optional copy to psa@ansi.org) to: Same

AAMI (Association for the Advancement of Medical Instrumentation)

901 N. Glebe Road, Suite 300, Arlington, VA 22203 ph: (703) 253-8284 www.aami.org

Reaffirmation

BSR/AAMI/ISO 14937-2009 (R202x), Sterilization of health care products - General requirements for characterization of a sterilizing agent and the development, validation and routine control of a sterilization process for medical devices (reaffirmation of ANSI/AAMI/ISO 14937-2009 (R2013))

Specifies general requirements for the characterization of a sterilizing agent and for the development, validation, and routine monitoring and control of a sterilization process for medical devices. Applies to sterilization processes in which microorganisms are inactivated by physical and/or chemical means. Intended to be applied by process developers, manufacturers of sterilization equipment, manufacturers of products to be sterilized, and organizations responsible for sterilizing medical devices.

Single copy price: \$118.00 (AAMI members), \$219.00 (List) Obtain an electronic copy from: https://my.aami.org/store/detail.aspx?id=14937-PDF Order from: https://my.aami.org/store/detail.aspx?id=14937-PDF Send comments (with optional copy to psa@ansi.org) to: abenedict@aami.org

ABMA (ASC B3) (American Bearing Manufacturers Association)

1001 N. Fairfax Street, Suite 500, Alexandria, VA 22314 ph: (703) 838-0053 www.americanbearings.org

Reaffirmation

BSR ABMA 9-2015 (R202x), Load Ratings and Fatigue Life for Ball Bearings (reaffirmation of ANSI ABMA 9-2015)

This standard specifies the method of calculating the basic dynamic load rating and the static equivalent load of rolling bearings. This standard also specifies the method of calculating the basic rating life, which is the life associated with 90% reliability.

Single copy price: \$55.00 Obtain an electronic copy from: aboutaleb@americanbearings.org Order from: Amir Aboutaleb, (703) 838-0053, aboutaleb@americanbearings.org Send comments (with optional copy to psa@ansi.org) to: Same

ABMA (ASC B3) (American Bearing Manufacturers Association)

1001 N. Fairfax Street, Suite 500, Alexandria, VA 22314 ph: (703) 838-0053 www.americanbearings.org

Reaffirmation

BSR/ABMA 10A-2001 (R202x), Metal Balls for Unground Bearings and Other Uses (reaffirmation of ANSI/ABMA 10A-2001 (R2015))

This standard establishes the requirements for metal balls for unground rolling contact bearings and other uses.

Single copy price: \$40.00 Obtain an electronic copy from: aboutaleb@americanbearings.org Order from: Amir Aboutaleb, (703) 838-0053, aboutaleb@americanbearings.org Send comments (with optional copy to psa@ansi.org) to: Same

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

2311 Wilson Boulevard, Suite 400, Arlington, VA 22201-3001 ph: (703) 293-4887 www.ahrinet.org

Revision

BSR/AHRI Standard 210/240-202x, Performance Rating of Unitary Air-Conditioning and Air-Source Heat Pump Equipment (revision of ANSI/AHRI Standard 210/240-2008 with Addenda 1 and 2-2011)

The purpose of this standard is to establish for Unitary Air - Conditioners and Air-Source Unitary Heat Pumps: Definitions; classifications; test requirements; rating requirements; minimum data requirements for Published Ratings; operating requirements; marking and nameplate data; and conformance conditions.

Single copy price: Free

Obtain an electronic copy from: kbest@ahrinet.org Order from: Karl Best, (703) 293-4887, kbest@ahrinet.org Send comments (with optional copy to psa@ansi.org) to: Same

AISI (American Iron and Steel Institute)

3425 Drighton Court, Bethlehem, PA 18020-1335 ph: (610) 691-6334 www.steel.org

New Standard

BSR/AISI S923-202x, Test Standard for Determining the Strength and Stiffness of Shear Connections in Composite Members (new standard)

This test standard provides a method for determining the strength and stiffness of composite shear connections used for shear transfer at the interface of the concrete slab or concrete-filled steel deck with the supporting steel members.

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

ASA (ASC S3) (Acoustical Society of America)

1305 Walt Whitman Road, Suite 300, Melville, NY 11747 ph: (516) 576-2341 www.acousticalsociety.org

Revision

BSR/ASA S3.2-202x, Method for Measuring the Intelligibility of Speech over Communication Systems (revision of ANSI/ASA S3.2 -2009 (R2020))

This standard specifies a method for subjectively evaluating the speech intelligibility of communication systems. The standard specifies thoroughly validated English word lists for performing the tests. The standard also specifies methods for selecting and training the talkers and listeners; for designing, controlling, and reporting the test conditions; for calculating the intelligibility score; and for analyzing and reporting the test results.

Single copy price: \$132.00

Obtain an electronic copy from: standards@acousticalsociety.org Order from: Nancy Blair-DeLeon, (516) 576-2341, standards@acousticalsociety.org Send comments (with optional copy to psa@ansi.org) to: Same

ASABE (American Society of Agricultural and Biological Engineers)

2950 Niles Road, Saint Joseph, MI 49085 ph: (269) 932-7015 https://www.asabe.org/

Revision

BSR/ASAE S604.3 MONYEAR-202x, Safety for Power Take-Off (PTO), PTO Drive Shafts, and Power Input Connection (PIC) for Agricultural Field Equipment (revision of ANSI/ASABE S604.2-OCT2018)

This standard is a guide to provide a reasonable degree of personal safety for operators and other persons during normal operation and servicing of the power take-off (PTO) drive shafts of a tractor or self-propelled machine used in agriculture and the power input connection (PIC) of its implement, in addition to what is given in ANSI/ASABE AD5673-1. It is applicable only to those PTO drive shafts and guards mechanically linked to the shaft by at least two bearings. It is not applicable to PTO drive shafts guarded by location or to the mechanical characteristics of overrun devices and torque limiters, nor are environmental aspects considered; neither is it applicable to PTO drive shafts and their guards manufactured before the date of its publication, neither is it applicable to service parts for agricultural equipment for field or stationary operation manufactured before the date of this publication.

Single copy price: \$48.00 (ASAE Members); \$68.00 (Non-members) Obtain an electronic copy from: vangilder@asabe.org Order from: Carla VanGilder, (269) 932-7015, vangilder@asabe.org Send comments (with optional copy to psa@ansi.org) to: Same

ATIS (Alliance for Telecommunications Industry Solutions)

1200 G Street NW, Suite 500, Washington, DC 20005 ph: (202) 628-6380 www.atis.org

Revision

BSR/ATIS 0600320-202x, Above-Baseline Electrical Protection for Designated Information and Communications Technology (ICT) Facilities against High-Altitude Electromagnetic Pulse (HEMP) (revision of ANSI/ATIS 0600320-2015)

This above-baseline standard applies to ICT facilities in public telecommunications networks in which a special measure of resistance to damage from high-altitude electromagnetic pulse (HEMP) is desired.

Single copy price: \$60.00 Obtain an electronic copy from: dgreco@atis.org Send comments (with optional copy to psa@ansi.org) to: dgreco@atis.org

ATIS (Alliance for Telecommunications Industry Solutions)

1200 G Street NW, Suite 500, Washington, DC 20005 ph: (202) 628-6380 www.atis.org

Revision

BSR/ATIS 0600321-202x, Electrical Protection for Network Operator-Type Equipment Positions (revision of ANSI/ATIS 0600321 -2015)

This standard addresses electrical protection at new installations of network operator-type equipment positions, and at buildings housing such positions. Electrical disturbances may appear at network operator-type equipment positions arising either from Electrostatic Discharge (ESD), or from other sources that are internal or external to the building containing these positions, such as lightning or ac power disturbances. Measures are presented that are intended to help to control ESD in the network operator-type environment, and to provide electrical protection measures that are intended to minimize potential differences at the network operator-type equipment position.

Single copy price: \$110.00 Obtain an electronic copy from: dgreco@atis.org Send comments (with optional copy to psa@ansi.org) to: dgreco@atis.org

AWEA (American Wind Energy Association)

1501 M Street, NW, , Suite 1000, Washington, DC 20005 ph: (202) 383-2500 www.awea.org

New National Adoption

BSR/AWEA 61400-26-1-202x, Availability for wind energy generation systems (identical national adoption of IEC 61400-26-1:2019)

This defines an information model from which time-based, and production-based availability indicators for services can be derived and reported. The purpose is to provide standardized metrics that can be used to create and organize methods for availability calculation and reporting according to the user's needs. The document provides information categories, which unambiguously describe how data is used to characterize and categorize the operation. The information model specifies category priority for discrimination between possible concurrent categories. Further, the model defines entry and exit criteria to allocate fractions of time and production values to the proper information category. A full overview of all information categories, exit and entry criteria is given in Annex. The document can be applied to any number of WTGSs, whether represented by an individual turbine, a fleet of wind turbines, a wind power station or a portfolio of wind power stations. A wind power station is typically made up of all WTGSs, functional services and balance of plant elements as seen from the point of common coupling.

Single copy price: \$Draft is available free of charge Obtain an electronic copy from: https://www.awea.org/resources/standards/public-comment

Send comments (with optional copy to psa@ansi.org) to: https://www.awea.org/resources/standards/public-comment

AWEA (American Wind Energy Association)

1501 M Street, NW, , Suite 1000, Washington, DC 20005 ph: (202) 383-2500 www.awea.org

New Standard

BSR/AWEA 5000-1-202x, AWEA Wind Workforce Definitions 2020 (new standard)

This standard provides definitions related to specific acronyms and terms contained in the Wind Technician Entry-Level Training standards.

Single copy price: \$Draft is available free of charge

Obtain an electronic copy from: https://www.awea.org/resources/standards/public-comment Send comments (with optional copy to psa@ansi.org) to: https://www.awea.org/resources/standards/public-comment

B11 (B11 Standards, Inc.)

P.O. Box 690905, Houston, TX 77269 ph: (832) 446-6999 https://www.b11standards.org/

Revision

BSR B11.7-202x, Cold Headers and Cold Formers - Safety Requirements for Construction, Care, and Use (revision of ANSI B11.7 -1995 (R2020))

The requirements of this standard apply only to those mechanically powered machines commonly referred to as cold headers and cold formers, which perform many operations such as shearing, heading, upsetting, extruding, trimming, forming, cold working, or warm forming material by means of tools and dies. This type of equipment generally has the ram in a horizontal position. Included are pointers and roll formers when they are mechanically an integral part of the basic machine.

Single copy price: \$100.00 Obtain an electronic copy from: cfelinski@b11standards.org Send comments (with optional copy to psa@ansi.org) to: dfelinski@b11standards.org

CSA (CSA America Standards Inc.)

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

Revision

BSR/CSA HGV 4.10-202x, Standard for fittings for use in compressed gaseous hydrogen fueling stations (revision of ANSI/CSA HGV 4.10-2012 (R2019))

This Standard specifies methods for testing and evaluating fittings for use with compressed hydrogen gas and hydrogen-rich gas mixtures. This Standard is intended for new fitting designs and existing designs made with new materials. It is not intended for (a) existing fitting designs with history of use; (b) fittings made of existing materials with history of use; (c) fittings qualified by industry-recognized organizations (e.g., ASME, CGA, MSS, and SAE) for use in compressed gaseous hydrogen applications; or (d) fittings listed in Table IP-8.1.1-1 of Section 12 of ASME B31.12.

Single copy price: Free

Obtain an electronic copy from: david.zimmerman@csagroup.org

Order from: David Zimmerman, (216) 524-4990, ansi.contact@csagroup.org

Send comments (with optional copy to psa@ansi.org) to: david.zimmerman@csagroup.org

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

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

Reaffirmation

BSR/ASSE 1064-2006 (R202x), Performance Requirements for Backflow Prevention Assembly Field Test Kits (reaffirmation of ANSI/ASSE 1064-2006 (R2011))

This standard covers the performance requirements and accuracy of a Backflow Prevention Assembly Field Test Kits. This standard is confined to analog dial type and digital instrumentation. Duplex gauges are not a part of this standard.

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

ICC (International Code Council)

4051 Flossmoor Road, Country Club Hills, IL 60478 ph: (888) 422-7233 www.iccsafe.org

Revision

BSR/ICC 500-202x, ICC/NSSA Standard for the Design and Construction of Storm Shelters (revision of ANSI/ICC 500-2014)

The objective of this Standard is to provide technical design and performance criteria that will facilitate and promote the design, construction, and installation of safe, reliable, and economical storm shelters to protect the public. It is intended that this Standard be used by design professionals; storm shelter designers, manufacturers, and constructors; building officials; and emergency management personnel and government officials to ensure that storm shelters provide a consistently high level of protection to the sheltered public.

Single copy price: Free

Obtain an electronic copy from: https://www.iccsafe.org/products-and-services/standards-development/is-stm/ Send comments (with optional copy to psa@ansi.org) to: kpaarlberg@iccsafe.org

NEMA (ASC C37) (National Electrical Manufacturers Association)

1300 North 17th Street, Suite 900, Rosslyn, VA 22209 ph: (703) 841-3231 www.nema.org

Revision

BSR C37.57-202x, Standard for Switchgear - Metal-Enclosed Interrupter Switchgear Assemblies - Conformance Testing (revision of ANSI C37.57-2003 (R2010))

This standard is a conformance testing standard optionally applicable to all metal-enclosed interrupter switchgear assemblies designed, tested, and manufactured in accordance with ANSI/IEEE C37.20.3. The requirement of ANSI/IEEE C37.20.3 is sufficient for application of metal-enclosed interrupter switchgear assemblies, and conformance testing is not necessary to satisfy the basic requirements of that standard. Conformance testing is performed to show compliance with the basic requirements when required to satisfy special agreements or regulatory agency requirements.

Single copy price: Free Obtain an electronic copy from: Brian.Marchionini@nema.org Order from: gerard.winstanley@nema.org Send comments (with optional copy to psa@ansi.org) to: Brian.Marchionini@nema.org

NETA (InterNational Electrical Testing Association)

3050 Old Centre, Suite 101, Portage, MI 49024 ph: (269) 488-6382 www.netaworld.org

Revision

BSR/NETA ATS-2021-202x, NETA Standard for Acceptance Testing Specifications for Electrical Power Equipment and Systems (revision of ANSI/NETA ATS-2017)

(1) These specifications cover the suggested field tests and inspections that are available to assess the suitability for initial energization and final acceptance of electrical power equipment and systems; (2) The purpose of these specifications is to assure that tested electrical equipment and systems are operational, are within applicable standards and manufacturer's tolerances, and are installed in accordance with design and project specifications; (3) The work specified in these specifications may involve hazardous voltages, materials, operations, and equipment. These specifications do not purport to address all of the safety issues associated with their use. It is the responsibility of the user to review all applicable regulatory limitations prior to the use of these specifications.

Single copy price: \$495.00 Obtain an electronic copy from: rpiet@netaworld.org Order from: Richard Piet, (269) 488-6382, rpiet@netaworld.org Send comments (with optional copy to psa@ansi.org) to: Same

RIA (Robotic Industries Association)

900 Victors Way, Suite 140, Ann Arbor, MI 48108-5210 ph: (734) 994-6088 www.robotics.org

New Standard

BSR/RIA R15.08-1-202x, Industrial Mobile Robots - Safety Requirements - Part 1: Requirements for the Industrial Mobile Robot (new standard)

This document specifies safety requirements for industrial mobile robots (IMRs). It describes basic hazards associated with IMRs in an industrial environment, and provides requirements to eliminate, or adequately reduce, the risks associated with these hazards. IMRs incorporate mobile platforms that can be either autonomous mobile robots (AMRs), or, where an industrial robot manipulator is combined with the mobile platform, automated guided vehicles (AGVs). (NOTE: For safety requirements of industrial robot manipulators that are fixed in place, see ANSI/RIA R15.06-2012; for safety requirements of AGVs that do not incorporate an industrial robot manipulator, see ANSI/ITSDF B56.5-2019.) Passenger-carrying vehicles and non-industrial mobile robots are out of scope for this document. This document is intended to be submitted for consideration as an ISO standard via ISO Technical Committee 299, Robotics.

Single copy price: \$225.00 (Non-members); \$190.00 (members of RIA (or its parent, A3)) Obtain an electronic copy from: cfranklin@robotics.org Send comments (with optional copy to psa@ansi.org) to: cfranklin@robotics.org

UL (Underwriters Laboratories)

12 Laboratory Drive, P.O. Box 13995, Research Triangle Park, NC 27709-3995 ph: (919) 549-1391 https://ul.org/

Reaffirmation

BSR/UL 150-2011 (R202x), UL Standard for Safety for Antenna Rotators (reaffirmation of ANSI/UL 150-2011 (R2015))

This proposal for UL 150 covers: Reaffirmation.

Single copy price: Free

Obtain an electronic copy from: https://csds.ul.com/Home/ProposalsDefault.aspx

Order from: http://www.shopulstandards.com

Send comments (with optional copy to psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 ph: (919) 549-1053 https://ul.org/

Reaffirmation

BSR/UL 2024-2015 (R202x), Standard for Cable Routing Assemblies and Communications Raceways (reaffirmation of ANSI/UL 2024 -2015)

(1) Reaffirmation and continuance of the fifth edition of the Standard for Cable Routing Assemblies and Communications Raceways, UL 2024, as an American National Standard.

Single copy price: Free

Obtain an electronic copy from: https://csds.ul.com/Home/ProposalsDefault.aspx

Order from: http://www.shopulstandards.com

Send comments (with optional copy to psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 ph: (919) 549-0973 https://ul.org/

Revision

BSR/UL 1191-202X, Standard for Components for Personal Flotation Devices (revision of ANSI/UL 1191-2019)

UL proposes a recirculation for proposals dated January 31, 2020.

Single copy price: Free

Obtain an electronic copy from: https://csds.ul.com/Home/ProposalsDefault.aspx

Order from: http://www.shopulstandards.com

Send comments (with optional copy to psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

Comment Deadline: August 25, 2020

ASME (American Society of Mechanical Engineers)

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

New Standard

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

BSR/ASME B89.4.23-202x, X -Ray Computed Tomography (Ct) Performance Evaluation Standard (new standard)

This Standard specifies the dimensional measurement accuracy of industrial X-ray computed tomography (CT) systems for length, size, and form measurands of sphere-based test objects made of homogeneous materials. Medical CT systems are outside the scope of this Standard. This Standard is applicable to dimensional measurements made at the surface of the workpiece, i.e., at the workpiece material–air interface, including those of internal cavities.

Single copy price: Free

Obtain an electronic copy from: http://cstools.asme.org/publicreview Order from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm Send comments (with optional copy to psa@ansi.org) to: Justin Cassamassino, cassasmassinoj@asme.org

ASME (American Society of Mechanical Engineers)

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

Reaffirmation

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

BSR/ASME PTC 12.1-2015 (R202x), Closed Feedwater Heaters (reaffirmation of ANSI/ASME PTC 12.1-2015)

This Code provides procedures, direction, and guidance for determining the thermohydraulic performance of a closed feedwater heater. It can be utilized to verify contractual performance for a new heater or to calculate performance of an existing heater in comparison to the design point.

Single copy price: \$160.00

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

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

Send comments (with optional copy to psa@ansi.org) to: Angel L. Guzman Rodriguez, guzman@asme.org

ASME (American Society of Mechanical Engineers)

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

Revision

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

BSR/ASME B16.47-202x, Large Diameter Steel Flanges NPS 26 through NPS 60 Metric/Inch Standard (revision of ANSI/ASME B16.47-2017)

This Standard covers pressure–temperature ratings, materials, dimensions, tolerances, marking, and testing for pipe flanges in sizes NPS 26 through NPS 60. Included are flanges with rating class designations 75, 150, 300, 400, 600, and 900 with requirements given in both SI (Metric) and U.S. Customary units, with the diameter of bolts and flange bolt holes expressed in inch units.

Single copy price: Free

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

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

Send comments (with optional copy to psa@ansi.org) to: Andres Carrion, CarrionA@asme.org

IEEE (Institute of Electrical and Electronics Engineers)

445 Hoes Lane, Piscataway, NJ 08854 ph: (732) 562-3854 www.ieee.org

New Standard

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

BSR/IEEE 844.1-202x, Standard for Skin Effect Trace Heating of Pipelines, Vessels, Equipment, and Structures - General, Testing, Marking, and Documentation Requirements (new standard)

This standard applies to general, testing, marking, and documentation requirements for skin effect trace heating systems rated up to and including 5 kVac and 260°C maximum skin effect insulated conductor temperature. These heating systems are intended for installation in accordance with the CSA C22.1, Canadian Electrical Code, Part I (CE Code); NFPA 70, National Electrical Code[®] (NEC[®]) in the U.S.; or with any other national electrical installation code, as applicable.

Single copy price: \$99.00 (pdf); \$122.00 (print) Order from: https://www.techstreet.com/ieee/searches/27607189 Send comments (with optional copy to psa@ansi.org) to: k.evangelista@ieee.org

IEEE (Institute of Electrical and Electronics Engineers)

445 Hoes Lane, Piscataway, NJ 08854 ph: (732) 562-3854 www.ieee.org

New Standard

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

BSR/IEEE 844.2-202x, Standard for Skin Effect Trace Heating of Pipelines, Vessels, Equipment, and Structures - Application Guide for Design, Installation, Testing, Commissioning, and Maintenance (new standard)

This document provides for the application of skin-effect trace heating systems for pipes, vessels, and structures. It provides recommendations for design, installation, maintenance, and repair of these systems in general industry for ordinary locations, as well as in hazardous areas with potentially explosive atmospheres. This document, when used with other recognized codes and standards, is intended to cover skin-effect trace heating systems in its entirety, including system design, specification, installation, operation, testing, commissioning, and maintenance. This document also addresses the following associated systems which are important to the performance of skin effect trace heating systems: (a) Thermal insulation system, (b) Electric power supply system, (c) Electric grounding system, and (d) Control and monitoring system.

Single copy price: \$78.00 (pdf); \$100.00 (print) Order from: https://www.techstreet.com/ieee/searches/27607189 Send comments (with optional copy to psa@ansi.org) to: k.evangelista@ieee.org

IEEE (Institute of Electrical and Electronics Engineers)

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New Standard

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

BSR/IEEE 844.3-202x, Standard for Impedance Heating of Pipelines and Equipment - General, Testing, Marking, and Documentation Requirements (new standard)

This standard applies to general, testing, marking, and documentation requirements for impedance heating systems for steel or steel alloy pipe or equipment, rated up to and including 132 Vac. These heating system components are intended for installation in accordance with the CSA C22.1, Canadian Electrical Code, Part I (CE Code); NFPA 70, National Electrical Code(R) (NEC(R)) in the U. S.; or with any other national electrical installation codes, as applicable. This standard applies to impedance heating systems intended to be installed in ordinary and hazardous locations. The hazardous location installations are limited to 30 Vac.

Single copy price: \$79.00 (pdf); \$100.00 (print) Order from: https://www.techstreet.com/ieee/searches/27607189 Send comments (with optional copy to psa@ansi.org) to: k.evangelista@ieee.org

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New Standard

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

BSR/IEEE 844.4-202x, Standard for Impedance Heating of Pipelines and Equipment - Application Guide for Design, Installation, Testing, Commissioning and Maintenance (new standard)

This standard provides for the application of impedance heating systems for steel or steel alloy pipe and equipment. It provides recommendations for design, installation, maintenance, and repair of these systems in general industry applications.

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Revision

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

BSR/IEEE C95.1-202x, Standard for Safety Levels with Respect to Human Exposure to Electric, Magnetic, and Electromagnetic Fields, 0 Hz to 300 GHz (revision of ANSI/IEEE C95.1-2006)

Recommendations are made to protect against established adverse health effects in humans resulting from exposure to electric, magnetic and electromagnetic fields in the frequency range of 0 Hz to 300 GHz. The recommendations are expressed in terms of exposure reference levels (ERLs) and dosimetric reference levels (DRLs). The DRLs are limits on in situ electric field strength, specific absorption rate (SAR), and incident power density; the ERLs, which are derived from the DRLs, are limits on external fields and induced and contact current. This standard is intended to apply to all human exposures except for exposure of patients under medical supervision. The recommendations are not intended for the purpose of preventing interference with medical and other devices that may exhibit susceptibility to radio frequency (RF) fields. The recommendations at 300 GHz are consistent with existing recommendations for safe exposure in the infrared frequency range, which begins at 300 GHz, cf., ANSI Z136.1 and IEC 60825-1.

Single copy price: \$351.00 (print) Order from: https://www.techstreet.com/ieee/searches/27607189 Send comments (with optional copy to psa@ansi.org) to: k.evangelista@ieee.org

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

700 K Street NW, Suite 600, Washington, DC 20001 ph: (202) 737-8888 www.incits.org

New Standard

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

BSR INCITS 506-202x, Information technology - SBC-4 (SCSI Block Commands - 4) (new standard)

SCSI Block Commands - 4 is the next generation of the SCSI Block Commands. It follows SBC-3, SBC-2, and SBC. The following items should be considered for inclusion in SCSI Block Commands - 4: (a) enhancements to block commands; (b) enhancements to the application of the definitions for read, write, and other operations; (c) corrections and clarifications; and (d) other capabilities that may fit within the scope of this project.

Single copy price: Free

Obtain an electronic copy from: https://standards.incits.org/apps/org/workgroup/eb/download.php/119813/latest Order from: https://standards.incits.org/apps/org/workgroup/eb/download.php/119813/latest Send comments (with optional copy to psa@ansi.org) to: comments@standards.incits.org

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

700 K Street NW, Suite 600, Washington, DC 20001 ph: (202) 737-8888 www.incits.org

Reaffirmation

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

INCITS 83-1995 [R202x], Information Systems - ISO Registration According to ISO 2375 - ANSI Sponsorship Procedures (reaffirmation of INCITS 83-1995 [R2015])

Specifies the procedure to be followed in submitting proposals for character sets for ANSI sponsorship for submission to the ISO Registration Authority for processing in accordance with the ISO procedure for registration.

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

700 K Street NW, Suite 600, Washington, DC 20001 ph: (202) 737-8888 www.incits.org

Reaffirmation

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

INCITS 322-2015 [R202x], Information Technology - Card Durability Test Methods (reaffirmation of INCITS 322-2015)

Since the publication of INCITS 322-2008, additional test methods and refinements of the published test methods have been proposed.

Single copy price: \$60.00 Obtain an electronic copy from: http://webstore.ansi.org/ Order from: http://webstore.ansi.org/ Send comments (with optional copy to psa@ansi.org) to: comments@standards.incits.org

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

700 K Street NW, Suite 600, Washington, DC 20001 ph: (202) 737-8888 www.incits.org

Reaffirmation

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

INCITS 335-2000 [R202x], Information technology - Small Computer System Interface (SCSI-3) Stream Commands (SSC) (reaffirmation of INCITS 335-2000 [R2015])

Defines the command set extensions to facilitate operation of SCSI stream devices. The clauses of this standard, implemented in conjunction with the applicable clauses of the SCSI Primary Commands 2 standard, fully specify the standard command set for the SCSI stream device class.

Single copy price: \$60.00 Obtain an electronic copy from: http://webstore.ansi.org/ Order from: http://webstore.ansi.org/ Send comments (with optional copy to psa@ansi.org) to: comments@standards.incits.org

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

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INCITS 403-2005 [R202x], Information technology - Automation/Drive Interface - Commands (ADC) (reaffirmation of INCITS 403 -2005 [R2015])

Defines the model and command set extensions to facilitate operation of automation/drive interface devices. The clauses of this standard, implemented in conjunction with the applicable clauses of SPC-2 and SPC-3, fully specify the standard command set for automation/drive interface devices.

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INCITS 406-2005 [R202x], Information technology - Automation/Drive Interface - Transport Protocol (ADT) (reaffirmation of INCITS 406-2005 [R2015])

Specifies the transport requirements for the SCSI Automation/Drive interface device. This standard permits the SCSI Automation/Drive interface devices to attach to application clients and provides the definitions for their use.

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INCITS 452-2009/AM 1:2010 [R202x], Information Technology - AT Attachment-8 ATA/ATAPI Command Set (ATA8-ACS) -Amendment 1 (reaffirmation of INCITS 452-2009/AM 1:2010 [R2015])

The project corrects defects in INCITS 452.

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INCITS 457-2010 [R202x], Information technology - Serial Attached SCSI - 2 (SAS-2) (reaffirmation of INCITS 457-2010 [R2015])

The SCSI family of standards provides for many different transport protocols that define the rules for exchanging information between different SCSI devices. This standard defines the rules for exchanging information between SCSI devices using a serial interconnect. Other SCSI transport protocol standards define the rules for exchanging information between SCSI devices using other interconnects.

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INCITS 465-2010 [R202x], Information technology - SCSI/ATA Translation - 2 (SAT-2) (reaffirmation of INCITS 465-2010 [R2015])

The set of SCSI standards specifies the interfaces, functions, and operations necessary to ensure interoperability between conforming SCSI implementations. This standard is a functional description. Conforming implementations may employ any design technique that does not violate interoperability. This standard defines the protocol requirements of the SCSI/ATA Translation Layer (SATL) to allow conforming SCSI/ATA translating components to interoperate with ATA devices and SCSI application layers.

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INCITS 468-2010 [R202x], Information technology - Multi-media Command Set - 6 (MMC-6) (reaffirmation of INCITS 468-2010 [R2015])

Defines a set of SCSI command descriptor blocks that are useful in accessing and controlling devices with a peripheral device type set to 5.

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INCITS 469-2015 [R202x], Information Technology - Open Virtualization Format (OVF) Specification (reaffirmation of INCITS 469 -2015)

The Open Virtualization Format (OVF) Specification describes an open, secure, efficient, and extensible format for the packaging and distribution of software to be run in virtual systems.

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INCITS 471-2010 [R202x], Information Technology - USB Attached SCSI (UAS) (reaffirmation of INCITS 471-2010 [R2015])

Describes a SCSI transport protocol (see SAM-4) for USB-2 and USB-3 with the following properties: (a) mechanism to send commands associated with any T10 command standard to a USB device; (b) complies with SCSI Architecture Model - 4 (e.g., autosense and command queuing); and (c) other capabilities.

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INCITS 480-2011/AM 1-2015 [R202x], Information Technology - BIOS Enhanced Disk Drive Specification - 4 (EDD-4) - Amendment 1 (reaffirmation of INCITS 480:2011/AM 1-2015)

The changes in this amendment to EDD-4 allow the published standard to be used by NVM Express products as follows. A new Device path definition for NVMe is added to Offset 40 of Table 23 in section 8.20.1 "Get Device Parameters"; An NVMe-specific definition for the Device path is appended to Table 25 in section 8.20.2 "Interface Path".

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INCITS 492-2015 [R202x], Information technology - SAS Protocol Layer (SPL-3) (reaffirmation of INCITS 492-2015)

Specifies three transport protocols used over the SAS interconnect specified in SAS-3, one to transport SCSI commands, another to transport Serial ATA commands to multiple SATA devices, and a third to support interface management. This standard is intended to be used in conjunction with SAS standards, SCSI command set standards, and ATA command set standards.

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INCITS 496-2012/AM1-2015 [R202x], Information Technology - Fibre Channel - Security Protocols - 2/Amendment 1 - (FC-SP -2/AM1) (reaffirmation of INCITS 496-2012/AM1-2015)

This amendment updates ANSI INCITS 496-2012, FC-SP-2, to support additional cryptographic algorithms.

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INCITS 512-2015 [R202x], Information Technology - Fibre Channel - Physical Interface-6 (FC-PI-6) (reaffirmation of INCITS 512 -2015)

Describes the point-to-point physical interface portions of Fibre Channel serial electrical and optical link variants that support the higher level Fibre Channel protocols. This standard is recommended for new implementations but does not obsolete existing Fibre Channel standards.

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INCITS 513-2015 [R202x], Information technology - SCSI Primary Commands - 4 (SPC-4) (reaffirmation of INCITS 513-2015)

Defines the device model for all SCSI devices. This standard defines the SCSI commands that are basic to every device model and the SCSI commands that may apply to any device model.

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INCITS 517-2015 [R202x], Information technology - SCSI/ATA Translation - 3 (SAT-3) (reaffirmation of INCITS 517-2015)

Defines the protocol requirements of the SCSI/ATA Translation Layer (SATL) to allow conforming SCSI/ATA translating components to interoperate with ATA devices, SCSI transports, and SCSI application layers. The SATL covers a range of implementations that use ATA devices to emulate the behavior of SCSI devices as viewed by the SCSI application layer.

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INCITS 522-2014 [R202x], Information Technology - ATA/ATAPI Command Set - 3 (ACS-3) (reaffirmation of INCITS 522-2014)

Specifies the AT Attachment command set used to communicate between host systems and storage devices.

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INCITS 410:2015 [R202x], Information Technology - Identification Cards - Limited Use (LU), Proximity Integrated Circuit Card (PICC) (reaffirmation of INCITS 410:2015)

Provides a physical specification with similar electronic characteristics to Proximity Integrated Circuit Cards (PICCs), such as those specified within ISO/IEC 14443-2 and 3. The physical card thickness (finished card body) formats, are defined within this specification and may also have references to both ISO/IEC 7810:2012 (ID1-Identification cards), INCITS 440 (Card Life Cycle), and ISO/IEC 15457 for thin flexible cards and other thickness dimensions as called out in this standard. Construction attributes, pertaining to the materials, functionality, and environmental requirements and the targeted use of these cards are also specified. This type of PICC is to be classified as a Limited Use - Proximity Integrated Circuit Card (LU-PICC).

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INCITS 440:2015 [R202x], Information Technology - Card Durability/Service Life (reaffirmation of INCITS 440:2015)

Defines a method to determine a card application class for the intended card use. Once the service life application is determined, the standard defines test methods and requirements for the card application.

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INCITS 442:2010 [R202x], Information Technology - Biometric Identity Assurance Services (BIAS) (reaffirmation of INCITS 442:2010 [R2015])

BIAS defines biometric services used for identity assurance that are invoked over a services-based framework. It is intended to provide a generic set of biometric and identity-related functions and associated data definitions to allow remote access to biometric services. To allow BIAS to be flexible to the amount and types of biographic and biometric information available to and used by a system, the terms "biographic data" and "biometric data" as used in this standard are very general. The binding of these services to specific frameworks is not included in this project, but will be the subject of separate standards. The first such standard (for a Web services framework) is planned to be developed by OASIS by the BIAS Integration Technical Committee.

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INCITS 378:2009/AM 1:2010 [R202x], Information Technology - Finger Minutiae Format for Data Interchange - Amendment 1 (reaffirmation of INCITS 378:2009/AM 1:2010 [R2015])

Amendment 1 to INCITS 378:2009.

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INCITS/ISO 19125-1:2004 [R202x], Geographic Information - Simple Feature Access - Part 1: Common Architecture (reaffirmation of INCITS/ISO 19125-1:2004 [R2015])

Establishes a common architecture for geographic information and defines terms to use within the architecture. It also standardizes names and geometric definitions for Types for Geometry. This standard does not place any requirements on how to define the Geometry Types in the internal schema nor does it place any requirements on when or how or who defines the Geometry Types. ISO 19125-1:2004 does not attempt to standardize and does not depend upon any part of the mechanism by which Types are added and maintained.

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INCITS/ISO 19125-2:2004 [R202x], Geographic Information - Simple Feature Access - Part 2: SQL Option (reaffirmation of INCITS/ISO 19125-2:2004 [R2015])

Specifies an SQL schema that supports storage, retrieval, query, and update of simple geospatial feature collections via the SQL Call Level Interface (SQL/CLI) and establishes an architecture for the implementation of feature tables. It defines terms to use within the architecture of geographic information and defines a simple feature profile of ISO 19107. In addition, this part of ISO 19125:2004 describes a set of SQL Geometry Types together with SQL functions on those types. The Geometry Types and Functions described represent a profile of ISO 13249-3. It standardizes the names and geometric definitions of the SQL Types for Geometry and the names, signatures, and geometric definitions of the SQL Functions for Geometry.

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INCITS/ISO 19144-1:2009 [R202x], Geographic information - Classification systems - Part 1: Classification system structure (reaffirmation of INCITS/ISO 19144-1:2009 [R2015])

Establishes the structure of a geographic information classification system, together with the mechanism for defining and registering the classifiers for such a system. It specifies the use of discrete coverages to represent the result of applying the classification system to a particular area and defines the technical structure of a register of classifiers in accordance with ISO 19135.

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INCITS/ISO 19106:2004 [R202x], Geographic Information - Profiles (reaffirmation of INCITS/ISO 19106:2004 [R2015])

This standard is intended to define the concept of a profile of the ISO geographic information standards developed by ISO/TC 211 and to provide guidance for the creation of such profiles. Only those components of specifications that meet the definition of a profile contained herein can be established and managed through the mechanisms described in this International Standard. These profiles can be standardized internationally using the ISO standardization process. This document also provides guidance for establishing, managing, and standardizing at the national level (or in some other forum).

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INCITS/ISO 19128:2005 [R202x], Geographic Information - Web Map Server Interface (reaffirmation of INCITS/ISO 19128:2005 [R2015])

This standard specifies the behavior of a service that produces spatially referenced maps dynamically from geographic information. It specifies operations to retrieve a description of the maps offered by a server, to retrieve a map, and to query a server about features displayed on a map. ISO 19128:2005 is applicable to pictorial renderings of maps in a graphical format; it is not applicable to retrieval of actual feature data or coverage data values.

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INCITS/ISO 6709:2008/COR 1:2009 [R202x], Standard representation of geographic point location by coordinates (reaffirmation of INCITS/ISO 6709:2008/COR 1:2009 [R2015])

Technical Corrigendum 1 to ISO 6709:2008.

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INCITS/ISO 19108:2002/COR 1:2006 [R202x], Geographic Information - Temporal Schema - Technical Corrigendum 1 (reaffirmation of INCITS/ISO 19108:2002/COR 1:2006 [R2015])

Technical Corrigendum 1 to ISO 19108:2002.

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INCITS/ISO/IEC 8632-1:1999/COR 1:2006 [R202x], Information Technology - Computer Graphics - Metafile for the Storage and Transfer of Picture Description Information - Part 1: Functional Specification - Technical Corrigendum 1 (reaffirmation of INCITS/ISO/IEC 8632-1:1999/COR 1:2006 [R2015])

Technical Corrigendum 1 to ISO/IEC 8632-1:1999.

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INCITS/ISO/IEC 8632-1:1999/COR 2:2007 [R202x], Information Technology - Computer Graphics - Metafile for the Storage and Transfer of Picture Description Information - Part 1: Functional Specification - Technical Corrigendum 2 (reaffirmation of INCITS/ISO/IEC 8632-1:1999/COR 2:2007 [R2015])

Technical Corrigendum 2 to ISO/IEC 8632-1:1999.

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INCITS/ISO/IEC 8859-2:1999 [R202x], Information Technology - 8-Bit Single-Byte Coded Graphic Character Sets - Part 2: Latin Alphabet No. 2 (reaffirmation of INCITS/ISO/IEC 8859-2:1999 [R2015])

This part of ISO/IEC 8859 specifies a set of 191 coded graphic characters identified as Latin alphabet No. 10. This set of coded graphic characters is intended for use in data and text processing applications and also for information interchange. The set contains graphic characters used for general purpose applications in typical office environments in at least the following languages: Albanian, Croatian, English, Finnish, French, German, Hungarian, Irish Gaelic (new orthography), Italian, Latin, Polish, Romanian, and Slovenian. This set of coded graphic characters may be regarded as a version of an 8-bit code according to ISO/IEC 2022 or ISO/IEC 4873 at level 1.

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INCITS/ISO/IEC 8859-3:1999 [R202x], Information technology - 8-bit single-byte coded graphic character sets - Part 3: Latin alphabet No. 3 (reaffirmation of INCITS/ISO/IEC 8859-3:1999 [R2015])

This part of ISO/IEC 8859 specifies a set of 184 coded graphic characters identified as Latin alphabet No. 3. This set of coded graphic characters is intended for use in data and text processing applications and also for information interchange. The set contains graphic characters used for general purpose applications in typical office environments in at least the following languages: Esperanto and Maltese, and if needed in conjunction with these, English, French (with restrictions, see Annex A.1, Notes), German, Italian, Latin and Portuguese. Coding of Turkish characters using this part is deprecated, that specified in part 9 is to be used. This set of coded graphic characters may be regarded as a version of an 8-bit code according to ISO/IEC 2022 or ISO/IEC 4873 at level 1.

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INCITS/ISO/IEC 8859-5:1999 [R202x], Information Technology - 8-Bit Single-Byte Coded Graphic Character Sets - Part 5: Latin/Cyrillic Alphabet (reaffirmation of INCITS/ISO/IEC 8859-5:1999 [R2015])

This part of ISO/IEC 8859 specifies a set of 191 coded graphic characters identified as the Latin/ Cyrillic alphabet. This set of coded graphic characters is intended for use in data and text processing applications and also for information interchange. The set contains graphic characters used for general-purpose applications in typical office environments in at least the following languages: Bulgarian, Byelorussian, English, Latin, (Slavic) Macedonian, Russian, Serbian, and Ukrainian.

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INCITS/ISO/IEC 8859-6:1999 [R202x], Information Technology - 8-Bit Single-Byte Coded Graphic Character Sets - Part 6: Latin/Arabic Alphabet (reaffirmation of INCITS/ISO/IEC 8859-6:1999 [R2015])

This part of ISO/IEC 8859 specifies a set of 146 coded graphic characters identified as Latin/Arabic alphabet. This set of coded graphic characters is intended for use in data and text processing applications and also for information interchange. The set contains graphic characters used for general purpose applications in typical office environments in at least the following languages: Arabic, English, and Latin. Some of the characters in this set are combining characters (see clause 6). This set of coded graphic characters may be regarded as a version of an 8-bit code according to ISO/IEC 2022 or ISO/IEC 4873 at level 1.

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INCITS/ISO/IEC 8859-8:1999 [R202x], Information Technology - 8-Bit Single-Byte Coded Graphic Character Sets - Part 8: Latin/Hebrew Alphabet (reaffirmation of INCITS/ISO/IEC 8859-8:1999 [R2015])

This part of ISO/IEC 8859 specifies a set of 155 coded graphic characters identified as Latin/Hebrew alphabet. This set of coded graphic characters is intended for use in data and text processing applications and also for information interchange. The set contains graphic characters used for general-purpose applications in typical office environments in at least the following languages: English, Hebrew, Latin. It is not intended for pointed Hebrew. This set of coded graphic characters may be regarded as a version of an 8-bit code according to ISO/IEC 2022 or ISO/IEC 4873 at level 1. This part of ISO/IEC 8859 may not be used in conjunction with any other parts of ISO/IEC 8859.

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INCITS/ISO/IEC 8859-16:2001 [R202x], Information Technology - 8-Bit Single-Byte Coded Graphic Character Sets - Part 16: Latin Alphabet No. 10 (reaffirmation of INCITS/ISO/IEC 8859-16:2001 [R2015])

This part of ISO/IEC 8859 specifies a set of 191 coded graphic characters identified as Latin alphabet No. 10. This set of coded graphic characters is intended for use in data and text processing applications and also for information interchange. The set contains graphic characters used for general purpose applications in typical office environments in at least the following languages: Albanian, Croatian, English, Finnish, French, German, Hungarian, Irish Gaelic (new orthography), Italian, Latin, Polish, Romanian, and Slovenian. This set of coded graphic characters may be regarded as a version of an 8-bit code according to ISO/IEC 2022 or ISO/IEC 4873 at level 1.

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INCITS/ISO/IEC 9593-1:1990/COR 1:1993 [R202x], Information processing systems - Computer graphics - Programmers Hierarchical Interactive Graphics System (PHIGS) language bindings - Part 1: FORTRAN - Technical Corrigendum 1 (reaffirmation of INCITS/ISO/IEC 9593-1:1990/COR 1:1993 [R2015])

Technical Corrigendum 1 to ISO/IEC 9593-1:1990.

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INCITS/ISO/IEC 9593-1:1990/COR 2:1994 [R202x], Information Processing Systems - Computer Graphics - Programmers Hierarchical Interactive Graphics System (PHIGS) Language Bindings - Part 1: FORTRAN - Technical Corrigendum 2 (reaffirmation of INCITS/ISO/IEC 9593-1:1990/COR 2:1994 [R2015])

Technical Corrigendum 2 to ISO/IEC 9593-1:1990.

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INCITS/ISO/IEC 9593-3:1990/COR 1:1993 [R202x], Information Technology - Computer Graphics - Programmers Hierarchical Interactive Graphics System (PHIGS) Language Bindings - Part 3: ADA - Technical Corrigendum 1 (reaffirmation of INCITS/ISO/IEC 9593-3:1990/COR 1:1993 [R2015])

Technical Corrigendum 1 to ISO/IEC 9593-3:1990.

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INCITS/ISO/IEC 9593-3:1990/COR 2:1994 [R202x], Information Technology - Computer Graphics - Programmers Hierarchical Interactive Graphics System (PHIGS) Language Bindings - Part 3: ADA - Technical Corrigendum 2 (reaffirmation of INCITS/ISO/IEC 9593-3:1990/COR 2:1994 [R2015])

Technical Corrigendum 2 to ISO/IEC 9593-3:1990.

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INCITS/ISO/IEC 9593-4:1991/COR 1:1994 [R202x], Information technology - Computer graphics - Programmers Hierarchical Interactive Graphics System (PHIGS) language bindings - Part 4: C - Technical Corrigendum 1 (reaffirmation of INCITS/ISO/IEC 9593 -4:1991/COR1:1994 [R2015])

Technical Corrigendum 1 to ISO/IEC 9593-4:1991.

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INCITS/ISO/IEC 9798-5:2009 [R202x], Information Technology - Security Techniques - Entity Authentication - Part 5: Mechanisms Using Zero-Knowledge Techniques (reaffirmation of INCITS/ISO/IEC 9798-5:2009 [R2015])

Specifies entity authentication mechanisms using zero-knowledge techniques: mechanisms based on identities and providing unilateral authentication; mechanisms based on integer factorization and providing unilateral authentication; mechanisms based on discrete logarithms with respect to numbers that are either prime or composite, and providing unilateral authentication; mechanisms based on asymmetric encryption systems and providing either unilateral authentication, or mutual authentication; mechanisms based on discrete logarithms on elliptic curves and providing unilateral authentication.

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INCITS/ISO/IEC 9834-6:2005 [R202x], Information technology - Open Systems Interconnection - Procedures for the operation of OSI Registration Authorities: Registration of application processes and application entities (reaffirmation of INCITS/ISO/IEC 9834 -6:2005 [R2015])

Specifies the procedures applicable to the registration of application processes and application entities. No requirement for an international registration authority has been identified; therefore, these procedures apply to registration at any point in the ASN.1 object identifier tree. This standard does not cover the registration of application-process types or application-entity types. No requirement for such registration has been identified.

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INCITS/ISO/IEC 9834-9:2008 [R202x], Information technology - Open Systems Interconnection - Procedures for the operation of OSI Registration Authorities: Registration of object identifier arcs for applications and services using tag-based identification (reaffirmation of INCITS/ISO/IEC 9834-9:2008 [R2015])

Specifies the procedures for operating the Registration Authority for object identifiers under the arc {joint-iso-itu-t(2) tag-based (27)}, that supports tag-based applications and services.

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INCITS/ISO/IEC 12087-2:1994/COR 1:1997 [R202x], Information Technology - Computer Graphics and Image Processing - Image Processing and Interchange (IPI) - Functional Specification - Part 2: Programmers Imaging Kernel System Application Programme Interface - Technical Corrigendum 1 (reaffirmation of INCITS/ISO/IEC 12087-2:1994/COR 1:1997 [R2015])

Technical Corrigendum 1 to ISO/IEC 12087-2:1994.

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INCITS/ISO/IEC 12087-5:1998/COR 1:2001 [R202x], Information Technology - Computer Graphics and Image Processing - Image Processing and Interchange (IPI) - Functional Specification - Part 5: Basic Image Interchange Format (BIIF) - Technical Corrigendum 1 (reaffirmation of INCITS/ISO/IEC 12087-5:1998/COR 1:2001 [R2015])

Technical Corrigendum 1 to ISO/IEC 12087-5:1998.

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INCITS/ISO/IEC 12087-5:1998/COR 2:2002 [R202x], Information Technology - Computer Graphics and Image Processing - Image Processing and Interchange (IPI) - Functional Specification - Part 5: Basic Image Interchange Format (BIIF) - Technical Corrigendum 2 (reaffirmation of INCITS/ISO/IEC 12087-5:1998/COR 2:2002 [R2015])

Technical Corrigendum 2 to ISO/IEC 12087-5:1998.

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INCITS/ISO/IEC 13888-3:2009 [R202x], Information technology - Security techniques - Non-repudiation - Part 3: Mechanisms using asymmetric techniques (reaffirmation of INCITS/ISO/IEC 13888-3:2009 [R2015])

Specifies mechanisms for the provision of specific, communication-related, non-repudiation services using asymmetric cryptographic techniques.

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INCITS/ISO/IEC 14496-10:2014 [R202x], Information technology - Coding of audio-visual objects - Part 10: Advanced Video Coding (reaffirmation of INCITS/ISO/IEC 14496-10:2014 [2015])

Specifies advanced video coding for coding of audio-visual objects.

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INCITS/ISO/IEC 14772-1:1997 [R202x], Information Technology - Computer Graphics and Image Processing - The Virtual Reality Modeling Language - Part 1: Functional Specification and UTF-8 Encoding (reaffirmation of INCITS/ISO/IEC 14772-1:1997 [R2015])

Defines a file format that integrates 3D graphics and multimedia. Conceptually, each VRML file is a 3D time-based space that contains graphic and aural objects that can be dynamically modified through a variety of mechanisms. This part of ISO/IEC 14772 defines a primary set of objects and mechanisms that encourage composition, encapsulation, and extension.

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INCITS/ISO/IEC 14772-1:1997/AM 1:2003 [R202x], Information Technology - Computer Graphics and Image Processing - The Virtual Reality Modeling Language - Part 1: Functional Specification and UTF-8 Encoding - Amendment 1 (reaffirmation of INCITS/ISO/IEC 14772-1:1997/AM 1:2003 [R2015])

Amendment 1 to ISO/IEC 14772-1:1997.

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INCITS/ISO/IEC 14776-414:2009 [R202x], Information technology - Small Computer System Interface (SCSI) - Part 414: SCSI Architecture Model-4 (SAM-4) (reaffirmation of INCITS/ISO/IEC 14776-414:2009 [R2015])

Defines a reference model that specifies common behaviors for SCSI devices and an abstract structure that is generic to all SCSI I/O system implementations. Defines generic requirements that pertain to SCSI implementation standards. It also defines implementation requirements. An implementation requirement specifies behavior in terms of measurable or observable parameters that apply to an implementation.

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INCITS/ISO/IEC 14888-1:2008 [R202x], Information technology - Security techniques - Digital signatures with appendix - Part 1: General (reaffirmation of INCITS/ISO/IEC 14888-1:2008 [R2015])

Specifies several digital signature mechanisms with appendix for messages of arbitrary length. This part of contains general principles and requirements for digital signatures with appendix. It also contains definitions and symbols which are used in all parts of ISO/IEC 14888. Various means are available to obtain a reliable copy of the public verification key, e.g., a public key certificate. Techniques for managing keys and certificates are outside the scope of ISO/IEC 14888.

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INCITS/ISO/IEC 15944-7:2009 [R202x], Information technology - Business Operational View - Part 7: eBusiness vocabulary (reaffirmation of INCITS/ISO/IEC 15944-7:2009 [R2015])

Provides a consolidated vocabulary of eBusiness concepts as found and defined in ISO/IEC 14662 and the existing parts of ISO/IEC 15944, namely, Parts 1, 2, 4, 5, 6 and 7 along with their associated terms. This standard provides the rules, guidelines, and procedures governing the formation of definitions for concepts relevant to eBusiness and choice of terms as a single, harmonized and integrated controlled vocabulary. This includes those governing multilingual expandability which incorporates and integrates cultural capability.

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INCITS/ISO/IEC 18014-1:2008 [R202x], Information technology - Security techniques - Time-stamping services - Part 1: Framework (reaffirmation of INCITS/ISO/IEC 18014-1:2008 [R2015])

Identifies the objective of a time-stamping authority; describes a general model on which time-stamping services are based; defines time-stamping services; and defines the basic protocols between the involved entities.

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INCITS/ISO/IEC 18014-2:2009 [R202x], Information technology - Security techniques - Time-stamping services - Part 2: Mechanisms producing independent tokens (reaffirmation of INCITS/ISO/IEC 18014-2:2009 [R2015])

Presents a general framework for the provision of time-stamping services. Time-stamping services may generate, renew, and verify time-stamp tokens. Time-stamp tokens are associations between data and points in time, and are created in a way that aims to provide evidence that the data existed at the associated date and time. In addition, the evidence may be used by non-repudiation services. This standard specifies mechanisms that generate independent time-stamps: in order to verify an independent time-stamp token, verifiers do not need access to any other time-stamp tokens. That is, time-stamp tokens are not linked, as is the case for the token types defined in ISO/IEC 18014-3.

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INCITS/ISO/IEC 18014-3:2009 [R202x], Information Technology - Security Techniques - Time-Stamping Services - Part 3: Mechanisms Producing Linked Tokens (reaffirmation of INCITS/ISO/IEC 18014-3:2009 [R2015])

This part of the standard describes a general model for time-stamping services producing linked tokens, describes the basic components used to construct a time-stamping service producing linked tokens, defines the data structures used to interact with a time-stamping service producing linked tokens, describes specific instances of time-stamping services producing linked tokens, and defines a protocol to be utilized by time-stamping services producing linked tokens for the purpose of extending linked tokens to published values.

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INCITS/ISO/IEC 19785-4:2010 [R202x], Information Technology - Common Biometric Exchange Formats Framework - Part 4: Security Block Format Specifications (reaffirmation of INCITS/ISO/IEC 19785-4:2010 [R2015])

Specifies security block formats (see ISO/IEC 19785-1) registered in accordance with ISO/IEC 19785-2 as formats defined by the CBEFF biometric organization ISO/IEC JTC 1/SC 37, and specifies their registered security block format identifiers.

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INCITS/ISO/IEC 19785-2:2006/AM 1:2010 [R202x], Information Technology - Common Biometric Exchange Formats Framework -Part 2: Procedures for the Operation of the Biometric Registration Authority - Amendment 1: Additional Registrations (reaffirmation of INCITS/ISO/IEC 19785-2:2006/AM 1:2010 [R2015])

Amendment 1 to ISO/IEC 19785-2:2006.

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INCITS/ISO/IEC 19794-2:2005/COR 1:2009 [R202x], Information technology - Biometric data interchange formats - Part 2: Finger minutiae data - Technical Corrigendum 1 (reaffirmation of INCITS/ISO/IEC 19794-2:2005/COR 1:2009 [R2015])

Technical Corrigendum 1 to ISO/IEC 19794-2:2005.

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INCITS/ISO/IEC 19794-2:2005/AM 1:2010 [R202x], Information technology - Biometric data interchange formats - Part 2: Finger minutiae data - Amendment 1: Detailed description of finger minutiae location, direction, and type (reaffirmation of INCITS/ISO/IEC 19794-2:2005/AM 1:2010 [R2015])

Amendment 1 to ISO/IEC 19794-2:2005.
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INCITS/ISO/IEC 19794-7:2007/COR 1:2009 [R202x], Information technology - Biometric data interchange formats - Part 7: Signature/sign time series data - Technical Corrigendum 1 (reaffirmation of INCITS/ISO/IEC 19794-7:2007/COR 1:2009 [R2015])

Technical Corrigendum 1 to ISO/IEC 19794-7:2007.

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INCITS/ISO/IEC 19794-11:2013/AM 1:2014 [R202x], Information technology - Biometric data interchange formats - Part 11: Signature/sign processed dynamic data - Amendment 1: Conformance test assertions (reaffirmation of INCITS/ISO/IEC 19794 -11:2013/Amd 1:2014 (2015))

Specifies a data interchange format for processed signature/sign behavioral data extracted from a time series, captured using devices such as digitizing tablets, pen-based computing devices, or advanced pen systems.

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INCITS/ISO/IEC 19794-2:2005/Amd 1:2010/Cor 2:2014 [R202x], Information technology - Biometric data interchange formats - Part 2: Finger minutiae data - Amendment 1: Detailed description of finger minutiae location, direction and type - Technical Corrigendum 2 (reaffirmation of INCITS/ISO/IEC 19794-2:2005/Amd 1:2010/Cor 2:2014 [2015])

Technical Corrigendum 2 to ISO/IEC 19794-2:2005/AM 1:2010.

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INCITS/ISO/IEC 21000-7:2007 [R202x], Information technology - Multimedia framework (MPEG-21) - Part 7: Digital Item Adaptation (reaffirmation of INCITS/ISO/IEC 21000-7:2007 [R2015])

Specifies the syntax and semantics of tools that may be used to assist the adaptation of Digital Items, i.e., the Digital Item Declaration and resources referenced by the declaration. The tools could be used to satisfy transmission, storage, and consumption constraints, as well as Quality of Service management by the various Users. It is important to emphasize that the adaptation engines themselves are non-normative tools of this part of ISO/IEC 21000.

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INCITS/ISO/IEC 23360-1:2006 [R202x], Linux Standard Base (LSB) Core Specification 3.1 - Part 1: Generic Specification (reaffirmation of INCITS/ISO/IEC 23360-1:2006 [R2015])

Defines a system interface for compiled applications and a minimal environment for support of installation scripts. Its purpose is to enable a uniform industry standard environment for high-volume applications conforming to the LSB.

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INCITS/ISO/IEC 23360-2:2006 [R202x], Linux Standard Base (LSB) Core Specification 3.1 - Part 2: Specification for IA32 Architecture (reaffirmation of INCITS/ISO/IEC 23360-2:2006 [R2015])

This standard is the IA32 architecture-specific Core part of the Linux Standard Base (LSB). It supplements the generic LSB Core module with those interfaces that differ between architectures. Interfaces described in ISO/IEC 23360-2 are mandatory except where explicitly listed otherwise. Core interfaces may be supplemented by other modules; all modules are built upon the core, ISO/IEC 23360-1.

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INCITS/ISO/IEC 23360-3:2006 [R202x], Linux Standard Base (LSB) Core Specification 3.1 - Part 3: Specification for IA64 Architecture (reaffirmation of INCITS/ISO/IEC 23360-3:2006 [R2015])

This standard is the Itanium(TM) architecture-specific Core part of the Linux Standard Base (LSB). It supplements the generic LSB Core module with those interfaces that differ between architectures. Interfaces described in ISO/IEC 23360-3 are mandatory except where explicitly listed otherwise. Core interfaces may be supplemented by other modules; all modules are built upon the core.

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INCITS/ISO/IEC 23360-4:2006 [R202x], Linux Standard Base (LSB) Core Specification 3.1 - Part 4: Specification for AMD64 Architecture (reaffirmation of INCITS/ISO/IEC 23360-4:2006 [R2015])

This standard is the AMD64 architecture-specific Core part of the Linux Standard Base (LSB). It supplements the generic LSB Core module with those interfaces that differ between architectures. Interfaces described in ISO/IEC 23360-4 are mandatory except where explicitly listed otherwise. Core interfaces may be supplemented by other modules; all modules are built upon the core.

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INCITS/ISO/IEC 23360-5:2006 [R202x], Linux Standard Base (LSB) Core Specification 3.1 - Part 5: Specification for PPC32 Architecture (reaffirmation of INCITS/ISO/IEC 23360-5:2006 [R2015])

This standard is the PPC32 architecture-specific Core part of the Linux Standard Base (LSB). It supplements the generic LSB Core module with those interfaces that differ between architectures. Interfaces described in ISO/IEC 23360-5 are mandatory except where explicitly listed otherwise. Core interfaces may be supplemented by other modules; all modules are built upon the core.

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INCITS/ISO/IEC 23360-6:2006 [R202x], Linux Standard Base (LSB) Core Specification 3.1 - Part 6: Specification for PPC64 Architecture (reaffirmation of INCITS/ISO/IEC 23360-6:2006 [R2015])

This standard is the PPC64 architecture-specific Core part of the Linux Standard Base (LSB). It supplements the generic LSB Core module with those interfaces that differ between architectures. Interfaces described in ISO/IEC 23360-6 are mandatory except where explicitly listed otherwise. Core interfaces may be supplemented by other modules; all modules are built upon the core.

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INCITS/ISO/IEC 23360-7:2006 [R202x], Linux Standard Base (LSB) Core Specification 3.1 - Part 7: Specification for S390 Architecture (reaffirmation of INCITS/ISO/IEC 23360-7:2006 [R2015])

This standard is the S390 architecture-specific Core part of the Linux Standard Base (LSB). It supplements the generic LSB Core module with those interfaces that differ between architectures. Interfaces described in ISO/IEC 23360-7 are mandatory except where explicitly listed otherwise. Core interfaces may be supplemented by other modules; all modules are built upon the core.

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INCITS/ISO/IEC 23360-8:2006 [R202x], Linux Standard Base (LSB) Core Specification 3.1 - Part 8: Specification for S390X Architecture (reaffirmation of INCITS/ISO/IEC 23360-8:2006 [R2015])

This standard is the S390X architecture-specific Core part of the Linux Standard Base (LSB). It supplements the generic LSB Core module with those interfaces that differ between architectures. Interfaces described in ISO/IEC 23360-8 are mandatory except where explicitly listed otherwise. Core interfaces may be supplemented by other modules; all modules are built upon the core.

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INCITS/ISO/IEC 24713-3:2009 [R202x], Information technology - Biometric profiles for interoperability and data interchange - Part 3: Biometrics-based verification and identification of seafarers (reaffirmation of INCITS/ISO/IEC 24713-3:2009 [R2015])

This part of ISO/IEC 24713 specifies a biometric profile including data interchange formats, system requirements, and the operation of biometric procedures on a Seafarers' Identity Document (SID). The domain of applicability can extend to other situations where an interoperable biometrics-based identity document is required, but the main focus is on the use of biometrics on a Seafarers' Identity Document (SID). This part of ISO/IEC 24713 notes that ILO Convention No. 185 already provides the overarching policy guidance on biometric verification and identification of seafarers and it relies on that guidance. Determining any matters of policy beyond those or in contradiction to those included in ILO Convention No. 185 is explicitly out of scope of this part of ISO/IEC 24713.

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INCITS/ISO/IEC 24824-1:2007 [R202x], Information technology - Generic applications of ASN.1: Fast infoset (reaffirmation of INCITS/ISO/IEC 24824-1:2007 [R2015])

Specifies an ASN.1 type (see ITU-T Rec. X.680 | ISO/IEC 8824-1) whose abstract values represent instances of the W3C XML Information Set. It also specifies binary encodings for those values, using ASN.1 Encoding Control Notation (see ITU-T Rec. X.692 | ISO/IEC 8825-3).

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INCITS/ISO/IEC 24824-2:2006 [R202x], Information technology - Generic applications of ASN.1: Fast Web Services (reaffirmation of INCITS/ISO/IEC 24824-2:2006 [R2015])

Specifies the messages and encodings that enable the use of Fast Web Services, together with the means of description of such services. The protocol used to support these services satisfies the requirements of the SOAP processing model (see W3C SOAP Part 1, clause 2) and is based on the transfer of: (a) ASN.1 SOAP messages that contain embedded ASN.1 encoded values and embedded fast infoset documents and (b) fast infoset SOAP messages.

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INCITS/ISO/IEC 24824-3:2008 [R202x], Information technology - Generic applications of ASN.1: Fast infoset security (reaffirmation of INCITS/ISO/IEC 24824-3:2008 [R2015])

Specifies four (canonical Fast Infoset) algorithms that can be used in the application of W3C XML Signature (and provides URLs for them). It also specifies application-level extensions to the W3C XML Encryption processing rules for the encryption of part of an XML infoset (see 8.1) serialized as a fast infoset document and for the decryption of an encrypted part (see 8.3) that was serialized as a fast infoset document. The use of any resulting W3C XML Signature information items or W3C XML Encryption information items is not within the scope of this Recommendation | International Standard.

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INCITS/ISO/IEC 29109-1:2009 [R202x], Information technology - Conformance testing methodology for biometric data interchange formats defined in ISO/IEC 19794 - Part 1: Generalized conformance testing methodology (reaffirmation of INCITS/ISO/IEC 29109 -1:2009 [R2015])

Defines the concepts of conformance testing for biometric data interchange formats and defines a general conformance testing framework. It specifies common (modality-neutral) elements of the testing methodology, such as test methods and procedures, implementation conformance claim, and test results reporting. It also provides the assertion language definition and sets forth other testing and reporting requirements, and outlines other aspects of the conformance testing methodology that are generally applicable and not modality-specific.

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INCITS/ISO/IEC 29109-2:2010 [R202x], Information technology - Conformance testing methodology for biometric data interchange formats defined in ISO/IEC 19794 - Part 2: Finger minutiae data (reaffirmation of INCITS/ISO/IEC 29109-2:2010 [R2015])

Specifies elements of conformance testing methodology, test assertions, and test procedures as applicable to the biometric data interchange format standard relating to finger minutiae data (i.e., ISO/IEC 19794-2).

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INCITS/ISO/IEC 29109-4:2010 [R202x], Information technology - Conformance testing methodology for biometric data interchange formats defined in ISO/IEC 19794 - Part 4: Finger image data (reaffirmation of INCITS/ISO/IEC 29109-4:2010 [R2015])

Specifies elements of conformance testing methodology, test assertions, and test procedures as applicable to ISO/IEC 19794-4.

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INCITS/ISO/IEC 2382:2015 [R202x], Information technology - Vocabulary (reaffirmation of INCITS/ISO/IEC 2382:2015 [2015])

Terms and definitions.

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INCITS/ISO/IEC 9496:2003 [R202x], CHILL - The ITU-T Programming Language (reaffirmation of INCITS/ISO/IEC 9496:2003 [R2015])

Defines the ITU-T programming language CHILL. CHILL is a strongly typed, block-structured, and object-oriented language designed primarily for the implementation of large and complex embedded systems. CHILL was designed to provide reliability and run-time efficiency, at the same time sufficient flexibility and powerfulness to encompass the required range of applications. CHILL also provides facilities that encourage piecewise and modular development of large systems.

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INCITS/ISO/IEC 10747:1994 [R202x], Information technology - Telecommunications and information exchange between systems - Protocol for exchange of inter-domain routeing information among intermediate systems to support forwarding of ISO 8473 PDUs (reaffirmation of INCITS/ISO/IEC 10747:1994 [R2015])

Specifies a protocol to be used by boundary intermediate systems to acquire and maintain information for the purpose of routeing NPDUs between different routeing domains. Lays down the procedures for the exchange of inter-domain reachability and path information between BISs, the procedures for maintaining inter-domain routeing information bases within a BIS, the encoding of protocol data units used to distribute inter-domain routeing information between BISs, the functional requirements for implementations that claim conformance to this standard. The protocol described operates at the level of individual routeing domains. Does not cover the establishment of administrative domains.

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INCITS/ISO/IEC 14977:1996 [R202x], Information Technology - Syntactic Metalanguage - Extended BNF (reaffirmation of INCITS/ISO/IEC 14977:1996 [R2015])

Defines a notation, Extended BNF, for specifying the syntax of a linear sequence of symbols. It defines both the logical structure of the notation and its graphical representation.

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INCITS/ISO/IEC 15145:1997 [R202x], Information technology Programming languages - FORTH (reaffirmation of INCITS/ISO/IEC 15145:1997 [R2015])

Specifies an interface between a Forth System and a Forth Program by defining the words provided by a Standard System. Specifies the forms that a program written in the Forth language may take; the rules for interpreting the meaning of a program and its data.

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INCITS/ISO/IEC 16509:1999 [R202x], Information technology - Year 2000 terminology (reaffirmation of INCITS/ISO/IEC 16509:1999 [R2015])

Identifies terms and concepts pertinent to the resolution of the Year 2000 issue, including the rollover from the year 1999 to 2000, incorrect recognition of leap years, and values in date fields used for non-date purposes, and provides definitions of these terms and descriptions of these concepts. This standard does not specifically address operating system anomalies such as might occur in the year 2038.

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INCITS/ISO/IEC 18026:2009 [R202x], Information Technology - Spatial Reference Model (SRM) (reaffirmation of INCITS/ISO/IEC 18026:2009 [R2015])

Specifies the Spatial Reference Model (SRM) defining relevant aspects of spatial positioning and related information processing. The SRM allows precise and unambiguous specification of geometric properties such as position (location), direction, and distance. The SRM addresses the needs of a broad community of users, who have a range of accuracy and performance requirements in computationally intensive applications. Aspects of this standard apply to, but are not limited to: (1) mapping, charting, geodesy, and imagery; (2) topography; (3) location-based services; (4)oceanography; (5) meteorology and climatology; (6) interplanetary and planetary sciences; (7) embedded systems; and (8) modelling and simulation.

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INCITS/ISO/IEC 18092:2013 [R202x], Information Technology - Telecommunications and Information Exchange between Systems - Near Field Communication - Interface and Protocol (NFCIP-1) (reaffirmation of INCITS/ISO/IEC 18092:2013 [2015])

Defines communication modes for Near Field Communication Interface and Protocol (NFCIP-1) using inductive coupled devices operating at the center frequency of 13,56 MHz for interconnection of computer peripherals. It also defines both the Active and the Passive communication modes of Near Field Communication Interface and Protocol (NFCIP-1) to realize a communication network using Near Field Communication devices for networked products and also for consumer equipment. Specifies, in particular, modulation schemes, codings, transfer speeds, and frame format of the RF interface, as well as initialization schemes and conditions required for data collision control during initialization. Defines a transport protocol including protocol activation and data exchange methods.

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INCITS/ISO/IEC 21481:2012 [R202x], Information technology - Telecommunications and information exchange between systems - Near Field Communication Interface and Protocol -2 (NFCIP-2) (reaffirmation of INCITS/ISO/IEC 21481:2012 [2015])

ISO/IEC 18092, ISO/IEC 14443 and ISO/IEC 15693 specify the radio frequency signal interface, initialization, anti-collision and protocols for wireless interconnection of closely coupled devices and access to contactless integrated circuit cards operating at 13,56 MHz. This Standard specifies the communication mode selection mechanism, designed not to disturb any ongoing communication at 13,56 MHz, for devices implementing ISO/IEC 18092, ISO/IEC 14443, or ISO/IEC 15693. This Standard requires implementations to enter the selected communication mode as specified in the respective Standard. The communication mode specifications, however, are outside the scope of this Standard.

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INCITS/ISO/IEC 22536:2013 [R202x], Information technology - Telecommunications and information exchange between systems -Near Field Communication Interface and Protocol (NFCIP-1) - RF interface test methods (reaffirmation of INCITS/ISO/IEC 22536:2013 [2015])

This standard is part of a suite of standards that specify tests for ISO/IEC 18092. It defines test methods for the RF-interface. This standard specifies RF-test methods for NFCIP-1 devices with antennas fitting within the rectangular area of 50 mm by 40 mm. This test standard, the first of two parts, specifies compliance tests for the RF interface of ISO/IEC 18092 devices. The companion test standard ISO/IEC 23917 specifies protocol tests for ISO/IEC 18092.

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INCITS/ISO/IEC 22537:2006 [R202x], Information technology - ECMAScript for XML (E4X) specification (reaffirmation of INCITS/ISO/IEC 22537:2006 [R2015])

Defines the syntax and semantics of ECMAScript for XML (E4X), a set of programming language extensions adding native XML support to ECMAScript.

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INCITS/ISO/IEC 23917:2005 [R202x], Information technology - Telecommunications and information exchange between systems - NFCIP-1 - Protocol test methods (reaffirmation of INCITS/ISO/IEC 23917:2005 [R2015])

Specifies protocol test methods for ISO/IEC 18092 in addition to those specified in ISO/IEC 22536.

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INCITS/ISO/IEC 24747:2009 [R202x], Information technology - Programming languages, their environments and system software interfaces - Extensions to the C library to support mathematical special functions (reaffirmation of INCITS/ISO/IEC 24747:2009 [R2015])

Defines extensions to the C Standard Library that is defined in the International Standard for the C programming language (ISO/IEC 9899). Unless otherwise specified, the whole of the C Standard Library is included in ISO/IEC 24747:2009 by reference.

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INCITS/ISO/IEC 25436:2006 [R202x], Information technology - Eiffel: Analysis, Design and Programming Language (reaffirmation of INCITS/ISO/IEC 25436:2006 [R2015])

Provides the full reference for the Eiffel language. Eiffel is a method of software construction and a language applicable to the analysis, design, implementation, and maintenance of software systems. ISO/IEC 25436:2006 covers only the language, with an emphasis on the implementation aspects.

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INCITS/ISO/IEC 28361:2007 [R202x], Information technology - Telecommunications and information exchange between systems - Near Field Communication Wired Interface (NFC-WI) (reaffirmation of INCITS/ISO/IEC 28361:2007 [R2015])

Specifies the digital wire interface between a Transceiver and a Front-end. The specification includes the signal wires, binary signals, the state diagrams and the bit encodings for three data rates.

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INCITS/ISO/IEC 29141:2009 [R202x], Information technology - Biometrics - Tenprint capture using biometric application programming interface (BioAPI) (reaffirmation of INCITS/ISO/IEC 29141:2009 [R2015])

Specifies requirements for the use of ISO/IEC 19784-1, as amended by ISO/IEC 19784-1/Amd. 1 (BioAPI) for the purpose of performing a tenprint capture operation. It specifies a BDB format that is used to interact with a BioAPI framework (and hence with BSPs) to support an application wishing to perform a tenprint capture. It specifies a capture control block and a capture output block that conforming BSPs are required to support if they conform to this Standard.

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INCITS/ISO/IEC 10747:1994/AM 1:1996 [R202x], Information technology - Telecommunications and information exchange between systems - Protocol for exchange of inter-domain routeing information among intermediate systems to support forwarding of ISO 8473 PDUs - Amendment 1: Implementation conformance statement proformas (reaffirmation of INCITS/ISO/IEC 10747:1994/AM 1:1996 [R2015])

Amendment 1 to ISO/IEC 10747:1994.

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INCITS/ISO/IEC 26300:2006/COR 3:2014 [R202x], Information technology - Open Document for Office Applications (OpenDocument) v1.0 - Technical Corrigendum 3 (reaffirmation of INCITS/ISO/IEC 26300:2006/COR 3:2014 [2015])

Technical Corrigendum 3 to ISO/IEC 26300:2006.

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INCITS/ISO/IEC 26300:2006/AM 1:2012/COR 1:2014 [R202x], Information technology - Open Document Format for Office Applications (OpenDocument) v1.0 - Amendment 1: Open Document Format for Office Applications (OpenDocument) v1.1 - Technical Corrigendum 1 (reaffirmation of INCITS/ISO/IEC 26300:2006/Amd 1:2012/Cor 1:2014 [2015])

Technical Corrigendum 1 to ISO/IEC 26300:2006/AM 1:2012.

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INCITS 461-2010 [S202x], Information technology - Fibre Channel - Switch Fabric - 5 (FC-SW-5) (stabilized maintenance of INCITS 461-2010 [R2015])

Describes the operation and interaction of Fibre Channel Switches. This standard includes: (a) E_Port Operation and Fabric Configuration; (b) Path selection (FSPF); (c) Bridge Port (B_Port) operation; (d) Distributed server interaction and communication; (e) Exchange of information between Switches to support zoning; (f) Distribution of event notifications between Switches; (g) Virtual fabrics switch support; (h) Enhanced commit service; and (i) Virtual channels.

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INCITS 462-2010 [S202x], Information Technology - Fibre Channel - Backbone - 5 (FC-BB-5) (stabilized maintenance of INCITS 462 -2010 [R2015])

This standard consists of distinct Fibre Channel mappings resulting in the following models FC-BBIP (FC over TCP/IP backbone network) and Transparent FC-BB consisting of: FC-BBGFPT (FC over SONET/SDH/OTN/PDH backbone network using GFPT adaptation), FC-BBPW (FC over MPLS network using PW adaptation), and FC-BBE (FC over Ethernet).

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INCITS 463-2010 [S202x], Information Technology - Fibre Channel - Generic Services - 6 (FC-GS-6) (stabilized maintenance of INCITS 463-2010 [R2015])

This standard describes in detail the services accessed by well-known addresses defined in FC-FS-3. Generic Services described in this document are: (a) Directory Service; (b) Management Service; and (c) Event Service. In addition, to the aforementioned Generic Services, the Common Transport (CT) protocol is described. The Common Transport service provides a common FC-4 for use by Generic Services.

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INCITS 464-2010 [S202x], Information Technology - Information Management - Extensible Access Method (XAM) (stabilized maintenance of INCITS 464-2010 [R2015])

This part of the XAM standard is a normative specification of the general architecture and semantics of the XAM API. It applies to programmers who are generating XAM applications in any programming language. It also applies to storage system vendors who are creating vendor interface modules (VIMs). This document uses an object model to describe syntax in examples; these examples are informative only. It is not a normative specification of the syntax of the XAM C API Specification [XAM-C-API]. The normative specification of the syntax of the Java language binding is defined in the XAM Java API Specification [XAM-JAVA-API].

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INCITS/ISO 5654-1:1984 [S202x], Information processing - Data interchange on 200 mm (8 in) flexible disk cartridges using twofrequency recording at 13 262 ftprad, 1,9 tpmm (48 tpi), on one side - Part 1: Dimensional, physical and magnetic characteristics (stabilized maintenance of INCITS/ISO 5654-1:1984 [R2015])

This Standard Defines dimensional, physical, and magnetic characteristics of the 200-mm (8-in) flexible disk cartridges using a twofrequency recording at 13 262 ftprad on one side so as to provide physical interchangeability between data processing systems.

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INCITS/ISO 6596-1:1985 [S202x], Information processing - Data interchange on 130 mm (5.25 in) flexible disk cartridges using twofrequency recording at 7 958 ftprad, 1.9 tpmm (48 tpi), on one side - Part 1: Dimensional, physical, and magnetic characteristics (stabilized maintenance of INCITS/ISO 6596-1:1985 [R2015])

This Standard shows dimensional, physical, and magnetic characteristics of 130 mm (5.25 in) flexible disk cartridges recorded at 7 958 ftprad on one side using two frequency so as to provide physical interchangeability between data processing systems. Applicable in conformance with ISO 646, 2022, 4873, and 7665.

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INCITS/ISO 8630-1:1987 [S202x], Info processing-Data interchange on 130 mm (5.25 in) flexible disk cartridges using modified frequency modulation recording at 13 262 ftprad, on 80 tracks on each side - Part 1: Dimensional, physical, and magnetic characteristics (stabilized maintenance of INCITS/ISO 8630-1:1987 [R2015])

This standard defines the dimensional, physical, and magnetic characteristics of the cartridge so as to provide physical interchangeability between data processing systems. Provides for full data interchange between data processing systems and provides an alternative method of full data interchange between data processing systems. To be used in compliance with ISO 646; ISO 2022; ISO 4873; ISO 6429; ISO 7665; ISO 9293.

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INCITS/ISO 3562:1976 [S202x], Information processing - Interchangeable magnetic single-disk cartridge (top loaded) - Physical and magnetic characteristics (stabilized maintenance of INCITS/ISO 3562:1976 [R2015])

Includes the general, physical, and magnetic characteristics for the interchange of magnetic single-disk cartridges (top loaded) in order to facilitate the interchange of data between electronic data-processing systems.

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INCITS/ISO/IEC 7065-1:1985 [S202x], Info processing - Data interchange on 200 mm (8 in) flexible disk cartridges using modified frequency modulation recording,13 262 ftprad, 1,9 tpmm (48 tpi), both sides - Part 1: Dimensional, physical and magnetic characteristics (stabilized maintenance of INCITS/ISO/IEC 7065-1:1985 [R2015])

This Standard contains the dimensional, physical, and magnetic characteristics of 200-mm (8-in) flexible disk cartridges recording at 13 262 ftprad, 1.9 tpmm (48 tpi), on both sides using modified frequency modulation recording. Together with the labelling scheme specified in ISO 7665, ISO 7065/1 and /2 provide for full data interchange between data processing systems. Provides physical interchangeability between data processing systems.

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INCITS/ISO/IEC 7487-1:1993 [S202x], Information technology - Data interchange on 130 mm (5,25 in) flexible disk cartridges using modified frequency modulation recording at 7 958 ftprad, 1,9 tpmm (48 tpi), on both sides - ISO type 202 - Part 1: Dimensional, physical and magnetic characteristics (stabilized maintenance of INCITS/ISO/IEC 7487-1:1993 [R2015])

Specifies the dimensional (environment and transportation, dimension of jacket, liner and disk), physical (inflammability, coefficient of linear thermal expansion, coefficient of linear hygroscopic expansion, opacity, torque) and magnetic (track geometry, functional testing) characteristics and requirements of the cartridge so as to provide physical interchangeability between data processing systems.

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INCITS/ISO/IEC 8860-1:1987 [S202x], Information Processing - Data Interchange on 90 mm (3.5 In) Flexible Disk Cartridges Using Modified Frequency Modulation Recording at 7 958 ftprad on 80 Tracks on Each Side - Part 1: Dimensional, Physical and Magnetic Characteristics (stabilized maintenance of INCITS/ISO/IEC 8860-1:1987 [R2015])

This standard provides the dimensional, physical, and magnetic characteristics of the cartridge so as to provide physical interchangeability between data processing systems. Provides for full data interchangeability between data processing systems in conjunction with the ISO standards 8860-2 and 9293, and applies, moreover, in conjunction with ISO 683-13.

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INCITS/ISO/IEC 9529-1:1989 [S202x], Information Processing Systems - Data Interchange on 90 mm (3,5 In) Flexible Disk Cartridges Using Modified Frequency Modulation Recording at 15 916 ftprad, on 80 Tracks on Each Side - Part 1: Dimensional, Physical and Magnetic Characteristics (stabilized maintenance of INCITS/ISO/IEC 9529-1:1989 [R2015])

Specifies the dimensional, physical and magnetic characteristics of the 90-mm (3.5-in) flexible disk cartridge using modified frequency modulation recording at 15 916 ftprad on 80 tracks on each side, so as to provide physical interchangeability between data processing systems.

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INCITS/ISO/IEC 19757-4:2006/COR 1:2008 [S202x], Information Technology - Document Schema Definition Languages (DSDL) - Part 4: Namespace-based Validation Dispatching Language (NVDL) - Technical Corrigendum 1 (stabilized maintenance of INCITS/ISO/IEC 19757-4:2006/COR 1:2008 [R2015])

Technical Corrigendum 1 to ISO/IEC 19757-4:2006.

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INCITS/ISO/IEC 19796-3:2009 [S202x], Information Technology - Learning, Education and Training - Quality Management, Assurance and Metrics - Part 3: Reference Methods and Metrics (stabilized maintenance of INCITS/ISO/IEC 19796-3:2009 [R2015])

This part of ISO/IEC 19796 extends the reference framework for the description of quality approaches (RFDQ) defined in ISO/IEC 19796-1 by providing a harmonized description of the methods and metrics required to implement quality management and quality assurance systems for stakeholders designing, developing, or utilizing information technology systems used for learning, education, and training.

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INCITS/ISO/IEC 3561:1976 [S202x], Information processing - Interchangeable magnetic six-disk pack - Track format (stabilized maintenance of INCITS/ISO/IEC 3561:1976 [R2015])

Specifies the track format characteristics for the six-disk pack to be used for data interchange (see ISO 2864). The 7-bit coded character set specified in ISO 646 has been adopted, though, by agreement between the interchange parties, the 7-bit or 8-bit extensions specified in ISO 2022 may be used.

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INCITS/ISO/IEC 3563:1976 [S202x], Information processing - Interchangeable magnetic single-disk cartridge (top loaded) - Track format (stabilized maintenance of INCITS/ISO/IEC 3563:1976 [R2015])

Specifies the track format characteristics for the single-disk cartridge (top loaded) to be used for data interchange (see ISO 3562). The 7-bit coded character set specified in ISO 646 has been adopted, though, by agreement between the interchange parties, the 7-bit or 8-bit code extensions specified in ISO 2022 may be used. However, it should be noted that in this International Standard plain binary numbers in 8-bit bytes are used in the control field to define the control information.

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INCITS/ISO/IEC 3564:1976 [S202x], Information processing - Interchangeable magnetic eleven-disk pack - Physical and magnetic characteristics (stabilized maintenance of INCITS/ISO/IEC 3564:1976 [R2015])

Specifies the general physical and magnetic characteristics for the physical interchange of magnetic eleven-disk packs for use in electronic data processing systems.

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INCITS/ISO/IEC 3692:1996 [S202x], Information processing - Reels and cores for 25,4 mm (1 in) perforated paper tape for information interchange - Dimensions (stabilized maintenance of INCITS/ISO/IEC 3692:1996 [R2015])

This Standard lays down the dimensions of take-up (or storage) reels with separable flanges, and of cores, so that rolls of perforated tape may be interchanged among machines of various manufacturers. It is also intended to serve as a guide in the coordination of equipment design. A compatible reel and core are described. These can be used together or either one can be used separately to transfer tape from one machine to another.

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INCITS/ISO/IEC 4337:1977 [S202x], Information processing - Interchangeable magnetic twelve-disk pack (100 Mbytes) (stabilized maintenance of INCITS/ISO/IEC 4337:1977 [R2015])

Specifies the general, physical, and magnetic characteristics and the pre-initialization for the physical interchange of 100 Mbytes magnetic twelve-disk packs, for use in electronic data processing systems.

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INCITS/ISO/IEC 5653:1980 [S202x], Information processing - Interchangeable magnetic twelve-disk pack (200 Mbytes) (stabilized maintenance of INCITS/ISO/IEC 5653:1980 [R2015])

Specifies the general, physical, and magnetic characteristics and the pre-initialization for the physical interchange of 200 Mbytes magnetic twelve-disk packs, for use in electronic data processing systems.

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INCITS/ISO/IEC 10744:1997 [S202x], Information Technology - Hypermedia/Time-Based Structuring Language (HyTime) (stabilized maintenance of INCITS/ISO/IEC 10744:1997 [R2015])

Defines a language and underlying model for the representation of "hyperdocuments" that link and synchronize static and dynamic (time-based) information contained in multiple conventional and multimedia documents and information objects. The language is known as the "Hypermedia/Time-based Structuring Language", or "HyTime". HyTime can represent time in both the abstract, or "musical" sense, and in user-defined real-time units. It also provides a way of relating the two so that elements of time-dependent documents can be synchronized.

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INCITS/ISO/IEC 10885:1993 [S202x], Information technology - 356 mm optical disk cartridge for information interchange - Write once (stabilized maintenance of INCITS/ISO/IEC 10885:1993 [R2015])

Specifies definitions of essential concepts, the environment in which the characteristics shall be tested, the environments in which the cartridge shall be operated and stored, the mechanical, physical and dimensional characteristics of the case and of the optical disk, the optical characteristics and the recording characteristics for recording the information once and for reading it many times, so as to provide physical interchangeability between data processing systems, the format for the physical disposition of the tracks and sectors, the error correction codes, the modulation methods used for recording and the quality of the recorded signals.

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INCITS/ISO/IEC 11560:1992 [S202x], Information Technology - Information Interchange on 130 mm Optical Disk Cartridges Using the Magneto-Optical Effect, for Write Once, Read Multiple Functionality (stabilized maintenance of INCITS/ISO/IEC 11560:1992 [R2015])

Specifies definitions of the essential concepts: the environment in which the characteristics are to be tested; the environments in which the cartridge is to be operated and stored; the mechanical, physical, and dimensional characteristics of the case and of the optical disk; the magneto-optical characteristics and the recording characteristics, so as to provide physical interchangeability between data-processing systems; the format for the physical disposition of the tracks and sectors; the error correction codes; the modulation method used for recording; and the quality of the recorded signals.

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INCITS/ISO/IEC 14760:1997 [S202x], Information technology - Data interchange on 90 mm overwritable and read only optical disk cartridges using phase change - Capacity: 1,3 Gbytes per cartridge (stabilized maintenance of INCITS/ISO/IEC 14760:1997 [R2015])

Specifies the characteristics of 90-mm Optical Disk Cartridges (ODCs) using the phase change technology, with a capacity of 1.3 Gbytes per cartridge. It specifies three related types of such cartridges.

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INCITS/ISO/IEC 15445:2000 [S202x], Information technology - Document description and processing languages - HyperText Markup Language (HTML) (stabilized maintenance of INCITS/ISO/IEC 15445:2000 [R2015])

This standard is a conforming application of ISO 8879, SGML. This Standard describes the way in which the HTML language specified by the certain clauses (see standard) in the W3C Recommendation for HTML 4.01 shall be used, and does so by identifying all the differences between the HTML language specified by the W3C Recommendation for HTML 4.01 and the HTML language defined by this Standard.

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INCITS/ISO/IEC 15485:1997 [S202x], Information technology - Data interchange on 120 mm optical disk cartridges using phase change PD format - Capacity: 650 Mbytes per cartridge (stabilized maintenance of INCITS/ISO/IEC 15485:1997 [R2015])

Specifies the characteristics of 120-mm Optical Disk Cartridges (ODCs) with a capacity of 650 Mbytes using Phase Change PD format. This present International Standard specifies two related, but different, implementations of such cartridges, viz. Type R/W provides for data to be written, read, and overwritten many times over the whole recording surface of the disk using the phase change recording and read-out method.

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INCITS/ISO/IEC 15498:1997 [S202x], Information technology - Data interchange on 90 mm optical disk cartridges - HS-1 format - Capacity: 650 Mbytes per cartridge (stabilized maintenance of INCITS/ISO/IEC 15498:1997 [R2015])

Specifies the characteristics of 120-mm Optical Disk Cartridges (ODCs) with a capacity of 650 Mbytes using Phase Change PD format. This present International Standard specifies two related, but different, implementations of such cartridges, viz. Type R/W provides for data to be written, read, and overwritten many times over the whole recording surface of the disk using the phase change recording and read-out method.

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INCITS/ISO/IEC 15718:1998 [S202x], Information technology - Data interchamge on 8 mm wide magnetic tape cartridge - Helical scan recording - HH-1 format (stabilized maintenance of INCITS/ISO/IEC 15718:1998 [R2015])

Specifies the physical and magnetic characteristics of an 8-mm-wide magnetic tape cartridge so as to provide physical interchange of such cartridges between drives. It also specifies the quality of the recorded signals, the recording method and the recorded format - called HH-1 format - thereby allowing for full data interchange between drives by means of such magnetic tape cartridges.

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INCITS/ISO/IEC 15895:1999 [S202x], Information technology - Data interchange on 12,7 mm 128-track magnetic tape cartridges - DLT 3-XT format (stabilized maintenance of INCITS/ISO/IEC 15895:1999 [R2015])

This Standard specifies the physical and magnetic characteristics of a 12.7 mm wide, 128-track magnetic tape cartridge, to enable physical interchangeability of such cartridges between drives. It also specifies the quality of the recorded signals, a format - called Digital Linear Tape 3 Extended (DLT 3-XT) - and a recording method, thereby allowing data interchange between drives. Together with a labelling standard (for instance, International Standard ISO 1001 for Magnetic Tape Labelling), it allows full data interchange by means of such magnetic tape cartridges.

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INCITS/ISO/IEC 15896:1999 [S202x], Information technology - Data interchange on 12,7 mm 208-track magnetic tape cartridges - DLT 5 format (stabilized maintenance of INCITS/ISO/IEC 15896:1999 [R2015])

Specifies the physical and magnetic characteristics of a 12.7 mm wide, 208-track magnetic tape cartridge, to enable physical interchangeability of such cartridges between drives. It also specifies the quality of the recorded signals, a format - called Digital Linear Tape 5 (DLT 5) - and a recording method, thereby allowing data interchange between drives. Together with a labelling standard, for instance International Standard ISO 1001 for Magnetic Tape Labelling, it allows full data interchange by means of such magnetic tape cartridges.

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INCITS/ISO/IEC 16382:2000 [S202x], Information technology - Data interchange on 12,7 mm 208-track magnetic tape cartridges - DLT 6 format (stabilized maintenance of INCITS/ISO/IEC 16382:2000 [R2015])

Specifies the physical and magnetic characteristics of a 12.7 mm wide, 208-track magnetic tape cartridge, to enable physical interchangeability of such cartridges between drives. It also specifies the quality of the recorded signals, a format - called Digital Linear Tape 6 (DLT 6) - and a recording method, thereby allowing data interchange between drives. Together with a labelling standard (for instance, International Standard ISO 1001 for Magnetic Tape Labelling), it allows full data interchange by means of such magnetic tape cartridges.

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INCITS/ISO/IEC 16824:1999 [S202x], Information technology - 120 mm DVD rewritable disk (DVD-RAM) (stabilized maintenance of INCITS/ISO/IEC 16824:1999 [R2015])

Specifies the mechanical, physical, and optical characteristics of a 120-mm optical disk to enable interchange of such disks. It specifies the quality of the recorded signals and the format of the data and the recording method, thereby allowing for information interchange by means of such disks. The data can be written, read, and overwritten many times using the phase change method. This disk is identified as DVD-RAM.

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INCITS/ISO/IEC 16825:1999 [S202x], Information technology - Case for 120 mm DVD-RAM disks (stabilized maintenance of INCITS/ISO/IEC 16825:1999 [R2015])

Specifies the characteristics of a case for use with 120-mm DVD-RAM disks as specified in Standard ECMA-ppp. The present International Standard specifies three related, but different implementations of such cases, viz. Type 1 provides a case for a onesided (Type 1S) or a two-sided (Type 2S) DVD-RAM disk such that the disk can not be removed from the case. This case is reversible. Type 2 provides a case for a one-sided DVD-RAM disk (Type 1S) such that the disk may be removed from the case. This case is not reversible. Type 3 provides a case into which a one-sided DVD-RAM disk (Type 1S) may be inserted, then used as a cartridge. This case in not reversible.

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INCITS/ISO/IEC 16969:1999 [S202x], Information technology - Data interchange on 120 mm optical disk cartridges using +RW format - Capacity: 3,0 Gbytes and 6,0 Gbytes (stabilized maintenance of INCITS/ISO/IEC 16969:1999 [R2015])

Specifies the mechanical, physical, and optical characteristics of 120-mm rewritable optical disks with capacities of 3.0 Gbytes and 6.0 Gbytes. It specifies the quality of the recorded and unrecorded signals, the format of the data and the recording method, thereby allowing for information interchange by means of such disks.

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INCITS/ISO/IEC 17342:2004 [S202x], Information Technology - 80 Mm (1,46 Gbytes Per Side) and 120 mm (4,70 Gbytes per Side) DVD Re-Recordable Disk (DVD-RW) (stabilized maintenance of INCITS/ISO/IEC 17342:2004 [R2015])

Specifies the mechanical, physical, and optical characteristics of an 80-mm and a 120-mm DVD re-recordable disk to enable the interchange of such disks. It specifies the quality of the pre-recorded, unrecorded, and recorded signals: the format of the data, the format of the information zone, the format of the unrecorded zone, and the recording method, thereby allowing for information interchange by means of such disks.

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INCITS/ISO/IEC 17346:2005 [S202x], Information Technology - Data Interchange on 90 mm Optical Disk Cartridges - Capacity: 1,3 Gbytes per Cartridge (stabilized maintenance of INCITS/ISO/IEC 17346:2005 [R2015])

This standard defines the characteristics of 90-mm Optical Disk Cartridges (ODC) with a capacity of 1.3 GB per cartridge. It specifies only Type R/W for 2 048-byte sectors of such cartridges.

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INCITS/ISO/IEC 17592:2004 [S202x], Information technology - 120 mm (4,7 Gbytes per side) and 80 mm (1,46 Gbytes per side) DVD rewritable disk (DVD-RAM) (stabilized maintenance of INCITS/ISO/IEC 17592:2004 [R2015])

Specifies the mechanical, physical, and optical characteristics of an optical disk, identified as DVD Rewritable Disk (DVD-RAM), to enable interchange of such disks. It specifies the quality of the recorded signals, the format of the data and the recording method, thereby allowing for information interchange by means of such disks. The data can be written, read, and overwritten many times using the phase change method. Two types are specified that differ only by their diameter of 120 mm and 80 mm, and the resulting difference of capacity.

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INCITS/ISO/IEC 17594:2004 [S202x], Information technology - Cases for 120 mm and 80 mm DVD-RAM disks (stabilized maintenance of INCITS/ISO/IEC 17594:2004 [R2015])

Specifies the characteristics of a case for use with the 120-mm and 80-mm DVD-RAM disks specified in ISO/IEC 17592. ISO/IEC 17594:2004 specifies nine related, but different implementations of this case. This standard specifies: the environments in which the cases are to be operated and stored, and the dimensional and mechanical characteristics of the case, so as to provide mechanical interchangeability between data processing systems. This standard provides for mechanical interchange between optical disk drives. Together with ISO/IEC 17592 for 120 mm (4,7 Gbytes per side) and 80 mm (1,46 Gbytes per side) DVD-RAM disks and a standard for volume and file structure, it provides for full data interchange between data processing systems.

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INCITS/ISO/IEC 17913:2000 [S202x], Information Technology - 12,7mm 128-Track Magnetic Tape Cartridge for Information Interchange - Parallel Serpentine Format (stabilized maintenance of INCITS/ISO/IEC 17913:2000 [R2015])

Specifies the physical and magnetic characteristics of a magnetic tape cartridge, using a magnetic tape 12,7 mm wide, so as to provide physical interchange of such cartridges between drives. It also specifies the quality of the recorded signals, the recording method and the recorded format known as Parallel Serpentine, thereby allowing data interchange between drives by means of such cartridges. The format supports variable-length Logical Records, high-speed search, and the use of the algorithm for data compression specified in ISO/IEC 15200.

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INCITS/ISO/IEC 22533:2005 [S202x], Information Technology - Data Interchange on 90 mm Optical Disk Cartridges - Capacity: 2,3 Gbytes per Cartridge (stabilized maintenance of INCITS/ISO/IEC 22533:2005 [R2015])

This Standard defines the characteristics of 90-mm Optical Disk Cartridges (ODC) with a capacity of 2,3 GB per cartridge. The Standard specifies only Type R/W for 2 048-byte sectors of such cartridge. Type R/W provides for data to be written, read and erased many times over the entire recording surface of the disk using the thermo-magnetic and magneto-optical effects. It is also referred to as "fully rewritable". This International Standard provides for 2 048-byte sectors only. All sectors on a disk are of the same size.

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INCITS/ISO/IEC 23912:2005 [S202x], Information Technology - 80 mm (1,46 Gbytes per Side) and 120 mm (4,70 Gbytes per Side) DVD Recordable Disk (DVD-R) (stabilized maintenance of INCITS/ISO/IEC 23912:2005 [R2015])

Specifies the mechanical, physical, and optical characteristics of an 80-mm and a 120-mm DVD Recordable disk to enable the interchange of such disks. It specifies the quality of the pre-recorded, unrecorded, and recorded signals; the format of the data; the format of the information zone; the format of the unrecorded zone; and the recording method, thereby allowing for information interchange by means of such disks. This disk is identified as a DVD Recordable (DVD-R) disk.

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INCITS/ISO/IEC 25435:2006 [S202x], Data Interchange on 60 mm Read-Only ODC - Capacity: 1,8 Gbytes (UMDTM) (stabilized maintenance of INCITS/ISO/IEC 25435:2006 [R2015])

Specifies the mechanical, physical, and optical characteristics of a 60-mm, read-only ODC having a maximum capacity of 1,8 Gbytes. It specifies the physical format, the quality of the recorded signals, the format of the data, and its modulation method, thereby allowing for information interchange by means of such ODCs. This standard specifies two types of ODCs, Type A and Type B:

Type A: Single-layer disk with maximum recorded capacity of 0,9 G-bytes; Type B: Dual-layer disk with maximum recorded capacity of 1,8 G-bytes.

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INCITS/ISO/IEC 29171:2009 [S202x], Information technology - Digitally recorded media for information interchange and storage - Information versatile disk for removable usage (iVDR) cartridge (stabilized maintenance of INCITS/ISO/IEC 29171:2009 [R2015])

Specifies the dimensional, mechanical, and physical characteristics of an information Versatile Disk for Removable usage (iVDR) cartridge to enable mechanical interchangeability between data processing systems. An iVDR cartridge can contain hard-disk drive technology or other suitable storage technologies. This standard specifies the environment in which iVDR cartridges are to be operated and stored and specifies the dimensions and pin assignments of a connector employed by iVDR cartridges to enable data interchange. Together with ISO/IEC 24739-3 and a standard for volume and file structure, ISO/IEC 29171 enables full data interchange between data processing systems.

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INCITS/ISO/IEC 8879:1986/AM 1:1988 [S202x], Information Processing - Text and Office Systems - Standard Generalized Markup Language (SGML) - Amendment 1 (stabilized maintenance of INCITS/ISO/IEC 8879:1986/AM 1:1988 [R2015])

Amendment 1 to ISO/IEC 8879:1986.

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INCITS/ISO/IEC 8879:1986/COR 1:1996 [S202x], Information Processing - Text and Office Systems - Standard Generalized Markup Language (SGML) - Technical Corrigendum 1 (stabilized maintenance of INCITS/ISO/IEC 8879:1986/COR 1:1996 [R2015])

Technical corrigendum 1 to ISO/IEC 8879:1986.

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INCITS/ISO/IEC 8879:1986/COR 2:1999 [S202x], Information Processing - Text and Office Systems - Standard Generalized Markup Language (SGML) - Technical Corrigendum 2 (stabilized maintenance of INCITS/ISO/IEC 8879:1986/COR 2:1999 [R2015])

Technical corrigendum 2 to ISO/IEC 8879:1986.

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INCITS/ISO/IEC 10036:1996/COR 1:2001 [S202x], Information Technology - Font Information Interchange - Procedures for Registration of Font-Related Identifiers - Technical Corrigendum 1 (stabilized maintenance of INCITS/ISO/IEC 10036:1996/COR 1:2001 [R2015])

Technical corrigendum 1 to ISO/IEC 10036:1996.

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INCITS/ISO/IEC 10036:1996/COR 2:2002 [S202x], Information Technology - Font Information Interchange - Procedures for Registration of Font-Related Identifiers - Technical Corrigendum 2 (stabilized maintenance of INCITS/ISO/IEC 10036:1996/COR 2:2002 [R2015])

Technical corrigendum 2 to ISO/IEC 10036:1996.

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INCITS/ISO/IEC 10179:1996/COR 1:2001 [S202x], Information Technology - Processing Languages - Document Style Semantics and Specification Language (DSSSL) - Technical Corrigendum 1 (stabilized maintenance of INCITS/ISO/IEC 10179:1996/COR 1:2001 [R2015])

Technical corrigendum 1 to ISO/IEC 10179:1996.

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INCITS/ISO/IEC 10179:1996/AM 2:2005 [S202x], Information Technology - Processing Languages - Document Style Semantics and Specification Language (DSSSL) - Amendment 2 (stabilized maintenance of INCITS/ISO/IEC 10179:1996/AM 2:2005 [R2015])

Amendment 2 to ISO/IEC 10179:1996.

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INCITS/ISO/IEC 10180:1995/COR 1:2001 [S202x], Information Technology - Processing Languages - Standard Page Description Language (SPDL) - Technical Corrigendum 1 (stabilized maintenance of INCITS/ISO/IEC 10180:1995/COR 1:2001 [R2015])

Technical corrigendum 1 to ISO/IEC 10180:1995.

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INCITS/ISO 8378-3-1986 [S2018], Information Processing - Data Interchange on 130 mm (5.25 in) Flexible Disk Cartridges Using Modified Frequency Modulation Recording at 7 958 ftprad, 3,8 tpmm (96 tpi), on Both Sides - Part 3: Track Format B (withdrawal of INCITS/ISO 8378-3-1986 [S2018])

Specifies the quality of recorded signals, the track layout, and a track format to be used on 130-mm (5.25-in) flexible disk cartridges intended for data interchange between data processing systems.

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INCITS/ISO 19111-2:2009 [2015], Geographic information - Spatial referencing by coordinates - Part 2: Extension for parametric values (withdrawal of INCITS/ISO 19111-2:2009 [2015])

Specifies the conceptual schema for the description of spatial referencing using parametric values or functions. It applies the schema of ISO 19111 to combine a position referenced by coordinates with a parametric value to form a spatio-parametric coordinate reference system (CRS). The spatio-parametric CRS can optionally be extended to include time. The intended users of ISO 19111-2:2009 are producers and users of environmental information. Parameters which are attributes of spatial locations or features, but which are not involved in their spatial referencing, are not addressed by ISO 19111-2:2009.

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INCITS/ISO/IEC 8378-1:1986 [R2015], Information Processing - Data Interchange on 130 mm (5.25 in) Flexible Disk Cartridges Using Modified Frequency Modulation Recording at 7 958 ftprad, 3,8 tpmm (96 Tpi), on Both Sides - Part 1: Dimensional, Physical and Magnetic Characteristics (withdrawal of INCITS/ISO/IEC 8378-1:1986 [R2015])

Provides the dimensional, physical, and magnetic characteristics of 130 mm (5.25 in) flexible disk cartridges for data interchange between EDP systems with modified frequency modulation recording on 80 tracks on each side and recorded at 7 958 ftprad, 3,8 tpmm (96 tpi). Applicable in conjunction with ISO 8378 and ISO 8378/2 or 8378/3.

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INCITS/ISO/IEC 27004:2009 [2015], Information technology - Security techniques - Information security management - Measurement (withdrawal of INCITS/ISO/IEC 27004:2009 [2015])

Provides guidance on the development and use of measures and measurement in order to assess the effectiveness of an implemented information security management system (ISMS) and controls or groups of controls, as specified in ISO/IEC 27001. ISO/IEC 27004:2009 is applicable to all types and sizes of organization.

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New National Adoption

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BSR/UL 12402-9-202X, Standard for Personal Flotation Devices - Part 9: Test Methods (national adoption of ISO 12402-9:2006 with modifications and revision of ANSI/UL 12402-9-2015)

UL proposes the following changes to UL 12402-9: Adult Subject Selection Criteria, Buoyancy Distribution Test Method, Pamphlet Attachment Strength Test, Inflation Options for Inflatable Mechanical Properties Tests, Rear Pocket Testing Requirements for Adult Buoyancy Aids, and Revisions to Test of the Resistance to Inadvertent Inflation.

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Revision

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BSR/UL 330-202x, Standard for Hose and Hose Assemblies for Dispensing Flammable Liquids (revision of ANSI/UL 330-2019)

The following is being proposed: Joint Standard for Hose and Hose Assemblies for Dispensing Flammable Liquids, Bi-National Standard UL 330, using ANSI/UL 330:2019 and CAN/ULC-S612:2016, Standard for Hose and Hose Assemblies for Flammable and Combustible Liquids.

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BSR/UL 2900-2-1-202X, Standard for Software Cybersecurity for Network-Connectable Products - Part 2-1: Particular Requirements for Network Connectable Components of Healthcare and Wellness Systems (revision of ANSI/UL 2900-2-1-2020)

Proposals to clarify and update to UL 2900-2-1 and the addition of an Informational Annex to provide rationale for the requirements in UL 2900-2-1.

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Revision

TR 51-2020, Levies Companion Document Uniform Adoption of X9.129 for Levies Version 3.0 (revision of a technical report)

The purpose of the Levies Companion Document (LCD) is to formalize an industry standard for exchange of legal orders using the ANSI X9.129 standard format and a compilation of industry norms. This Levies Companion Document is not intended to replace the ANSI X9.129 standard, but rather to clarify how financial institutions and agencies should use the standard to ensure all necessary and appropriate levies and asset-based orders are exchanged between financial institutions and/or agencies. The use of this document requires that all legal orders exchange participants obtain, use, and adhere to the record and field usage definitions detailed in the ANSI X9.129 standard. Users of this document are required to review and be knowledgeable of the full standard to ensure file structure and data and field specifications are understood and used correctly. This document further defines the specific usage of the ANSI X9.129 standard and describes all of the records and fields which contain critical data. Based on this usage, it is reasonable to expect that exchange participants will implement file validation practices to ensure that all critical data is contained in legal order exchange files. If a file contains records or fields of critical data that do not conform to the usage practices detailed in the standard it is reasonable to expect the receiving institution or agency will reject the item or file back to the sending institution or agency as the order(s) contained in the file may be unusable/unprocessable. Conversely, if a record or field which does not contain critical data is populated with incomplete, erroneous, or invalid data, it is reasonable to expect these files or items would be accepted and processed.

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Project Withdrawn

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

ASTM (ASTM International)

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

BSR/ASTM F2435-202x, Specification for Steel Reinforced Polyethylene (PE) Corrugated Pipe (revision of ANSI/ASTM F2435-2015)

http://www.astm.org/ANSI_SA.

Inquiries may be directed to Corice Leonard, (610) 832-9744, accreditation@astm.org

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ICC (International Code Council)

4051 Flossmoor Road, Country Club Hills, IL 60478 ph: (888) 422-7233 www.iccsafe.org

BSR/ICC 1400-202x, Standard for Remote Virtual Inspections (RVI) (new standard)

As an ANSI-accredited SDO, ICC is developing a comprehensive standard to provide guidance to the Authority Having Jurisdiction (AHJ) when implementing Remote Virtual Inspection (RVI) Programs. This standard will specifically address items related to the preparation and conduct of these types of inspections that view and discuss construction activities with others remotely. Inquiries may be directed to Karl Aittaniemi, (888) 422-7233, kaittaniemi@iccsafe.org

inquines may be directed to Kan Artaniem, (888) 422-7255, Kartaniem @rccsale.org

Notice of Withdrawn ANS by an ANSI-Accredited Standards Developer

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

APTech (ASC CGATS) (Association for Print Technologies)

1896 Preston White Drive, Reston, VA 20191 ph: (703) 264-7200 www.printtechnologies.org

ANSI IT8.7/1-1993 (R2013), Graphic technology - Color transmission target for input scanner calibration

Questions may be directed to: Debra Orf, (703) 264-7200, dorf@aptech.org

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

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

ANSI/ASTM F2435-2015, Specification for Steel Reinforced Polyethylene (PE) Corrugated Pipe

Questions may be directed to: Corice Leonard, (610) 832-9744, accreditation@astm.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.

AAMI (Association for the Advancement of Medical Instrumentation)

Contact: Wil Vargas

901 N. Glebe Road, Suite 300 Arlington, VA 22203 p: (703) 647-2779 e: wvargas@aami.org

BSR/AAMI 2700-2-1-202x, Medical Devices and Medical Systems - Essential Safety and Performance Requirements for Equipment Comprising the Patient-centric Integrated Clinical Environment (ICE) - Part 2-1: Particular Requirements or Forensic Data Logging (new standard)

ABMA (ASC B3) (American Bearing Manufacturers Association)

Contact: Amir Aboutaleb 1001 N. Fairfax Street, Suite 500 Alexandria, VA 22314 p: (703) 838-0053 e: aboutaleb@agma.org

- BSR ABMA 9-2015 (R202x), Load Ratings and Fatigue Life for Ball Bearings (reaffirmation of ANSI ABMA 9-2015)
- BSR/ABMA 10A-2001 (R202x), Metal Balls for Unground Bearings and Other Uses (reaffirmation of ANSI/ABMA 10A -2001 (R2015))

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

Contact: Karl Best

2311 Wilson Boulevard, Suite 400 Arlington, VA 22201-3001 p: (703) 293-4887 e: kbest@ahrinet.org

BSR/AHRI Standard 210/240-202x, Performance Rating of Unitary Air-Conditioning and Air-Source Heat Pump Equipment (revision of ANSI/AHRI Standard 210/240-2008 with Addenda 1 and 2-2011)

ASA (ASC S3) (Acoustical Society of America)

Contact: Nancy Blair-DeLeon 1305 Walt Whitman Road, Suite 300 Melville, NY 11747 p: (516) 576-2341 e: standards@acousticalsociety.org

BSR/ASA S3.2-202x, Method for Measuring the Intelligibility of Speech over Communication Systems (revision of ANSI/ASA S3.2-2009 (R2020))

ASABE (American Society of Agricultural and Biological Engineers)

Contact: Carla VanGilder 2950 Niles Road Saint Joseph, MI 49085 p: (269) 932-7015 e: vangilder@asabe.org

BSR/ASAE S604.3 MONYEAR-202x, Safety for Power Take-off (PTO), PTO Drive Shafts, and Power Input Connection (PIC) for Agricultural Field Equipment (revision of ANSI/ASABE S604.3 MONYEAR-202x)

ASME (American Society of Mechanical Engineers)

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

- BSR/ASME B16.36-202x, Orifice Flanges (revision of ANSI/ASME B16.36-2015)
- BSR/ASME B16.47-202x, Large Diameter Steel Flanges NPS 26 Through NPS 60 Metric/Inch Standard (revision of ANSI/ASME B16.47-2017)
- BSR/ASME B16.48-202x, Line Blanks (revision of ANSI/ASME B16.48-2015)

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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.

BSR/ASME B31G-202x, Manual for Determining the Remaining Strength of Corroded Pipelines (revision of ANSI/ASME B31G -2012 (R2017))

ATIS (Alliance for Telecommunications Industry Solutions)

Contact: Drew Greco 1200 G Street NW, Suite 500 Washington, DC 20005 p: (202) 628-6380 e: dgreco@atis.org

- BSR/ATIS 0600320-202x, Above-Baseline Electrical Protection for Designated Information and Communications Technology (ICT) Facilities against High-Altitude Electromagnetic Pulse (HEMP) (revision of ANSI/ATIS 0600320-2015)
- BSR/ATIS 0600321-202x, Electrical Protection for Network Operator-Type Equipment Positions (revision of ANSI/ATIS 0600321-2015)
- BSR/ATIS 0600336-202x, Design Requirements for Universal Cabinets and Framework (revision of ANSI/ATIS 0600336 -2015)

AWEA (American Wind Energy Association)

Contact: Michele Mihelic 1501 M Street, NW, , Suite 1000 Washington, DC 20005 p: (202) 383-2500 e: standards@awea.org

- BSR/AWEA 5000-1-202x, AWEA Wind Workforce Definitions 2020 (new standard)
- BSR/AWEA 61400-26-1-202x, Availability for wind energy generation systems (identical national adoption of IEC 61400 -26-1:2019)

CTA (Consumer Technology Association)

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

BSR/CTA 2102-202x, Performance Criteria and Testing Protocols for Respiration Monitoring Solutions (new standard)

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

Contact: Barbara Bennett 700 K Street NW, Suite 600 Washington, DC 20001 p: (202) 737-8888 e: comments@standards.incits.org

BSR INCITS 506-202x, Information Technology - SBC-4 (SCSI Block Commands - 4) (new standard)

Contact: Deborah Spittle 700 K Street NW, Suite 600 Washington, DC 20001 p: (202) 737-8888 e: comments@standards.incits.org

- INCITS 83-1995 [R202x], Information Systems ISO Registration According to ISO 2375 - ANSI Sponsorship Procedures (reaffirmation of INCITS 83-1995 [R2015])
- INCITS 322-2015 [R202x], Information Technology Card Durability Test Methods (reaffirmation of INCITS 322-2015)
- INCITS 335-2000 [R202x], Information technology Small Computer System Interface (SCSI-3) Stream Commands (SSC) (reaffirmation of INCITS 335-2000 [R2015])
- INCITS 403-2005 [R202x], Information technology -Automation/Drive Interface - Commands (ADC) (reaffirmation of INCITS 403-2005 [R2015])

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.

- INCITS 406-2005 [R202x], Information technology -Automation/Drive Interface - Transport Protocol (ADT) (reaffirmation of INCITS 406-2005 [R2015])
- INCITS 452-2009/AM 1:2010 [R202x], Information Technology -AT Attachment-8 ATA/ATAPI Command Set (ATA8-ACS) -Amendment 1 (reaffirmation of INCITS 452-2009/AM 1:2010 [R2015])
- INCITS 457-2010 [R202x], Information technology Serial Attached SCSI - 2 (SAS-2) (reaffirmation of INCITS 457-2010 [R2015])
- INCITS 461-2010 [S202x], Information technology Fibre Channel - Switch Fabric - 5 (FC-SW-5) (stabilized maintenance of INCITS 461-2010 [R2015])
- INCITS 462-2010 [S202x], Information Technology Fibre Channel - Backbone - 5 (FC-BB-5) (stabilized maintenance of INCITS 462-2010 [R2015])
- INCITS 463-2010 [S202x], Information Technology Fibre Channel - Generic Services - 6 (FC-GS-6) (stabilized maintenance of INCITS 463-2010 [R2015])
- INCITS 464-2010 [S202x], Information Technology Information Management - Extensible Access Method (XAM) (stabilized maintenance of INCITS 464-2010 [R2015])
- INCITS 465-2010 [R202x], Information technology SCSI/ATA Translation - 2 (SAT-2) (reaffirmation of INCITS 465-2010 [R2015])
- INCITS 468-2010 [R202x], Information technology Multi-media Command Set - 6 (MMC-6) (reaffirmation of INCITS 468-2010 [R2015])
- INCITS 469-2015 [R202x], Information technology Open Virtualization Format (OVF) specification (reaffirmation of INCITS 469-2015)

INCITS 471-2010 [R202x], Information technology - USB Attached SCSI (UAS) (reaffirmation of INCITS 471-2010 [R2015])

- INCITS 480-2011/AM 1-2015 [R202x], Information Technology -BIOS Enhanced Disk Drive Specification - 4 (EDD-4) -Amendment 1 (reaffirmation of INCITS 480:2011/AM 1-202x)
- INCITS 492-2015 [R202x], Information technology SAS Protocol Layer (SPL-3) (reaffirmation of INCITS 492-2015)
- INCITS 496-2012/AM1-2015 [R202x], Information Technology -Fibre Channel - Security Protocols - 2/Amendment 1 -(FC-SP -2/AM1) (reaffirmation of INCITS 496-2012/AM1-2015)
- INCITS 512-2015 [R202x], Information Technology Fibre Channel - Physical Interface-6 (FC-PI-6) (reaffirmation of INCITS 512-2015)
- INCITS 513-2015 [R202x], Information technology SCSI Primary Commands - 4 (SPC-4) (reaffirmation of INCITS 513-2015)
- INCITS 517-2015 [R202x], Information technology SCSI / ATA Translation - 3 (SAT-3) (reaffirmation of INCITS 517-2015)
- INCITS 522-2014 [R202x], Information Technology ATA/ATAPI Command Set - 3 (ACS-3) (reaffirmation of INCITS 522-2014)
- INCITS 410:2015 [R202x], Information Technology -Identification Cards - Limited Use (LU), Proximity Integrated Circuit Card (PICC) (reaffirmation of INCITS 410:2015)
- INCITS 440:2015 [R202x], Information Technology Card Durability / Service Life (reaffirmation of INCITS 440:2015)
- INCITS 442:2010 [R202x], Information Technology Biometric Identity Assurance Services (BIAS) (reaffirmation of INCITS 442:2010 [R2015])
- INCITS 378:2009/AM 1:2010 [R202x], Information Technology -Finger Minutiae Format for Data Interchange - Amendment 1 (reaffirmation of INCITS 378:2009/AM 1:2010 [R2015])
- INCITS/ISO 5654-1:1984 [S202x], Information processing Data interchange on 200 mm (8 in) flexible disk cartridges using two-frequency recording at 13 262 ftprad, 1,9 tpmm (48 tpi), on one side - Part 1: Dimensional, physical and magnetic characteristics (stabilized maintenance of INCITS/ISO 5654 -1:1984 [R2015])
- INCITS/ISO 6596-1:1985 [S202x], Information processing Data interchange on 130 mm (5.25 in) flexible disk cartridges using two-frequency recording at 7 958 ftprad, 1.9 tpmm (48 tpi), on one side - Part 1: Dimensional, physical and magnetic characteristics (stabilized maintenance of INCITS/ISO 6596 -1:1985 [R2015])
- INCITS/ISO 8378-3-1986 [S2018], Information Processing Data Interchange on 130 mm (5.25 in) Flexible Disk Cartridges Using Modified Frequency Modulation Recording at 7 958 ftprad, 3,8 tpmm (96 tpi), on Both Sides - Part 3: Track Format B (withdrawal of INCITS/ISO 8378-3-1986 [S2018])
- INCITS/ISO 8630-1:1987 [S202x], Info processing Data interchange on 130 mm (5.25 in) flexible disk cartridges using modified frequency modulation recording at 13 262 ftprad, on 80 tracks on each side - Part 1: Dimensional, physical and magnetic characteristics (stabilized maintenance of INCITS/ISO 8630-1:1987 [R2015])
- INCITS/ISO 19111-2:2009 [2015], Geographic information -Spatial referencing by coordinates - Part 2: Extension for parametric values (withdrawal of INCITS/ISO 19111-2:2009 [2015])
- INCITS/ISO 19125-1:2004 [R202x], Geographic Information -Simple Feature Access - Part 1: Common Architecture (reaffirmation of INCITS/ISO 19125-1:2004 [R2015])

- INCITS/ISO 19125-2:2004 [R202x], Geographic Information -Simple Feature Access - Part 2: SQL Option (reaffirmation of INCITS/ISO 19125-2:2004 [R2015])
- INCITS/ISO 19144-1:2009 [R202x], Geographic information -Classification systems - Part 1: Classification system structure (reaffirmation of INCITS/ISO 19144-1:2009 [R2015])
- INCITS/ISO 3562:1976 [S202x], Information processing -Interchangeable magnetic single-disk cartridge (top loaded) -Physical and magnetic characteristics (stabilized maintenance of INCITS/ISO 3562:1976 [R2015])
- INCITS/ISO 19106:2004 [R202x], Geographic Information -Profiles (reaffirmation of INCITS/ISO 19106:2004 [R2015])
- INCITS/ISO 19128:2005 [R202x], Geographic Information Web Map Server Interface (reaffirmation of INCITS/ISO 19128:2005 [R2015])
- INCITS/ISO 6709:2008/COR 1:2009 [R202x], Standard representation of geographic point location by coordinates (reaffirmation of INCITS/ISO 6709:2008/COR 1:2009 [R2015])
- INCITS/ISO 19108:2002/COR 1:2006 [R202x], Geographic Information - Temporal Schema Technical Corrigendum 1 (reaffirmation of INCITS/ISO 19108:2002/COR 1:2006 [R2015])
- INCITS/ISO/IEC 7065-1:1985 [S202x], Info processing Data interchange on 200 mm (8 in) flexible disk cartridges using modified frequency modulation recording,13 262 ftprad, 1,9 tpmm (48 tpi), both sides - Part 1: Dimensional, physical, and magnetic characteristics (stabilized maintenance of INCITS/ISO/IEC 7065-1:1985 [R2015])

- INCITS/ISO/IEC 7487-1:1993 [S202x], Information technology -Data interchange on 130 mm (5,25 in) flexible disk cartridges using modified frequency modulation recording at 7 958 ftprad, 1,9 tpmm (48 tpi), on both sides - ISO type 202 - Part 1: Dimensional, physical and magnetic characteristics (stabilized maintenance of INCITS/ISO/IEC 7487-1:1993 [R2015])
- INCITS/ISO/IEC 8378-1:1986 [R2015], Information Processing -Data Interchange on 130 mm (5.25 in) Flexible Disk Cartridges Using Modified Frequency Modulation Recording at 7 958 ftprad, 3,8 tpmm (96 tpi), on Both Sides - Part 1: Dimensional, Physical, and Magnetic Characteristics (withdrawal of INCITS/ISO/IEC 8378-1:1986 [R2015])
- INCITS/ISO/IEC 8632-1:1999/COR 1:2006 [R202x], Information Technology - Computer Graphics - Metafile for the Storage and Transfer of Picture Description Information - Part 1: Functional Specification - Technical Corrigendum 1 (reaffirmation of INCITS/ISO/IEC 8632-1:1999/COR 1:2006 [R2015])
- INCITS/ISO/IEC 8632-1:1999/COR 2:2007 [R202x], Information Technology - Computer Graphics - Metafile for the Storage and Transfer of Picture Description Information - Part 1: Functional Specification -Technical Corrigendum 2 (reaffirmation of INCITS/ISO/IEC 8632-1:1999/COR 2:2007 [R2015])
- INCITS/ISO/IEC 8859-2:1999 [R202x], Information Technology -8-Bit Single-Byte Coded Graphic Character Sets - Part 2: Latin Alphabet No. 2 (reaffirmation of INCITS/ISO/IEC 8859-2:1999 [R2015])
- INCITS/ISO/IEC 8859-3:1999 [R202x], Information technology -8-bit single-byte coded graphic character sets - Part 3: Latin alphabet No. 3 (reaffirmation of INCITS/ISO/IEC 8859-3:1999 [R2015])

- INCITS/ISO/IEC 8859-5:1999 [R202x], Information Technology -8-Bit Single-Byte Coded Graphic Character Sets - Part 5: Latin/Cyrillic Alphabet (reaffirmation of INCITS/ISO/IEC 8859 -5:1999 [R2015])
- INCITS/ISO/IEC 8859-6:1999 [R202x], Information Technology -8-Bit Single-Byte Coded Graphic Character Sets - Part 6: Latin/Arabic Alphabet (reaffirmation of INCITS/ISO/IEC 8859 -6:1999 [R2015])
- INCITS/ISO/IEC 8859-8:1999 [R202x], Information Technology -8-Bit Single-Byte Coded Graphic Character Sets - Part 8: Latin/Hebrew Alphabet (reaffirmation of INCITS/ISO/IEC 8859 -8:1999 [R2015])
- INCITS/ISO/IEC 8859-16:2001 [R202x], Information Technology -8-Bit Single-Byte Coded Graphic Character Sets - Part 16: Latin Alphabet No. 10 (reaffirmation of INCITS/ISO/IEC 8859 -16:2001 [R2015])
- INCITS/ISO/IEC 8860-1:1987 [S202x], Information Processing Data Interchange on 90 mm (3.5 In) Flexible Disk Cartridges
 Using Modified Frequency Modulation Recording at 7 958
 Ftprad on 80 Tracks on Each Side Part 1: Dimensional,
 Physical, and Magnetic Characteristics (stabilized maintenance of INCITS/ISO/IEC 8860-1:1987 [R2015])
- INCITS/ISO/IEC 9529-1:1989 [S202x], Information Processing Systems - Data Interchange on 90 mm (3,5 in) Flexible Disk Cartridges Using Modified Frequency Modulation Recording at 15 916 ftprad, on 80 Tracks on Each Side - Part 1: Dimensional, Physical and Magnetic Characteristics (stabilized maintenance of INCITS/ISO/IEC 9529-1:1989 [R2015])
- INCITS/ISO/IEC 9593-1:1990/COR 1:1993 [R202x], Information processing systems - Computer graphics - Programmers Hierarchical Interactive Graphics System (PHIGS) language bindings - Part 1: FORTRAN Technical Corrigendum 1 (reaffirmation of INCITS/ISO/IEC 9593-1:1990/COR 1:1993 [R2015])

- INCITS/ISO/IEC 9593-1:1990/COR 2:1994 [R202x], Information Processing Systems - Computer Graphics - Programmers Hierarchical Interactive Graphics System (PHIGS) Language Bindings - Part 1: FORTRAN - Technical Corrigendum 2 (reaffirmation of INCITS/ISO/IEC 9593-1:1990/COR 2:1994 [R2015])
- INCITS/ISO/IEC 9593-3:1990/COR 1:1993 [R202x], Information
 Technology Computer Graphics Programmers Hierarchical
 Interactive Graphics System (PHIGS) Language Bindings Part
 3: ADA Technical Corrigendum 1 (reaffirmation of
 INCITS/ISO/IEC 9593-3:1990/COR 1:1993 [R2015])
- INCITS/ISO/IEC 9593-3:1990/COR 2:1994 [R202x], Information Technology - Computer Graphics - Programmers Hierarchical Interactive Graphics System (PHIGS) Language Bindings - Part 3: ADA - Technical Corrigendum 2 (reaffirmation of INCITS/ISO/IEC 9593-3:1990/COR 2:1994 [R2015])
- INCITS/ISO/IEC 9593-4:1991/COR 1:1994 [R202x], Information technology - Computer graphics - Programmers Hierarchical Interactive Graphics System (PHIGS) language bindings - Part 4: C - Technical Corrigendum 1 (reaffirmation of INCITS/ISO/IEC 9593-4:1991/COR1:1994 [R2015])
- INCITS/ISO/IEC 9798-5:2009 [R202x], Information Technology -Security Techniques - Entity Authentication - Part 5: Mechanisms Using Zero-Knowledge Techniques (reaffirmation of INCITS/ISO/IEC 9798-5:2009 [R2015])
- INCITS/ISO/IEC 9834-6:2005 [R202x], Information technology -Open Systems Interconnection - Procedures for the operation of OSI Registration Authorities: Registration of application processes and application entities (reaffirmation of INCITS/ISO/IEC 9834-6:2005 [R2015])
- INCITS/ISO/IEC 9834-9:2008 [R202x], Information technology -Open Systems Interconnection - Procedures for the operation of OSI Registration Authorities: Registration of object identifier arcs for applications and services using tag-based identification (reaffirmation of INCITS/ISO/IEC 9834-9:2008 [R2015])

- INCITS/ISO/IEC 12087-2:1994/COR 1:1997 [R202x], Information Technology - Computer Graphics And Image Processing -Image Processing And Interchange (IPI) - Functional Specification - Part 2: Programmers Imaging Kernel System Application Programme Interface - Technical Corrigendum 1 (reaffirmation of INCITS/ISO/IEC 12087-2:1994/COR 1:1997 [R2015])
- INCITS/ISO/IEC 12087-5:1998/COR 1:2001 [R202x], Information
 Technology Computer Graphics And Image Processing Image Processing And Interchange (IPI) Functional
 Specification Part 5: Basic Image Interchange Format (BIIF) Technical Corrigendum 1 (reaffirmation of INCITS/ISO/IEC
 12087-5:1998/COR 1:2001 [R2015])
- INCITS/ISO/IEC 12087-5:1998/COR 2:2002 [R202x], Information Technology - Computer Graphics And Image Processing -Image Processing And Interchange (IPI) - Functional Specification - Part 5: Basic Image Interchange Format (BIIF) -Technical Corrigendum 2 (reaffirmation of INCITS/ISO/IEC 12087-5:1998/COR 2:2002 [R2015])
- INCITS/ISO/IEC 13888-3:2009 [R202x], Information technology -Security techniques - Non-repudiation - Part 3: Mechanisms using asymmetric techniques (reaffirmation of INCITS/ISO/IEC 13888-3:2009 [R2015])
- INCITS/ISO/IEC 14496-10:2014 [R202x], Information technology - Coding of audio-visual objects - Part 10: Advanced video coding (reaffirmation of INCITS/ISO/IEC 14496-10:2014 [2015])
- INCITS/ISO/IEC 14772-1:1997 [R202x], Information Technology -Computer Graphics and Image Processing - The Virtual Reality Modeling Language - Part 1: Functional Specification and UTF -8 Encoding (reaffirmation of INCITS/ISO/IEC 14772-1:1997 [R2015])

- INCITS/ISO/IEC 14772-1:1997/AM 1:2003 [R202x], Information Technology - Computer Graphics and Image Processing - The Virtual Reality Modeling Language - Part 1: Functional Specification and UTF-8 Encoding - Amendment 1 (reaffirmation of INCITS/ISO/IEC 14772-1:1997/AM 1:2003 [R2015])
- INCITS/ISO/IEC 14776-414:2009 [R202x], Information technology - Small Computer System Interface (SCSI) - Part 414: SCSI Architecture Model-4 (SAM-4) (reaffirmation of INCITS/ISO/IEC 14776-414:2009 [R2015])
- INCITS/ISO/IEC 14888-1:2008 [R202x], Information technology -Security techniques - Digital signatures with appendix - Part 1: General (reaffirmation of INCITS/ISO/IEC 14888-1:2008 [R2015])
- INCITS/ISO/IEC 15944-7:2009 [R202x], Information technology -Business Operational View - Part 7: eBusiness vocabulary (reaffirmation of INCITS/ISO/IEC 15944-7:2009 [R2015])
- INCITS/ISO/IEC 18014-1:2008 [R202x], Information Technology -Security Techniques - Time-Stamping Services - Part 1: Framework (reaffirmation of INCITS/ISO/IEC 18014-1:2008 [R2015])
- INCITS/ISO/IEC 18014-2:2009 [R202x], Information Technology -Security Techniques - Time-Stamping Services - Part 2: Mechanisms Producing Independent Tokens (reaffirmation of INCITS/ISO/IEC 18014-2:2009 [R2015])
- INCITS/ISO/IEC 18014-3:2009 [R202x], Information Technology -Security Techniques - Time-Stamping Services - Part 3: Mechanisms Producing Linked Tokens (reaffirmation of INCITS/ISO/IEC 18014-3:2009 [R2015])
- INCITS/ISO/IEC 19757-4:2006/COR 1:2008 [S202x], Information Technology - Document Schema Definition Languages (DSDL) -Part 4: Namespace-Based Validation Dispatching Language (NVDL) - Technical Corrigendum 1 (stabilized maintenance of INCITS/ISO/IEC 19757-4:2006/COR 1:2008 [R2015])

- INCITS/ISO/IEC 19785-4:2010 [R202x], Information Technology -Common Biometric Exchange Formats Framework - Part 4: Security Block Format Specifications (reaffirmation of INCITS/ISO/IEC 19785-4:2010 [R2015])
- INCITS/ISO/IEC 19785-2:2006/AM 1:2010 [R202x], Information Technology - Common Biometric Exchange Formats Framework - Part 2: Procedures for the Operation of the Biometric Registration Authority - Amendment 1: Additional Registrations (reaffirmation of INCITS/ISO/IEC 19785 -2:2006/AM 1:2010 [R2015])
- INCITS/ISO/IEC 19794-2:2005/COR 1:2009 [R202x], Information technology - Biometric data interchange formats - Part 2: Finger minutiae data - Technical Corrigendum 1 (reaffirmation of INCITS/ISO/IEC 19794-2:2005/COR 1:2009 [R2015])
- INCITS/ISO/IEC 19794-2:2005/AM 1:2010 [R202x], Information technology - Biometric data interchange formats - Part 2: Finger minutiae data - Amendment 1: Detailed description of finger minutiae location, direction, and type (reaffirmation of INCITS/ISO/IEC 19794-2:2005/AM 1:2010 [R2015])
- INCITS/ISO/IEC 19794-7:2007/COR 1:2009 [R202x], Information technology Biometric data interchange formats Part 7: Signature/sign time series data Technical Corrigendum 1 (reaffirmation of INCITS/ISO/IEC 19794-7:2007/COR 1:2009 [R2015])
- INCITS/ISO/IEC 19794-11:2013/AM 1:2014 [R202x], Information technology Biometric data interchange formats Part 11: Signature/sign processed dynamic data Amendment 1: Conformance test assertions (reaffirmation of INCITS/ISO/IEC 19794-11:2013/Amd 1:2014 (2015))
- INCITS/ISO/IEC 19794-2:2005/Amd 1:2010/Cor 2:2014 [R202x], Information technology - Biometric data interchange formats -Part 2: Finger minutiae data - Amendment 1: Detailed description of finger minutiae location, direction and type -Technical Corrigendum 2 (reaffirmation of INCITS/ISO/IEC 19794-2:2005/Amd 1:2010/Cor 2:2014 [2015])

- INCITS/ISO/IEC 19796-3:2009 [S202x], Information Technology -Learning, Education and Training - Quality Management, Assurance and Metrics - Part 3: Reference Methods and Metrics (stabilized maintenance of INCITS/ISO/IEC 19796 -3:2009 [R015])
- INCITS/ISO/IEC 21000-7:2007 [R202x], Information Technology -Multimedia Framework (MPEG-21) - Part 7: Digital Item Adaptation (reaffirmation of INCITS/ISO/IEC 21000-7:2007 [R2015])
- INCITS/ISO/IEC 23360-1:2006 [R202x], Linux Standard Base (LSB) Core Specification 3.1 - Part 1: Generic Specification (reaffirmation of INCITS/ISO/IEC 23360-1:2006 [R2015])
- INCITS/ISO/IEC 23360-2:2006 [R202x], Linux Standard Base (LSB) Core Specification 3.1 - Part 2: Specification for IA32 Architecture (reaffirmation of INCITS/ISO/IEC 23360-2:2006 [R2015])
- INCITS/ISO/IEC 23360-3:2006 [R202x], Linux Standard Base (LSB) Core Specification 3.1 - Part 3: Specification for IA64 Architecture (reaffirmation of INCITS/ISO/IEC 23360-3:2006 [R2015])
- INCITS/ISO/IEC 23360-4:2006 [R202x], Linux Standard Base (LSB) Core Specification 3.1 - Part 4: Specification for AMD64 Architecture (reaffirmation of INCITS/ISO/IEC 23360-4:2006 [R2015])
- INCITS/ISO/IEC 23360-5:2006 [R202x], Linux Standard Base (LSB) Core Specification 3.1 - Part 5: Specification for PPC32 Architecture (reaffirmation of INCITS/ISO/IEC 23360-5:2006 [R2015])
- INCITS/ISO/IEC 23360-6:2006 [R202x], Linux Standard Base (LSB) Core Specification 3.1 - Part 6: Specification for PPC64 Architecture (reaffirmation of INCITS/ISO/IEC 23360-6:2006 [R2015])

- INCITS/ISO/IEC 23360-7:2006 [R202x], Linux Standard Base (LSB) Core Specification 3.1 - Part 7: Specification for S390 Architecture (reaffirmation of INCITS/ISO/IEC 23360-7:2006 [R2015])
- INCITS/ISO/IEC 23360-8:2006 [R202x], Linux Standard Base (LSB) Core Specification 3.1 - Part 8: Specification for S390X Architecture (reaffirmation of INCITS/ISO/IEC 23360-8:2006 [R2015])
- INCITS/ISO/IEC 24713-3:2009 [R202x], Information technology -Biometric profiles for interoperability and data interchange -Part 3: Biometrics-based verification and identification of seafarers (reaffirmation of INCITS/ISO/IEC 24713-3:2009 [R2015])
- INCITS/ISO/IEC 24824-1:2007 [R202x], Information technology -Generic applications of ASN.1: Fast infoset (reaffirmation of INCITS/ISO/IEC 24824-1:2007 [R2015])
- INCITS/ISO/IEC 24824-2:2006 [R202x], Information technology -Generic applications of ASN.1: Fast Web Services (reaffirmation of INCITS/ISO/IEC 24824-2:2006 [R2015])
- INCITS/ISO/IEC 24824-3:2008 [R202x], Information technology -Generic applications of ASN.1: Fast infoset security (reaffirmation of INCITS/ISO/IEC 24824-3:2008 [R2015])
- INCITS/ISO/IEC 29109-1:2009 [R202x], Information technology -Conformance testing methodology for biometric data interchange formats defined in ISO/IEC 19794 - Part 1: Generalized conformance testing methodology (reaffirmation of INCITS/ISO/IEC 29109-1:2009 [R2015])
- INCITS/ISO/IEC 29109-2:2010 [R202x], Information technology -Conformance testing methodology for biometric data interchange formats defined in ISO/IEC 19794 - Part 2: Finger minutiae data (reaffirmation of INCITS/ISO/IEC 29109-2:2010 [R2015])

- INCITS/ISO/IEC 29109-4:2010 [R202x], Information technology -Conformance testing methodology for biometric data interchange formats defined in ISO/IEC 19794 - Part 4: Finger image data (reaffirmation of INCITS/ISO/IEC 29109-4:2010 [R2015])
- INCITS/ISO/IEC 2382:2015 [R202x], Information technology -Vocabulary (reaffirmation of INCITS/ISO/IEC 2382:2015 [2015])
- INCITS/ISO/IEC 3561:1976 [S202x], Information processing -Interchangeable magnetic six-disk pack - Track format (stabilized maintenance of INCITS/ISO/IEC 3561:1976 [R2015])
- INCITS/ISO/IEC 3563:1976 [S202x], Information processing -Interchangeable magnetic single-disk cartridge (top loaded) -Track format (stabilized maintenance of INCITS/ISO/IEC 3563:1976 [R2015])
- INCITS/ISO/IEC 3564:1976 [S202x], Information processing -Interchangeable magnetic eleven-disk pack - Physical and magnetic characteristics (stabilized maintenance of INCITS/ISO/IEC 3564:1976 [R2015])
- INCITS/ISO/IEC 3692:1996 [S202x], Information processing -Reels and cores for 25,4 mm (1 in) perforated paper tape for information interchange - Dimensions (stabilized maintenance of INCITS/ISO/IEC 3692:1996 [R2015])
- INCITS/ISO/IEC 4337:1977 [S202x], Information processing -Interchangeable magnetic twelve-disk pack (100 Mbytes) (stabilized maintenance of INCITS/ISO/IEC 4337:1977 [R2015])
- INCITS/ISO/IEC 5653:1980 [S202x], Information processing -Interchangeable magnetic twelve-disk pack (200 Mbytes) (stabilized maintenance of INCITS/ISO/IEC 5653:1980 [R2015])
- INCITS/ISO/IEC 9496:2003 [R202x], CHILL The ITU-T Programming Language (reaffirmation of INCITS/ISO/IEC 9496:2003 [R2015])

- INCITS/ISO/IEC 10744:1997 [S202x], Information Technology -Hypermedia/Time-Based Structuring Language (HyTime) (stabilized maintenance of INCITS/ISO/IEC 10744:1997 [R2015])
- INCITS/ISO/IEC 10747:1994 [R202x], Information technology -Telecommunications and information exchange between systems - Protocol for exchange of inter-domain routeing information among intermediate systems to support forwarding of ISO 8473 PDUs (reaffirmation of INCITS/ISO/IEC 10747:1994 [R2015])
- INCITS/ISO/IEC 10885:1993 [S202x], Information technology -356 mm optical disk cartridge for information interchange -Write once (stabilized maintenance of INCITS/ISO/IEC 10885:1993 [R2015])
- INCITS/ISO/IEC 11560:1992 [S202x], Information Technology -Information Interchange on 130 mm Optical Disk Cartridges Using the Magneto-Optical Effect, for Write Once, Read Multiple Functionality (stabilized maintenance of INCITS/ISO/IEC 11560:1992 [R2015])
- INCITS/ISO/IEC 14760:1997 [S202x], Information technology -Data interchange on 90 mm overwritable and read only optical disk cartridges using phase change - Capacity: 1,3 Gbytes per cartridge (stabilized maintenance of INCITS/ISO/IEC 14760:1997 [R2015])
- INCITS/ISO/IEC 14977:1996 [R202x], Information Technology -Syntactic Metalanguage - Extended BNF (reaffirmation of INCITS/ISO/IEC 14977:1996 [R2015])
- INCITS/ISO/IEC 15145:1997 [R202x], Information technology -Programming languages - FORTH (reaffirmation of INCITS/ISO/IEC 15145:1997 [R2015])
- INCITS/ISO/IEC 15445:2000 [S202x], Information technology -Document description and processing languages - HyperText Markup Language (HTML) (stabilized maintenance of INCITS/ISO/IEC 15445:2000 [R2015])

- INCITS/ISO/IEC 15485:1997 [S202x], Information technology -Data interchange on 120 mm optical disk cartridges using phase change PD format - Capacity: 650 Mbytes per cartridge (stabilized maintenance of INCITS/ISO/IEC 15485:1997 [R2015])
- INCITS/ISO/IEC 15498:1997 [S202x], Information technology -Data interchange on 90 mm optical disk cartridges - HS-1 format - Capacity: 650 Mbytes per cartridge (stabilized maintenance of INCITS/ISO/IEC 15498:1997 [R2015])
- INCITS/ISO/IEC 15718:1998 [S202x], Information technology -Data interchange on 8 mm wide magnetic tape cartridge -Helical scan recording - HH-1 format (stabilized maintenance of INCITS/ISO/IEC 15718:1998 [R2015])
- INCITS/ISO/IEC 15895:1999 [S202x], Information technology -Data interchange on 12,7 mm 128-track magnetic tape cartridges - DLT 3-XT format (stabilized maintenance of INCITS/ISO/IEC 15895:1999 [R2015])
- INCITS/ISO/IEC 15896:1999 [S202x], Information technology -Data interchange on 12,7 mm 208-track magnetic tape cartridges - DLT 5 format (stabilized maintenance of INCITS/ISO/IEC 15896:1999 [R2015])
- INCITS/ISO/IEC 16382:2000 [S202x], Information technology -Data interchange on 12,7 mm 208-track magnetic tape cartridges - DLT 6 format (stabilized maintenance of INCITS/ISO/IEC 16382:2000 [R2015])
- INCITS/ISO/IEC 16509:1999 [R202x], Information technology -Year 2000 terminology (reaffirmation of INCITS/ISO/IEC 16509:1999 [R2015])
- INCITS/ISO/IEC 16824:1999 [S202x], Information technology -120 mm DVD rewritable disk (DVD-RAM) (stabilized maintenance of INCITS/ISO/IEC 16824:1999 [R2015])

- INCITS/ISO/IEC 16825:1999 [S202x], Information technology -Case for 120 mm DVD-RAM disks (stabilized maintenance of INCITS/ISO/IEC 16825:1999 [R2015])
- INCITS/ISO/IEC 16969:1999 [S202x], Information technology -Data interchange on 120 mm optical disk cartridges using +RW format - Capacity: 3,0 Gbytes and 6,0 Gbytes (stabilized maintenance of INCITS/ISO/IEC 16969:1999 [R2015])
- INCITS/ISO/IEC 17342:2004 [S202x], Information Technology -80 mm (1,46 Gbytes per Side) and 120 mm (4,70 Gbytes per Side) DVD Re-Recordable Disk (DVD-RW) (stabilized maintenance of INCITS/ISO/IEC 17342:2004 [R2015])
- INCITS/ISO/IEC 17346:2005 [S202x], Information Technology -Data Interchange on 90 mm Optical Disk Cartridges - Capacity: 1,3 Gbytes per Cartridge (stabilized maintenance of INCITS/ISO/IEC 17346:2005 [R2015])
- INCITS/ISO/IEC 17592:2004 [S202x], Information technology -120 mm (4,7 Gbytes per side) and 80 mm (1,46 Gbytes per side) DVD rewritable disk (DVD-RAM) (stabilized maintenance of INCITS/ISO/IEC 17592:2004 [R2015])
- INCITS/ISO/IEC 17594:2004 [S202x], Information technology -Cases for 120 mm and 80 mm DVD-RAM disks (stabilized maintenance of INCITS/ISO/IEC 17594:2004 [R2015])
- INCITS/ISO/IEC 17913:2000 [S202x], Information Technology -12,7 mm 128-Track Magnetic Tape Cartridge for Information Interchange - Parallel Serpentine Format (stabilized maintenance of INCITS/ISO/IEC 17913:2000 [R2015])
- INCITS/ISO/IEC 18026:2009 [R202x], Information Technology -Spatial Reference Model (SRM) (reaffirmation of INCITS/ISO/IEC 18026:2009 [R2015])

- INCITS/ISO/IEC 18092:2013 [R202x], Information Technology -Telecommunications and Information Exchange between Systems - Near Field Communication - Interface and Protocol (NFCIP-1) (reaffirmation of INCITS/ISO/IEC 18092:2013 [2015])
- INCITS/ISO/IEC 21481:2012 [R202x], Information technology -Telecommunications and information exchange between systems - Near Field Communication Interface and Protocol -2 (NFCIP-2) (reaffirmation of INCITS/ISO/IEC 21481:2012 [2015])
- INCITS/ISO/IEC 22533:2005 [S202x], Information Technology -Data Interchange on 90 mm Optical Disk Cartridges - Capacity: 2,3 Gbytes per Cartridge (stabilized maintenance of INCITS/ISO/IEC 22533:2005 [R2015])
- INCITS/ISO/IEC 22536:2013 [R202x], Information Technology -Telecommunications and information Exchange between Systems - Near Field Communication Interface and Protocol (NFCIP-1) - RF Interface Test Methods (reaffirmation of INCITS/ISO/IEC 22536:2013 [2015])
- INCITS/ISO/IEC 22537:2006 [R202x], Information technology -ECMAScript for XML (E4X) specification (reaffirmation of INCITS/ISO/IEC 22537:2006 [R2015])
- INCITS/ISO/IEC 23912:2005 [S202x], Information Technology -80 mm (1,46 Gbytes per Side) and 120 mm (4,70 Gbytes per Side) DVD Recordable Disk (DVD-R) (stabilized maintenance of INCITS/ISO/IEC 23912:2005 [R2015])
- INCITS/ISO/IEC 23917:2005 [R202x], Information technology -Telecommunications and information exchange between systems -- NFCIP-1 -- Protocol Test Methods (reaffirmation of INCITS/ISO/IEC 23917:2005 [R2015])
- INCITS/ISO/IEC 24747:2009 [R202x], Information technology -Programming languages, their environments and system software interfaces - Extensions to the C Library to support mathematical special functions (reaffirmation of INCITS/ISO/IEC 24747:2009 [R2015])

- INCITS/ISO/IEC 25435:2006 [S202x], Data Interchange on 60 mm Read-Only ODC - Capacity: 1,8 Gbytes (UMDTM) (stabilized maintenance of INCITS/ISO/IEC 25435:2006 [R2015])
- INCITS/ISO/IEC 25436:2006 [R202x], Information technology -Eiffel: Analysis, Design and Programming Language (reaffirmation of INCITS/ISO/IEC 25436:2006 [R2015])
- INCITS/ISO/IEC 28361:2007 [R202x], Information Technology -Telecommunications and Information Exchange between Systems - Near Field Communication Wired Interface (NFC-WI) (reaffirmation of INCITS/ISO/IEC 28361:2007 [R2015])
- INCITS/ISO/IEC 29141:2009 [R202x], Information technology -Biometrics - Tenprint capture using biometric application programming interface (BioAPI) (reaffirmation of INCITS/ISO/IEC 29141:2009 [R2015])
- INCITS/ISO/IEC 29171:2009 [S202x], Information Technology Digitally Recorded Media for Information Interchange and Storage - Information Versatile Disk for Removable Usage (iVDR) Cartridge (stabilized maintenance of INCITS/ISO/IEC 29171:2009 [R2015])
- INCITS/ISO/IEC 27004:2009 [2015], Information technology -Security techniques - Information security management -Measurement (withdrawal of INCITS/ISO/IEC 27004:2009 [2015])
- INCITS/ISO/IEC 8879:1986/AM 1:1988 [S202x], Information Processing - Text and Office Systems - Standard Generalized Markup Language (SGML) - Amendment 1 (stabilized maintenance of INCITS/ISO/IEC 8879:1986/AM 1:1988 [R2015])
- INCITS/ISO/IEC 8879:1986/COR 1:1996 [S202x], Information Processing - Text and Office Systems - Standard Generalized Markup Language (SGML) - Technical Corrigendum 1 (stabilized maintenance of INCITS/ISO/IEC 8879:1986/COR 1:1996 [R2015])

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.

- INCITS/ISO/IEC 8879:1986/COR 2:1999 [S202x], Information Processing - Text And Office Systems - Standard Generalized Markup Language (SGML) - Technical Corrigendum 2 (stabilized maintenance of INCITS/ISO/IEC 8879:1986/COR 2:1999 [R2015])
- INCITS/ISO/IEC 10036:1996/COR 1:2001 [S202x], Information Technology - Font Information Interchange - Procedures for Registration of Font-Related Identifiers - Technical Corrigendum 1 (stabilized maintenance of INCITS/ISO/IEC 10036:1996/COR 1:2001 [R2015])
- INCITS/ISO/IEC 10036:1996/COR 2:2002 [S202x], Information Technology - Font Information Interchange - Procedures for Registration of Font-Related Identifiers - Technical Corrigendum 2 (stabilized maintenance of INCITS/ISO/IEC 10036:1996/COR 2:2002 [R2015])
- INCITS/ISO/IEC 10179:1996/COR 1:2001 [S202x], Information Technology - Processing Languages - Document Style Semantics and Specification Language (DSSSL) - Technical Corrigendum 1 (stabilized maintenance of INCITS/ISO/IEC 10179:1996/COR 1:2001 [R2015])
- INCITS/ISO/IEC 10179:1996/AM 2:2005 [S202x], Information
 Technology Processing Languages Document Style
 Semantics and Specification Language (DSSSL) Amendment 2
 (stabilized maintenance of INCITS/ISO/IEC 10179:1996/AM
 2:2005 [R2015])
- INCITS/ISO/IEC 10180:1995/COR 1:2001 [S202x], Information
 Technology Processing Languages Standard Page
 Description Language (SPDL) Technical Corrigendum 1
 (stabilized maintenance of INCITS/ISO/IEC 10180:1995/COR
 1:2001 [R2015])

- INCITS/ISO/IEC 10747:1994/AM 1:1996 [R202x], Information technology - Telecommunications and information exchange between systems - Protocol for exchange of inter-domain routeing information among intermediate systems to support forwarding of ISO 8473 PDUs - Amendment 1: Implementation conformance statement proformas (reaffirmation of INCITS/ISO/IEC 10747:1994/AM 1:1996 [R2015])
- INCITS/ISO/IEC 10747:1994/COR 1:1996 [R202x], Information technology - Telecommunications and information exchange between systems - Protocol for exchange of inter domain routeing information among intermediate systems to support forwarding of ISO 8473 PDUs - Technical Corrigendum 1 (reaffirmation of INCITS/ISO/IEC 10747:1994/COR 1:1996 [R2015])
- INCITS/ISO/IEC 26300:2006/COR 3:2014 [R202x], Information technology - Open Document for Office Applications (OpenDocument) v1.0 - Technical Corrigendum 3 (reaffirmation of INCITS/ISO/IEC 26300:2006/COR 3:2014 [2015])
- INCITS/ISO/IEC 26300:2006/AM 1:2012/COR 1:2014 [R202x], Information technology - Open Document Format for Office Applications (OpenDocument) v1.0 - Amendment 1: Open Document Format for Office Applications (OpenDocument) v1.1 - Technical Corrigendum 1 (reaffirmation of INCITS/ISO/IEC 26300:2006/Amd 1:2012/Cor 1:2014 [2015])

NSF (NSF International)

- Contact: Jason Snider 789 N. Dixboro Road Ann Arbor, MI 48105-9723 p: (734) 418-6660 e: jsnider@nsf.org
- BSR/NSF 350-202x (i49r1), Onsite Residential and Commercial Water Reuse Treatment Systems (revision of ANSI/NSF 350 -2019)

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.

- BSR/NSF 350-202x (i55r1), Onsite Residential and Commercial Water Reuse Treatment Systems (revision of ANSI/NSF 350 -2019)
- Contact: Monica Leslie 789 N. Dixboro Road Ann Arbor, MI 48105-9723 p: (734) 827-5643 e: mleslie@nsf.org
- BSR/NSF 42-202x (i104r1), Drinking Water Treatment Units -Aesthetic Effects (revision of ANSI/NSF 42-2019)
- BSR/NSF 53-202x (i122r1), Drinking Water Treatment Units -Health Effects (revision of ANSI/NSF 53-2019)
- BSR/NSF 244-202x (i8r1), Supplemental Microbiological Water Treatment Systems - Filtration (revision of ANSI/NSF 244 -2019)
- BSR/NSF 401-202x (i16), Drinking Water Treatment Units -Emerging Compounds / Incidental Contaminants (revision of ANSI/NSF 401-2019)

TIA (Telecommunications Industry Association)

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

BSR/TIA 568.2-D-2-202x, Balanced Twisted-Pair Telecommunications Cabling and Components Standard -Addendum 2: Power Delivery over Balanced Twisted-Pair Cabling (addenda to ANSI/TIA 568.2-D-2018)

BSR/TIA 942-B-1-202x, Telecommunications Infrastructure Standard for Data Centers - Addendum 1: Edge Data Centers (addenda to ANSI/TIA 942-B-2017)

Call for Members

AAMI (Association for the Advancement of Medical Instrumentation)

U.S. Adoption of AAMI/IEC 60601-1-16-2018

AAMI (<u>www.aami.org</u>) is actively seeking participation in the following standards development work and in the interest categories specified:

US adoption of **AAMI/IEC 60601-2-16-2018**, Medical electrical equipment - Part 2-16: Particular requirements for basic safety and essential performance of haemodialysis, haemodiafiltration and haemofiltration equipment. Specifies the minimum safety requirements for HAEMODIALYSIS EQUIPMENT. This HAEMODIALYSIS EQUIPMENT is intended for use either by medical staff or for use by the PATIENT or other trained personnel under medical supervision. Includes all ME EQUIPMENT that is intended to deliver a HAEMODIALYSIS, HAEMODIAFILTRATION and HAEMOFILTRATION treatment to a PATIENT, independent of the treatment duration and location. If applicable, applies to the relevant parts of ME EQUIPMENT intended for other extracorporeal blood purification treatments. Contact: Cliff Bernier, (703) 253-8263, <u>cbernier@aami.org</u>.

U.S. Adoption of AAMI/IEC 60601-2-39-2018

AAMI (<u>www.aami.org</u>) is actively seeking participation in the following standards development work and in the interest categories specified:

US adoption of **AAMI/IEC 60601-2-39:2018**, Medical electrical equipment - Part 2-39: Particular requirements for basic safety and essential performance of peritoneal dialysis equipment. Applies to the basic safety and essential performance of peritoneal dialysis ME equipment. Applies to PD equipment intended for use either by medical staff or under the supervision of medical experts, including PD equipment operated by the patient, regardless of whether the PD equipment is used in a hospital or domestic environment. Contact: Cliff Bernier, (703) 253-8263, cbernier@aami.org.

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:

- o General Interest
- o Government
- o Producer
- o 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.

API (American Petroleum Institute)

New Standard

ANSI/API RP 100-1-2019, Hydraulic Fracturing: Well Integrity and Fracture Containment (new standard): 3/20/2019

ASIS (ASIS International)

New Standard

ANSI/ASIS SA-2020, Security Awareness (new standard): 6/11/2020

ASME (American Society of Mechanical Engineers)

Reaffirmation

ANSI/ASME B30.28-2015 (R2020), Balance Lifting Units (reaffirmation of ANSI/ASME B30.28-2015): 6/12/2020

Revision

ANSI/ASME A17.3-2020, Safety Code for Existing Elevators and Escalators (revision of ANSI/ASME A17.3-2017): 6/12/2020

ANSI/ASME B30.8-2020, Floating Cranes and Floating Derricks (revision of ANSI/ASME B30.8-2015): 6/11/2020

ATIS (Alliance for Telecommunications Industry Solutions)

Reaffirmation

ANSI/ATIS 0900105-2015 (R2020), Synchronous Optical Network (SONET) -Basic Description including Multiplex Structure, Rates, and Formats (reaffirmation of ANSI/ATIS 0900105-2015): 6/11/2020

CPLSO

New National Adoption

ANSI/CPLSO 60335-2-76-2020, Particular requirements for electric fence energizers (national adoption with modifications of IEC 60335-2-76 (2018)): 6/15/2020

UL (Underwriters Laboratories)

Reaffirmation

- ANSI/UL 234-2015 (R2020), Standard for Safety for Low Voltage Lighting Fixtures for Use in Recreational Vehicles (reaffirmation of ANSI/UL 234 -2015): 6/10/2020
- ANSI/UL 618-2010 (R2020), Standard for Concrete Masonry Units (reaffirmation of ANSI/UL 618-2010 (R2015)): 6/12/2020
- ANSI/UL 60079-25-2011 (R2020), Standard for Safety for Explosive Atmospheres - Part 25: Intrinsically Safe Electrical Systems (reaffirmation of ANSI/UL 60079-25-2011 (R2015)): 6/12/2020

Revision

- ANSI/UL 94-2020, Standard for Safety for Tests for Flammability of Plastic Materials for Parts in Devices and Appliances (revision of ANSI/UL 94 -2018): 6/11/2020
- ANSI/UL 94-2020a, Standard for Tests for Flammability of Plastic Materials for Parts in Devices and Appliances (revision of ANSI/UL 94-2018): 6/11/2020
- ANSI/UL 962A-2020, Standard for Safety for Furniture Power Distribution Units (revision of ANSI/UL 962A-2019): 6/12/2020
- ANSI/UL 1951-2020, Standard for Safety for Electric Plumbing Accessories (revision of ANSI/UL 1951-2017a): 6/11/2020
- ANSI/UL 2610-2020, Standard for Safety for Commercial Premises Security Alarm Units and Systems (revision of ANSI/UL 2610-2018): 6/12/2020

Project Initiation Notification System (PINS)

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

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

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

AAFS (American Academy of Forensic Sciences)

Contact: Teresa Ambrosius, (719) 453-1036, tambrosius@aafs.org 410 North 21st Street, Colorado Springs, CO 80904 www.aafs.org

New Standard

BSR/ASB Std 148-202x, Standard for Personal Identification in Forensic Anthropology (new standard)

Stakeholders: Forensic anthropologists and the medicolegal community.

Project Need: Currently, there are no standards that define the approaches to personal identification. This document fills that gap.

This standard provides requirements for establishing the biological profile and contributing information (such as comparative radiography and serial numbers on surgical implants) leading to a positive identification of human remains. This standard does not address identification of living individuals.

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Contact: Teresa Ambrosius, (719) 453-1036, tambrosius@aafs.org 410 North 21st Street, Colorado Springs, CO 80904 www.aafs.org

New Standard

BSR/ASB Std 149-202x, Standard for Taphonomic Observations in Support of the Postmortem Interval (new standard)

Stakeholders: Forensic anthropologists and the medicolegal community.

Project Need: Currently, there are no standards that define the approaches to taphonomic effects. This document fills that gap.

This standard provides requirements for describing and analyzing the taphonomic effects on human remains and associated evidence that can be observed in the laboratory as well as in the field. Also, it provides requirements for recording and reporting the taphonomic and contextual indicators that contribute to estimating the postmortem interval in sufficient detail to allow for independent interpretation, replication, and verification of conclusions drawn.

AAFS (American Academy of Forensic Sciences)

Contact: Teresa Ambrosius, (719) 453-1036, tambrosius@aafs.org 410 North 21st Street, Colorado Springs, CO 80904 www.aafs.org

New Standard

BSR/ASB Std 150-202x, Standard for Determination of Medicolegal Significance from Skeletal Material (new standard)

Stakeholders: Forensic anthropologists and the medicolegal community.

Project Need: Currently, there are no standards that define the hierarchical determination of medicolegal significance in the assessment of skeletal material. This document fills that gap.

This standard sets procedures required for the determination and identification of remains as skeletal or nonskeletal. It further sets methodological, testing, and observational procedures for identifying skeletal remains as either human or non-human and sets required procedures to assess the relevancy of human remains to the medicolegal death investigation system.

ATIS (Alliance for Telecommunications Industry Solutions)

Contact: Drew Greco, (202) 628-6380, dgreco@atis.org 1200 G Street NW, Suite 500, Washington, DC 20005 www.atis.org

Revision

BSR/ATIS 0600336-202x, Design Requirements for Universal Cabinets and Framework (revision of ANSI/ATIS 060033(-2015)

Stakeholders: Communications industry.

Project Need: There is a need to revise ATIS 0600336.2015, Design Requirements for Universal Cabinets and Framework.

This standard, when used with established sheet metal manufacturing practices, sets forth the dimensional parameters, performance requirements, and acceptance criteria for the manufacture and availability of equipment frames for housing electronic equipment as used in communications networks. These frames are intended to be installed in communication carrier spaces. The cabinets and framework described will be designed to common dimensional footprints, have greater performance for handling larger, heavier equipment and dimensional parameters that may be used for designing future communications equipment. The cabinets and framework described are to be available as general-purpose products for use by those electronic equipment manufacturers and service providers that do not design and manufacture their own proprietary cabinets and framework.

CSA (CSA America Standards Inc.)

Contact: Anahita Jami, (416) 747-4317, anahita.jami@csagroup.org

, www.csagroup.org

Revision

BSR CSA B149.6-202x, Code for digester gas, landfill gas, and biogas generation and utilization (revision of ANSI/CSA B149.6-2019)

Stakeholders: Utilities, manufacturers, governmental agencies, suppliers.

Project Need: To address industry concerns regarding gas produced from renewable sources.

This Code applies to the installation of systems for the production, handling, storage, utilization, and safety aspects of the operation and maintenance for handling, storage, and utilization of: (1) digester gas in newly constructed wastewater treatment plants, as well as additions to, and the upgrading of, existing systems; (2) landfill gas in newly constructed landfill gas systems, as well as additions to, and the upgrading of, existing systems and temporary systems; and (3) biogas in newly constructed biogas systems.

CSA (CSA America Standards Inc.)

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

Addenda

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

Stakeholders: Consumers, manufacturers.

Project Need: To increase the nominal length of a connector to not exceed 25 ft (7.62 m). The nominal length shall refer to the overall length, including fittings. The additional hose length will allow portable generators connected to a structures (home) fuel supply to be placed at least 20 feet from the home to reduce the risk of carbon monoxide poisoning.

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

CSA (CSA America Standards Inc.)

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

New National Adoption

BSR/CSA HGV 19880-3-202x, Gaseous Hydrogen - Fuelling Stations - Part 3: Valves (national adoption with modifications of ISO 19880-3:2018)

Stakeholders: Consumers, manufacturers, gas suppliers, and certifying agencies.

Project Need: The ISO Standard was developed using CSA Group seed documents HGV 4.4, HGV 4.6, and HGV 4.7. The U.S. and Canada are adopting back the ISO International Standard with deviations necessary for safety. The Standard is an adoption with U.S. and Canadian deviations of the identically titled ISO Standard 19880-3 (first edition, 2018). This document provides the requirements and test methods for the safety performance of highpressure gas valves that are used in gaseous hydrogen stations of up to the H70 designation. This document covers the following gas valves:

- check valve;
- excess flow valve;
- flow control valve;
- hose breakaway device;
- manual valve;
- pressure safety valve; and
- shut-off valve.

CTA (Consumer Technology Association)

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

New Standard

BSR/CTA 2102-202x, Performance Criteria and Testing Protocols for Respiration Monitoring Solutions (new standard

Stakeholders: Consumers, manufacturers, and retailers.

Project Need: To establish definitions and performance criteria for consumer technology that measures respiration rate.

This standard establishes definitions and performance criteria for consumer technology that measures respiration rate. Specifically, the standard provides a process for the evaluation of respiration monitoring solutions through a variety of applications including sedentary, exercise, and everyday living.

ITSDF (Industrial Truck Standards Development Foundation, Inc.)

Contact: Chris Merther, (202) 296-9880, chris.merther@itsdf.org 1750 K Street NW, Suite 460, Washington, DC 20006 www.indtrk.org

Reaffirmation

BSR/ITSDF B56.14-200x (R202x), Safety Standard for Vehicle Mounted Trucks (reaffirmation of ANSI/ITSDF B56.14 -200x)

Stakeholders: Users and manufacturers of vehicle mounted trucks.

Project Need: Requirements are still current. No changes needed at this time.

This Standard defines the safety requirements relating to the elements of design, operation, and maintenance of industrial and rough-terrain vehicle-mounted forklifts controlled by a riding operator.

TIA (Telecommunications Industry Association)

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

Addenda

BSR/TIA 942-B-1-202x, Telecommunications Infrastructure Standard for Data Centers - Addendum 1: Edge Data Centers (addenda to ANSI/TIA 942-B-2017)

Stakeholders: Telecom, Internet service providers, edge data center engineers, edge data center manufacturers. Project Need: Update standard.

This addendum specifies requirements for the telecommunications infrastructure of data centers referred to as Edge Data Centers (EDCs), utilizing structures, enclosures, or spaces to contain facilities for networking, computing, storage, and access.

American National Standards Maintained Under Continuous Maintenance

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

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

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

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

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

American Academy of Forensic Sciences 410 North 21st Street Colorado Springs, CO 80904 Phone: (719) 453-1036 Web: www.aafs.org

AAMI

Association for the Advancement of Medical Instrumentation 901 N. Glebe Road Suite 300 Arlington, VA 22203 Phone: (703) 647-2779 Web: www.aami.org

ABMA (ASC B3)

American Bearing Manufacturers Association 1001 N. Fairfax Street Suite 500 Alexandria, VA 22314 Phone: (703) 838-0053 Web: www.americanbearings.org

AHRI

Air-Conditioning, Heating, and Refrigeration Institute 2311 Wilson Boulevard Suite 400 Arlington, VA 22201-3001 Phone: (703) 293-4887 Web: www.ahrinet.org

AISI

American Iron and Steel Institute 3425 Drighton Court Bethlehem, PA 18020-1335 Phone: (610) 691-6334 Web: www.steel.org

API

American Petroleum Institute 200 Massachusetts Avenue NW Washington, DC 20001 Phone: (202) 682-8571 Web: www.api.org

ASA (ASC S3)

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

ASABE

American Society of Agricultural and Biological Engineers 2950 Niles Road Saint Joseph, MI 49085 Phone: (269) 932-7015 Web: https://www.asabe.org/

ASC X9

Accredited Standards Committee X9, Incorporated 275 West Street Suite 107 Annapolis, MD 21401 Phone: (410) 267-7707 Web: www.x9.org

ASHRAE

American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. 1791 Tullie Circle, NE Atlanta, GA 30329-2305 Phone: (404) 636-8400 Web: www.ashrae.org

ASIS

ASIS International 1625 Prince Street Alexandria, VA 22314-2818 Phone: (703) 518-1439 Web: www.asisonline.org

ASME

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

ATIS

Alliance for Telecommunications Industry Solutions 1200 G Street NW Suite 500 Washington, DC 20005 Phone: (202) 628-6380 Web: www.atis.org

AWEA

American Wind Energy Association 1501 M Street, NW, Suite 1000 Washington, DC 20005 Phone: (202) 383-2500 Web: www.awea.org

B11

B11 Standards, Inc. P.O. Box 690905 Houston, TX 77269 Phone: (832) 446-6999 Web: https://www.b11standards. org/

CPLSO

CPLSO The Marchioness Building, Commercial Road Bristol BS16TG, UK BS1 6TG Phone: (078) 796-9298

CSA

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

СТА

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

IAPMO (ASSE Chapter)

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

ICC

International Code Council 4051 Flossmoor Road Country Club Hills, IL 60478 Phone: (888) 422-7233 Web: www.iccsafe.org

IEEE

Institute of Electrical and Electronics Engineers 445 Hoes Lane Piscataway, NJ 08854 Phone: (732) 562-3854 Web: www.ieee.org

ITI (INCITS)

InterNational Committee for Information Technology Standards 700 K Street NW Suite 600 Washington, DC 20001 Phone: (202) 737-8888 Web: www.incits.org

ITSDF

Industrial Truck Standards Development Foundation, Inc. 1750 K Street NW Suite 460 Washington, DC 20006 Phone: (202) 296-9880 Web: www.indtrk.org

NEMA (ASC C37)

National Electrical Manufacturers Association 1300 North 17th Street Suite 900 Rosslyn, VA 22209 Phone: (703) 841-3231 Web: www.nema.org

NETA

InterNational Electrical Testing Association 3050 Old Centre Suite 101 Portage, MI 49024 Phone: (269) 488-6382 Web: www.netaworld.org

NSF

NSF International 789 N. Dixboro Road Ann Arbor, MI 48105-9723 Phone: (734) 827-5643 Web: www.nsf.org

RIA

Robotic Industries Association 900 Victors Way Suite 140 Ann Arbor, MI 48108-5210 Phone: (734) 994-6088 Web: www.robotics.org

ΤΙΑ

Telecommunications Industry Association 1320 North Courthouse Road Suite 200 Arlington, VA 22201 Phone: (703) 907-7706 Web: www.tiaonline.org

UL

Underwriters Laboratories 12 Laboratory Drive Research Triangle Park, NC 27709 -3995 Phone: (919) 549-0973 Web: https://ul.org/

ISO & IEC Draft International Standards

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

Comments

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

Ordering Instructions

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

ISO Standards

AIRCRAFT AND SPACE VEHICLES (TC 20)

ISO 23748/DAmd1, Aerospace series - O-ring grooves - Dimensions -Amendment 1 - 9/11/2020, \$29.00

ISO/DIS 23670, Space systems - Vibration testing - 9/6/2020, \$93.00

COMMON NAMES FOR PESTICIDES AND OTHER AGROCHEMICALS (TC 81)

ISO 1750/DAmd7, Pesticides and other agrochemicals - Common names - Amendment 7 - 9/5/2020, \$155.00

CORK (TC 87)

ISO/DIS 10106, Cork stoppers - Determination of global migration - 9/7/2020, \$40.00

CRANES (TC 96)

ISO/DIS 10245-1, Cranes - Limiting and indicating devices - Part 1: General - 9/12/2020, \$53.00

ENVIRONMENTAL MANAGEMENT (TC 207)

ISO 14021/DAmd1, Environmental labels and declarations - Selfdeclared environmental claims (Type II environmental labelling) -Amendment 1: Carbon footprint, carbon neutral - 9/4/2020, \$33.00

FERTILIZERS AND SOIL CONDITIONERS (TC 134)

ISO/DIS 20620, Fertilizers and soil conditioners - Determination of total nitrogen by combustion - 9/11/2020, \$40.00

MINING (TC 82)

ISO/DIS 23875, Mining - Operator enclosures - Air quality control systems and air quality performance testing - 9/11/2020, \$82.00

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

- ISO/DIS 8233, Thermoplastics valves Torque Test method 9/10/2020, \$40.00
- ISO/DIS 13479, Polyolefin pipes for the conveyance of fluids -Determination of resistance to crack propagation - Test method for slow crack growth on notched pipes - 9/7/2020, \$67.00

ISO/DIS 19220, Plastics piping systems for soil and waste discharge (low and high temperature) inside buildings - Styrene copolymer blends (SAN + PVC) - 9/3/2020, \$93.00

SMALL TOOLS (TC 29)

ISO/DIS 8404, Tools for moulding - Angle pins - 9/10/2020, \$46.00

SOLID MINERAL FUELS (TC 27)

ISO/DIS 728, Coke - Size analysis by sieving - 9/6/2020, \$62.00

TEXTILES (TC 38)

ISO/DIS 22958, Textiles - Water resistance - Rain tests: Exposure to a horizontal water spray - 9/12/2020, \$46.00

TRADITIONAL CHINESE MEDICINE (TC 249)

ISO/DIS 23723, Traditional Chinese Medicine - General requirements for herbal raw material and materia medica - 9/6/2020, \$165.00

WELDING AND ALLIED PROCESSES (TC 44)

ISO/DIS 5179, Investigation of brazeability with spreading and gapfilling test - 9/3/2020, \$58.00

ISO/IEC JTC 1, Information Technology

- ISO/IEC 10118-1/DAmd1, Information technology Security techniques - Hash-functions - Part 1: General - Amendment 1: Padding methods for sponge functions - 9/3/2020, \$29.00
- ISO/IEC 11770-3/DAmd2, Information technology Security techniques Key management Part 3: Mechanisms using asymmetric techniques Amendment 2: SM9 key agreement protocol 9/7/2020, \$46.00

ISO/IEC 18033-5/DAmd1, Information technology - Security techniques - Encryption algorithms - Part 5: Identity-based ciphers -Amendment 1: SM9 mechanism - 9/11/2020, \$53.00

ISO/IEC DIS 11770-7, Information security - Key management - Part 7: Cross-domain password-based authenticated key exchange -9/6/2020, \$88.00

IEC Standards

1/2435/CDV, IEC 60050-651/AMD1 ED2: Amendment 1 - International Electrotechnical Vocabulary (IEV) - Part 651: Live working, 2020/9/11



- 8/1549/DTR, IEC TR 63282 ED1: Assessment of standard voltages and power quality requirements for LVDC distribution, 2020/8/14
- 9/2605/NP, PNW 9-2605: Railway applications Rolling stock Fuel cell systems for propulsion Part 1: Fuel Cell System, 2020/9/11
- 20/1919/CD, IEC 63294 ED1: Test methods for electric cables with rated voltages up to and including 450/750 V, 2020/9/11
- 21/1051/CDV, IEC 60095-4 ED3: Lead-acid starter batteries Part 4: Dimensions of batteries for heavy vehicles, 2020/9/11
- 21/1057/CD, IEC 62660-3 ED2: Secondary lithium-ion cells for the propulsion of electric road vehicles Part 3: Safety requirements, 2020/9/11
- 21/1052/CDV, IEC 60095-2 ED5: Lead-acid starter batteries Part 2: Dimensions of batteries and dimensions and marking of terminals, 2020/9/11
- 22H/262/CDV, IEC 62040-1/AMD1 ED2: Uninterruptible power systems (UPS) - Part 1: Safety requirements, 2020/9/11
- 23K/51/NP, PNW 23K-51: Energy Efficiency Systems Simple External Consumer Display, 2020/9/11
- 32C/587/FDIS, IEC 60127-2/AMD1 ED3: Miniature fuses Part 2: Cartridge fuse-links, 2020/7/31
- 34A/2192(F)/FDIS, IEC 62868-2-1 ED1: Organic light emitting diode (OLED) light sources for general lighting - Safety - Part 2-1: Particular requirements - Semi-integrated OLED modules, 2020/7/24
- 34A/2193(F)/FDIS, IEC 62868-2-2 ED1: Organic Light Emitting Diode (OLED) light sources for general lighting - Safety - Part 2-2: Particular requirements - Integrated OLED modules, 2020/7/24
- 45A/1342/NP, PNW 45A-1342: Human factors engineering in the design of nuclear facilities, 2020/9/11
- 46A/1420/CD, IEC 61196-1-212 ED1: Coaxial communication cables -Part 1-212: Environmental test methods - UV stability, 2020/9/11
- 46A/1421/CD, IEC 61196-1-326 ED1: Coaxial communication cables -Part 1-326: Mechanical test methods - Hanger test, 2020/9/11
- 47/2633(F)/FDIS, IEC 60749-30 ED2: Semiconductor devices -Mechanical and climatic test methods - Part 30: Preconditioning of non-hermetic surface mount devices prior to reliability testing, 020/7/3/
- 47/2634(F)/FDIS, IEC 60749-20 ED3: Semiconductor devices -Mechanical and climatic test methods - Part 20: Resistance of plastic encapsulated SMDs to the combined effect of moisture and soldering heat, 2020/7/10
- 47E/711/FDIS, IEC 60747-17 ED1: Semiconductor devices Part 17: Magnetic and capacitive coupler for basic and reinforced insulation, 2020/7/31
- 57/2237/DC, IEC TR 61850-6-100: Communication networks and systems for power utility automation - Part 6-100: Guidelines for IEC 61850 Function Modelling in SCL, 2020/7/31
- 57/2236/DTR, IEC TR 61850-90-13: Communication networks and systems for power utility automation - Part 90-13: Deterministic networking technologies, 2020/8/14
- 62A/1402/DTR, IEC TR 60601-4-5: Medical electrical equipment Part 4-5 Guidance and interpretation - Safety related technical security specifications for medical devices, 2020/8/14
- 62A/1403/DISH, IEC 60601-1/AMD1/ISH1 ED3: Interpretation Sheet 1 - Amendment 1 - Medical electrical equipment - Part 1: General requirements for basic safety and essential performance, 2020/7/31
- 62B/1168/CDV, IEC 62563-1/AMD2 ED1: Amendment 2 Medical electrical equipment Medical image display systems Part 1: Evaluation methods, 2020/9/11
- 65/815/NP, PNW 65-815: Unified reference model for smart manufacturing, 2020/8/14
- 65C/1037/CD, IEC 60802 ED1: Time-sensitive networking profile for industrial automation, 2020/8/14

- 77A/1081/CD, IEC 61000-2-4 ED3: Electromagnetic compatibility (EMC) - Part 2-4: Environment - Compatibility levels in industrial plants for low-frequency conducted disturbances, 2020/8/14
- 82/1756/FDIS, IEC 60904-9 ED3: Photovoltaic devices Part 9: Classification of solar simulator characteristics, 2020/7/31
- 86B/4320/CD, IEC 61300-2-24 ED3: Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-24: Tests - Screen testing of ceramic alignment split sleeve by stress application, 2020/9/11
- 86B/4318/CD, IEC 61300-3-35 ED3: Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-35: Examinations and measurements - Visual inspection of fibre optic connectors and fibre-stub transceivers, 2020/9/11
- 86C/1675/CD, IEC 61757-3-2 ED1: Fibre Optic Sensors Part 3-2: Acoustic sensing - Distributed sensing, 2020/9/11
- 86C/1674/CD, IEC 61757-5-1 ED1: Fibre optic sensors Part 5-1: Tilt measurement Tilt sensors based on fibre Bragg gratings, 2020/9/11
- 86C/1668/CDV, IEC 61280-2-8 ED2: Fibre optic communication subsystem test procedures - Digital systems - Part 2-8: Determination of low BER using Q-factor measurements, 2020/9/11
- 91/1650/CDV, IEC 60068-2-20 ED6: Environmental testing Part 2-20: Tests - Test T: Test methods for solderability and resistance to soldering heat of devices with leads, 2020/9/11
- 104/870/CDV, IEC 60068-2-38 ED3: Environmental testing Part 2-38: Tests - Test Z/AD: Composite temperature/humidity cyclic test, 2020/9/11
- 119/310/FDIS, IEC 62899-402-2 ED1: Printed Electronics Part 402-2: Printability - Measurement of qualities - Edge waviness, 2020/7/31
- CIS/B/742/CD, CISPR 11/FRAG5 ED7: Fragment 5: Requirements for wired network ports, 2020/9/11
- CIS/B/740/CD, CISPR 11/FRAG3 ED7: Fragment 3: Requirements for radio beam wireless power transfer (WPTAAD) equipment, 2020/9/11
- CIS/B/743/CD, CISPR 11/FRAG6 ED7: Fragment 6: Requirements for radiated emissions above 1 GHz, 2020/9/11
- CIS/B/739/CD, CISPR 11/FRAG2 ED7: Fragment 2: Miscellaneous, definitions and annexes, 2020/9/11
- CIS/B/744/CD, CISPR 11/FRAG7 ED7: Fragment 7: Requirements for radio enabled products, 2020/9/11
- CIS/B/741/CD, CISPR 11/FRAG4 ED7: Fragment 4: Requirements for measurements of robots, 2020/9/11
- JTC1-SC25/2959/DTS, ISO/IEC TS 11801-9903 ED1: Information technology Generic cabling for customer premises Part 9903: Matrix modelling of channels and links, 2020/9/11
- JTC1-SC41/158/CDV, ISO/IEC 20924 ED2: Internet of Things (IoT) Vocabulary, 2020/9/11

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

APPLICATIONS OF STATISTICAL METHODS (TC 69)

<u>ISO 2859-4:2020</u>, Sampling procedures for inspection by attributes -Part 4: Procedures for assessment of declared quality levels, \$103.00

BIOTECHNOLOGY (TC 276)

<u>ISO 21899:2020</u>, Biotechnology - Biobanking - General requirements for the validation and verification of processing methods for biological material in biobanks, \$138.00

COSMETICS (TC 217)

ISO 21322:2020, Cosmetics - Microbiology - Testing of impregnated or coated wipes and masks, \$138.00

ENERGY MANAGEMENT AND ENERGY SAVINGS (TC 301)

ISO 50004:2020, Energy management systems - Guidance for the implementation, maintenance and improvement of an ISO 50001 energy management system, \$185.00

ENVIRONMENTAL MANAGEMENT (TC 207)

ISO 14016:2020, Environmental management - Guidelines on the assurance of environmental reports, \$138.00

FLOOR COVERINGS (TC 219)

ISO 18167:2020, Textile floor coverings - Installation practices -General, \$185.00

LIFTS, ESCALATORS, PASSENGER CONVEYORS (TC 178)

<u>ISO 8102-1:2020</u>, Electrical requirements for lifts, escalators and moving walks - Part 1: Electromagnetic compatibility with regard to emission, \$103.00

MECHANICAL VIBRATION AND SHOCK (TC 108)

ISO 20816-9:2020, Mechanical vibration - Measurement and evaluation of machine vibration - Part 9: Gear units, \$138.00

METALLIC AND OTHER INORGANIC COATINGS (TC 107)

ISO 22462:2020, Metallic and other inorganic coatings - Test method for the friction coefficient measurement of chemical conversion coatings, \$68.00

ROAD VEHICLES (TC 22)

<u>ISO 18243/Amd1:2020</u>, Electrically propelled mopeds and motorcycles
 Test specifications and safety requirements for lithium-ion battery systems - Amendment 1, \$19.00

RUBBER AND RUBBER PRODUCTS (TC 45)

<u>ISO 4079:2020</u>, Rubber hoses and hose assemblies - Textilereinforced hydraulic types for oil-based or water-based fluids -Specification, \$103.00

SAFETY OF TOYS (TC 181)

- <u>ISO 8124-1/Amd1:2020</u>, Safety of toys Part 1: Safety aspects related to mechanical and physical properties Amendment 1: Flying toys, \$19.00
- <u>ISO 8124-1/Amd2:2020</u>, Safety of toys Part 1: Safety aspects related to mechanical and physical properties - Amendment 2: Various, \$19.00

TECHNICAL DRAWINGS, PRODUCT DEFINITION AND RELATED DOCUMENTATION (TC 10)

<u>ISO 128-3:2020</u>, Technical product documentation (TPD) - General principles of representation - Part 3: Views, sections and cuts, \$185.00

THERMAL INSULATION (TC 163)

ISO 16534:2020, Thermal insulating products for building applications - Determination of compressive creep, \$103.00

ISO 29470:2020, Thermal insulating products for building applications - Determination of the apparent density, \$45.00

VACUUM TECHNOLOGY (TC 112)

- ISO 21360-1:2020, Vacuum technology Standard methods for measuring vacuum-pump performance - Part 1: General description, \$162.00
- ISO 21360-2:2020, Vacuum technology Standard methods for measuring vacuum-pump performance - Part 2: Positive displacement vacuum pumps, \$103.00

ISO Technical Reports

APPLICATIONS OF STATISTICAL METHODS (TC 69)

ISO/TR 11462-3:2020, Guidelines for implementation of statistical process control (SPC) - Part 3: Reference data sets for SPC software validation, \$232.00

QUALITY MANAGEMENT AND CORRESPONDING GENERAL ASPECTS FOR MEDICAL DEVICES (TC 210)

<u>ISO/TR 24971:2020</u>, Medical devices - Guidance on the application of ISO 14971, \$232.00

WELDING AND ALLIED PROCESSES (TC 44)

<u>ISO/TR 20174:2020.</u> Welding - Grouping systems for materials - Japanese materials, \$138.00

ISO Technical Specifications

ROAD VEHICLES (TC 22)

ISO/TS 12103-3:2020, Road vehicles - Test contaminants for filter evaluation - Part 3: Soot contaminant, \$103.00

IEC Standards

AUDIO, VIDEO AND MULTIMEDIA SYSTEMS AND EQUIPMENT (TC 100)

IEC 63034 Ed. 1.0 b:2020, Microspeakers, \$281.00

DOCUMENTATION AND GRAPHICAL SYMBOLS (TC 3)

IEC 62656-8 Ed. 1.0 b:2020, Standardized product ontology register and transfer by data parcels - Part 8: Web service interface for data parcels, \$352.00

ELECTRICAL ACCESSORIES (TC 23)

<u>IEC 63180 Ed. 1.0 b:2020</u>, Methods of measurement and declaration of the detection range of detectors - Passive infrared detectors for major and minor motion detection, \$199.00

ELECTRICAL INSTALLATIONS FOR THE LIGHTING AND BEACONING OF AERODROMES (TC 97)

<u>IEC 63067 Ed. 1.0 b:2020</u>, Electrical installations for lighting and beaconing of aerodromes - Connecting devices - General requirements and tests, \$164.00

ENVIRONMENTAL STANDARDIZATION FOR ELECTRICAL AND ELECTRONIC PRODUCTS AND SYSTEMS (TC 111)

IEC 62321-10 Ed. 1.0 b:2020, Determination of certain substances in electrotechnical products - Part 10: Polycyclic aromatic hydrocarbons (PAHs) in polymers and electronics by gas chromatography-mass spectrometry (GC-MS), \$235.00

FIBRE OPTICS (TC 86)

IEC 61753-1 Amd.1 Ed. 2.0 en:2020, Amendment 1 - Fibre optic interconnecting devices and passive components - Performance standard - Part 1: General and guidance, \$12.00

IEC 61753-1 Ed. 2.1 en:2020, Amendment 1 - Fibre optic interconnecting devices and passive components - Performance standard - Part 1: General and guidance, \$469.00

INDUSTRIAL-PROCESS MEASUREMENT AND CONTROL (TC 65)

IEC 61804-3 Ed. 4.0 b:2020, Devices and integration in enterprise systems - Function blocks (FB) for process control and electronic device description language (EDDL) - Part 3: EDDL syntax and semantics, \$410.00

IEC 61804-4 Ed. 2.0 b:2020, Devices and integration in enterprise systems - Function blocks (FB) for process control and electronic device description language (EDDL) - Part 4: EDD interpretation, \$387.00

IEC 61804-5 Ed. 2.0 b:2020, Devices and intergration in enterprise systems - Function blocks (FB) for process control and electronic device description language (EDDL) - Part 5: EDDL Builtin library, \$410.00 IEC 62443-3-2 Ed. 1.0 en:2020, Security for industrial automation and control systems - Part 3-2: Security risk assessment for system design, \$235.00

IEC 62541-11 Ed. 2.0 b:2020, OPC Unified Architecture - Part 11: Historical Access, \$317.00

S+ IEC 62541-11 Ed. 2.0 en:2020 (Redline version), OPC Unified Architecture - Part 11: Historical Access, \$412.00

MAGNETIC COMPONENTS AND FERRITE MATERIALS (TC 51)

<u>IEC 60401-1 Ed. 2.0 b:2020</u>, Terms and nomenclature for cores made of magnetically soft ferrites - Part 1: Terms used for physical irregularities and reference of dimensions, \$199.00

MEASURING EQUIPMENT FOR ELECTROMAGNETIC QUANTITIES (TC 85)

IEC 61557-11 Ed. 2.0 b:2020, Electrical safety in low voltage distribution systems up to 1 000 V AC and 1 500 V DC - Equipment for testing, measuring or monitoring of protective measures - Part 11: Effectiveness of residual current monitors (RCM) in TT, TN and IT systems, \$82.00

S+ IEC 61557-11 Ed. 2.0 en:2020 (Redline version), Electrical safety

in low voltage distribution systems up to 1 000 V AC and 1 500 V DC - Equipment for testing, measuring or monitoring of protective measures - Part 11: Effectiveness of residual current monitors (RCM) in TT, TN and IT systems, \$107.00

Registration of Organization Names in the United States

The Procedures for Registration of Organization Names in the United States of America (document ISSB 989) require that alphanumeric organization names be subject to a 90-day Public Review period prior to registration. For further information, please contact the Registration Coordinator at (212) 642-4975.

The following is a list of alphanumeric organization names that have been submitted to ANSI for registration. Alphanumeric names appearing for the first time are printed in bold type. Names with confidential contact information, as requested by the organization, list only public review dates.

PUBLIC REVIEW

Southern California Edison (SCE)

Public Review Ends: August 28, 2020

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

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

Proposed Foreign Government Regulations

Call for Comment

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

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

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-regulatoryprograms/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.

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 fiberoptic 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

Approval of Reaccreditation

American Water Works Association (AWWA)

ANSI's Executive Standards Council has approved the reaccreditation of the American Water Works Association (AWWA), an ANSI Member and Accredited Standards Developer, under its recently revised operating procedures for documenting consensus on AWWA-sponsored American National Standards, effective June 18, 2020. For additional information, please contact: Mr. Paul Olson, Sr. Manager, Standards, American Water Works Association, 6666 W. Quincy Avenue, Denver, CO 80235; phone: 303.347.6178; email: Polson@awwa.org

Conveyor Equipment Manufacturers Association (CEMA)

The reaccreditation of the Conveyor Equipment Manufacturers Association (CEMA), an ANSI member and Accredited Standards Developer (ASD), has been approved at the direction of ANSI's Executive Standards Council under its recently revised operating procedures for documenting consensus on CEMA-sponsored American National Standards, effective June 24, 2020. For additional information, please contact: Ms. Naylu Garces, Manager of Engineering, Conveyor Equipment Manufacturers Association, 1250 Timiami Trail N., Suite 211, Naples, FL 34102; phone: 239.260.8009; e-mail: naylu@cemanet.org.

Reaccreditation

IEEE

Comment Deadline: July 27, 2020

IEEE, an ANSI Organizational Member, has submitted revisions to its currently accredited IEEE-SA Standards Board Operating Manual and IEEE-SA Standards Board Bylaws for documenting consensus on IEEE-sponsored American National Standards, under which it was last reaccredited in 2019. As the revisions appear to be substantive in nature, the reaccreditation process is initiated.

To obtain a copy of the revised procedures or to offer comments, please contact: Mr. David Ringle, Director, SA Governance, IEEE Standards Association, 445 Hoes Lane, Piscataway, NJ 08854-4141; phone: 732.562.3806; E-mail: d.ringle@ieee.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 IEEE by July 27, 2020, with a copy to the ExSC Recording Secretary in ANSI's New York Office (e-mail: <u>Jthompso@ANSI.org</u>).

U.S. Technical Advisory Groups

Application for Accreditation

U.S. TAG to ISO PC 308, Change of Custody – General Terminology and Models

Comment Deadline: July 27, 2020

UL has submitted an Application for Accreditation for a new proposed U.S. Technical Advisory Group (TAG) to ISO PC 308, Change of custody – General terminology and models, and a request for approval as TAG Administrator (A similar announcement was placed in the March 27, 2020 issue of Standards Action with Eastman Co. as the TAG Administrator – that application has been since been withdrawn). The proposed TAG intends to operate using the Model Operating Procedures for U.S. Technical Advisory Groups to ANSI for ISO Activities as contained in Annex A of the ANSI International Procedures.

To obtain a copy of the TAG application or to offer comments, please contact: Ms. Sonya Bird, Director of International Standards, Underwriters Laboratories, 12 Laboratory Drive, Research Triangle Park, NC 27709; phone: 919.549.1685; email: Sonya.m.bird@ul.com . Please submit your comments to UL by July 27, 2020 (please copy jthompso@ansi.org).



American National Standards (ANS) – Where to find Procedures, Guidance, Interpretations and More...

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

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

If you have a question about the ANS process and cannot find the answer quickly, please send an email to psa@ansi.org.

Please also visit Standards Boost Business at <u>www.standardsboostbusiness.org</u> for resources about why standards matter, testimonials, case studies, FAQs and more.

If you are interested in purchasing an American National Standard, please visit https://webstore.ansi.org/

Public Review Draft

Proposed Addendum aq to Standard 189.1-2017

Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings

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

This draft has been recommended for public review by the responsible project committee. To submit a comment on this proposed standard, go to the ASHRAE website at <u>www.ashrae.org/standards-research--technology/public-review-drafts</u> 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 <u>www.ashrae.org/bookstore</u> or by calling 404-636-8400 or 1-800-727-4723 (for orders in the U.S. or Canada).

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BSR/ASHRAE/ICC/USGBC/IES Addendum aq to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings Second Public Review Draft- Independent Substantive Changes.

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Foreword

Greenfield sites are a particular concern for Green building, as wildlife habitat loss is a worldwide concern. This second public review ISC replaces the defined term *site* with the phrase "area of the building project included in the scope of the construction permit." There are also editorial changes to improve the code language that do not change the intent of the addendum.

[Note to Reviewers: This addendum makes proposed changes to the first public review draft. These changes are indicated in the text by <u>underlining</u> (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 aq to 189.1-2017

Revise section 5.3.3 as follows:

5.3.3. Plants

5.3.3.2 Greenfield Sites

Greenfields shall comply with one of the following:

- 1. <u>Retain existing Existing native plants shall be retained</u> on an area of not less than 10% of the site area of the *building project* included in the scope of the construction permit;
- Dedicate not Not less than 20% of the site area of the building project included in the scope of the construction permit shall be dedicated to biodiverse plantings of native plants. The area of vegetated roof systems, vegetated terrace systems and planters shall be permitted to meet not greater than 50% of the required area of biodiverse plantings;
- 3. Dedicate not-<u>Not</u> less than 30% of the <u>site</u> area <u>of the *building project* included in the scope of the construction permit shall be dedicated</u> to *biodiverse plantings* other than *turfgrass* provided that the plants are specified and such plantings shall contribute to the local food web as determined by a *registered design professional* to contribute to the local food web. The area of vegetated roof systems, vegetated terrace systems and planters shall be permitted to meet not greater than 50% of the required area of *biodiverse plantings*;

Vegetated roofing systems, vegetated terrace systems and planters shall be permitted to meet not more than 50% of the requirement for areas of *biodiverse plantings*.

Public Review Draft

Proposed Addendum ax to Standard 189.1-2017

Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings

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BSR/ASHRAE/ICC/USGBC/IES Addendum ax to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings* Second Public Review Draft - Independent Substantive Changes.

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Foreword

The first public review of this addendum added a reference to Standard 62.1 Section 7, Construction and System Startup, which includes several requirements that support good indoor air quality. It also deleted some requirements from Section 10 of Standard 189.1 that are covered by the referenced section of Standard 62.1 to avoid duplication and confusion. This second public review ISC reinstates a requirement for an IAQ Construction Management Plan with a list of topics to be addressed.

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

Addendum ax to 189.1-2017

Modify Section 10 as follows:

10.3.1 Construction

10.3.1.5 IAQ Construction <u>Management</u> and System Startup. Ventilation systems shall be constructed and started in compliance with Section 7 of ANSI/ASHRAE Standard 62.1. <u>An IAQ construction management plan shall be developed and implemented that includes the following:</u>

- a. <u>Requirements of Section 7 of ANSI/ASHRAE Standard 62.1.</u>
- b. Use of construction filters in all operating HVAC systems, including installation, inspection and replacement.
- c. <u>Sealing of HVAC system supply and return air openings when systems are not in use and during activities that produce high dust.</u>
- d. <u>Managing migration of airborne *contaminants* associated with construction within the building by boundary sealing, pressure differentials or other methods.</u>
- e. Managing building pressures to control entry of outdoor humidity after the building enclosure is complete.
- f. Prohibition inside the building and within 25 ft (8 m) of the *building entrance* of smoking of any kind, and of electronic smoking devices.
- g. <u>Scheduling of construction and interior build-out such that absorptive materials (including carpet, textiles and porous ceiling tiles) are protected or installed later than materials that emit volatile compounds (including adhesives, mastics and coatings).</u>
- h. Exhaust systems to remove product emissions from construction and staging areas.
- i. Sealing of ducts, air terminals and air stream surfaces to protect them from moisture, particulates and other contaminants.
- j. <u>Regular cleaning during construction to remove contaminants and accumulated moisture.</u>
- k. Performance and reporting responsibilities of subcontractors and suppliers.

BSR/ASHRAE/ICC/USGBC/IES Addendum ax to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings* Second Public Review Draft - Independent Substantive Changes.

1. *Verification* and recordkeeping of the above activities.

Informative Note: ANSI/SMACNA 008-2008, IAQ Guidelines for Occupied Buildings under Construction, is a resource for developing an IAQ management plan.

Public Review Draft

Proposed Addendum bc to Standard 189.1-2017

Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings

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

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Foreword

In response to public comments, this ISC adds an exception for Section 5.2 Modeler Credentials of ANSI/ASHRAE Standard 209. Many modelers do not yet have these credentials. This ISC also includes a higher threshold for the buildings that fall under these requirements.

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

Addendum bc to 189.1-2017

7.5 Performance Option

•••

7.5.4 [JO] Energy Simulation Aided Design. For *building projects* that exceed $\frac{10,000 \text{ ft}^2 25,000 \text{ ft}^2 (2300 \text{ m}^2)}{1000 \text{ m}^2}$ of gross floor area, the *building project* shall comply with the requirements of Section 4.2.1 of ANSI/ASHRAE Standard 209.

Exception:

Section 5.2 of ANSI/ASHRAE Standard 209 shall not apply.

Public Review Draft

Proposed Addendum bi to Standard 189.1-2017

Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings

First Public Review (July 2020) (Draft Shows Proposed Changes to Current Standard)

This draft has been recommended for public review by the responsible project committee. To submit a comment on this proposed standard, go to the ASHRAE website at <u>www.ashrae.org/standards-research--technology/public-review-drafts</u> 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 <u>www.ashrae.org/bookstore</u> or by calling 404-636-8400 or 1-800-727-4723 (for orders in the U.S. or Canada).

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Foreword

This addendum revises requirements for multiple showerhead installations. The changes are consistent with an MOU between Plumbing Manufacturers Institute and the Alliance for Water Efficiency.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by <u>underlining</u> (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 bi to 189.1-2017

Add a new definition to Chapter 3 as follows:

shower outlet device: Any outlet component supplied by a shower valve excluding tub spouts.

Modify Section 6.3.2.1 as follows:

6.3.2 Building Water Use Reduction

6.3.2.1 Plumbing Fixtures and Fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following requirements, as shown in Table 6.3.2.1:

•••

- h. Residential showerheads and Shower Outlet Devices. Maximum flow rate of showerheads shall not exceed 2.0 gpm (7.6 L/min) when tested in accordance with ASME A112.18.1/CSA B125.1. *Residential* showerheads shall comply with the performance requirements of the USEPA WaterSense Specification for Showerheads. The total combined flow rate from all *shower outlet devices* controlled by one shower valve shall not exceed 2.0 gpm (7.6 L/m) including multiple shower outlet devices serving one shower compartment.
- i. Residential shower compartment (stall) in dwelling units and guest rooms. The allowable flow rate from all shower outlets (including rain systems, waterfalls, bodys-prays, and jets) that can operate simultaneously shall be limited to a total of 2.0 gpm (7.6 L/min).

Gang or Group Showers. Each *shower outlet device* in gang or group showers shall not exceed 2.0 gpm (7.6 L/m) for each 1296 square inches (0.8361 m^2) of shower floor area. Where the shower outlet devices are wall mounted or ceiling mounted, the shower outlet devices shall be installed not less than 35 inches (889 mm) apart as measured horizontally.

BSR/ASHRAE/ICC/USGBC/IES Addendum bi to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings First Public Review Draft.

Exception to 6.3.2.1(i): Where the area of a shower compartment exceeds $2600 \text{ in}^2 (1.7 \text{ m}^2)$, an additional flow of 2.0 gpm (7.6 L/min) shall be permitted for each multiple of $2600 \text{ in}^2 (1.7 \text{ m}^2)$ of floor area or fraction thereof.

Plumbing Fixture	Maximum	
Water closets (toilets)—flushometer single-flush valve type	Single-flush volume of 1.28 gal (4.8 L)	
Water closets (toilets)-flushometer dual-flush valve type	Full-flush volume of 1.28 gal (4.8 L)	
Water closets (toilets)—single-flush tank-type	Single-flush volume of 1.28 gal (4.8 L)	
Water closets (toilets)—dual-flush tank-type	Full-flush volume of 1.28 gal (4.8 L)	
Urinals	Flush volume 0.5 gal (1.9 L)	
Public lavatory faucets Flow rate—0.5 gpm (1.9 L/min)		
Public metering self-closing faucet 0.25 gal (1.0 L) per metering cycle		
Residential bathroom lavatory sink faucets	Flow rate—1.5 gpm (5.7 L/min)	
Residential kitchen faucets	Flow rate—1.8 gpm (6.8 L/min) ^a	
<i>Residential</i> showerheads Flow rate—2.0 gpm (7.6 L/min)		
Residential shower compartment (stall) in dwelling units and Flow rate from all showerheads and show		
guest rooms lodging facilities outlets shower outlet devices total o		
	L/min) per shower valve	
Gang or Group showers	Flow rate—2.0 gpm (7.6 L/min) for each 1296	
	square inches (0.8361 m ²) of shower floor area	

a. With provision for a temporary override to 2.2 gpm (8.3 L/min) as specified in Section 6.3.2.1(g).

Public Review Draft

Proposed Addendum bj to Standard 189.1-2017

Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings

First Public Review (July 2020) (Draft Shows Proposed Changes to Current Standard)

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BSR/ASHRAE/ICC/USGBC/IES Addendum bj to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings First Public Review Draft.

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Foreword

This addendum modifies the landscape design requirements in Section 6 to simplify and clarify that they are intended only for irrigated areas with the objective of reducing water consumption. The changes also replace the term "adapted plants" with "rainfall- ET_c compatible plants and native plants." The former term is deemed difficult to enforce while that is not the case with the replacement, and the replacement term is not felt to change the intent of the requirements.

[Note to Reviewers: This addendum makes proposed changes to the standard. These changes are indicated in the text by <u>underlining</u> (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 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 bj to 189.1-2017

Modify Section 6.3.1.1 as follows:

6.3.1.1. Landscape Design. A minimum of 60% of the area of the *improved landscape* shall be in *biodiverse planting* of *native plants* and *rainfall ET_e compatible plants*.

Exceptions to 6.3.1.1:

- 1. The area of dedicated athletic fields, golf courses, driving ranges, and areas dedicated for production of food for human consumption, shall be excluded from the calculation of the *improved landscape* for schools, *residential* common areas, or public recreational facilities.
- 2. Landscape areas irrigated solely with alternate on site sources of water shall be exempt from these requirements.
- 3. Where average annual rainfall is less than 12 in. (300 mm), *plants* other than *turfgrass*, with an annual ET_e of 15 in. (380 mm) or less, shall be deemed equivalent to *rainfall* ET_e compatible plants.

6.3.1.1 Irrigation Limitations. Not more than 40% of the *improved landscape* area shall be irrigated.

Exceptions to 6.3.1.1:

- 1) Dedicated athletic fields, golf courses, and driving ranges.
- 2) Areas dedicated for production of food for human consumption.
- 3) Burial grounds.
- 4) Landscape areas irrigated solely with *alternate on-site sources of water*.
- 5) Areas dedicated to plants with an annual ET_c of 15 in. (380 mm) or less, where average annual rainfall is less than 12 in. (300 mm).
- 6) <u>Irrigation applied only during the *landscape establishment period*.</u>

BSR/ASHRAE/ICC/USGBC/IES Addendum bj to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings First Public Review Draft.

Modify Section 6.3.1.2.3 as follows:

6.3.1.2.3 Irrigation of Rainfall-ET*c* **Compatible Plants**<u>and Native Plants</u>. The use of *potable water* or *reclaimed water* for *irrigation of adapted plants* is prohibited after the *landscape establishment period*. In-ground irrigation systems <u>serving for rainfall</u>. *ETc compatible plants<u>or native plants</u>* using potable or off-site treated *reclaimed water* are prohibited. After the *landscape establishment period* of *adapted plants, rainfall-ETc compatible plants* and *native plants*, the irrigation system using *potable water* or *reclaimed water* shall be permanently disabled or removed from the *site*.

Exception to 6.3.1.2.3: <u>Areas identified</u> <u>*Plants* deemed equivalent to *rainfall* ETc compatible plants by Section 6.3.1.1, Exception 35, shall be exempt from the requirements of Section 6.3.1.3.</u>

Public Review Draft

Proposed Addendum bo to Standard 189.1-2017

Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings

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

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BSR/ASHRAE/ICC/USGBC/IES Addendum bo to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings* Second Public Review Draft - Independent Substantive Changes.

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Foreword

This addendum modifies Sections 8.3.4 to improve soil-gas control requirements. The changes shown in this ISC were included in the first public review draft but were not properly marked in strikethrough/underline format. This draft shows changes relative to the first public review language.

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

Addendum bo to 189.1-2017

Modify Section 8.3.4 as follows:

8.3.4 Soil-Gas Control. *Building projects* shall be designed to control soil-gas entry in accordance with Sections 8.3.4.1 or 8.3.4.2.

Exceptions to 8.3.4:

- 1. Buildings or portions thereof that are not routinely occupied, such as warehouses and open parking garages.
- 2. Ventilated garages that comply with ANSI/ASHRAE Standard 62.1, Sections 5.15 and 6.5.

8.3.4.1 Soil-Gas Control Systems. <u>Building projects shall comply with the design requirements of ANSI/AARST CC-1000, Sections 2 through 13, as modified by Section 8.3.4.1.1.</u>

8.3.4.1.1 Soil-Gas Retarders. Soil-gas retarder membranes shall comply with ASTM E1745, and shall be installed in accordance with ASTM E1643.

Public Review Draft

Proposed Addendum bq to Standard 189.1-2017

Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings

First Public Review (July 2020) (Draft Shows Proposed Changes to Current Standard)

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Foreword

This addendum adds an alternative compliance path for health care facilities that comply with ANSI/ASHRAE/ASHE Standard 189.3, *Design, Construction, and Operation of Sustainable High-Performance Health Care Facilities*. This addendum has been prepared in response to a continuous maintenance proposal from SSPC 189.3, which included the following justification:

"As the technical content of the International Green Construction Code (IgCC), it is imperative that all available ASHRAE technical content is made available to users of the IgCC document. To that end, we would strongly advocate that the content of ASHRAE Standard 189.3 is incorporated into 189.1 to ensure that as future IgCC versions are published, that users are provided access and use of this specific content that addresses health care facilities.

"ASHRAE and our important co-sponsor American Society for Healthcare Engineering (ASHE) have worked extensively to develop a sustainable high-performance standard that addresses the specific needs of healthcare facilities. Significant efforts have been taken over many years before and after publication of 189.3 in continually coordinating the content alongside the activities of 189.1 and the involvement of multiple members in 189.1 sub-committees and the establishment of liaison roles ensures reinforces the commitment to that goal."

This addendum is intended to achieve the same result as the changes identified in the CMP: to allow health care facilities to comply with Standard 189.1 and the IgCC through compliance with 189.3.

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Addendum bq to 189.1-2017

Modify Section 4.1 as follows:

- 4.1 General. Building projects shall comply with either:
 - <u>a.</u> Sections 4 through 11. Within each of those sections, *building projects* shall comply with all mandatory provisions (x.3) and, where offered, either the

BSR/ASHRAE/ICC/USGBC/IES Addendum bq to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings First Public Review Draft.

- 1. Prescriptive Option (x.4) or
- 2. Performance Option (x.5)
- b. ASHRAE/ASHE Standard 189.3

Informative Note: Per its scope, 189.3 is applicable only to "patient care areas and related support areas of health care facilities, including hospitals, nursing facilities, outpatient facilities and their *sites.*"

Add the following reference to Section 11:

ANSI/ASHRAE/ASHE Standard 189.3-2017: Design, Construction, and Operation of Sustainable High-Performance Health Care Facilities 4.1

Public Review Draft

Proposed Addendum br to Standard 189.1-2017

Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings

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Foreword

This addendum removes the JO (jurisdictional option) designation from Section 8.3.1.3b, which requires ozone removal when outdoor air concentrations are expected to be elevated. Given the serious health impacts of elevated ozone concentrations and the ease of removing ozone from air, this requirement is more appropriate as a core requirement of the standard than as a jurisdictional option. Note that addendum 189.1bg (not yet published) makes other changes to this section, which are shown at the end of this document for reference only.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by <u>underlining</u> (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 br to 189.1-2017

Revise Informative Table 4.2 as follows:

SECTION	SECTION TITLE OR DESCRIPTION AND DIRECTIVES	Jurisdictional Requirement
8.3.1.3.(b)	Ozone	<u> </u>

Revise Section 8 as follows:

8.3.1.3 Filtration and Air Cleaner Requirements

b. [JO] Ozone. Outdoor air ozone removal. Air cleaning devices for ozone shall be provided for buildings located in an area that is designated "nonattainment" in an area that exceeds the National Ambient Air Quality Standards (NAAQS) for ozone, as determined by the *authority having jurisdiction (AHJ)*. Such air cleaning devices shall have an ozone removal efficiency of no less than 40% where installed, operated, and maintained in accordance with the manufacturer's recommendations. Such air cleaning devices shall be operated whenever the outdoor ozone level is expected to exceed the NAAQS. This requirement supersedes the requirements of ASHRAE Standard 62.1, Section

BSR/ASHRAE/ICC/USGBC/IES Addendum br to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings First Public Review Draft.

6.2.1.3. This requirement applies to all buildings, including health care facilities covered by ASHRAE/ASHE Standard 170.

For Reference Only

[Note to Reviewers: Addendum bg, which is still in the process of public review and comment resolution, proposes revisions to this same section as well as changing the title as noted above. That addendum retains the [JO] designation, which is proposed for removal by the current addendum. If the revisions to section 8.3.1.3b proposed by addendum bg and this addendum are both approved, Section 8.3.1.3b will appear as follows:]

b. Outdoor air ozone removal. Air cleaning devices for ozone shall be provided for buildings located in an area that is designated "non-attainment" for ozone by the US EPA, or located in an area that does not comply with applicable ambient air quality standards for ozone as determined by the *authority having jurisdiction (AHJ)*. Such air cleaning devices shall have an ozone removal efficiency of not less than 40% where installed, operated, and maintained in accordance with the manufacturer's recommendations, and shall be installed in all *outdoor air* intakes. This requirement supersedes the requirements of ASHRAE Standard 62.1, Section 6.1.4.3. This requirement applies to all buildings, including health care facilities covered by ASHRAE/ASHE Standard 170.

Exceptions to 8.3.1.3b:

1. The system design outdoor air intake flow is 1.5 air change per hour or less.

2. Controls are provided that sense outdoor ozone level and reduce intake airflow to 1.5 air change per hour or less while complying with the outdoor airflow requirements of Section 8.3.1.1.

3. Outdoor air is brought into the building and heated by direct-fired makeup air units.

Public Review Draft

Proposed Addendum by to Standard 189.1-2017

Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings

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Foreword

This addendum removes ANSI/BIFMA e3 from the list of standards for acceptable for compliance with Section 9.4.1.4.3. The ANSI/BIFMA e3 standard is a furniture sustainability standard and not directly applicable to materials and resources referenced in Section 9 of Standard 189.1.

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Addendum by to 189.1-2017

Edit Section 9.4.1.4.3 as follows:

9.4.1.4.3 Third-Party Multiattribute Certification. A material-specific assessment shall be submitted for each product in accordance with one of the following standards, where applicable. The assessment shall be certified as meeting the minimum performance level specified in each standard. Each product complying with this section shall be counted as two products for compliance with Section 9.4.1.4.

- a. ANSI/BIFMA e3 [Adjust subsequent numbering]
- b. NSF/ANSI 140
- c. NSF/ANSI 332
- d. NSF/ANSI 336
- e. NSF/ANSI 342
- f. NSF/ANSI 347
- g. NSC 373
- h. ANSI A138.1
- i. UL 100
- j. UL 102

Public Review Draft

Proposed Addendum w to Standard 189.1-2017

Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings

Second Public Review (July 2020) (Draft Shows Proposed Changes to Current Standard)

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

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



BSR/ASHRAE/ICC/USGBC/IES Addendum w to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings Second Public Review Draft.

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

Foreword

This addendum adds a jurisdictional option for new buildings with less than 100,000 ft^2 of conditioned floor area that are not high-rise to have air tightness verified through whole building air leakage testing. It also updates references to Standard 90.1 to reflect the 2019 version of that standard.

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

Addendum w to 189.1-2017

Add new definitions in Section 3 as follows:

High-rise building: A building with an occupied floor located more than 75 feet (23 m) above the lowest level of fire department vehicle access.

Revise Table 4.2 as follows:

INFORMATIVE TABLE 4.2

REQUIREMENTS DETERMINED BY THE JURISDICTION

SECTION	SECTION TITLE OR DESCRIPTION AND DIRECTIVES	Jurisdictional Requirement
<u>10.3.1.3.5</u>	Building Envelope Airtightness Testing	<u>No</u>

Revise Section 7.3.1.2 as follows:

7.3.1.2 Continuous Air Barrier Air Leakage. The exceptions to the requirement for a *continuous air barrier* in ANSI/ASHRAE/ IES Standard 90.1, Section 5.4.3.1, for specific climate zones and constructions shall not apply. Whole-building pressurization testing shall be conducted in accordance with ASTM E779, ASTM E1827, ASTM E3158, CAN/CGSB-149.10, CAN/CGSB-149.15, or ISO 9972. The testing criteria of Section 10.3.1.3.5(a) shall supersede ANSI/ASHRAE/IES Standard 90.1, Section 5.4.3.1.3(a).

BSR/ASHRAE/ICC/USGBC/IES Addendum w to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings Second Public Review Draft.

Replace Section 10.3.1.3.5 as follows:

10.3.1.3.5 Building Envelope Airtightness. *Building envelope* airtightness shall comply with ANSI/ASHRAE/IES Standard 90.1, with the following modifications and additions. Air leakage *verification* shall be in accordance with ANSI/ASHRAE/IES Standard 90.1, Section <u>5.9.2.2</u>:

a. When implementing the testing option in ANSI/ASHRAE/ IES Standard 90.1, Sections.9.2.2(b) and 5.4.3.1.3(a), wholebuilding pressurization testing shall meet the following requirements:

- 1. It shall be conducted in accordance with ASTM E779, ASTM E1827, CAN/CGSB 149.10, CAN/CGSB 149.15, ISO 9972, or equivalent standard by an independent third party.
- 2. The measured air leakage rate of the building envelope shall not exceed 0.25 cfm/ft² (1.25 L/s·m²) under a pressure differential of 0.3 in. of water (75 Pa), with this air leakage rate normalized by the sum of the above and below grade building envelope areas of the conditioned and semiheated space.
- 3. Section 5.4.3.1.3(a), Exception (1), is not allowed.
- 4. Section <u>5.</u>.4.3.1.3(a), Exception (2), is allowed where the measured air leakage rate exceeds 0.25 cfm/ft² (1.25 L/s m²) but does not exceed 0.40 cfm/ft² (2.0 L/s·m²).

b.When implementing the verification program option in ANSI/ASHRAE/IES Standard 90.1, Section 5.9.2.2(a), the air barrier design review shall be performed by an independent third party.

[JO] 10.3.1.3.5 Building Envelope Airtightness Testing. The requirements in this section supersede the requirements in ANSI/ASHRAE Standard 90.1, Section 5.4.3.1.1.

- a. For new buildings with a *gross conditioned floor area* of 100,000 ft² (10,000 m²) or less and that are not *highrise buildings*, an independent third party shall perform whole-building pressurization testing in accordance with ASTM E779, ASTM E1827, ASTM E3158, CAN/CGSB-149.10, CAN/CGSB-149.15, or ISO 9972.
 - The measured air leakage rate of the building, normalized by the sum of the above-grade and belowgrade building envelope areas of conditioned space and semiheated space shall not exceed 0.25 cfm/ft² (1.25L/s m²) under a pressure differential of 0.3 in. of water (75 Pa).
 - **Exception:** Where the measured air leakage rate is between 0.25 cfm/ft² (1.25 L/s m²) and 0.40 cfm/ft² (2.0 L/s m²), an independent third party shall perform a diagnostic evaluation, perform a visual inspection, prepare a report of corrective actions and submit the report in accordance with Exception 2 to Section 5.4.3.1.1 of Standard 90.1.
 - 2) Where the measured air leakage rate exceeds 0.40 cfm/ft² (2.0 L/s m²), an independent third party shall perform corrective action and repeat the whole-building pressurization testing described in (a) above until the measured air leakage rate complies with the requirements in item 1.
- b. For *high-rise buildings*, buildings greater than 100,000 ft² (10,000 m²) of *gross conditioned floor area*, and existing buildings, an independent third party shall perform either the whole building pressurization testing described in (a) above or shall verify the design and installation of the *continuous air barrier* in accordance with ANSI/ASHRAE Standard 90.1, Section 5.9.1.2

Modify Section 11 (Normative References) by inserting the following references under ASTM:

ASTM E3158-18, Standard Test Method for Measuring the Air Leakage Rate of a Large or Multizone Building, 10.3.1.3.5

Notes to reviewers:

- Addendum ao, published on the ASHRAE website, changed section number for continuous air barrier from 7.3.1.1 to 7.3.1.2
- Addendum ac, published on the ASHRAE website, added the new definition *gross conditioned floor area*, also used here.



Proposed Revision of:

Orifice Flanges

Draft Date 06/2020

TENTATIVE SUBJECT TO REVISION OR WITHDRAWAL Specific Authorization Required For the Reproduction or Quotation ASME Codes and Standards (a) welding neck flanges Classes 300, 400, 600, 900, 1500, and 2500.

'Delete'

ORIFICE FLANGES

(15) **1 SCOPE**

This Standard covers pressure-temperature ratings, materials, dimensions, tolerances, testing, and making of flanges (similar to those covered in ASME B16.5) that have orifice pressure differential connections. Coverage is/limited to the following:

(*a*) welding neck flanges Classes 300, 600, 900, 1500, and 2500. U.S. Customary units are presented in Mandatory Appendix I.

(b) slip-on and threaded Class 300.

(c) welding neck flanges Class 400 in U.S. Customary Anits in Mandatory Appendix II.

2 GENERAL

2.1 References

Codes, standards, and specifications containing provisions to the extent referenced herein constitute requirements of this Standard. These reference documents are listed in Mandatory Appendix III.

2.2 Quality Systems

Nonmandatory requirements relating to the product manufacturer's Quality System Program are described in Nonmandatory Appendix A.

2.3 Relevant Units

This Standard states values in both SI (Metric) and U.S. Customary units. As an exception, diameter of bolts and flange bolt holes are expressed in inch units only. These systems of units are to be regarded separately as standard. Within the text, the U.S. Customary units are shown in parentheses or in separate tables. The values stated in each system are not exact equivalents; therefore, it is required that each system of units be used independently of the other. Except for diameter of bolts and flange bolt holes, combining values from the two systems constitutes nonconformance with the Standard. Except for Class 400, the values in U.S. Customary units are in Mandatory Appendix I. The main text of this Standard does not contain requirements for Class 400 welding neck flanges; however, Mandatory Appendix II does contain requirements for this class, expressed in U.S. Customary units only.

(15) 2.4 Convention

- Except for Class 400, the values in U.S. Customary units are in Mandatory Appendix I. The
- main text of this Standard does not contain requirements expressed in SI units for Class 400 flanges; however, Mandatory Appendix II does contain requirements for this class expressed in U.S. Customary units.

(maximum and minimum values) are specified, shall be as defined in ASTM E29. This requires that an observed or calculated value be rounded off to the nearest unit in the last right-hand digit used for expressing the limit. Decimal values and tolerances do not imply a particular method of measurement.

2.5 Denotation 2.5.1 Pressure

(a) Class, followed by a dimensionless number, is the designation for pressure-temperature ratings as follows: Classes 300 600 900 1500 2500.

(b) Class 400 is retained in the U.S. Customary tables.

2.5.2 Sizes. NPS, followed by a dimensionless number, is the designation for the nominal flange size. NPS is related to the reference nominal diameter, DN, used in international standards. The relationship is, typically, as follows:

NPS	DN
1	25
$1\frac{1}{2}$	40
2	50
$2\frac{1}{2}$	65
3	80
4	100

GENERAL NOTE: For NPS \geq 4, the related DN = 25 × (NPS).

2.6 Service Conditions

Criteria for selection of materials suitable for the particular fluid service are not within the Standard. Except when the purchaser chooses flanges with nipples

3 PRESSURE-TEMPERATURE RATING welded to the flange taps, assembly of

The pressure-temperature ratings, in multiple pieces into the recommendations and limitations, and finished product by rating given in ASME B16.5 apply to the welding or other means

4 MATERIAL

4.1 General

(a) Flange materials shall be in accordance with the requirements of ASME B16.5. Flanges shall be manufactured as one piece in accordance with the applicable materials specification. Assembly of multiple pieces into the finished product by welding or other means is not permitted by this Standard. (15)

s not permitted by this

Standard.

[•]Delete

(b) For materials manufactured to editions of the material specification other than those listed in Mandatory Appendix III of ASME B16.5, refer to para. 4.3.

4.2 Bolting

Bolting material recommendations are given in ASME B16.5. For materials manufactured to editions of the material specification other than those listed in Mandatory Appendix III of ASME B16.5, refer to para. 4.3.

4.3 Materials Manufactured to Other Editions

Materials may meet the requirements of material specfication editions other than those listed in Mandatory Appendix III of ASME B16.5, provided

(*a*) the materials are the same specification, e.g., grade, type, class, or alloy, and heat-treated conditions, as applicable

(*b*) the flange manufacturer certifies that the requirements of the edition of the specification listed in Mandatory Appendix III of ASME B16.5 have been met

4.4 Plugs

Pressure-retaining plugs shall conform to ASME B16.11, unless otherwise agreed between purchaser and manufacturer. Plug material shall be at least as corrosi When the location of the pressure tap with material. respect to the orifice plate is critical to the service and metering conditions, the

5 SIZE distance from the face of the flange to the tap centerline may be changed to

Orifice f size to wh Tables 1 Mandatory Mandatory Orifice f accommodate other than 1.5 mm (0.06 in.) thick gaskets or ring-type joint gaskets whose thickness may vary from that listed in Tables 2 through 5, Tables I-2 through

I-5 or Mandatory Appendix II.

6 MARK

Flanges Changing the distance from the face of the For weldir flange to the tap centerline may also be be marked accomplished by changing the raised face

height. If flat gaskets are being used and **FLANG** the raised face is completely removed, the

7 FLANG user is cautioned to limit the to the outside The finis diameter of raised face, R, in order to

ments of Aassure proper gasket compression.

8 GASKETS FOR RAISED FACE FLANGES

8.1 Gasket Thickness

Flange dimensions are based on the use of 1.5 mm (0.06 in.) thick gaskets.

8.2 Flange Gaskets Requiring Dimensional Changes

When the location of the pressure tap with respect to the orifice plate is critical to the service and metering conditions, its location may be altered to accommodate other than 1.5 mm (0.06 in.) thick gaskets or ring type joint gaskets whose thickness may vary from that listed in Tables 2 through 5 or those listed in Tables I 2 through I-5 or Mandatory Appendix II.

The alteration of location may also be accomplished by the removal of 2 mm (0.06 in.) from the raised face of the flange. If an original 2 mm (0.06 in.) high raised face is removed, the user is cautioned to limit the outside diameter of the gasket or orifice plate to the tabulated *R* dimension.

9 PRESSURE TAPS

91 General

Each orifice flange shall be provided with two pressure tap holes extending radially from the outside diameter of the flange to the inside diameter of the flange. Corner taps may be used on NPS $1\frac{1}{2}$ and smaller if space permits. See Fig. 1.

For ring joint flanges listed in Tables 2 through 5, Tables I-2 through I-5, and Mandatory Appendix II, where radial taps will interfere with the ring groove, angular meter taps, as illustrated in Fig. 2, will be required. Each pressure tap hole shall be equipped with a pipe plug.

9.2 Location

9.2.1 Measurement. The 24 mm (0.94 in.) dimension for raised face and 12 mm (0.75 in.) for ring joint shall be measured at the bore.

9.2.2	*Refer to next page for revisions*	ng
alterati		ce
with th		in
this Sta		þer

agreement between purchaser and manufacturer.

9.3 Pipe Connection

Unless otherwise specified, pressure tap holes may be either tapped $\frac{1}{2}$ NPT in accordance with ASME B1.20.1 or $\frac{1}{2}$ NPS socket connection in accordance with ASME B16.11.

10 JACK SCREW PROVISION

10.1 Location

Each flarge shall have a machine bolt mounted in a hole drilled on the flange bolt circle centerline at 90 deg from the pressure taps, for use as a jack sciew. The machine bolt shall be regular with one heavy lex nut. See Fig. 3.

10.7 Slot for Nut

A slot shall be provided in the flange 2 mm (0.06 in.) vider than the width across flats of the nut. The depth of

Delete*

9 PRESSURE TAPS

9.1 General

Each orifice flange shall be provided with two pressure tap holes extending radially from the outside diameter of the flange to the inside diameter of the flange. Corner taps may be used on NPS $1\frac{1}{2}$ and smaller if space permits. See Fig. 1.

For ring joint flanges listed in Tables 2 through 5, Tables I-2 through I-5, and Mandatory Appendix II, where radial taps will interfere with the ring groove, angular meter taps, as illustrated in Fig. 2, will be required. Each pressure tap hole shall be equipped with a pipe plug.

9.2 Location

9.2.1 Measurement. The 24 mm (0.94 in.) dimension for raised face and 19 mm (0.75 in.) for ring joint shall be measured at the bore.

9.2.2 Identification. For ring joint flanges requiring alteration of pressure tap location due to interference with the ring groove other than methods provided in this Standard, such alteration shall be identified per agreement between purchaser and manufacturer.

9.3 Pipe Connection

Unless otherwise specified, pressure tap holes may be either tapped $\frac{1}{2}$ NPT in accordance with ASME B1.20.1 or $\frac{1}{2}$ NPS socket connection in accordance with ASME B16.11.

10 JACK SCREW PROVISION 10.1 Location

Each flange shall have a machine bolt mounted in a hole drilled on the flange bolt circle centerline at 90 deg from the pressure taps, for use as a jack screw. The machine bolt shall be regular with one heavy hex nut. See Fig. 3.

10.2 Slot for Nut

A slot shall be provided in the flange 2 mm (0.06 in.) wider than the width across flats of the nut. The depth of

Delete

The distance between the centerline of the tap and the face of the flange shall be measured at the bore. Dimensions different than those shown in the tables may be supplied by agreement between the purchaser and manufacturer.

When methods other than those described in this standard are used for ring joint flanges requiring changes to the pressure tap location due to interference with the ring groove, such changes shall be identified as agreed by purchaser and manufacturer.

Unless otherwise specified by the purchaser, orifice flanges shall be supplied with NPS ½ threaded connections.

NEW

9.3.1 NPS ½ Taps. Pressure tap connections may be internally threaded in accordance with ASME B1.20.1 or socket in accordance with ASME B16.11. Each threaded pressure tap connection shall be equipped with a pipe plug meeting the requirements of para. 4.4. Each socket pressure tap connection shall be fitted with a plastic socket weld plug.

NEW

9.3.2 Nipples. NPS ½ or NPS ¾ nipples may be provided at the pressure tap connections when specified by the purchaser. Unless otherwise agreed by the purchaser and the manufacturer, nipples shall: a. extend 75 mm (3 in.) beyond the outside diameter of the flange

b. have plain ends

c. be Schedule 160 wall thickness in accordance with ASME B36.10M

d. be at least as corrosion resistant as the corresponding flange material

Welding shall be in accordance with the requirements of ASME B31.1 or ASME B31.3. The NPS ½ nipple shall be socket welded to the flange. The NPS ¾ nipple shall be full penetration groove welded to the flange as illustrated in Figure 4.



MANDATORY APPENDIX III REFERENCES

The following is a list of publications referenced in this Standard. The latest editions of ASME publications are to be used.

ASME B1.20.1, Pipe Threaded, General Purpose (Inch) ASME B16.5, Pipe Flanges and Flanged Fittings

ASME B16.11, Forged Fittings, Socket-Welding and Threaded

ASME B16.21, Nonmetallic Gaskets for Pipe Flanges

ASME Boiler and Pressure Vessel Code: Section I, Power Boilers; Section II, Materials; Section III, Nuclear Power Plant Components; Section VIII, Divisions 1 and 2, Pressure Vessels Publisher: The American Society of Mechanical Engineers (ASME), Two Park Avenue, New York, NY 10016-5990 (www.asme.org)

- ISO 9000:2005, Quality management systems Fundamentals and vocabulary
- ISO 9001:2008, Quality management systems Requirements
- ISO 9004:2000, Quality management systems Guidelines for performance improvements
- Publisher: International Organization for Standardization (ISO), 1 ch. de la Voie-Creuse, Case postale 56, CH-1211 Genève 20, Switzerland/Suisse (www.iso.org)

Insert New ASME B36.10M, Welded and Seamless Wrought Steel Pipe ASME B31.1, Power Piping ASME B31.3, Process Piping



Proposed Revision of:

Line Blanks

Draft Date 06/2020

TENTATIVE SUBJECT TO REVISION OR WITHDRAWAL Specific Authorization Required For the Reproduction or Quotation ASME Codes and Standards



Table 1 Dimensions of Class 150 Blanks for Use With Raised Face Flanges

Optional Raised Face [Note (2)]

	Inside Diameter, B,	Outside Diameter, O,	Centerline Dimension, A,	Thickness, <i>t</i> ,	Web Width, <i>W</i> ,
NPS	mm	mm	mm	mm	mm
1/2	16	45	60	3.0	38
3/4	21	54	70	3.0	38
1	27	64	80	3.0	38
$1^{1}/_{4}$	42 12	21 73	90	6.4	38
$1^{1}/_{2}$	48	83	100	6.4	38
2	61	102	120	6.4	51
2 ¹ / ₂	73	₩ ₁₀₇	140	6.4	51
3	89	133 – 17	1 150	6.4	64
$3^{1}/_{2}$	102	159	175	9.7	64
4	114	172	190	9.7	64
5	141	194	215	9.7	76
6	168	219	240	12.7	76
8	219	276	300	12.7	76
10	273	337	360	15.7	102
12	324	406	430	19.1	102
14	356	448	475	19.1	108
16	406	511	540	22.4	108
18	457	546	580	25.4	114
20	508	603	635	28.4	121
24	610	714	750	31.8	140

GENERAL NOTE: Dimensions are in millimeters. For inch dimensions, refer to corresponding Table I-1 in Mandatory Appendix I. NOTES:

(1) Hole size (where required due to bolt spacing) shall be the same as the flange bolt hole and located such that it will not interfere with bolting between two flanges.

(2) Optional raised face. Refer to para. 4.3.1.

(3) The thickness of the web (or tie bar) dimension, W_t , shall be as determined by para. 4.1.



 Table 7
 Dimensions of Class 150 Female Ring-Joint Facing Figure-8 Blanks

	Inside Diameter, <i>B</i> ,	Outside Diameter, <i>O</i> ,	Centerline Dimension, A,	Thickness, <i>t</i> ,	Web Width, <i>W</i> ,
NPS	mm	mm	mm	mm	mm
1	34	64	80	19.1	51
$1^{1}/_{4}$	42	73	90	19.1	51
$1^{1}/_{2}$	48	83	100	19.1	57
2	61	102	120	19.1	57
$2^{1}/_{2}$	73	121	140	22.4	57
3	89	1331	71 150	22.4	57
3 ¹ / ₂	102	154	175	22.4	64
4	11/	177	190	22 /	64
5	141	194	215	25.4	70
6	168	219	240	25.4	83
8	219	273	300	28.4	95
10	273	330 4	360	31.8	102
12	324	406	430	35.1	121
14	356	426	475	35.1	127
16	406	483	540	38.1	127
18	457	546	580	41.1	127
20	508	597	635	41.1	127
24	610	711	750	47.8	152

GENERAL NOTE: Dimensions are in millimeters. For inch dimensions, refer to corresponding Table I-7 in Mandatory Appendix I. NOTES:

 Hole size (where required due to bolt spacing) shall be the same as the flange bolt hole and located such that it will not interfere with bolting between two flanges.

(2) Female ring-joint groove dimensions shall be in accordance with ASME B16.5.

(3) The thickness of the web (or tie bar) dimension, W_t , shall be as determined by para. 4.1.



Table 14 Dimensions of Class 300 Male Ring-Joint Facing Figure-8 Blanks

	Inside Diameter, <i>B</i> ,	Centerline Dimension, A,	Thickness, <i>t</i> ,	Web Width, <i>W</i> ,
NPS	mm	mm	mm	mm
1/2	21	65	6.4	38
3/4	27	80	9.7	45
1	34	90	9.7	51
$1^{1}/_{4}$	42	100	9.7	51
$1^{1}/_{2}$	48	115	9.7	57
2	61	125	12.7	57
2 ¹ / ₂	73	150	15.7	57
3	89	170	15.7	57
$3^{1}/_{2}$	102	180	15.7	64
4	114	200	15.7	64
5	141	235	19.1	76
6	168	270	22.4	83
8	219	330 - 515	25.4	95
10	273	390	28.4	102
12	324	450	35.1	121
14	356	415	38.1	127
16	406	570	41.1	127
18	457	630	44.5	127
20	508	685	50.8	127
24	610	810	57.2	152

GENERAL NOTE: Dimensions are in millimeters. For inch dimensions, refer to corresponding Table I-14 in Mandatory Appendix I. NOTES:

- (1) Hole size (where required due to bolt spacing) shall be the same as the flange bolt hole and located such that it will not interfere with bolting between two flanges.
- (2) Oval or octagonal ring shapes may be provided; only the oval ring is illustrated for simplicity. Ring dimensions shall be in accordance with ASME B16.20, except $T_h = T + t$, where T is the ring height specified in ASME B16.20.
- (3) The thickness of the web (or tie bar) dimension, W_t , shall be as determined by para. 4.1.



Proposed Revision of:

Manual for Determining the Remaining Strength of Corroded Pipelines

Supplement to ASME B31 Code for Pressure Piping

Draft Date 06/2020

TENTATIVE SUBJECT TO REVISION OR WITHDRAWAL Specific Authorization Required for Reproduction or Quotation ASME Codes and Standards the nominal hoop stress based on the original wall dimension. Evaluation of individual deep pits within a generally corroded area should account for the effect of wall loss due to general corrosion.

(c) Under conditions normally encountered in buried pipelines, the hoop stress due to internal pressure is the largest stress and will govern the mode of failure. High longitudinal stresses in tension acting on metal loss having a significant circumferential extent, in unrestrained piping, could change the failure mode from longitudinal to circumferential. The methods and criteria provided herein do not address circumferential failure due to high longitudinal tensile stresses. For such situations, the user should refer to a more comprehensive fitness-forpurpose guidance document, such as API 579-1/ ASME FFS-1–2007, Fitness-for-Service.

(*d*) Metal loss having a significant circumferential extent and acted on by high longitudinal stresses in compression could be susceptible to wrinkling or buckling. Also, the combination of hoop stress due to internal pressure and longitudinal compression could interact to lower the failure pressure in the metal loss area. The methods and criteria provided herein do not address buckling or wrinkling, or interaction of hoop stress with longitudinal compressive stresses. For such situations, the user should refer to a more comprehensive fitness-for-purpose guidance document, such as API 579-1/ASME FFS-1.

(12) 1.5 Nomenclature

- A = local area of metal loss in the longitudinal plane
- A_C = cross-sectional area of Charpy impact specimen
- A_0 = local original metal area = Lt
- C_V = Charpy V-notched impact absorbed energy
- D = specified outside diameter of the pipe
- d = depth of the metal loss
- E = elastic modulus of steel
- L =length of the metal loss
- $-L_e = \text{effective length} = L(\pi/4)$

M = bulging stress magnification factor

- MAOP = maximum allowable operating pressure
 - MOP = maximum operating pressure
 - P_F = estimated failure pressure = $2S_F t/D$
 - P_O = operating pressure, may equal MAOP or MOP
 - P_S = safe operating pressure = P_F/SF
 - S_F = estimated failure stress level
 - S_{flow} = flow stress, defined in para. 1.7(b)
 - S_O = hoop stress at the operating pressure, calculated as $P_OD/2t$
 - S_{UT} = specified ultimate tensile strength at temperature, may equal SMTS
 - S_{YT} = specified yield strength at temperature, may equal SMYS

$$SF = safety factor$$

- *SMTS* = specified minimum tensile strength at ambient conditions
- *SMYS* = specified minimum yield strength at ambient conditions
 - t = pipe wall thickness $z = L^2/Dt$ $z_e = L_e^2/Dt$

1.6 Analysis Level

The user may choose to conduct a Level 0, Level 1, Level 2, or Level 3 analysis, depending on the quantity and quality of data available with which to perform an evaluation, and on the desired degree of refinement of the analysis.

(*a*) A Level 0 evaluation is one that relies on the tables of allowable defect length and depth found in section 3. These tables are carried over without change from earlier editions of ASME B31G and have been supplemented by the addition of tables in metric units. It is intended that a Level 0 evaluation be conducted in the field without the need for performing detailed calculations.

(*b*) A Level 1 evaluation is a simple calculation that relies on single measurements of the maximum depth and axial extent of metal loss. It is intended that a Level 1 evaluation be conducted in the field by an engineer, corrosion technician, coating inspector, or other individual having appropriate training. A Level 1 evaluation is also suitable for use in prioritizing metal-loss anomalies identified by inline inspection.

(c) A Level 2 evaluation is one that incorporates a greater level of detail than a Level 1 evaluation in order to produce a more accurate estimate of the failure pressure. It typically relies on detailed measurements of the corroded surface profile, accounting for the actual distribution of metal loss, and involves repetitive computations that may be facilitated by the use of computer software or spreadsheets. It is intended that a Level 2 evaluation be conducted by an engineer or technician having appropriate training. A Level 2 evaluation may be suitable for use in prioritizing metal-loss anomalies identified by high-resolution inline inspection.

(*d*) A Level 3 evaluation is a detailed analysis of a specific flaw in accordance with a user-defined methodology, with full justification for loadings, boundary conditions, material properties, and failure criteria. It is intended that a Level 3 evaluation be conducted by a technical specialist having appropriate expertise in the subject of fitness-for-service assessment.

1.7 Material Properties and Other Data

(*a*) Specified minimum material properties shall be used when conducting Level 0, Level 1, or Level 2 evaluations for the purpose of determining the need for a repair. Actual material properties from mill test reports (MTRs) or laboratory testing, if known with sufficient

ERRATA:

Change to "uncorroded"

ASME B31G INTERPRETATIONS

Record: 19-1548

Interpretation: G-1-01

Subject: ASME B31G-2009

Date Issued: September 29, 2011

File: 11-1259

Question (1): When calculating the term $z = L^2/Dt$, is t in this case the corroded pipe wall thickness?

Reply (1): No. Dimension t is the uncorroded pipe wall thickness.

Question (2): When calculating the failure stress (S_F), is t the corroded pipe wall thickness? Reply (2): Yes.

Question (3): When calculating the hoop stress (S_O or S_h), is t in this case the corroded pipe wall thickness?

Reply (3): No. Dimension t is the uncorroded pipe wall thickness.

Question (4): Does *t* represent the uncorrroded pipe wall thickness? Reply (4): Yes. Not for publication. This document is part of the NSF International standard development process. This draft text is for circulation for review and/or approval by an NSF Standards Committee and has not been published or otherwise officially adopted. All rights reserved. This document may be reproduced for informational purposes only.

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

NSF/ANSI Standard for Drinking Water Treatment Units —

NSF/ANSI 42: Drinking Water Treatment Units – Aesthetic Effects

NSF/ANSI 53: Drinking Water Treatment Units – Health Effects

NSF/ANSI 244: Supplemental Microbiological Water Treatment Systems – Filtration

NSF/ANSI 401: Drinking Water Treatment Units – Emerging Compounds / Incidental Contaminants

- 4.2.2 Exposure water
- •
- 4.2.3 Exposure

4.2.3.1 The system or component(s) of a system shall be installed, flushed, and conditioned in accordance with the manufacturer's instructions using the exposure water specified in Section 4.2.2 at an initial inlet static pressure of 340 kPa (50 psig). Nonpressurized systems, e.g., pour through products, shall be exposed at atmospheric pressure.

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Rationale: Added statement for clarity per 2020 DWTU JC meeting discussion (May 13, 2020).

Tracking number 350i49r1 © 2020 NSF International Revision to NSF/ANSI 350-2019 Issue 49 Revision 1 (June 2020)

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NSF/ANSI Standard for Wastewater Technology–

Onsite residential and commercial water reuse treatment systems

8 Performance testing and evaluation

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

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8.1.2.1.1 Greywater challenge water – Systems treating bathing source water

Prepare the challenge water according to the following formula:

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

Revision to NSF/ANSI 350-2019 Issue 49 Revision 1 (June 2020)

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¹ See Annex I-2 for example products.

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

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

Parameter	Required range	Individual sample maximum
TSS	50 to 100 mg/L	
BOD ₅	100 to 200 mg/L	
temperature	25 to 35 °C	
рН	6.0 to 8.5	
turbidity	30 to 70 NTU	
total phosphorous – P	1.0 to 4.0 mg/L	
total Kjeldahl nitrogen – N	3.0 to 5.0 mg/L	_
COD	200 to 400 mg/L	_
total coliforms ¹	10 ³ to 10 ⁷ cfu/100 mL or	10 ⁹ cfu/100 mL or
(30-d geometric mean)	10 ³ to 10 ⁷ MPN/ 100 mL	10 ⁹ MPN/ 100 mL
E. colĭ¹	10 ² to 10 ⁶ cfu/100 mL or	10 ⁷ cfu/100 mL or
(30-d geometric mean)	10 ² to 10 ⁶ MPN/100 mL	10 ⁷ MPN/100 mL
¹ See Section 8.6.1.2.		

8.1.2.1.2 Greywater challenge water – Systems treating laundry source water

Prepare the challenge water according to the following formula:

Wastewater components ¹	Amount/100 L
liquid laundry detergent (2x)	40 mL
A2 – fine test dust, meeting ISO 12103-1	10 g
secondary effluent	2 L
raw influent screened to ≤ 1mm	1 L
liquid laundry fabric softener	21 mL
Na ₂ SO ₄	4 g
NaHCO ₃	2 g
Na ₃ PO ₄	4 g
urea	as needed to bring influent TKN within the specified range
NaOH	as needed to adjust pH

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HCI	as needed to adjust pH	
¹ See Annex I-2 for example products.		

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

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

Parameter	Required range	Individual sample maximum	
TSS	50 to 100 mg/L		
BOD₅	220 to 370 mg/L		
temperature	25 to 35 °C	—	
рН	6.0 to 8.5		
turbidity	50 to 90 NTU		
total phosphorous – P	< 2 mg/L		
total Kjeldahl nitrogen – N	4.0 to 6.0 mg/L	_	
COD	300 to 740 mg/L		
total coliforms ¹ (30-d geometric mean)	10 ³ to 10 ⁷ cfu/100 mL or 10 ³ to 10 ⁷ MPN/100 mL 10 ² to 10 ⁶ cfu/100 mL or	10 ⁹ cfu/100 mL or 10 ⁹ MPN/100 mL 10 ⁷ cfu/100 mL or	
(30-d geometric mean)	10 ² to 10 ⁶ MPN/100 mL	10 ⁷ MPN/100 mL	
¹ See Section 8.6.1.2.			

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

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

Parameter	Required range	Required range Individual sample maximum	
TSS	50 to 160 mg/L		
BOD₅	130 to 210 mg/L	—	
temperature	25 to 35 °C	_	
рН	6.0 to 8.5	_	
turbidity	30 to 100 NTU	_	
total phosphorous – P	1.0 to 3.0 mg/L	_	
total Kjeldahl nitrogen – N	3.0 to 5.0 mg/L	_	
COD	250 to 420 mg/L	_	
total coliforms ¹	10 ³ to 10 ⁷ cfu/100 mL or	10 ⁹ cfu/100 mL or	
(30-d geometric mean)	10 ³ to 10 ⁷ MPN/100 mL	10 ⁹ MPN/100 mL	

Revision to NSF/ANSI 350-2019 Issue 49 Revision 1 (June 2020)

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

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Normative Annex 1

(formerly Annex A)

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

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	Table N-1.1	
Summary of anal	ytical accuracy and	precision limit goals

Analyses	Units	Reference methods	Accuracy percent recovery	Precision relative percent difference
BOD ₅	mg/L	SM 5210 B	75 to 125	0 to 20
CBOD ₅	mg/L	SM 5210 B	75 to 125	0 to 20
total suspended solids	mg/L	SM 2540 D	NA ¹	0 to 10
рН	SU	SM 4500-H+-B	NA ¹	0 to 10
temperature	°C	SM 2550 B ²	NA ¹	0 to 10
E. coli	MPN/100 mL or	SM 9221		
	cfu/100mL	SM 9223-B by Colilert		
turbidity	NTU	EPA 180.1	89 to 102	0 to 7
total chlorine residual	mg/L	SM 4500-CI-B-I	98 to 111	0 to 10
TKN	mg/L as N	EPA 351.2	80 to 120	0 to 10
NO ₃ /NO ₂	mg/L as N	EPA 353.2	80 to 120	0 to 10
total phosphorous	mg/L	SM 4500-P-E	89 to 123	0 to 10
COD	mg/L	SM 5220 B		
total caliform	MPN/100 mL or	SM 9221		
total collform	cfu/100mL	SM 9222-B		
TOC	mg/L	SM 5310 C	79 to 129	0 to 5
alkalinity	mg/L as CaCO₃	EPA 310.1	80 to 120%	0 to 10
hardness	mg/L as CaCO₃	EPA 200.7	88 to 119	0 to 17
¹ NA: Not applicable.				
² Standard Methods. ⁴				
Revision to NSF/ANSI 350-2019 Draft 1, Issue 55 (June 2020)

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NSF/ANSI Standard For Wastewater Technology –

Onsite Residential and Commercial Water Reuse Treatment Systems

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- •
- 3 Definitions
- •
- •

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3.X maintenance: Routine activities specified by the manufacturer in O&M manuals on a regular schedule that allow the treatment system to perform as intended.

Examples of maintenance activities include but are not limited to:

- cleaning filters,
- replacing media,
- cleaning screens,
- rebooting operating system following power loss,
- cleaning UV light tubes or;
- filling chemical reservoirs.

Maintenance is carried out by trained personnel, which may include treatment system owners. Maintenance is to be distinguished from repairs, which are not routine and happen only when a component fails.

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Revision to NSF/ANSI 350-2019 Draft 1, Issue 55 (June 2020)

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Normative Annex 1

(formerly Annex A)

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

N-1.1 General description

A detailed procedure for field evaluation, consistent with the testing and performance evaluation described above in Section 8, *Performance Testing and Evaluation*, shall be developed for each field evaluation. The components shall include the following:

- facility description;
- wastewater source description;
- daily volume of treated reuse water production;
- test duration, minimum of 6 mo;
- sample collection:
 - sample frequency, as per Section 8.4; and
 - specific analyses, influent and effluent, as per Section 8.5.
- performance criteria, as per Section 8.6; and
- final report.

When system maintenance is a normal part of operation, the manufacturer may specify maintenance for the test agency to perform at prescribed intervals during testing. Examples include but are not limited to:

- filling a reservoir with a consumable; or
- cleaning a screen.
- •
- •
- •

N-1.5 Reporting

At a minimum, reports shall include:

- description of onsite commercial treatment system location(s);
- specifications for the tested system;
- description of typical installation;
- list of key participants;
- complete description of sampling and analytical methods;
- all testing results; and
- rationale for exclusion of data or removal of a system from statistical analysis.
- A list of all maintenance events that includes a description and date for each event.

Default Ballot

ANSI/TIA-PN-568.2-D-2-D1, Balanced Twisted-Pair Telecommunications Cabling and Components Standard Addendum 2: Power Delivery Over Balanced Twisted-Pair Cabling

This default ballot is a result of the comment resolution held regarding ANSI/TIA-PN-568.2-D-2-R1 and is limited to 3 specific technical changes and unresolved technical comments. Other comments submitted to ANSI/TIA-PN-568.2-D-2-R1 were resolved editorially. The results of the ANSI/TIA-PN-568.2-D-2-R1 ballot consisted of 13 "abstain", 17 "approve" votes, 5 "approve with comments" votes, and 1 with "disapprove with comments".

This default ballot is constructed in a table format with the submitter (source) of each ANSI/TIA-PN-568.2-D-2-R1 ballot comment included in the "ID" column for each row. Each comment within this default ballot corresponds to the location within the ANSI/TIA-PN-568.2-D-2-R1 ballot document (page, clause, line). The locations of the two technical changes and one unresolved technical comment for this default ballot correspond to the locations within the ANSI/TIA-PN-568.2-D-2-R1 ballot document.

For the purpose of this default ballot, the resolution to the submitter's comment that was reached by the Subcommittee should be considered in your vote and comment. For example:

- If you agree with the resolution to these items, your vote would be "yes", or
- if you agree with the resolution, but have comments to the resolution, your vote would be "yes with comments" and include specific proposed changes along with rationale, or
- if you disagree with the resolution, your vote would be "disapprove with comments" and include specific proposed changes along with rationale.

The following is copied from the TR-42 Operational Guide regarding ballot comment and resolution

11. BALLOT COMMENT AND RESOLUTION

Ballot comment resolution is typically constructed by the editor of the document in cooperation with the chair. "Technical comments" and "technical 'no' with comments" submitted on the document shall be included in ballot resolution. Comments submitted as "technical" shall not be re-classified as "editorial" and shall be addressed in committee. Editorial comments submitted on the document may be considered technical by the editor or chair and shall be included in the ballot resolution. Purely editorial comments will be posted for committee consideration and may be accepted as a grouping of comments (thereby reducing the time of the committee).

11.1 Acceptable resolutions

There are 4 acceptable resolutions to ballot comments: These resolutions shall be recorded for each comment. Consensus (see current TIA Engineering Manual) is the goal of comment resolution.

- Reject: No consensus to support the proposed change.
- Withdrawn: The commenter withdraws their proposal.
- Accept: The proposed change shall be implemented in the document exactly as proposed.
- Accept with Edits: The proposed change, along with the groups agreed upon and recorded changes shall be implemented in the document.

NOTES

1 – Accommodated resolutions are typically recorded as "Accepted with edits" and refer to the comment (those that are typically "accept" or accept with edits") that accommodated the comment.

2 – Specific efforts to resolve comments shall be documented and noted within the ballot comment resolution and meeting report.

11.2 Comment submittal

Comments are to be submitted on the TR-42 Ballot Comment Form (found in admin folder of TR-42MAIN FTP site). The comments are to be specific and include proposed text for review and consideration. Comments that do not provide specific text for review and consideration are subject to rejection. Providing specific editable text ensures that the comment resolution process results in documented closure on each issue. Where the committee rejects comments, it shall be noted, in general, within the resolution document and meeting report the attempts made to resolve the comment.

Examples of unacceptable proposed comment resolutions include:

- "Add a new annex on XXX" (no text provided)
- "Add a new clause on YYY" (no text provided)
- "Add text to harmonize with ZZZ" (no text provided)
- Assign to an individual, task group, or committee to develop text
- 11.3 Guidelines for reconsidering comments

A comment that has been resolved may be re-opened for consideration if a motion from the floor is made to, "Reconsider". A motion to re-consider can only be made by a member who voted with the prevailing side. It requires a second and greater than 50% consensus support.

Comments on ANSI/TIA-PN-568.2-D-2-R1, Balanced Twisted-Pair Telecommunications Cabling and Components Standard Addendum 2: Power Delivery Over Balanced Twisted-Pair Cabling

E: editorial, T: technical, TN: technical no vote issue ID: Company with comment # (do not automate comment #) Please do not re-size table

Page	Line	Clause	E/T/TN	ID	Comment (rationale)	Proposed change (specific; add, delete. From-to)	Resolution
5	210	Q.2.1	Т	CS-07	Clarification. Make this generic and outside the scope for horizontal cables only. 28 AWG cords are allowed with additional installation restrictions of bundle size and spacing. See lines 231-232	From: Conductor sizes smaller than 28 AWG shall not be used. To: Conductor sizes smaller than 28 AWG are not recognized for horizontal cables in TIA-568-D and outside the scope of this standard.	Rejected no consensus for change
7	249	Q.3.3.2	Т	Prysmian	Per TSB-184A Table A.6	From: Cat5e 1000mA in Air, max bundle size is 58 (typo) To: Should be 51	Accept
10	319	Q.4.3	Т	CS-09	This will prevent a hidden mid-span DCPS from existing and potentially damaging equipment.	Add note 4: A mid-span DCPS should be placed outside the permanent link.	Accept

BSR/UL 13 Standard for Safety for Power-Limited Circuit Cables

For your convenience in review, proposed additions to the previously proposed requirements dated 2019-12-20 are shown underlined and proposed deletions are shown lined out.

missionfromUl Topic 1. Add a continuity test to Section 23 Impact Test for Type PLTC Cable Marked "-ER"

PROPOSAL

23.10 The test sample of the cable is to be advanced to and impacted at each of the successive marks for a total of ten strikes. After each strike, continuity of the circuit conductors is to be checked (see Continuity Test of Conductors, Section 16). When any lamp lights this is considered a failure and the impacted cable section containing the short mark(s) should be removed from the cable before continuing with the impact test. If more than two of the ten impact points on any test length causes a lamp to light, the cable does not meet the impact-test requirement. Additionally, any failure of the continuity test is considered a failure of the impact test requirement.

16.2 To determine whether or not the finished cable complies with the requirement in 5.3, 10.1, or in 23.10 for cable marked "-ER", each conductor or shield taken separately is to be connected in series with a light-emitting diode (LED), lamp, buzzer, bell, or other indicator, and an appropriate low-voltage a-c or d-c power supply less than 30 V.

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BSR/UL 360, Standard for Liquid-Tight Flexible Metal Conduit

1. Introduction of a range for the specific gravity of copper sulfate solution

PROPOSAL

15.2 The solution of copper sulfate is to be made from distilled water and the American Chemical Society (ACS) reagent grade of cupric sulfate (CuSO₄). In a copper container or in a glass, polyethylene, or other chemically nonreactive container to which a bright piece of cooper is added, a quantity of the cupric sulfate is to be dissolved in hot distilled water to obtain a solution that has a specific gravity slightly higher than 1.186 within the range of 1.183 to 1.189 after the solution is cooled to a temperature of 18.3°C (65.0°F). As necessary, Aany free acid that might be present is to be neutralized by the addition of approximately 1 gram of cupric oxide (CuO) or 1 gram of cupric hydroxide [Cu(OH)₂] per liter of solution. The solution is to be diluted with distilled water to obtain a specific gravity of exactly 1.186 within the range of 1.183 to 1189 at a temperature of

BSR/UL 412, Standard for Safety for Refrigeration Unit Coolers

1. Proposed Revision to Replace the References to the Standard For Power Conversion Equipment, UL 508C, With Reference to the Standard For Adjustable Speed Electric Power Drive Systems, UL 61800-5-1

25.14 Except as specified in <u>25.16</u>, an operating control, including of the electronic type, **1**¹ shall comply with:
a) One of the standards specified in <u>25.10</u> (a) - (g);
b) The requirements in this Standard as far as they reasonably apply; or

- c) One of the following standards:
 - Standard for Solid-State Controls for Appliances, UL 244A; 1)

Standard for Automatic Electrical Controls Part 1: General 2) Requirements, UL 60730-1, and the applicable Part 2 standard from the UL 60730 series; or

Standard for Power Conversion Equipment, UL 508C Standard for 3) Leophiested material Not authorized for furth Adjustable Speed Electric Power Drive Systems – Part 5-1: Safety Requirements - Electrical, Thermal, and Energy, UL 61800-5-1.

BSR/UL 923, Standard for Safety for Household Microwave Ovens

1. Child Resistant Oven Door

36A.1.4 For touch-type controls, if the door has not opened within 10 seconds, the door ionfromul will require a renewed two-step action sequence to unlock the door.

2. Withdrawal and replacement of 508C with UL 618005-1

21.5 Electronically protected motor circuits shall comply with one of the following:

a) The Standard for Tests for Safety-Related Controls Employing Solid-State Devices, UL 991. When the protective electronic circuit is relying upon software as a protective component, it shall comply with the requirements in the Standard for Software in Programmable Components, UL 1998. If software is relied upon to perform a safety function, it shall be considered software Class 1; b) The Standard for Automatic Electrical Controls - Part 1: General Requirements, UL 60730-1. If software is relied upon to perform a safety function, it shall be considered software Class B; or

c) The Standard for Power Conversion Equipment, UL 508C Standard for Adjustable Speed Electrical Power Drive Systems - Part 5-1: Safety Requirements - Electrical, Thermal and Energy - UL 61800-5-1.

Exception No. 1: Compliance with the above standards is not required for an electronically protected motor circuit if there is no risk of fire, electric shock, or injury to persons during abnormal testing with the motor electronic circuit rendered ineffective; compliance with the applicable requirements of this end product standard is then required.

Exception No. 2: For DC motors used in Class 2 low-voltage circuits, the above evaluation does not apply. Only the applicable requirements for risk of fire and injury in this end product standard shall apply. JL copyrighted mai

UL 962A, Standard for Safety for Furniture Power Distribution Units

1. Enclosure Cap or Cover Over the Reset Actuator (i.e. Stem) of a Supplementary Protector

CONSTRUCTION

7 Enclosure

7.1 General

Inission from UL. 7.1.5.1 An FPDU that employs an enclosure cap or cover over the reset actuator (i.e. stem) of a supplementary protector shall not interfere with trip and/or reset function of the supplementary overcurrent protector.

16 Supplementary Overcurrent Protection

16.4.1 An FPDU that employs an enclosure cap or cover over the reset actuator (i.e. stem) of a supplementary overcurrent protector shall comply with Impact test Section 38.1.3.1 followed by the tionwithout Supplementary Overcurrent Protector Check Test Section 38.5.

38 Impact Tests

38.1 General

38.1.1 A FPDU employing a metallic or polymeric enclosure is to be subjected to the impact tests described in 38.2.1 – 38.4.1 38.5.7 without any occurrence of the following:

a) Creation of any openings in the enclosure that result in accessibility of live parts, when evaluated in accordance with Enclosure Accessibility and Accessibility of Live Parts, Section 9:

- b) Any condition that is capable of affecting the intended mechanical performance of the FPDU;
- c) Any other condition that increases the risk of electric shock; and
- d) Spacings shall not be less than those described in Spacings, Section 20; and
- e) Prevention of either trip and/or reset function when an FPDU employs an enclosure cap or cover over the reset actuator (i.e. stem) of a supplementary overcurrent protector.

38.1.3.1 With reference to 38.1.1(e), there shall not be cracking or denting of the enclosure that affects the function of the supplementary overcurrent protector as a result of the Drop Impact Test. Section 38.2. After being subjected to the Drop Impact Test described in Section 38.2, each device shall then be subjected to Section 38.5, Supplementary Overcurrent Protector Check Test.

38.2 Drop impact test

38.2.1 Each of three samples of the FPDU is to be subjected to an impact that results from the sample being dropped three times (a series) through a distance of 3 ft (0.91 m) from the bottom of the FPDU to strike a hardwood surface in the positions that produce adverse results. In each drop, the sample is to strike in a position on the enclosure different from those of each of the other two drops in the series.

Exception: When agreeable to those concerned, fewer samples are not prohibited from being used in accordance with Figure 38.2 38.1 wherein each series consists of three drops of the sample. The overall performance is acceptable upon completion of any one of the sequences represented in the figure.

38.3 Steel sphere impact test

38.3.1 Each of three samples of the FPDU shall be subjected to a single impact of 5 ft lbf (6.8 J). Each impact shall be applied to an enclosure surface not impacted previously in the test sequence. Each impact is to be imparted by dropping a steel sphere 2 inches (50.8 mm) in diameter, and weighing 1.18 lb (0.535 kg), from a height that produces the specified impact as shown in Figure 38.3 38.2.

The ball shall not impact on a receptacle face, <u>supplementary</u> overcurrent protective device, switch, pilot light or similar component. For surfaces other than the top on an enclosure, the steel sphere is to be suspended by a cord and swung as a pendulum, dropping through the vertical distance required to cause it to strike the surface with the specified impact as shown in Figure 38.3. Three samples are to be used for the tests in the equipment restrained mode.

Exception: When agreeable to those concerned, fewer than three samples are not prohibited from being used for the tests in accordance with Figure <u>38.2</u> <u>38.1</u> in which each series of impacts is to consist of one impact. The overall performance is acceptable upon completion of any one of the sequences represented in the figure.



1 - H indicates the vertical distance the sphere must travel to produce the desired impact.

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2 – The supporting surface is to consist of a layer of tongue-and-groove oak flooring mounted on two layers of 3/4 in (19 mm) plywood. The oak flooring is nominally 3/4 in thick (actual size 3/4 by 2 1/4 in or 19 by 57 mm). The assembly is to rest on a concrete floor. An equivalent non-resilient supporting surface is not prohibited from being used.







1 - H indicates the vertical distance the sphere must travel to produce the desired impact.

2 - For the ball pendulum impact test the sphere is to contact the test sample when the string is in the vertical position as shown.

3 – The supporting surface is to consist of a layer of tongue-and-groove oak flooring mounted on two layers of 3/4 in (19 mm) plywood. The oak flooring is nominally 3/4 in thick (actual size 3/4 by 2-1/4 in or 19 by 57 mm). The assembly is to rest on a concrete floor. An equivalent non-resilient supporting surface is not prohibited from being used.

4 – The backing surface is to consist of 3/4 in (19 mm) plywood over a rigid surface of concrete. An equivalent nonresilient backing surface is not prohibited from being used.

38.5 Supplementary Overcurrent Protector Check Test

<u>38.5.1 When tested in this section, the supplementary overcurrent protector shall operate as intended</u> when the test circuit is closed.

<u>38.5.2 Each of the three samples previously subjected to Drop Impact Test, Section 38.2, are to be tested</u> through a mated shorted attachment plug.

<u>38.5.3 A receptacle protected by a 20 A circuit breaker for branch circuit protection is to be connected to a flush receptacle installed in a flush device box with a metal faceplate.</u>

38.5.4 The FPDU under test is to be plugged-into the flush receptacle.

<u>38.5.5 An attachment plug shall be assembled to a 2-ft (0.6 m) length of 14 AWG (2.1 mm²) flexible cord or cable. The load conductors shall be shorted together at the end. The plug shall then be inserted in the FPDU under test.</u>

38.5.6 For all test operations, the test circuit shall be closed by an external switch on mated devices.

<u>38.5.7 The supplementary overcurrent protector of the FPDU under test was reset and the test was repeated five times.</u>

2. Correction to Clause 53.24 and 53.25 to Add Clarification for Marked Electrical Rating

53.24 A Class 2 lead or Class 2 separable interface shall be identified as being "Class 2" and marked with the output electrical rating. The "Class 2" and output electrical rating shall be permanently marked and visible after installation. The output electrical rating may be expressed in amperes and voltage, or wattage or in volt-ampere.

L'ur deciring 53.25 The output Class 2 connectors of receptacles with Class 2 integral power supplies shall be identified as being "Class 2" and marked with the output electrical rating. The output electrical rating shall BSR/UL 1203, Standard for Safety for Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations

1. Revisions to add details for the construction and testing of blanking elements (closeup plugs) and thread adapters.

PROPOSAL

7.17 BLANKING ELEMENT - Fitting intended to close unused field wiring entries. These fitting can also be referred to as close-up plugs.

7.18 THREAD ADAPTER - Fitting intended to allow a threaded fitting or conduit to be installed in an opening with a different thread. These fittings may be NPT-NPT, NPT-Metric, or Metric-Metric.

76.2 These requirements cover capped elbows, outlet boxes, conduit fittings for draining or venting, conduit fittings for sealing, conduit unions, cord connectors, flexible-connection fittings, mineral insulated cable fittings, blanking elements, thread adapters, and luminaire fittings of the adjustable, flexible, and rigid types. ductionwi

76.2A Blanking elements

76.2A.1 NPT blanking elements

76.2A.1.1 NPT blanking elements shall comply with the following:

when made from materials other than stainless steel, thread shall conform to the a) NPT requirements of ANSI/ASME B1.20.1;

when made from stainless steel shall, shall conform to the NPT thread form b) requirements of ANSI/ASME B1.20.1, except that the male threads shall gauge with +1/2 to $\pm 1-1/2$ turns beyond the L-1 gauging notch in lieu of the ± 1 turns described in ANSI/ASME B1.20.1.

the effective thread length shall not be less than the "L2" dimension; c)

on fittings with a shoulder or other interruption, a thread length not less than the d) L4 dimension defined shall be provided between the face of the shoulder and the end of the fitting thread; and

there shall be a provision for installation / removal using a tool.

76.2A.2 Metric blanking elements

76.2A.2.1 Metric blanking elements shall comply with the following:

the thread form for external threads shall have a tolerance Class of 6g or better a) according to ISO 965-1 and ISO 965-3, and any chamfer or undercut shall be limited to a maximum axial length of 2 mm from both sides of the threaded part; and the threaded part shall comprise at least eight full threads. If the thread is provided with an undercut, then a non-detachable and non-compressible washer or equivalent device shall be fitted to ensure the required length of thread engagement;

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b) a shoulder or interruption shall be included to preclude the blanking element from being threaded fully through the enclosure wall.; and

c) there shall be a provision for installation / removal using a tool.

76.2A.3 Thread adapters

76.2A.3.1 Thread adapters shall comply with the following:

a) a male NPT thread

- 1. <u>made from materials other than stainless steel, shall conform to the NPT requirements of</u> <u>ANSI/ASME B1.20.1;</u>
- made from stainless steel shall, shall conform to the NPT thread form requirements of ANSI/ASME B1.20.1, except that the male threads shall gauge with +1/2 to +1-1/2 turns beyond the L-1 gauging notch in lieu of the ±1 turns described in ANSI/ASME B1.20.1.
- b) a female NPT thread;
 - 1. thread form shall conform to the NPT requirements of ANSI/ASME B1.20.1;
 - 2. <u>shall shall gauge with +1/2 to +3-1/2 turns beyond the 1 gauging notch in lieu of the ±1</u> <u>turns described in ANSI/ASME B1.20.1; and</u>
 - 3. effective thread length shall not be less than the "2" dimension; and
- c) metric male threads shall have a tolerance Class of 6g or better according to ISO 965-1 and ISO 965-3, and any chamfer or undercut shall be limited to a maximum axial length of 2 mm from both sides of the threaded part; and the threaded part shall comprise at least eight full threads. If the thread is provided with an undercut, then a non-detachable and noncompressible washer or equivalent device shall be fitted to ensure the required length of thread engagement, and a shoulder or interruption shall be included to preclude the blanking element from being threaded fully through the enclosure wall;
- d) metric female threads shall have a tolerance Class of 6H or better according to ISO 965-1 and ISO 965-3, and any chamfer or undercut shall be limited to a maximum axial length of 2 mm from the external wall surface; and the threaded part shall include at least five full threads; and
- e) threads shall be co-axial designs. Alternatively, other designs (such as elbow adapters) shall comply with all of the following:
 - 1. when metric on the side with the male thread, incorporate an external locknut (to secure the adapter in the intended direction); and
 - the length and internal volume of thread adapters shall be minimized.

85.1 Explosion testing performed on outlet boxes and fittings is performed in accordance with Section 21, Explosion Tests, except as specifically required in 85.2 – 85.6.

Exception No. 1: A conduit fitting for sealing, a conduit union, a conduit elbow, <u>a blanking element</u>, <u>a thread adapter</u>, and any other similar fitting, other than a flexible connection fitting or flexible fixture fitting, that does not increase the internal cross-sectional area of the conduit on which it is intended to be installed need not be subjected to explosion tests if:

a) The fitting is for use in Group C, Group D, or Groups C and D locations; or

b) The fitting is for use in Group A, Group B, or Groups A and B, locations and all joints are tapered, threaded type, with taper of 3/4 inch per foot (60 mm/m); and

c) The fitting is subjected to a hydrostatic pressure strength test in accordance with 84.1.

Exception No. 2: A flexible connection fitting or flexible fixture fitting need not be subjected to explosion tests if the fitting is subjected to a hydrostatic pressure strength test in accordance with 86.2.

86.1 For a conduit fitting as described in Exception No. 1 to 85.1 that is not subjected to explosion tests, the hydrostatic test pressure is to be as specified in Table 86.2. For lower ambient temperatures below -25°C, the test pressures are increased by the factors shown in Table 86.4.

Fitting material	Additional test factor for hydrostatic test			
	<u>-40°C</u>	<u>-50°C</u>	<u>-60°C</u>	
<u>cast metal</u>	<u>1.5</u>	tept <u>1.5</u>	<u>1.625</u>	
<u>fabricated steel,</u> stainless steel, or aluminium	1.125 601 filt	<u>1.125</u>	<u>1.2</u>	

Table 86.4 Additional test factor for lower ambient temperature below -25°C

86.5A Torque test for blanking elements

86.5A.1 An NPT blanking element of each size shall be screwed into a steel test-block containing a threaded entry hole of size and form appropriate to the device under test. The sample shall be tightened to a torque at least equivalent to the appropriate torque given in Table 101.1 using a suitable tool. The test shall be deemed to be satisfactory if the correct thread engagement has been achieved and if, when dismantled, no damage invalidating the type of protection is found.

86.5A.2 Metric blanking element of each size shall be screwed into a steel test-block containing a threaded entry hole of size and form appropriate to the device under test. The sample shall be tightened to a torque at least equivalent to the appropriate torque given in Table 86.5A.2 using a suitable tool. The test shall be deemed to be satisfactory if the shoulder has not pulled fully into the thread.

Table 85.5A.2

<u>Thread</u> <u>size</u>	Tightening torque blanking elements with shoulder	
mm	<u>Nm</u>	
<u>< 16</u>	<u>3,5 <i>d</i> a</u>	U
<u>16</u>	<u>65</u>	frol.
<u>20</u>	<u>65</u>	i noi
<u>25</u>	<u>95</u>	test
<u>32</u>	<u>110</u>	annie
<u>40</u>	<u>130</u>	2 0+
<u>50</u>	<u>165</u>	
<u>63</u>	<u>195</u>	
<u>75</u>	<u>230</u>	
<u>> 75</u>	<u>3,5 d a</u>	
a The variable <i>d</i> is the major dia	meter of thread in millimetres.	

Tightening torque values, metric

85.5A.3 Torque tests for thread adapters

85.5A.3.1 A sample thread adapter of each size shall be screwed into a steel test-block, containing a threaded entry of size and form appropriate to the device under test. A steel or brass threaded plug of appropriate form and size shall be screwed into the female entry of the thread adapter.

85.5A.3.2 The plug shall be tightened to a torque at least equivalent to the torque given in Table 101.1 or Table 85.5A.2, based on the larger of the two threads on the adapter. The test shall be deemed to be satisfactory if no viable deformation to the thread adapter is found when the assembly is dismantled.

2. Revision to align the terms used in UL 1203 with the defined terms in NFPA 70 for Explosionproof and Dust-Ignitionproof types of protection.

PROPOSAL

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The individual paragraph references are not provided as this update will consist of a global replacement of the applicable terms.

BSR/UL 1564, Standard for Safety for Industrial Battery Chargers

Topic: New requirements for industrial battery chargers intended to charge lithium ion batteries

PROPOSAL

SB1.3 Industrial batteries provided with a Battery Management System (BMS) and intended for missionfrom use with a specific charger shall comply with either of the following standards the relevant standard as follows:

- a) UL 2271, Batteries for Use in Light Electric Vehicle (LEV) Applications; or
- b) UL 2580, Batteries for Use in Electric Vehicles-; or

c) UL 1973, Batteries for Use in Stationary, Vehicle Auxiliary Power and Light Electric Rail (LER) Applications.

If the Battery Management System or a portion of the protective system and/or Battery Management System resides within external components or within the charger, then the combination of the external components, charger, and the battery pack are critical and shall be evaluated together to the requirements of the respective battery standard and this Standard. The battery pack and charger and shall be provided with marking for correct use.

SB3.1 During the Temperature Test of a product using a battery load, the battery shall be discharged to 3 V per cell fully discharged per the battery manufacturer's specifications and then charged until temperatures on the product reach a maximum and begin to decrease. The Temperature Test is then to be continued using a second battery, also discharged to 3 V per cell fully discharged per the battery manufacturer's specifications, until maximum temperatures are attained. A product provided with a timer and a marked charging time based on the amperehour capacity of the battery is to be tested for the marked time period.

Exception: A second battery is not used for products which provide a constant charging current , ing ti , ing ti , ing ti , ing ti or have a marked charging time such that only one battery can be charged during an 8-hour

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BSR/UL 2225, Standard for Safety for Cables and Cable-Fittings for Use in Hazardous (Classified) Locations

1. This proposal provides revisions to the proposal document dated May 1, 2020 per comments received.

PROPOSAL

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37A.2 Electronic medium for required instructions

<u>37A.2.1 The required instructional material of this standard may be provided additionally or alternatively by electronic media under the following conditions:</u>

a) 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 document number, revision level and location of the electronic documentation (e.g. URL, QRcode).

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

- there shall be marking on the apparatus that contains the international symbol
 <u>A</u> (Reference No. 0434B of ISO 7000), along with the document number, revision level and location of the electronic documentation (e.g. URL, QRcode); and
- 2) the printed instructions provided with the apparatus shall clearly identify that additional information is available electronically, along with the document number, revision level and 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 \triangle (Reference No. 0434B of ISO 7000) and the document number, revision level and location of the electronic documentation (e.g. URL, QRcode):

a) <u>the international symbol (Reference No. 0434B of ISO 7000) shall</u> <u>be marked on the apparatus; and</u>

b) printed instructions shall be provided with the apparatus that, as a minimum, indicates the document number, revision level and location of the electronic documentation (e. g. URL, QRcode).

NOTE When electronic documentation is referenced either on the device or on the printed instructions, the location given can be the specific location for the required instructions (e. g. direct link to the specific instructions), or can be a more general location. (e.g. the URL for the overall manufacturer's website). It is the manufacturer's responsibility to assure that the location of the required instructions is accessible by the user.

37A.2.2 Alternatively, the reference to the document number and revision level on the marking can be excluded if the location of the electronic documentation marked on the apparatus (e.g. URL, QRcode) involves an electronic search feature that makes the required documentation available by entering specific information that is required to be marked on the apparatus, such as

any combination of model number, part number, serial number, date code, or other unique identifier.

37A.2.3 Where a QRcode is used to provide the required instructional material, and the QRcode contains all required instructional material (as opposed to merely referencing a URL that contains required instructional material), a document number and revision level need not be indicated.

37A.2.4 Where some or all of the required instructional material is provided by electronic media.

NOTE 1 Where required instructional material, especially drawings, is provided in an electronic documentation format, consideration should be given by the manufacturer to its viewability and print capability by the user.

Le contration of the second se \mathcal{C} NOTE 2 While electronic medium is permitted for required instructions as part of standards supported by the NEC, CE Code and IECEx System, other constraints may apply in certain market places (e. g. the European Commission's Standing Committee for the ATEX Directive has taken the view that at least the safety related parts of the instructions

BSR/UL 2250 Standard for Safety for Instrumentation Tray Cable

For your convenience in review, proposed additions to the previously proposed requirements dated 2019-12-20 are shown underlined and proposed deletions are shown lined out.

Topic 1. Add a continuity test to Section 32 Impact Test for Type ITC Cable Marked "-ER"

PROPOSAL

missionfromul 32.10 The test sample of the cable is to be advanced to and impacted at each of the successive marks for a total of ten strikes. After each strike, continuity of the circuit conductors is to be checked (see Continuity Test of Conductors, Section 16). When any lamp lights this is considered a failure and the impacted cable section containing the short mark(s) should be removed from the cable before continuing with the impact test. If more than two of the ten impact points on any test length causes a lamp to light, the cable does not meet the impact-test requirement. Additionally, any failure of the continuity test is considered a failure of the impact test requirement.

19.2 To determine whether or not the finished cable complies with the requirement in 5.2 or in 32.10 for cable marked "-ER", each conductor taken separately is to be connected in series with a light-emitting diode (LED), lamp, buzzer, bell, or other indicator, and an er, tauthonized for ful byr appropriate low-voltage a-c or d-c power supply.

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BSR/UL 61810-1, Standard for Electromechanical Elementary Relays - Part 1: General Requirements

1. Harmonization of UL 61810-1 Edition 1 with IEC 61810-1, Edition 4, Amendment 1

PROPOSAL

Table 4 - Routine tests					
Inspection lot	Tests-	Clause	Additional references		
1	Marking and	7	Table 6: 1a;1b;1c		
	documentation		mis		
2	Basic operating function	Ð	- etti		
3-	Dielectric strength	10.2			
Dielectric test for routine test could be carried out for duration of 1s in accordance with IEC 61810-					
7:2006, 4.9. The test voltage shall not have any negative impact on the insulation (further use).					

Inspection lot	<u>Tests</u>	<u>Clause</u>	Additional	
			<u>references</u>	
all ^d	Marking and	<u> </u>	Table 6: 1a;1b;1c	
	documentation	001		
<u>all^d</u>	Basic operating function	<u>9</u> ª	Mode II applies ^b	
<u>all^d</u>	Dielectric strength	<u>10.2^c</u>		
^a The presenditioning within Table 11 for operations well release does not apply. For routing testing				

^a The preconditioning within Table 11 for operate as well release does not apply. For routine testing, 9.2.2 could be handled via 9.2.1. As these tests are usually carried out at room temperature the manufacturer has to specify an appropriate level for the operate or release voltage to ensure that the relay will work at the maximum (operate) and minimum (release) permissible ambient temperature within the defined values.

^b 9.3 for bistable relays applies accordingly.

^c Dielectric test for routine test could be carried out for duration of 1 s in accordance with IEC 61810-7:2006, 4.9. The test voltage shall not have any negative impact on the insulation (further use). Other parameters like current limit or specification of the high-voltage transformer shall be specified by the manufacturer at an appropriate value. 10.3 may apply as alternate to 10.2 especially for existing designs.

d For routine tests by definition all products are tested.