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Project Initiation Notification System (PINS)

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

AISC (American Institute of Steel Construction)

Nathaniel Gonner; gonner@aisc.org | 130 E. Randolph Street, Suite 2000 | Chicago, IL 60601-6204 www.aisc.org

Revision

BSR/AISC N690-202x, Specification for Safety-Related Steel Structures for Nuclear Facilities (revision of ANSI/AISC N690-2018)

Stakeholders: structural engineers, steel fabricators, steel erectors, construction managers, building owners

Project Need: Update the standard for the use in the design and construction of safety-related steel structures.

Interest Categories: industry, consultant, general interest

Scope: This standard applies to the design of safety-related steel structures and steel elements in nuclear facilities. Structures and structural elements subject to this standard are those steel structures that are part of a safety-related system or that support, house, or protect safety-related systems or components, the failure of which would impair the safety-related functions of these systems or components.

ARESCA (American Renewable Energy Standards and Certification Association)

George Kelly; secretary@aresca.us | 256 Farrell Farm Road | Norwich, VT 05055 www.aresca.us

National Adoption

BSR/ARESCA 61400-5-202x, Wind energy generation systems - Part 5: Wind turbine blades (identical national adoption of IEC 61400-5:2020)

Stakeholders: U.S. wind developers and investors, Certified Verification Agents (CVAs), Bureau of Safety and Environmental Enforcement (BSEE), Bureau of Ocean Energy Management (BOEM), U.S. Department of the Interior (DOI)

Project Need: The ambitious plans for development of wind energy projects requires a consistent and comprehensive set of industry-based consensus standards. This IEC document is directly applicable as an ANS for such projects.

Interest Categories: End users, OEMs, Industry, General interest

Scope: Identical adoption of IEC

ARESCA (American Renewable Energy Standards and Certification Association)

George Kelly; secretary@aresca.us | 256 Farrell Farm Road | Norwich, VT 05055 www.aresca.us

National Adoption

BSR/ARESCA 61400-8-202x, Wind energy generation systems - Part 8: Design of wind turbine structural components (identical national adoption of IEC 61400-8:2023)

Stakeholders: U.S. wind developers and investors, Certified Verification Agents (CVAs), Bureau of Safety and Environmental Enforcement (BSEE), Bureau of Ocean Energy Management (BOEM), U.S. Department of the Interior (DOI)

Project Need: The ambitious plans for development of wind energy projects requires a consistent and comprehensive set of industry-based consensus standards. This IEC document is directly applicable as an ANS for such projects.

Interest Categories: End users, OEMs, Industry, General interest

Scope: Identical adoption of IEC

ARESCA (American Renewable Energy Standards and Certification Association)

George Kelly; secretary@aresca.us | 256 Farrell Farm Road | Norwich, VT 05055 www.aresca.us

National Adoption

BSR/ARESCA 61400-28-202x, Wind energy generation systems - Part 28: Through life management and life extension of wind power assets (identical national adoption of IEC TS 61400-28:2023)

Stakeholders: U.S. wind developers and investors, Certified Verification Agents (CVAs), Bureau of Safety and Environmental Enforcement (BSEE), Bureau of Ocean Energy Management (BOEM), U.S. Department of the Interior (DOI)

Project Need: The ambitious plans for development of wind energy projects requires a consistent and comprehensive set of industry-based consensus standards. This IEC document is directly applicable as an ANS for such projects.

Interest Categories: End users, OEMs, Industry, General interest

Scope: Identical adoption of IEC

ARESCA (American Renewable Energy Standards and Certification Association)

George Kelly; secretary@aresca.us | 256 Farrell Farm Road | Norwich, VT 05055 www.aresca.us

National Adoption

BSR/ARESCA 61400-29-202x, Wind energy generation systems - Part 29: Marking and lighting of wind turbines (identical national adoption of IEC TS 61400-29:2023)

Stakeholders: U.S. wind developers and investors, Certified Verification Agents (CVAs), Bureau of Safety and Environmental Enforcement (BSEE), Bureau of Ocean Energy Management (BOEM), U.S. Department of the Interior (DOI)

Project Need: The ambitious plans for development of wind energy projects requires a consistent and comprehensive set of industry-based consensus standards. This IEC document is directly applicable as an ANS for such projects.

Interest Categories: End users, OEMs, Industry, General interest

Scope: Identical adoption of IEC

ARESCA (American Renewable Energy Standards and Certification Association)

George Kelly; secretary@aresca.us | 256 Farrell Farm Road | Norwich, VT 05055 www.aresca.us

National Adoption

BSR/ARESCA 61400-30-202x, Wind energy generation systems - Part 30: Safety of Wind Turbine Generator Systems (WTGs) - General principles for design (identical national adoption of IEC TS 61400-30:2023)

Stakeholders: U.S. wind developers and investors, Certified Verification Agents (CVAs), Bureau of Safety and Environmental Enforcement (BSEE), Bureau of Ocean Energy Management (BOEM), U.S. Department of the Interior (DOI)

Project Need: The ambitious plans for development of wind energy projects requires a consistent and comprehensive set of industry-based consensus standards. This IEC document is directly applicable as an ANS for such projects.

Interest Categories: End users, OEMs, Industry, General interest

Scope: Identical adoption of IEC

ARESCA (American Renewable Energy Standards and Certification Association)

George Kelly; secretary@aresca.us | 256 Farrell Farm Road | Norwich, VT 05055 www.aresca.us

National Adoption

BSR/ARESCA 61400-31-202x, Wind energy generation systems - Part 31: Siting Risk Assessment (identical national adoption of IEC TS 61400-31:2023)

Stakeholders: U.S. wind developers and investors, Certified Verification Agents (CVAs), Bureau of Safety and Environmental Enforcement (BSEE), Bureau of Ocean Energy Management (BOEM), U.S. Department of the Interior (DOI)

Project Need: The ambitious plans for development of wind energy projects requires a consistent and comprehensive set of industry-based consensus standards. This IEC document is directly applicable as an ANS for such projects.

Interest Categories: End users, OEMs, Industry, General interest

Scope: Identical adoption of IEC

ARESCA (American Renewable Energy Standards and Certification Association)

George Kelly; secretary@aresca.us | 256 Farrell Farm Road | Norwich, VT 05055 www.aresca.us

National Adoption

BSR/ARESCA 61400-15-2-202x, Wind energy generation systems - Part 15-2: Framework for assessment and reporting of the wind resource and energy yield (identical national adoption of IEC 61400-15-2:2023)

Stakeholders: U.S. wind developers and investors, Certified Verification Agents (CVAs), Bureau of Safety and Environmental Enforcement (BSEE), Bureau of Ocean Energy Management (BOEM), U.S. Department of the Interior (DOI)

Project Need: The ambitious plans for development of wind energy projects requires a consistent and comprehensive set of industry-based consensus standards. This IEC document is directly applicable as an ANS for such projects.

Interest Categories: End users, OEMs, Industry, General interest

Scope: Identical adoption of IEC

ARESCA (American Renewable Energy Standards and Certification Association)

George Kelly; secretary@aresca.us | 256 Farrell Farm Road | Norwich, VT 05055 www.aresca.us

National Adoption

BSR/ARESCA 61400-26-4-202x, Wind energy generation systems - Part 26-4: Reliability for wind energy generating systems (identical national adoption of IEC TS 61400-26-4:2023)

Stakeholders: U.S. wind developers and investors, Certified Verification Agents (CVAs), Bureau of Safety and Environmental Enforcement (BSEE), Bureau of Ocean Energy Management (BOEM), U.S. Department of the Interior (DOI)

Project Need: The ambitious plans for development of wind energy projects requires a consistent and comprehensive set of industry-based consensus standards. This IEC document is directly applicable as an ANS for such projects.

Interest Categories: End users, OEMs, Industry, General interest

Scope: Identical adoption of IEC

ASTM (ASTM International)

Laura Klineburger; accreditation@astm.org | 100 Barr Harbor Drive | West Conshohocken, PA 19428-2959 www.astm.org

New Standard

BSR/ASTM WK81868-202x, Reinstatement of D2749-13 Standard Symbols for Dimensions of Plastic Pipe Fittings (new standard)

Stakeholders: Fittings Industry

Project Need: A number of manufacturers produce fittings that use this standard to identify fitting terms and dimensions. Previous efforts failed to resolve negative ballots by F17 members, resulting in the standard being withdrawn. A need exists to reinstate the withdrawn standard.

Interest Categories: Interest Categories: Producer, User, General Interest

Scope: The standard uses symbols in order to specify terminology for dimensions used for pipe fittings made of plastic material. The standard uses a list of letter designations combined with written definitions that use drawings to support and help identify the dimensions described by the standard.

ASTM (ASTM International)

Laura Klineburger; accreditation@astm.org | 100 Barr Harbor Drive | West Conshohocken, PA 19428-2959 www.astm.org

New Standard

BSR/ASTM WK82055-202x, New Test Method for Determining Fire Resistance of Joint Systems Installed Between Interior Rated Wall Assemblies and Exterior Nonrated Wall Assemblies (new standard)

Stakeholders: Fire Resistance Industry

Project Need: This condition exists in the field today, yet there is not a test standard to evaluate this type of joint system.

Interest Categories: Interest Categories: Producer, User, General Interest

Scope: Develop a test protocol and standard methodology for evaluating the joint protection at the opening between interior rated wall assemblies and exterior nonrated wall assemblies.

AWWA (American Water Works Association)

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

Supplement

BSR/AWWA C205a-202x, Addendum to C205-18 Cement-Mortar Protective Lining and Coating for Steel Water Pipe – 4 In. (100mm) and Larger – Shop Applied (supplement to ANSI/AWWA C205-2017)

Stakeholders: Drinking water treatment and supply industry. Water utilities, consulting engineers, water treatment equipment manufacturers, etc.

Project Need: The purpose of this addendum to C205-18 is to include ASTM C595 type IL cement as an additional allowable material for CML and CMC due to the U.S. cement suppliers converting to blended cement and phasing out C150 cements to improve environmental impacts from cement manufacturing.

Interest Categories: General Interest, Producers and Users

Scope: The addendum will include a revision to the requirements in sections of C205-18 to include ASTM C595 type IL cement as an additional allowable material for CML and CMC.

CSA (CSA America Standards Inc.)

Debbie Chesnik; ansi.contact@csagroup.org | 8501 East Pleasant Valley Road | Cleveland, OH 44131-5575 www.csagroup.org

Revision

BSR Z21.21A-2021/CSA 6.5A-2021, Automatic valves for gas appliances (same as CSA 6.5) (revision of ANSI Z21.21A-2021/CSA 6.5A-2021)

Stakeholders: manufacturers, certifiers

Project Need: Update Non metallic material requirements.

Interest Categories: Consumers, Users, Manufacturers, Gas Suppliers, Research, General Interest

Scope: This Standard applies to newly produced automatic valves (see Clause 3, Definitions) constructed entirely of new, unused parts and materials. These valves may be individual automatic valves or valves utilized as parts of automatic gas ignition systems. This Standard also applies to commercial/industrial safety shutoff valves (see Clause 3), herein after referred to as C/I valves. This Standard does not apply to self-contained water heater, cooking appliance, or room heater thermostats, or self-contained automatic gas shutoff valves for hot water supply systems.

HI (Hydraulic Institute)

Amy Sisto; asisto@pumps.org | 300 Interpace Parkway, Building A, 3rd Floor, #280 | Parsippany, NJ 07054 www.pumps.org

Revision

BSR/HI 7.1-7.5-202x, Controlled-Volume Metering Pumps for Nomenclature, Definitions, Application, and Operation (revision of ANSI/HI 7.1-7.5-2017)

Stakeholders: End-user, Pump OEM, Engineering Design Firms, Environmental, Chemical

Project Need: Update document to align with content found within ANSI/HI 10.1-10.5 2021 and ANSI/HI 10.6 2021.

Interest Categories: Pump OEM, Motor/VFD OEM, Seal OEM, Expansion Joint OEM, Engineering Design Firm, End-User

Scope: Hydraulic Institute's Standards Committee has approved the work item for a committee to review and revise the 2017 publication of ANSI/HI 7.1-7.5. Additional work will be done to create a troubleshooting section.

HI (Hydraulic Institute)

Arunima Chatterjee; a chatterjee@pumps.org | 300 Interpace Parkway, Building A, 3rd Floor, #280 | Parsippany, NJ 07054
www.pumps.org

Revision

BSR/HI 14.1-14.2-202x, Rotodynamic Pumps for Nomenclature and Definitions (revision of ANSI/HI 14.1-14.2-2019)

Stakeholders: Pump Manufacturers, Suppliers, Specifier, Consultants and End Users.

Project Need: This standard needs to be revised to include updated nomenclature and definitions for Rotodynamic Pumps.

Interest Categories: Producers, General Interest and Users.

Scope: This standard provides nomenclature and definition for Rotodynamic pumps for various pump configurations and services.

SPRI (Single Ply Roofing Industry)

Linda King; info@spri.org | 465 Waverley Oaks Road, Suite 421 | Waltham, MA 02452 www.spri.org

Reaffirmation

BSR/SPRI/RCI NT-1-2012 (R202x), Detection and Location of Latent Moisture in Building Roofing Systems by Nuclear Radioisotopic Thermalization (reaffirmation of ANSI/SPRI/RCI NT-1-2012 (R2017))

Stakeholders: Building owners, roof systems manufacturers, designers, contractors; roof consultants, testing firms and manufacturers that use these devices for the purpose of identifying moisture in roofing assemblies.

Project Need: Review and recanvass as per SPRI procedures

Interest Categories: Producer, Other Producer, General Interest; User

Scope: This standard shall apply to all roofing moisture surveys conducted using nuclear moisture gauges. It shall address: the effect of roof construction, material differences and roof conditions on the performance of the nuclear gauge; limitations in the use of radioisotopic inspection; the governmental control of the equipment used to conduct nuclear moisture surveys; and operating procedures, operator qualifications, verification, and reporting procedures.

Call for Comment on Standards Proposals

American National Standards

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

Ordering Instructions for "Call-for-Comment" Listings

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

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

* Standard for consumer products

Comment Deadline: July 17, 2022

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

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

Addenda

BSR/ASHRAE Addendum f to Standard 30-202x, Method of Testing Liquid Chillers (addenda to ANSI/ASHRAE Standard 30-2019)

This addendum adds a Microsoft® Excel® workbook to facilitate calculates in accordance with Section 8.4 and adds a new Informative Appendix C with a link and description to the supplemental Microsoft® Excel® workbook.

[Click here to view these changes in full](#)

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

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

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

Addenda

BSR/ASHRAE/IES Addendum bo to BSR/ASHRAE/IES Standard 90.1-202x, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.1-2019)

This ISC modifies the proposed new fan power limit requirements (6.5.3.1) to include additional allowances for certain equipment and to make some necessary clarifications and error corrections.

[Click here to view these changes in full](#)

Send comments (copy psa@ansi.org) to: <https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts>

Comment Deadline: July 17, 2022

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

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

Addenda

BSR/ASHRAE/IES Addendum ca to BSR/ASHRAE/IES Standard 90.1-202x, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.1-2019)

This addendum would expand the scope of Standard 90.1 to allow grid-interactive design strategies.

[Click here to view these changes in full](#)

Send comments (copy psa@ansi.org) to: <https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts>

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

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

Addenda

BSR/ASHRAE/IES Addendum g to BSR/ASHRAE/IES Standard 100-202x, Energy Efficiency in Existing Buildings (addenda to ANSI/ASHRAE/IES Standard 100-2018)

This proposed addendum revises Section 5.2.1 to simplify and clarify the descriptive language for net energy consumption, deletes the existing Figure 5-1 illustrating the net energy use concept and replaces it with a new Figure 5-1, and deletes the existing Table 5-1 completely as it does not add any useful information with respect to a building's net energy consumption.

[Click here to view these changes in full](#)

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

ASME (American Society of Mechanical Engineers)

Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 | ansibox@asme.org, www.asme.org

Revision

BSR/ASME B31.1-202x, Power Piping (revision of ANSI/ASME B31.1-2020)

ASME B31.1 prescribes minimum requirements for the design, materials, fabrication, erection, test, examination, inspection, operation, and maintenance of piping systems typically found in electric power generating stations, industrial and institutional plants, geothermal heating systems, and central and district heating and cooling systems. It also covers boiler-external piping for power boilers and high-temperature, high-pressure water boilers in which steam or vapor is generated at a pressure of more than 15 psig [100 kPa (gage)]; and high-temperature water is generated at pressures exceeding 160 psig [1,103 kPa (gage)] and/or temperatures exceeding 250 degrees F (120 degrees C).

[Click here to view these changes in full](#)

Send comments (copy psa@ansi.org) to: Umberto D'Urso; dursou@asme.org

Comment Deadline: July 17, 2022

NSF (NSF International)

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

Revision

BSR/NSF 40-202x (i44r1), Residential Wastewater Treatment Systems (revision of ANSI/NSF 40-2020)

This wastewater standard contains minimum requirements for residential wastewater treatment systems having rated treatment capacities between 1514 L/day (400 gal/day) and 5678 L/day (1500 gal/day).

Management methods for the treated effluent discharged from residential wastewater treatment systems are not addressed by this Standard.

[Click here to view these changes in full](#)

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

NSF (NSF International)

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

Revision

BSR/NSF 40-202x (i46r1), Residential Wastewater Treatment Systems (revision of ANSI/NSF 40-2020)

This wastewater standard contains minimum requirements for residential wastewater treatment systems having rated treatment capacities between 1514 L/day (400 gal/day) and 5678 L/day (1500 gal/day).

Management methods for the treated effluent discharged from residential wastewater treatment systems are not addressed by this Standard.

[Click here to view these changes in full](#)

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

NSF (NSF International)

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

Revision

BSR/NSF 49-202x (i171r1), Biosafety Cabinetry: Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-2020)

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

[Click here to view these changes in full](#)

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

Comment Deadline: July 17, 2022

NSF (NSF International)

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

Revision

BSR/NSF 455-4-202x (i29r1), Good Manufacturing Practices for Over-the-Counter Drugs (revision of ANSI/NSF 455-4-2021)

This Standard is intended to define a standardized approach for auditing to determine the level of compliance of over-the-counter (OTC) drug products to 21 CFR Part 210, Current Good Manufacturing Practice in Manufacturing, Processing, Packing, or Holding of Drugs; General and 21 CFR Part 211, Current Good Manufacturing Practice for Finished Pharmaceuticals, as well as incorporating additional retailer requirements. It refers to the requirements for good manufacturing practices (GMPs) applicable to all OTC drugs. It will assist in the determination of adequate facilities and controls for OTC drug manufacture with sufficient quality to ensure suitability for intended use.

[Click here to view these changes in full](#)

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

UL (Underwriters Laboratories)

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

Revision

BSR/UL 295-202x, Standard for Safety for Commercial-Industrial Gas Burners (revision of ANSI/UL 295-2019)

The following topic is being recirculated: (1) Addition of conduit standard reference.

[Click here to view these changes in full](#)

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

UL (Underwriters Laboratories)

333 Pflugsten Road, Northbrook, IL 60062-2096 | mitchell.gold@ul.org, <https://ul.org/>

Revision

BSR/UL 508A-202x, Standard for Safety for Industrial Control Panels (revision of ANSI/UL 508A-2020)

Recirculation of the following proposals balloted July 16, 2021 and recirculated February 11, 2022: (6) Clarification of the requirements for an air outlet from a forced ventilation system located in the area occupied by an operator; (8) Alignment with NFPA 79 and NEC regarding the term used to indicate the full-load current; (16) Alternate enclosure types; (17) Enclosure access; and (26) Internal conductor ampacity requirements for power circuits.

[Click here to view these changes in full](#)

Send comments (copy psa@ansi.org) to: <https://csds.ul.com>

Comment Deadline: July 17, 2022

UL (Underwriters Laboratories)

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

Revision

BSR/UL 521-202x, Standard for Safety for Heat Detectors for Fire Protective Signaling Systems (revision of ANSI/UL 521-2021)

(1) Test Equipment Reference.

[Click here to view these changes in full](#)

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

Comment Deadline: August 1, 2022

AARST (American Association of Radon Scientists and Technologists)

527 N. Justice Street, Hendersonville, NC 28739 | StandardsAssist@gmail.com, www.aarst.org

Revision

BSR/AARST MALB-202x, Protocol for Conducting Measurements of Radon and Radon Decay Products in Schools and Large Buildings (revision of ANSI/AARST MALB-2014)

This standard of practice specifies procedures and minimum requirements when measuring radon concentrations in shared structures, or portions of shared structures, used for residential, non-residential or mixed-use purposes to determine if radon mitigation is necessary to protect current and future occupants. These updates are the result of continuous maintenance and harmonization efforts for AARST MAMF and AARST MALB. These proposed revisions update testing provisions that include locations with invalid tests, reporting them, and updates to Appendix C to improve clarity.

Single copy price: \$TBD

Obtain an electronic copy from: www.standards.aarst.org

Order from: StandardsAssist@gmail.com

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

AARST (American Association of Radon Scientists and Technologists)

527 N. Justice Street, Hendersonville, NC 28739 | StandardsAssist@gmail.com, www.aarst.org

Revision

BSR/AARST MAMF-202x, Protocol for Conducting Measurements of Radon and Radon Decay Products in Multifamily Buildings (revision of ANSI/AARST MAMF-2017)

This standard of practice specifies procedures and minimum requirements when measuring radon concentrations in shared structures, or portions of shared structures, used for residential, non-residential or mixed use purposes to determine if radon mitigation is necessary to protect current and future occupants. These updates are the result of continuous maintenance and harmonization efforts for AARST MAMF and AARST MALB. These proposed revisions update testing provisions that include locations with invalid tests, reporting them, and updates to Appendix C to improve clarity.

Single copy price: \$TBD

Obtain an electronic copy from: <https://standards.aarst.org/public-review>

Order from: StandardsAssist@gmail.com

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

Comment Deadline: August 1, 2022

AARST (American Association of Radon Scientists and Technologists)

527 N. Justice Street, Hendersonville, NC 28739 | StandardsAssist@gmail.com, www.aarst.org

Revision

BSR/AARST MS-QA-202x, Radon Measurement Systems Quality Assurance (revision of ANSI/AARST MS-QA-2019)

This standard of practice specifies minimum requirements for quality systems designed to quantify the concentration of ^{222}Rn gas in air by qualified professionals (QPs) and laboratories, whose data are intended to be used to determine the need for, or success of, radon mitigation. These proposed revisions address several items that include updates related certification and device listing programs, clarity, corrections, and several harmonized definitions with device performance protocol ANSI/AARST MS-PC-2022.

Single copy price: \$TBD

Obtain an electronic copy from: <https://standards.aarst.org/public-review>

Order from: StandardsAssist@gmail.com

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

ACP (American Clean Power Association)

1501 M Street NW, Suite 900, Washington, DC 20005 | Standards@cleanpower.org, www.cleanpower.org

New Standard

BSR/ACP RP 1001-2-202x, Recommended Practice for Offshore Safety Training and Medical Requirements (new standard)

It is the intent of this standard to provide the offshore wind industry with an identified list of minimum and recommended safety training and medical requirements for persons performing work activities on offshore structures and vessels within the United States Outer Continental Shelf.

Single copy price: Free

Obtain an electronic copy from: Standards@Cleanpower.org

Order from: Standards@cleanpower.org

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

ANS (American Nuclear Society)

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

Reaffirmation

BSR/ANS 19.4 (R202x), A Guide for Acquisition and Documentation of Reference Power Reactor Physics Measurements for Nuclear Analysis Verification (reaffirmation of ANSI/ANS 19.4-2017)

This standard specifies and provides requirements for the reference measurements of reactor geometry, reactivity, and operation parameters in light-water power reactors. The measurement data are used in the verification of reactor physics computational methods used for nuclear core designs and analyses. The standard identifies the types of parameters, a brief description of test conditions and experimental data required for such reference measurements, problems and concerns which may affect the accuracy or interpretation of the data, and criteria to be used in documenting the results of reference measurements.

Single copy price: \$134.00

Obtain an electronic copy from: orders@ans.org

Order from: orders@ans.org

Send comments (copy psa@ansi.org) to: pschroeder@ans.org

Comment Deadline: August 1, 2022

ASABE (American Society of Agricultural and Biological Engineers)

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

Revision

BSR/ASAE/NFBA EP559.2 MONYEAR-202x, Design Requirements and Engineering Properties for Mechanically-Laminated Wood (Mechlam) Assemblies (revision and redesignation of ANSI/ASAE EP559.1 W/Corr. 1 AUG2010 (R202x))

This Engineering Practice provides equations for calculating the adjusted design moment for bending about either assembly axis, and the adjusted design forces for axial tension and axial compression for spliced and unspliced mechlam assemblies. This EP also contains methodology for establishing the flexural rigidity value (EI) for bending about either assembly axis and equations for calculating minimum flexural rigidity values (EI_{min}) for beam and column stability calculations.

Single copy price: \$51.00 (ASABE members); \$75.00 (non-members)

Obtain an electronic copy from: walsh@asabe.org

Order from: Jean Walsh; walsh@asabe.org

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

ASC X9 (Accredited Standards Committee X9, Incorporated)

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

National Adoption

BSR X9.134-5-202x, Mobile Financial Services - Part 5: Mobile Payments to Businesses (national adoption with modifications of ISO 12812-Part 5)

Part 5 of the suite of standards for mobile banking/payments will include specific requirements applicable to all mobile financial service providers (MFSPs) detailing the approach to a secure deployment and operation of an MFS application for mobile payments to businesses in order to facilitate and promote interoperability, security, and quality of MFS services throughout the U.S. A summary of those requirements, as initially provided by the U.S., through X9 (X9F4) and ISO TC68/SC2 (WG13), chaired by the U.S., includes but is not limited to: (1) security; (2) notice; (3) logging; (4) receipt; and (5) consumer education requirements.

Single copy price: \$200.00

Obtain an electronic copy from: ambria.frazier@x9.org

Order from: ambria.frazier@x9.org

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

Comment Deadline: August 1, 2022

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

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

Addenda

BSR/ASHRAE Addendum cf to BSR/ASHRAE Standard 135-202x, BACnet® - A Data Communication Protocol for Building Automation and Control Networks (addenda to)

The purpose of this addendum is to formalize the definition of the “data_attributes” Parameter, redefine “Must Understand” for data options, and make changes to segmentation to enforce data attribute consistency.

Single copy price: \$35.00

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

Order from: standards.section@ashrae.org

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

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

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

Addenda

BSR/ASHRAE Addendum cg to BSR/ASHRAE Standard 135-202x, BACnet® - A Data Communication Protocol for Building Automation and Control Networks (addenda to)

This addendum defines a standard and interoperable mechanism for authenticating and authorizing devices to take actions in other devices. It is based on the Internet standards OAuth 2.0, OpenID Connect, ACE-OAuth, and the suite of RFCs that define the data structures that support these protocols; makes changes to BACnet/SC to Support Authentication and Authorization; adds new service clause AuthRequest; adds informative examples of some message exchanges and data structures; and makes changes to existing Services to Support Authentication and Authorization.

Single copy price: \$35.00

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

Order from: standards.section@ashrae.org

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

Comment Deadline: August 1, 2022

ASME (American Society of Mechanical Engineers)

Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 | ansibox@asme.org, www.asme.org

Revision

BSR/ASME B31.8-202x, Gas Transmission and Distribution Piping Systems (revision of ANSI/ASME B31.8-2020)

This Code covers the design, fabrication, installation, inspection, and testing of pipeline facilities used for the transportation of gas. This Code also covers safety aspects of the operation and maintenance of those facilities. This Code is concerned only with certain safety aspects of liquefied petroleum gases when they are vaporized and used as gaseous fuels. All of the requirements of NFPA 58 and NFPA 59 and of this Code concerning design, construction, and operation and maintenance of piping facilities shall apply to piping systems handling butane, propane, or mixtures of these gases.

Single copy price: Free

Obtain an electronic copy from: <https://cstools.asme.org/csconnect/PublicReviewPage.cfm>

Send comments (copy psa@ansi.org) to: Paul Stumpf; stumpfp@asme.org

ASME (American Society of Mechanical Engineers)

Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 | ansibox@asme.org, www.asme.org

Revision

BSR/ASME B31.8S-202x, Managing System Integrity of Gas Pipelines (revision of ANSI/ASME B31.8S-2020)

This Code applies to onshore pipeline systems constructed with ferrous materials and that transport gas. The principles and processes embodied in integrity management are applicable to all pipeline systems. This Code is specifically designed to provide the operator with the information necessary to develop and implement an effective integrity management program utilizing proven industry practices and processes. The processes and approaches described within this Code are applicable to the entire pipeline.

Single copy price: Free

Obtain an electronic copy from: <https://cstools.asme.org/csconnect/PublicReviewPage.cfm>

Send comments (copy psa@ansi.org) to: Paul Stumpf; stumpfp@asme.org

ASTM (ASTM International)

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

Revision

BSR/ASTM E2224-202x, Guide for Forensic Analysis of Fibers by Infrared Spectroscopy (revision of ANSI/ASTM E2224-2019)

<https://www.astm.org/ansi-review>

Single copy price: Free

Obtain an electronic copy from: accreditation@astm.org

Order from: accreditation@astm.org

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

Comment Deadline: August 1, 2022

ASTM (ASTM International)

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

Revision

BSR/ASTM E2225-202x, Guide for Forensic Examination of Fabrics and Cordage (revision of ANSI/ASTM E2225-2021)

<https://www.astm.org/ansi-review>

Single copy price: Free

Obtain an electronic copy from: accreditation@astm.org

Order from: accreditation@astm.org

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

ASTM (ASTM International)

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

Revision

BSR/ASTM E2228-202x, Guide for Microscopical Examination of Textile Fibers (revision of ANSI/ASTM E2228-2019)

<https://www.astm.org/ansi-review>

Single copy price: Free

Obtain an electronic copy from: accreditation@astm.org

Order from: accreditation@astm.org

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

AWS (American Welding Society)

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

Reaffirmation

BSR/AWS A5.4/A5.4M-2012 (R202x), Specification for Stainless Steel Electrodes for Shielded Metal Arc Welding (reaffirmation of ANSI/AWS A5.4/A5.4M-2012)

Composition and other requirements are specified for more than forty classifications of covered stainless-steel welding electrodes. The requirements include general requirements, testing, and packaging. Annex A provides application guidelines and other useful information about the electrodes. This specification makes use of both U.S. Customary Units and the International System of Units [SI]. Since these are not equivalent, each system must be used independently of the other.

Single copy price: \$28.00 (AWS members); \$37.00 (non-members)

Obtain an electronic copy from: kbulger@aws.org

Order from: Kevin Bulger; kbulger@aws.org

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

Comment Deadline: August 1, 2022

AWWA (American Water Works Association)

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

Revision

BSR/AWWA G440-202x, Emergency Preparedness Practices (revision of ANSI/AWWA G440-2017)

This standard covers the minimum requirements to establish and maintain an acceptable level of emergency preparedness based on the identified and perceived risks facing utilities within the water sector.

Single copy price: Free

Obtain an electronic copy from: ETSsupport@awwa.org

Order from: AWWA, Attn: Vicki David; v david@awwa.org

Send comments (copy psa@ansi.org) to: AWWA, Attn: Paul Olson; polson@awwa.org

CSA (CSA America Standards Inc.)

8501 East Pleasant Valley Road, Cleveland, OH 44131-5575 | ansi.contact@csagroup.org, www.csagroup.org

National Adoption

BSR/CSA LNG 3.2-202x, Road vehicles - Liquefied natural gas (LNG) fuel system components - Part 2: Performance and general test methods (national adoption of ISO 12614-2 with modifications and revision of ANSI/CSA LNG 3.2-2018)

This Standard specifies performance and general test methods of liquefied natural gas fuel system components, intended for use on the types of motor vehicles as defined in CSA B109.2 or NFPA 52. It also provides general design principles and specifies requirements for instructions and marking. This Standard is not applicable to the following: (a) fuel containers; (b) stationary gas engines; (c) container mounting hardware; and (d) electronic fuel management; fuelling receptacles.

Single copy price: Free

Obtain an electronic copy from: ansi.contact@csagroup.org

Send comments (copy psa@ansi.org) to: ansi.contact@csagroup.org

ECIA (Electronic Components Industry Association)

13873 Park Center Road, Suite 315, Herndon, VA 20171 | ldonohoe@ecianow.org, www.ecianow.org

Reaffirmation

BSR/EIA 60384-4-2017 (R202x), Fixed capacitors for use in electronic equipment - Part 4: Sectional specification - Fixed aluminium electrolytic capacitors with solid (MnO₂) and non-solid electrolyte (reaffirmation of ANSI/EIA 60384-4-2017)

This part of IEC 60384 applies to fixed aluminium electrolytic capacitors with solid (MnO₂) and non-solid electrolyte primarily intended for d.c. applications for use in electronic equipment. It covers capacitors for long-life applications and capacitors for general-purpose applications. Capacitors for fixed surface mount aluminium electrolytic capacitors are not included but they are covered by IEC 60384-18. Capacitors for special-purpose applications may need additional requirements.

Single copy price: \$116.00

Obtain an electronic copy from: global.ihs.com

Order from: Global Engineering Documents, (800) 854-7179, www.global.ihs.com

Send comments (copy psa@ansi.org) to: emikoski@ecianow.org

Comment Deadline: August 1, 2022

EOS/ESD (ESD Association, Inc.)

218 W. Court Street, Rome, NY 13440 | jkirk@esda.org, www.esda.org

Reaffirmation

BSR/ESD SP5.4.1-2018 (R202x), ESD Association Standard Practice for Latch-up Sensitivity Testing of CMOS/BiCMOS Integrated Circuits Transient Latch-up Testing Device Level (reaffirmation of ANSI/ESD SP5.4.1-2018)

This document defines procedures to characterize the latch-up sensitivity of integrated circuits triggered by fast transients.

Single copy price: \$145.00 (List)/\$115.00 (EOS/ESD Members) [Hard-Cover]; \$135.00 (List)/\$105.00 (EOS/ESD Members) [Soft-Cover]

Obtain an electronic copy from: cearl@esda.org

Order from: Christina Earl; cearl@esda.org

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

UL (Underwriters Laboratories)

333 Pfingsten Road, Northbrook, IL 60062-2096 | alan.t.mcgrath@ul.org, <https://ul.org/>

National Adoption

BSR/UL 60335-2-40-202X, Standard for Household and Similar Electrical Appliances - Safety - Part 2-40: Particular requirements for electrical heat pumps, air-conditioners and dehumidifiers (national adoption of IEC 60335-2-40 with modifications and revision of ANSI/UL 60335-2-40-2019)

ANSI approval of the 4th edition of UL 60335-2-40.

Single copy price: Free

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

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UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | Tony.Partridge@ul.org, <https://ul.org/>

Reaffirmation

BSR/UL 340-2017 (R202x), Standard for Tests for Comparative Flammability of Liquids (reaffirmation of ANSI/UL 340-2017)

(1) Reaffirmation and continuance of the 6th edition of the Standard for Tests for Comparative Flammability of Liquids, UL 340, as a standard.

Single copy price: Free

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

Comment Deadline: August 1, 2022

UL (Underwriters Laboratories)

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

Reaffirmation

BSR/UL 1004-7-2017 (R202x), Standard for Electronically Protected Motors (reaffirmation of ANSI/UL 1004-7-2017)

Reaffirmation of UL 1004-7 which covers Electronically Protected Motors.

Single copy price: Free

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

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Comment Deadline: August 1, 2022

UL (Underwriters Laboratories)

333 Pfingsten Road, Northbrook, IL 60062 | Elizabeth.Northcott@ul.org, <https://ul.org/>

Revision

BSR/UL 970-202x, Standard for Retail Fixtures and Merchandising Displays (revision of ANSI/UL 970-2020)

(1) Revision to the scope to clarify the products covered by the standard; (2) Revisions and additions to Section 2, Glossary, to clarify and align the defined terms with the requirements in the standard; (3) Revisions to add references to UL 62368-1 to provide manufacturers an alternative to compliance with requirements in UL 60950-1, with related revisions to replace references LPS Circuits with Low Voltage, Low Energy (LVLE) Circuits In Applicable Requirements; (4) Revision to clarify that Relocatable Power Taps (RPT) and Furniture Power Distribution Units (FPDU) are intended to be powered by the building electrical system; (5) Addition of Temperature Test loading requirements for products with receptacles; (6) Addition of construction and marking requirements for dedicated receptacles; (7) Revision to clarify circuit dimmer requirements in circuits for receptacles; (8) Revision to clarify endurance testing for cords subject to flexing; (9) Revisions to Paragraph 11.2.17 to clarify that “The Wall” reference refers to the building wall; (10) Revisions to specify cord length for displays intended to rest on another display or shelving unit; (11) Revisions to allow for glass types equivalent to Class A; (12) Revisions to clarify that material without backing with a surface area greater than 10 square feet is required to be flame tested; (13) Revisions to Table 28.1 to specify tests not required to be performed on Fixed Displays; (14) Clarification of Loading Test requirements for displays; (15) Deletion of Paragraph 31.2.6 to eliminate conflict with other requirements regarding conditioning of polymeric materials used for support or bearing weight load; (16) Revisions to Paragraph 32.2.3 to clarify Stability Configuration Test requirement; (17) Addition of requirements to clarify test configurations for leveling items; (18) Revisions to clarify test requirements with respect to test method, correct references and correct conversion measurements; (19) Revision to allow displays intended for damp or wet locations to alternatively comply with the leakage current test after conditioning; (20) Revisions to clarify electrical rating requirements when overcurrent protection is provided; (21) Revisions to clarify electrical rating requirements for cord- and plug-connected displays; (22) Revisions to instruction requirements to delete references to foot supports; (23) Revisions to Paragraph 101.2 to clarify construction of power supplies/drivers with respect to luminaires; (24) Addition of Paragraph 104.3 to specify applicable construction requirements for power supply/drivers; (25) Clarification of marking requirements for temporary displays; (26) Revisions to requirements specific to showcases to use terminology that correctly identifies the product under investigation; (27) 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; (28) Revision and ...

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Comment Deadline: August 1, 2022

VITA (VMEbus International Trade Association (VITA))

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

Revision

BSR/VITA 67.3-202x, Coaxial Interconnect on VPX, Spring-Loaded Contact on Backplane Standard (revision of ANSI/VITA 67.3-2020)

This document describes an open standard for configuration and interconnect within the structure of VITA 67.0 enabling an interface compatible with VITA 46 containing multi-position blind-mate analog connectors with coaxial contacts, having fixed contacts on the Plug-In Module and spring action on the backplane.

Single copy price: \$25.00

Obtain an electronic copy from: admin@vita.com

Send comments (copy psa@ansi.org) to: admin@vita.com

Comment Deadline: August 16, 2022

ASME (American Society of Mechanical Engineers)

Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 | ansibox@asme.org, www.asme.org

Revision

BSR/ASME A17.6-202x, Standard for Elevator Suspension, Compensation, and Governor Systems (revision of ANSI/ASME A17.6-2017)

This Standard covers the means and members of suspension, compensation, and governor systems for elevators within the scope of ASME A17.1/CSA B44 and ASME A17.8/CSA B44.8. This Standard includes the material properties, design, testing, inspection, and replacement criteria for these means. It includes the requirements for steel wire rope and noncircular elastomeric-coated steel suspension members, and provides direction for future constructions as new technology develops.

Single copy price: Free

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

Send comments (copy psa@ansi.org) to: Nicole Gomez; ansibox@asme.org

Comment Deadline: August 16, 2022

CSA (CSA America Standards Inc.)

8501 East Pleasant Valley Road, Cleveland, OH 44131-5575 | ansi.contact@csagroup.org, www.csagroup.org

National Adoption

BSR/CSA C22.2 No. 22734-202x, Hydrogen generators using water electrolysis - Industrial, commercial, and residential applications (national adoption with modifications of ISO 22734:2019)

This document defines the construction, safety, and performance requirements of modular or factory-matched hydrogen gas generation appliances, herein referred to as hydrogen generators, using electrochemical reactions to electrolyze water to produce hydrogen. This document is applicable to hydrogen generators that use the following types of ion transport medium: group of aqueous bases; group of aqueous acids; solid polymeric materials with acidic function group additions, such as acid proton exchange membrane (PEM); solid polymeric materials with basic function group additions, such as anion exchange membrane (AEM). This document is applicable to hydrogen generators intended for industrial and commercial uses, and indoor and outdoor residential use in sheltered areas, such as car-ports, garages, utility rooms, and similar areas of a residence. Hydrogen generators that can also be used to generate electricity, such as reversible fuel cells, are excluded from the scope of this document. Residential hydrogen generators that also supply oxygen as a product are excluded from the scope of this document.

Single copy price: Free

Obtain an electronic copy from: ansi.contact@csagroup.org

Send comments (copy psa@ansi.org) to: ansi.contact@csagroup.org

UL (Underwriters Laboratories)

333 Pfingsten Road, Northbrook, IL 60062 | Elizabeth.Northcott@ul.org, <https://ul.org/>

New Standard

BSR/UL 8802-202x, Standard for Ultraviolet (UV) Germicidal Equipment and Systems (new standard)

(1) Proposed adoption of the first edition of the Standard for Ultraviolet (UV) Germicidal Equipment and Systems, UL 8802, as a UL standard for the U.S. and Canada.

Single copy price: Free

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Send comments (copy psa@ansi.org) to: <https://csds.ul.com/Home/ProposalsDefault.aspx>

Comment Deadline: August 16, 2022

UL (Underwriters Laboratories)

171 Nepean Street, Suite 400, Ottawa, ON K2P 0B4 Canada | laura.werner@ul.org, <https://ul.org/>

New Standard

BSR/UL/ULC 2447-202x, Standard for Safety for Containment Sumps, Fittings and Accessories for Flammable & Combustible Liquids (new standard)

This Standard sets forth the minimum requirements for containment sumps, and associated sump fittings and accessories (products) intended for below-grade, at-grade or aboveground use as an enclosure for the housing of, and access to, underground piping, connector piping, and other fueling system components (such as pumps, valves, sensors, wiring, etc.) in addition to temporary containment of typical liquid fuels as identified in this Standard. These products are intended for use in commercial (public) or private (fleet) automotive fueling station applications or similar fuel-dispensing applications, and in piping systems for fuel supply to generators, burners, or similar equipment. Some sump fitting or sump accessory products may be optionally evaluated for repair or replacement applications in containment sumps that have been in service. Single copy price: Free

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

Send comments (copy psa@ansi.org) to: Laura Werner, laura.werner@ul.org

Final Actions on American National Standards

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

AAFS (American Academy of Forensic Sciences)

410 North 21st Street, Colorado Springs, CO 80904 | tambrosius@aafs.org, www.aafs.org

New Standard

ANSI/ASB Std 149-2022, Standard for Taphonomic Observations in Support of the Postmortem Interval (new standard) Final Action Date: 6/9/2022

ABYC (American Boat and Yacht Council)

613 Third Street, Suite 10, Annapolis, MD 21403 | bgoodwin@abycinc.org, www.abycinc.org

New Standard

ANSI/ABYC S-32-2022, Warnings and Safety Signs for Boats (new standard) Final Action Date: 6/9/2022

Revision

ANSI/ABYC H-37-2022, Jet Boats - Light Weight (revision of ANSI/ABYC H-37-2017) Final Action Date: 6/9/2022

Revision

ANSI/ABYC S-30-2022, Outboard Engine and Related Equipment Weights (revision of ANSI/ABYC S-30-2017) Final Action Date: 6/9/2022

ASME (American Society of Mechanical Engineers)

Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 | ansibox@asme.org, www.asme.org

Revision

ANSI/ASME B40.100-2022, Pressure Gauges and Gauge Attachments (revision of ANSI/ASME B40.100-2013) Final Action Date: 6/6/2022

CTA (Consumer Technology Association)

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

Stabilized Maintenance

ANSI/CTA 708.1-2012 (S2022), Digital Television (DTV) Closed Captioning: 3D Extensions (stabilized maintenance of ANSI/CTA 708.1-2012 (R2017)) Final Action Date: 6/6/2022

Stabilized Maintenance

ANSI/CTA 2038-2012 (S2022), Command-Driven Analog IR-Synchronized Active Eyewear (stabilized maintenance of ANSI/CTA 2038-2012 (R2017)) Final Action Date: 6/6/2022

ECIA (Electronic Components Industry Association)

13873 Park Center Road, Suite 315, Herndon, VA 20171 | Idonohoe@ecianow.org, www.ecianow.org

Reaffirmation

ANSI/EIA 364-12A-2005 (R2022), Restricted Entry Test Procedure for Electrical Connectors (reaffirmation of ANSI/EIA 364-12A-2005 (R2017)) Final Action Date: 6/6/2022

Reaffirmation

ANSI/EIA 364-62A-2004 (R2022), Terminal Strength Test Procedure for Electrical Connectors and Sockets (reaffirmation of ANSI/EIA 364-62A-2004 (R2017)) Final Action Date: 6/6/2022

ECIA (Electronic Components Industry Association)

13873 Park Center Road, Suite 315, Herndon, VA 20171 | Idonohoe@ecianow.org, www.ecianow.org

Reaffirmation

ANSI/EIA 364-81A-2005 (R2022), Combustion Characteristics Test Procedure for Electrical Connector Housings, Connector Assemblies and Sockets (reaffirmation of ANSI/EIA 364-81A-2005 (R2017)) Final Action Date: 6/6/2022

Reaffirmation

ANSI/EIA 364-91B-2016 (R2022), Dust Test Procedure for Electrical Connectors and Sockets (reaffirmation of ANSI/EIA 364-91B-2016) Final Action Date: 6/6/2022

Revision

ANSI/EIA 364-23D-2022, Low Level Contact Resistance Test Procedure for Electrical Connectors and Sockets (revision and redesignation of ANSI/EIA 364-23C-2006 (R2017)) Final Action Date: 6/6/2022

EOS/ESD (ESD Association, Inc.)

218 W. Court Street, Rome, NY 13440 | cearl@esda.org, www.esda.org

Revision

ANSI/EOS ESD STM11.11-2022, ESD Association Standard Test Method for Protection of Electrostatic Discharge Susceptible Items - Surface Resistance Measurement of Planar Materials (revision of ANSI/ESD STM11.11-2021) Final Action Date: 6/9/2022

Revision

ANSI/EOS ESD STM5.5.1-2022, ESD Association Standard Test Method for Electrostatic Discharge (ESD) Sensitivity Testing - Transmission Line Pulse (TLP) - Device Level (revision of ANSI/ESD STM5.5.1-2017) Final Action Date: 6/9/2022

Revision

ANSI/ESDA/JEDEC JS-002-2022, ESDA/JEDEC Joint Standard for Electrostatic Discharge Sensitivity Testing - Charged Device Model (CDM) - Device Level (revision of ANSI/ESDA/JEDEC JS-002-2018) Final Action Date: 6/9/2022

FCI (Fluid Controls Institute)

1300 Sumner Avenue, Cleveland, OH 44115 | fci@fluidcontrolsinstitute.org, www.fluidcontrolsinstitute.org

Revision

ANSI/FCI 13-1-2022, Standard for Determining Condensate Loads to Size Steam Traps (revision of ANSI/FCI 13-1-2016) Final Action Date: 6/6/2022

IES (Illuminating Engineering Society)

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

New Standard

ANSI/IES LP-16-2022, Lighting Practice: Documenting Control Intent Narratives and Sequence of Operations (new standard) Final Action Date: 6/10/2022

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

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

Withdrawal

INCITS 499-2018, Information technology - Next Generation Access Control - Functional Architecture (withdrawal of INCITS 499-2018) Final Action Date: 6/10/2022

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

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

Withdrawal

INCITS 525-2018, Information technology - Next Generation Access Control - Implementation Requirements, Protocols and API Definitions (NGAC-IRPADS) (withdrawal of INCITS 525-2018) Final Action Date: 6/10/2022

NCMA (National Contract Management Association)

21740 Beaumeade Circle, Suite 125, Ashburn, VA 20147 | jwilkinson@thinc-llc.com, www.ncmahq.org

Reaffirmation

ANSI/NCMA ASD 1-2019 (R2022), Contract Management Standard (reaffirmation of ANSI/NCMA ASD 1-2019) Final Action Date: 6/8/2022

NEMA (ASC C12) (National Electrical Manufacturers Association)

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

Revision

ANSI C12.1-2022, Code for Electricity Metering (revision of ANSI C12.1-2016) Final Action Date: 6/9/2022

NEMA (ASC C50) (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Rosslyn, VA 22209 | mike.leibowitz@nema.org, www.nema.org

Revision

ANSI NEMA MG 1-2022, Motors and Generators (revision of ANSI NEMA MG 1-2021) Final Action Date: 6/6/2022

NFPA (National Fire Protection Association)

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

Revision

ANSI/NFPA 498-2023, Standard for Safe Havens and Interchange Lots for Vehicles Transporting Explosives (revision of ANSI/NFPA 498-2018) Final Action Date: 6/9/2022

NSF (NSF International)

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

Revision

ANSI/NSF 25-2022 (i10r6), Vending Machines for Food and Beverages (revision of ANSI/NSF 25-2021) Final Action Date: 6/1/2022

Revision

ANSI/NSF 170-2022 (i30r3), Glossary of Food Equipment Terminology (revision of BSR/NSF 170-2021) Final Action Date: 6/1/2022

Revision

ANSI/NSF 173-2022 (i97r1), Dietary Supplements (revision of ANSI/NSF 173-2021) Final Action Date: 6/2/2022

Revision

ANSI/NSF 350-2022 (i62r1), Onsite Residential and Commercial Water Reuse Treatment Systems (revision of ANSI/NSF 350-2020) Final Action Date: 6/2/2022

Revision

ANSI/NSF 350-2022 (i66r1), Onsite Residential and Commercial Water Reuse Treatment Systems (revision of ANSI/NSF 350-2020) Final Action Date: 6/6/2022

NSF (NSF International)

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

Revision

ANSI/NSF/CAN 50-2022 (i186r2), Equipment and Chemicals for Swimming Pools, Spas, Hot Tubs, and Other Recreational Water Facilities (revision of ANSI/NSF/CAN 50-2020) Final Action Date: 5/31/2022

Revision

ANSI/NSF/CAN 61-2022 (i161r1), Drinking Water System Components - Health Effects (revision of ANSI/NSF/CAN 61-2021) Final Action Date: 6/8/2022

PHTA (Pool and Hot Tub Alliance)

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

Reaffirmation

ANSI/APSP/ICC-4 2012 (R2022), Standard for Aboveground/Onground Residential Swimming Pools (reaffirmation of ANSI/APSP/ICC-4 2012) Final Action Date: 6/6/2022

Reaffirmation

ANSI/APSP/ICC-5 2012 (R2022), Standard for Residential Inground Swimming Pools (reaffirmation and redesignation of ANSI/APSP 5-2012) Final Action Date: 6/6/2022

SCTE (Society of Cable Telecommunications Engineers)

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

Reaffirmation

ANSI/SCTE 20-2017 (R2022), Methods for Carriage of CEA 608 Closed Captions and Non-Real Time Sampled Video (reaffirmation of ANSI/SCTE 20-2017) Final Action Date: 6/6/2022

Reaffirmation

ANSI/SCTE 21-2017 (R2022), Standard for Carriage of VBI Data in Cable Digital Transport Streams (reaffirmation of ANSI/SCTE 21-2017) Final Action Date: 6/8/2022

Reaffirmation

ANSI/SCTE 25-3-2017 (R2022), Hybrid Fiber Coax Outside Plant Status Monitoring - Power Supply to Transponder Interface Bus (PSTIB) Specification v1.1 (reaffirmation of ANSI/SCTE 25-3-2017) Final Action Date: 6/8/2022

UL (Underwriters Laboratories)

333 Pfingsten Road, Northbrook, IL 60062-2096 | mitchell.gold@ul.org, https://ul.org/

National Adoption

ANSI/UL 61800-5-2-2022, The Standard for Safety for Adjustable Speed Electrical Power Drive Systems - Part 5-2: Safety Requirements - Functional (national adoption with modifications of IEC 61800-5-2) Final Action Date: 5/3/2022

Reaffirmation

ANSI/UL 60950-21-2007 (R2022), Standard for Safety for Information Technology Equipment - Safety - Part 21: Remote Power Feeding (reaffirmation of ANSI/UL 60950-21-2007 (R2016)) Final Action Date: 6/6/2022

Reaffirmation

ANSI/UL 60950-22-2017 (R2022), Standard for Safety for Information Technology Equipment - Safety - Part 22: Equipment to be Installed Outdoors (reaffirmation of ANSI/UL 60950-22-2017) Final Action Date: 6/6/2022

UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | Julio.Morales@UL.org, <https://ul.org/>

Reaffirmation

ANSI/UL 60950-23-2016 (R2022), Standard for Safety for Information Technology Equipment - Safety - Part 23: Large Data Storage Equipment (reaffirmation of ANSI/UL 60950-23-2007 (R2016)) Final Action Date: 6/6/2022

Revision

ANSI/AAMI/UL 2800-1-2022, Standard for Safety for Medical Device Interoperability (revision and partition of ANSI/AAMI/UL 2800-1-2019) Final Action Date: 6/10/2022

Revision

ANSI/AAMI/UL 2800-1-1-2022, Standard for Safety for Risk Concerns for Interoperable Medical Products (revision and partition of ANSI/AAMI/UL 2800-1-2019) Final Action Date: 6/10/2022

Revision

ANSI/AAMI/UL 2800-1-2-2022, Standard for Safety for Interoperable Item Development Life Cycle (revision and partition of ANSI/AAMI/UL 2800-1-2019) Final Action Date: 6/10/2022

Revision

ANSI/AAMI/UL 2800-1-3-2022, Standard for Safety for Interoperable Item Integration Life Cycle (revision and partition of ANSI/UL 2800-1-2019) Final Action Date: 6/10/2022

Revision

ANSI/UL 162-2022, Standard for Foam Equipment and Liquid Concentrates (March 11, 2022) (revision of ANSI/UL 162-2022) Final Action Date: 6/10/2022

Revision

ANSI/UL 428A-2022, Standard for Electrically Operated Valves for Gasoline and Gasoline/Ethanol Blends with Nominal Ethanol Concentrations Up to 85 Percent (E0 - E85) (revision of ANSI/UL 428A-2021) Final Action Date: 6/6/2022

Revision

ANSI/UL 1310-2022, Standard for Class 2 Power Units (revision of ANSI/UL 1310-2019) Final Action Date: 6/9/2022

Revision

ANSI/UL 60745-1-2022, Standard for Safety Hand-Held Motor-Operated Electric Tools - Part 1: General Requirements (revision of ANSI/UL 60745-1-2020) Final Action Date: 6/10/2022

Revision

ANSI/UL 60745-2-13-2022, UL Standard for Safety for Hand-Held Motor-Operated Electric Tools - Safety - Part 2 -13: Particular Requirements for Chain Saws (revision of ANSI/UL 60745-2-13-2017) Final Action Date: 6/10/2022

Revision

ANSI/UL 62841-1-2022, Standard for Safety for Electric Motor-Operated Hand-Held Tools, Transportable Tools And Lawn And Garden Machinery - Safety - Part 1: General Requirements (revision of ANSI/UL 62841-1-2020) Final Action Date: 6/10/2022

UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | Doreen.Stocker@ul.org, <https://ul.org/>

Revision

ANSI/UL 62841-3-1-2022, Standard for Electric Motor-Operated Hand-Held Tools, Transportable Tools And Lawn And Garden Machinery - Part 3-1: Particular Requirements For Transportable Table Saws (revision of ANSI/UL 62841-3-1-2017) Final Action Date: 6/10/2022

Call for Members (ANS Consensus Bodies)

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

ANSI Accredited Standards Developer

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

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

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

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

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

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

ANSI Accredited Standards Developer

SCTE (Society of Cable Telecommunications Engineers)

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

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

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

More information is available at www.scte.org or by e-mail from standards@scte.org.

Call for Members (ANS Consensus Bodies)

AARST (American Association of Radon Scientists and Technologists)

527 N. Justice Street, Hendersonville, NC 28739 | StandardsAssist@gmail.com, www.aarst.org

BSR/AARST MALB-202x, Protocol for Conducting Measurements of Radon and Radon Decay Products in Schools and Large Buildings (revision of ANSI/AARST MALB-2014)

AARST (American Association of Radon Scientists and Technologists)

527 N. Justice Street, Hendersonville, NC 28739 | StandardsAssist@gmail.com, www.aarst.org

BSR/AARST MAMF-202x, Protocol for Conducting Measurements of Radon and Radon Decay Products in Multifamily Buildings (revision of ANSI/AARST MAMF-2017)

ACP (American Clean Power Association)

1501 M Street NW, Suite 900, Washington, DC 20005 | Standards@cleanpower.org, www.cleanpower.org

BSR/ACP RP 1001-2-202x, Recommended Practice for Offshore Safety Training and Medical Requirements (new standard)

ARESCA (American Renewable Energy Standards and Certification Association)

256 Farrell Farm Road, Norwich, VT 05055 | secretary@aresca.us, www.aresca.us

BSR/ARESCA 61400-5-202x, Wind energy generation systems - Part 5: Wind turbine blades (identical national adoption of IEC 61400-5:2020)

ARESCA (American Renewable Energy Standards and Certification Association)

256 Farrell Farm Road, Norwich, VT 05055 | secretary@aresca.us, www.aresca.us

BSR/ARESCA 61400-8-202x, Wind energy generation systems - Part 8: Design of wind turbine structural components (identical national adoption of IEC 61400-8:2023)

ARESCA (American Renewable Energy Standards and Certification Association)

256 Farrell Farm Road, Norwich, VT 05055 | secretary@aresca.us, www.aresca.us

BSR/ARESCA 61400-28-202x, Wind energy generation systems - Part 28: Through life management and life extension of wind power assets (identical national adoption of IEC TS 61400-28:2023)

ARESCA (American Renewable Energy Standards and Certification Association)

256 Farrell Farm Road, Norwich, VT 05055 | secretary@aresca.us, www.aresca.us

BSR/ARESCA 61400-29-202x, Wind energy generation systems - Part 29: Marking and lighting of wind turbines (identical national adoption of IEC TS 61400-29:2023)

ARESCA (American Renewable Energy Standards and Certification Association)

256 Farrell Farm Road, Norwich, VT 05055 | secretary@aresca.us, www.aresca.us

BSR/ARESCA 61400-30-202x, Wind energy generation systems - Part 30: Safety of Wind Turbine Generator Systems (WTGs) - General principles for design (identical national adoption of IEC TS 61400-30:2023)

Call for Members (ANS Consensus Bodies)

ARESCA (American Renewable Energy Standards and Certification Association)

256 Farrell Farm Road, Norwich, VT 05055 | secretary@aresca.us, www.aresca.us

BSR/ARESCA 61400-31-202x, Wind energy generation systems - Part 31: Siting Risk Assessment (identical national adoption of IEC TS 61400-31:2023)

ARESCA (American Renewable Energy Standards and Certification Association)

256 Farrell Farm Road, Norwich, VT 05055 | secretary@aresca.us, www.aresca.us

BSR/ARESCA 61400-15-2-202x, Wind energy generation systems - Part 15-2: Framework for assessment and reporting of the wind resource and energy yield (identical national adoption of IEC 61400-15-2:2023)

ARESCA (American Renewable Energy Standards and Certification Association)

256 Farrell Farm Road, Norwich, VT 05055 | secretary@aresca.us, www.aresca.us

BSR/ARESCA 61400-26-4-202x, Wind energy generation systems - Part 26-4: Reliability for wind energy generating systems (identical national adoption of IEC TS 61400-26-4:2023)

ASME (American Society of Mechanical Engineers)

Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 | ansibox@asme.org, www.asme.org

BSR/ASME A17.6-202x, Standard for Elevator Suspension, Compensation, and Governor Systems (revision of ANSI/ASME A17.6-2017)

AWS (American Welding Society)

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

BSR/AWS A5.4/A5.4M-2012 (R202x), Specification for Stainless Steel Electrodes for Shielded Metal Arc Welding (reaffirmation of ANSI/AWS A5.4/A5.4M-2012)

ECIA (Electronic Components Industry Association)

13873 Park Center Road, Suite 315, Herndon, VA 20171 | Idoonohoe@ecianow.org, www.ecianow.org

BSR/EIA 60384-4-2017 (R202x), Fixed capacitors for use in electronic equipment - Part 4: Sectional specification - Fixed aluminium electrolytic capacitors with solid (MnO₂) and non-solid electrolyte (reaffirmation of ANSI/EIA 60384-4-2017)

EOS/ESD (ESD Association, Inc.)

218 W. Court Street, Rome, NY 13440 | jkirk@esda.org, www.esda.org

BSR/ESD SP5.4.1-2018 (R202x), ESD Association Standard Practice for Latch-up Sensitivity Testing of CMOS/BiCMOS Integrated Circuits Transient Latch-up Testing Device Level (reaffirmation of ANSI/ESD SP5.4.1-2018)

HI (Hydraulic Institute)

300 Interpace Parkway, Building A, 3rd Floor, #280, Parsippany, NJ 07054 | asisto@pumps.org, www.pumps.org

BSR/HI 7.1-7.5-202x, Controlled-volume Metering Pumps for Nomenclature, Definitions, Application, and Operation (revision of ANSI/HI 7.1-7.5-2017)

Call for Members (ANS Consensus Bodies)

NSF (NSF International)

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

BSR/NSF 40-202x (i44r1), Residential Wastewater Treatment Systems (revision of ANSI/NSF 40-2020)

NSF (NSF International)

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

BSR/NSF 40-202x (i46r1), Residential Wastewater Treatment Systems (revision of ANSI/NSF 40-2020)

NSF (NSF International)

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

BSR/NSF 49-202x (i171r1), Biosafety Cabinetry: Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-2020)

UL (Underwriters Laboratories)

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

BSR/UL 521-202x, Standard for Safety for Heat Detectors for Fire Protective Signaling Systems (revision of ANSI/UL 521-2021)

VITA (VMEbus International Trade Association (VITA))

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

BSR/VITA 67.3-202x, Coaxial Interconnect on VPX, Spring-Loaded Contact on Backplane Standard (revision of ANSI/VITA 67.3-2020)

American National Standards (ANS) Announcements

Discontinuance of a standards project

ASTM - ASTM International

BSR/ASTM WK64118-202x

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:

BSR/ASTM WK64118-202x, New Practice for Extension of data from NFPA 285 for fire testing of exterior assemblies, (new standard)

Inquiries may be directed to: Laura Klineburger; accreditation@astm.org

Discontinuance of a standards project

RESNET - Residential Energy Services Network, Inc.

BSR/RESNET/ICC 301-2019 Addendum E-202x

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:

BSR/RESNET/ICC 301-2019 Addendum E-202x, Appendix A Insulation Installation Grading Update, (addenda to ANSI/RESNET/ICC 301-2019)

Inquiries may be directed to: Richard Dixon; rick.dixon@resnet.us

American National Standards (ANS) Process

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

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

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

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

American National Standards Under Continuous Maintenance

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

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

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

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

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

ANSI-Accredited Standards Developers (ASD) Contacts

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

AAFS

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ABYC

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ASHRAE

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CTA

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Arlington, VA 22202
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Catrina Akers
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ECIA

Electronic Components Industry
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ANSI-Accredited Standards Developers Contact Information

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IES

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ITI (INCITS)

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NCMA

National Contract Management
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ISO & IEC Draft International Standards



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

COMMENTS

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

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

ORDERING INSTRUCTIONS

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

ISO Standards

Agricultural food products (TC 34)

ISO/FDIS 16577, Molecular biomarker analysis - Vocabulary for molecular biomarker analytical methods in agriculture and food production - 6/17/2021, \$119.00

Air quality (TC 146)

ISO/FDIS 10849, Stationary source emissions - Determination of the mass concentration of nitrogen oxides in flue gas - Performance characteristics of automated measuring systems - 2/15/2021, FREE

Aircraft and space vehicles (TC 20)

ISO/DIS 5109, Evaluation method for the resonance frequency of the multi-copter UA by measurement of rotor and body frequencies - 8/28/2022, \$46.00

ISO/FDIS 7689, Aerospace - Bolts, with MJ threads, made of alloy steel, strength class 1 100 MPa - Procurement specification - 2/23/2020, \$82.00

ISO/DIS 24113, Space systems - Space debris mitigation requirements - 4/8/2022, \$67.00

ISO/DIS 23629-8, UAS Traffic Management (UTM) - Part 8: Remote identification - 4/8/2022, \$53.00

Bamboo and rattan (TC 296)

ISO/DIS 6128, Laminated products made of bamboo strips for indoor furniture purposes - 8/25/2022, \$40.00

Building construction (TC 59)

ISO/DIS 21928-2, Sustainability in buildings and civil engineering works - Sustainability indicators - Part 2: Framework for the development of indicators for civil engineering works - 4/10/2022, \$155.00

Building construction machinery and equipment (TC 195)

ISO/DIS 24147, Road operation machinery and associated equipment - Road surface cleaning machines - Terminology and commercial specifications - 4/10/2022, \$77.00

Building environment design (TC 205)

ISO/FDIS 16484-5, Building automation and control systems (BACS) - Part 5: Data communication protocol -, \$380.00

Dentistry (TC 106)

ISO/FDIS 9333, Dentistry - Brazing materials - 6/11/2021, \$53.00

ISO/DIS 10394, Dentistry - Designation system for supernumerary teeth - 4/11/2022, \$33.00

ISO/FDIS 5467-1, Dentistry - Mobile dental units and dental patient chairs - Part 1: General requirements - 9/24/2021, \$58.00

ISO/FDIS 5467-2, Dentistry - Mobile dental units and dental patient chairs - Part 2: Air, water, suction and wastewater systems - 10/2/2021, \$62.00

Environmental management (TC 207)

ISO 14050:2020/DAmD 1, Environmental management - Vocabulary - Amendment 1 - 8/28/2022, \$107.00

Fasteners (TC 2)

ISO/FDIS 898-2, Fasteners - Mechanical properties of fasteners made of carbon steel and alloy steel - Part 2: Nuts with specified property classes - 7/1/2021, \$93.00

Gears (TC 60)

ISO/DIS 10300-2, Calculation of load capacity of bevel gears - Part 2: Calculation of surface durability (pitting) - 8/29/2022, \$107.00

Geographic information/Geomatics (TC 211)

ISO/DIS 19150-6, Geographic information - Ontology - Part 6: Service ontology register - 4/9/2022, \$98.00

Graphic technology (TC 130)

ISO/DIS 12641-1, Graphic technology - Prepress digital data exchange - Colour targets for input scanner calibration - Part 1: Colour targets for input scanner calibration - 4/10/2022, \$88.00

Industrial automation systems and integration (TC 184)

ISO/DIS 24644-1, Mass customization value chain management - Part 1: Framework - 4/11/2022, \$88.00

Industrial fans (TC 117)

ISO/FDIS 13349-1, Fans - Vocabulary and definitions of categories - Part 1: Vocabulary - 5/17/2021, \$82.00

ISO/FDIS 13349-2, Fans - Vocabulary and definitions of categories - Part 2: Categories -, \$88.00

Industrial furnaces and associated processing equipment (TC 244)

ISO/DIS 20431, Heat treatment - Control of quality - 4/8/2022, \$107.00

Information and documentation (TC 46)

ISO/DIS 11798, Information and documentation - Permanence and durability of writing, printing and copying on paper - Requirements and test methods - 8/28/2022, \$82.00

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

ISO/DIS 19901-3, Petroleum and natural gas industries - Specific requirements for offshore structures - Part 3: Topsides structure - 8/27/2022, \$175.00

Mechanical testing of metals (TC 164)

ISO/FDIS 11531, Metallic materials - Sheet and strip - Earing test -, \$40.00

Nuclear energy (TC 85)

ISO/DIS 20043-2, Measurement of radioactivity in the environment - Guidelines for effective dose assessment using environmental monitoring data - Part 2: Nuclear emergency exposure situation - 4/11/2022, \$102.00

Optics and optical instruments (TC 172)

ISO 9022-4:2014/DAMd 1, Optics and photonics - Environmental test methods - Part 4: Salt mist - Amendment 1 - 8/27/2022, \$29.00

ISO/DIS 10109, Optics and photonics - Guidance for the selection of environmental tests - 8/29/2022, \$82.00

ISO/DIS 9342-1, Optics and optical instruments - Test lenses for calibration of focimeters - Part 1: Reference lenses for focimeters used for measuring spectacle lenses - 4/11/2022, \$71.00

ISO/DIS 9022-23, Optics and photonics - Environmental test methods - Part 23: Low pressure combined with cold, ambient temperature and dry or damp heat - 8/27/2022, \$62.00

Paper, board and pulps (TC 6)

ISO/DIS 8784-2, Pulp, paper and board - Microbiological examination - Part 2: Enumeration of bacteria, yeast and mould on surface - 4/9/2022, \$40.00

ISO/DIS 12625-12, Tissue paper and tissue products - Part 12: Determination of tensile strength of perforated lines - Calculation of perforation efficiency - 4/8/2022, \$62.00

Personal safety - Protective clothing and equipment (TC 94)

ISO/DIS 13997, Protective clothing - Mechanical properties - Determination of resistance to cutting by sharp objects - 4/10/2022, \$82.00

Petroleum products and lubricants (TC 28)

ISO/DIS 12924, Lubricants, industrial oils and related products (Class L) - Family X (Greases) - Specifications - 4/8/2022, \$53.00

Photography (TC 42)

ISO/DIS 18946, Imaging materials - Reflection colour photographic prints - Method for testing humidity fastness - 8/27/2022, \$62.00

Plastics (TC 61)

ISO/DIS 182-3, Plastics - Determination of the tendency of compounds and products based on vinyl chloride homopolymers and copolymers to evolve hydrogen chloride and any other acidic products at elevated temperatures - Part 3: Conductometric method - 4/10/2022, \$71.00

ISO/DIS 11337, Plastics - Polyamides - Determination of ϵ -caprolactam and ω -laurolactam by gas chromatography - 4/10/2022, \$58.00

Road vehicles (TC 22)

ISO/DIS 11992-4, Road vehicles - Interchange of digital information on electrical connections between towing and towed vehicles - Part 4: Diagnostic communication - 8/28/2022, \$98.00

ISO/DIS 16750-1, Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 1: General - 4/8/2022, \$82.00

ISO/DIS 16750-3, Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 3: Mechanical loads - 4/8/2022, \$165.00

ISO/DIS 16750-4, Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 4: Climatic loads - 4/8/2022, \$125.00

ISO/DIS 16750-5, Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 5: Chemical loads - 4/8/2022, \$40.00

ISO/DIS 19642-2, Road vehicles - Automotive cables - Part 2: Test methods - 4/10/2022, \$155.00

ISO/DIS 20766-5, Road vehicles - Liquefied petroleum gas (LPG) fuel system components - Part 5: Fuel selection system and electrical installations - 8/27/2022, \$33.00

Rubber and rubber products (TC 45)

ISO/DIS 11346, Rubber, vulcanized or thermoplastic - Estimation of life-time and maximum temperature of use - 4/8/2022, \$82.00

ISO/DIS 9924-1, Rubber and rubber products - Determination of the composition of vulcanizates and uncured compounds by thermogravimetry - Part 1: Butadiene, ethylene-propylene copolymer and terpolymer, isobutene-isoprene, isoprene and styrene-butadiene rubbers - 8/26/2022, \$53.00

Ships and marine technology (TC 8)

ISO/DIS 4857, Ships and marine technology - Test procedures and methods for windlasses and winches - 4/9/2022, \$40.00

ISO/DIS 4861, Ships and marine technology - Piling barge winches - 4/10/2022, \$40.00

ISO/DIS 4862, Ships and marine technology - Winches for trailing suction hopper dredger - 4/10/2022, \$33.00

ISO/DIS 5483, Ships and marine technology - Drain facilities from oil and water tanks - 4/11/2022, \$98.00

ISO/DIS 23807, Ships and marine technology - General requirements for the asynchronous time-insensitive ship-shore data transmission - 4/10/2022, \$67.00

Sieves, sieving and other sizing methods (TC 24)

ISO/DIS 23484, Determination of particle concentration by smallangle X-ray scattering (SAXS) - 4/14/2022, \$62.00

Solid mineral fuels (TC 27)

ISO/DIS 4077, Coal - Guidance for sampling in coal preparation plants - 8/28/2022, \$134.00

Sterilization of health care products (TC 198)

ISO 11607-1:2019/DAmD 1, Packaging for terminally sterilized medical devices - Part 1: Requirements for materials, sterile barrier systems and packaging systems - Amendment 1 - 8/26/2022, \$67.00

ISO 11607-2:2019/DAmD 1, Packaging for terminally sterilized medical devices - Part 2: Validation requirements for forming, sealing and assembly processes - Amendment 1 - 8/26/2022, \$67.00

Sustainable development in communities (TC 268)

ISO/FDIS 37108, Sustainable cities and communities - Business districts - Guidance for practical local implementation of ISO 37101 - 6/20/2021, \$125.00

Textiles (TC 38)

ISO/DIS 9073-13, Nonwovens - Test methods - Part 13: Repeated liquid strike-through time (simulated urine) - 4/10/2022, \$53.00

ISO/DIS 9073-14, Nonwovens - Test methods - Part 14: Coverstock wetback (simulated urine) - 4/8/2022, \$58.00

Thermal insulation (TC 163)

ISO/DIS 18393-1, Thermal insulation products - Determination of ageing by settlement - Part 1: Blown loose fill insulation for ventilated attics simulating humidity and temperature cycling - 4/10/2022, \$33.00

Tractors and machinery for agriculture and forestry (TC 23)

ISO/DIS 10975, Agricultural machinery and tractors - Auto-guidance systems for operator-controlled tractors and self-propelled machines - Safety requirements - 8/25/2022, \$40.00

ISO/DIS 18497-2, Agricultural machinery and tractors - Safety of partially automated, semi-autonomous and autonomous machinery - Part 2: Design principles for obstacle protection systems - 8/25/2022, \$77.00

ISO/DIS 23117-1, Agricultural and forestry machinery - Unmanned aerial spraying systems - Part 1: Environmental requirements - 9/1/2022, \$58.00

Traditional Chinese medicine (TC 249)

ISO/DIS 22587, Traditional Chinese Medicine - Acupoint magnetotherapy plaster for single use - 4/9/2022, \$40.00

Transport information and control systems (TC 204)

ISO/DIS 18561-2, Intelligent transport systems - Urban mobility applications via nomadic device for green transport management - Part 2: Functional requirements and specifications for trip and modal choice application - 8/25/2022, \$71.00

Water quality (TC 147)

ISO/DIS 4979, Water quality - Aquatic toxicity test based on root re-growth in Lemna minor - 4/11/2022, \$77.00

Water re-use (TC 282)

ISO/DIS 4789, Guidelines for wastewater treatment and reuse in thermal power plants - 4/8/2022, \$93.00

Welding and allied processes (TC 44)

ISO/DIS 15613, Specification and qualification of welding procedures for metallic materials - Qualification based on a pre-production welding test - 8/26/2022, \$40.00

ISO/DIS 15614-2, Specification and qualification of welding procedures for metallic materials - Welding procedure test - Part 2: Arc welding of aluminium and its alloys - 4/8/2022, \$88.00

ISO/DIS 9455-17, Soft soldering fluxes - Test methods - Part 17: Surface insulation resistance comb test and electrochemical migration test of flux residues - 8/25/2022, \$77.00

ISO/DIS 15614-11, Specification and qualification of welding procedures for metallic materials - Welding procedure test - Part 11: Electron and laser beam welding - 8/27/2022, \$88.00

ISO/IEC JTC 1, Information Technology

ISO/IEC 23094-1:2020/DAmD 1, Information technology - General video coding - Part 1: Essential video coding - Amendment 1: Green metadata supplemental enhancement information - 8/27/2022, \$82.00

ISO/IEC DIS 17917, Smart cities - Guidance to establishing a decision-making framework for sharing data and information services - 8/28/2022, \$112.00

ISO/IEC DIS 3532-2, Information technology - 3D Printing and scanning - Medical image-Based modelling - Part 2: Segmentation - 8/28/2022, \$88.00

ISO/IEC DIS 22123-2, Information technology - Cloud computing - Part 2: Concepts - 4/8/2022, \$134.00

ISO/IEC DIS 23090-5/DAmD 1, Information technology - Coded representation of immersive media - Part 5: Visual volumetric video-based coding (V3C) and video-based point cloud compression (V-PCC) - Amendment 1: V3C extension mechanism and payload type - 8/29/2022, \$53.00

ISO/IEC DIS 24787-1, Information technology - On-card biometric comparison - Part 1: General principles and specifications - 4/9/2022, \$102.00

ISO/IEC DIS 24787-2, Information Technology - On-card biometric comparison - Part 2: Work-sharing mechanism - 4/9/2022, \$40.00

ISO/IEC DIS 30134-7, Information Technology - Data centres key performance indicators - Part 7: Cooling Efficiency Ratio (CER) - 8/26/2022, \$67.00

ISO/IEC FDIS 19794-14, Information technology - Biometric data interchange formats - Part 14: DNA data - 7/30/2021, \$175.00

ISO/IEC DIS 23090-12/DAmD 1, Information technology - Coded representation of immersive media - Part 12: MPEG Immersive video - Amendment 1: V3C extension mechanism - 8/27/2022, \$29.00

IEC Standards**All-or-nothing electrical relays (TC 94)**

94/714/CD, IEC 61810-7-50 ED1: All-or-nothing electrical relays - Tests and Measurements - Part 7-50: Momentary drop in supply voltage, 08/05/2022

94/713/CD, IEC 61810-7-51 ED1: All-or-nothing electrical relays - Tests and Measurements - Part 7-51: Reset behavior at coil voltage drop, 08/05/2022

94/712/CD, IEC 61810-7-52 ED1: All-or-nothing electrical relays - Tests and Measurements - Part 7-52: Coil overvoltage, 08/05/2022

94/711/CD, IEC 61810-7-53 ED1: All-or-nothing electrical relays - Tests and Measurements - Part 7-53: Slow decrease and increase of supply voltage, 08/05/2022

94/710/CD, IEC 61810-7-54 ED1: All-or-nothing electrical relays - Tests and Measurements - Part 7-54: Critical DC load current test, 08/05/2022

94/715/CD, IEC 61810-7-6 ED1: All-or-nothing electrical relays - Tests and Measurements - Part 7-6: Contact-circuit resistance (or voltage drop), 08/05/2022

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

100/3760/CDV, IEC 60728-113 ED2: Cable networks for television signals, sound signals and interactive services - Part 113: Optical systems for broadcast signal transmissions loaded with digital channels only, 09/02/2022

Automatic controls for household use (TC 72)

72/1307/FDIS, IEC 60730-1 ED6: Automatic electrical controls - Part 1: General requirements, 07/22/2022

Cables, wires, waveguides, r.f. connectors, and accessories for communication and signalling (TC 46)

46A/1578/FDIS, IEC 61196-1-124 ED1: Coaxial Communication Cables Part 1-124: Electrical test methods - Test for coupling loss of radiating cable, 07/22/2022

Capacitors and resistors for electronic equipment (TC 40)

40/2943/CDV, IEC 60115-2 ED4: Fixed resistors for use in electronic equipment - Part 2: Sectional specification: "Low power film resistors with leads for through-hole assembly on circuit boards (THT), 09/02/2022

40/2944/CDV, IEC 60115-2-10 ED2: Fixed resistors for use in electronic equipment - Part 2-10: Blank detail specification: Low-power film resistors with leads for through-hole assembly on circuit boards (THT), for general electronic equipment, classification level G, 09/02/2022

40/2951(F)/FDIS, IEC 60384-1-1 ED1: Fixed capacitors for use in electronic equipment - Part 1-1: Generic blank detail specification, 07/08/2022

Dependability (TC 56)

56/1954/CDV, IEC 60300-1 ED4: Dependability management - Part 1: Managing dependability, 09/02/2022

Electric cables (TC 20)

20/2028/CDV, IEC 60840/AMD1 ED5: Amendment 1 - Power cables with extruded insulation and their accessories for rated voltages above 30 kV ($U_m = 36$ kV) up to 150 kV ($U_m = 170$ kV) - Test methods and requirements, 09/02/2022

Electric road vehicles and electric industrial trucks (TC 69)

69/845/DTS, IEC TS 61851-3-1 ED1: Electric Vehicles conductive power supply system - Part 3-1: DC EV supply equipment where protection relies on double or reinforced insulation - General rules and requirements for stationary equipment, 09/02/2022

69/846/DTS, IEC TS 61851-3-2 ED1: Electric Vehicles conductive power supply system - Part 3-2: DC EV supply equipment where protection relies on double or reinforced insulation - Particular requirements for portable and mobile equipment, 09/02/2022

Electrical accessories (TC 23)

23B/1389A/CD, IEC 60670-21 ED2: Boxes and enclosures for electrical accessories for household and similar fixed electrical installations - Part 21: Particular requirements for boxes and enclosures with provision for suspension means, 08/12/2022

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

48B/2972/CD, IEC 63171 ED2: Connectors for electrical and electronic equipment - Shielded or unshielded free and fixed connectors for balanced single-pair data transmission with current-carrying capacity - General requirements and tests, 09/02/2022

Fibre optics (TC 86)

86A/2200/CDV, IEC 60793-1-44 ED3: Optical fibres - Part 1-44: Measurement methods and test procedures - Cut-off wavelength, 09/02/2022

86A/2199/CDV, IEC 60794-1-303 ED1: Optical fibre cables - Part 1-303: Generic specification - Basic optical cable test procedures - Cable element test methods - Ribbon dimensions - Aperture gauge, Method G3, 09/02/2022

86A/2201/CDV, IEC 60794-2-22 ED2: Optical fibre cables - Part 2-22: Indoor cables - Detail specification for multi-simplex breakout optical cables for use in terminated breakout cable assemblies, 09/02/2022

86A/2202/CDV, IEC 60794-2-50 ED3: Optical fibre cables - Part 2-50: Indoor cables - Family specification for simplex and duplex cables for use in terminated cable assemblies, 09/02/2022

86B/4608/CDV, IEC 61300-2-6 ED3: Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-6: Tests - Tensile strength of coupling mechanism, 09/02/2022

86B/4626/FDIS, IEC 61753-089-02 ED1: Fibre optic interconnecting devices and passive components - Performance standard - Part 089-02: Non-connectorised single-mode bidirectional OTDR monitoring WWDM for category C - Indoor controlled environment, 07/22/2022

86B/4624/FDIS, IEC 62077 ED4: Fibre optic interconnecting devices and passive components - Fibre optic circulators - Generic specification, 07/22/2022

Fuel Cell Technologies (TC 105)

105/912(F)/FDIS, IEC 62282-4-101 ED2: Fuel cell technologies - Part 4-101: Fuel cell power systems for electrically powered industrial trucks - Safety, 06/24/2022

Insulators (TC 36)

36/547/CD, IEC TS 60815-1 ED2: Selection and dimensioning of high-voltage insulators intended for use in polluted conditions - Part 1: Definitions, information and general principles, 09/02/2022

36/548/CD, IEC TS 60815-2 ED2: Selection and dimensioning of high-voltage insulators intended for use in polluted conditions - Part 2: Ceramic and glass insulators for a.c. systems, 09/02/2022

36/549/CD, IEC TS 60815-3 ED2: Selection and dimensioning of high-voltage insulators intended for use in polluted conditions - Part 3: Polymer insulators for a.c. systems, 09/02/2022

Lamps and related equipment (TC 34)

34D/1663/FDIS, IEC 60598-2-18 ED3: Luminaires - Part 2-18: Particular requirements - Luminaires for swimming pools and similar applications, 07/22/2022

Laser equipment (TC 76)

76/709/CD, IEC TR 60825-13 ED3: Safety of laser products - Part 13: Measurements for classification of laser products, 08/05/2022

Magnetic alloys and steels (TC 68)

68/711/NP, PNW 68-711 ED1: Magnetic materials - Part XX: Permanent magnet (magnetically hard) materials - Methods of measurement of the magnetic properties in an open magnetic circuit using a superconducting magnet, 09/02/2022

Methods for the Assessment of Electric, Magnetic and Electromagnetic Fields Associated with Human Exposure (TC 106)

106/575/FDIS, IEC 62764-1 ED1: Measurement procedures of magnetic field levels generated by electronic and electrical equipment in the automotive environment with respect to human exposure - Part 1: Low-frequency magnetic fields, 07/22/2022

Performance of household electrical appliances (TC 59)

59L/215(F)/FDIS, IEC 61855 ED2: Household and similar use electrical hair care appliances - Methods for measuring the performance, 07/01/2022

Quantities and units, and their letter symbols (TC 25)

25/732/FDIS, IEC 80000-6 ED2: Quantities and units - Part 6: Electromagnetism, 07/22/2022

Safety of household and similar electrical appliances (TC 61)

61/6529/CDV, IEC 60335-2-103 ED4: Household and similar electrical appliances - Safety - Part 2-103: Particular requirements for drives for gates, doors and windows, 09/02/2022

61/6527/CDV, IEC 60335-2-11 ED9: Household and similar electrical appliances - Safety - Part 2-11: Particular requirements for tumble dryers, 09/02/2022

61/6526/CDV, IEC 60335-2-95 ED5: Household and similar electrical appliances - Safety - Part 2-95: Particular requirements for drives for vertically moving garage doors for residential use, 09/02/2022

61/6528/CDV, IEC 60335-2-97 ED4: Household and similar electrical appliances - Safety - Part 2-97: Particular requirements for drives for shutters, awnings, blinds and similar equipment, 09/02/2022

Switchgear and controlgear (TC 17)

17C/855/CD, IEC 62271-200/AMD1 ED3: Amendment 1 - High-voltage switchgear and controlgear - Part 200: AC metal-enclosed switchgear and controlgear for rated voltages above 1 kV and up to and including 52 kV, 09/02/2022

17/1124(F)/FDIS, IEC 62271-4 ED2: High-voltage switchgear and controlgear - Part 4: Handling procedures for gases for insulation and/or switching, 06/24/2022

Switchgear and Controlgear and Their Assemblies for Low Voltage (TC 121)

121A/511/CD, IEC 60947-3/AMD1 ED4: Amendment 1 - Low-voltage switchgear and controlgear - Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units, 09/02/2022

121B/155/CDV, IEC 61439-5 ED3: Low-voltage switchgear and controlgear assemblies - Part 5: Assemblies for power distribution in public networks, 09/02/2022

121A/510/CD, IEC 62626-1 ED2: Low-voltage switchgear and controlgear enclosed equipment - Part 1: Enclosed switch-disconnectors outside the scope of IEC 60947-3 to provide isolation during repair and maintenance work, 09/02/2022

(TC)

CIS/F/821/CD, CISPR 15/AMD1 ED9: Amendment 1 - Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment, 09/02/2022



Newly Published ISO & IEC Standards

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

ISO Standards

Agricultural food products (TC 34)

[ISO 23418:2022](#), Microbiology of the food chain - Whole genome sequencing for typing and genomic characterization of bacteria - General requirements and guidance, \$200.00

[ISO 22003-1:2022](#), Food safety - Part 1: Requirements for bodies providing audit and certification of food safety management systems, \$149.00

[ISO 22003-2:2022](#), Food safety - Part 2: Requirements for bodies providing evaluation and certification of products, processes and services, including an audit of the food safety system, \$175.00

Cosmetics (TC 217)

[ISO 24442:2022](#), Cosmetics - Sun protection test methods - In vivo determination of sunscreen UVA protection, \$225.00

Environmental management (TC 207)

[ISO 14015:2022](#), Environmental management - Guidelines for environmental due diligence assessment, \$149.00

Ferroalloys (TC 132)

[ISO 4298:2022](#), Manganese ores and concentrates - Determination of manganese content - Potentiometric method, \$73.00

Gas cylinders (TC 58)

[ISO 23876:2022](#), Gas cylinders - Cylinders and tubes of composite construction - Acoustic emission examination (AT) for periodic inspection and testing, \$111.00

Metallic and other inorganic coatings (TC 107)

[ISO 4528:2022](#), Vitreous and porcelain enamel finishes - Selection of test methods for vitreous and porcelain enamelled areas of articles, \$73.00

Paints and varnishes (TC 35)

[ISO 19403-1:2022](#), Paints and varnishes - Wettability - Part 1: Vocabulary and general principles, \$73.00

Paper, board and pulps (TC 6)

[ISO 24196:2022](#), Lignins - Determination of lignin content in kraft lignin, soda lignin and hydrolysis lignin, \$73.00

Personal safety - Protective clothing and equipment (TC 94)

[ISO 12312-1:2022](#), Eye and face protection - Sunglasses and related eyewear - Part 1: Sunglasses for general use, \$175.00

Plain bearings (TC 123)

[ISO 7905-4:2022](#), Plain bearings - Bearing fatigue - Part 4: Tests on half-bearings of a metallic multilayer bearing material, \$73.00

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

[ISO 15874-1:2013/Amd 1:2022](#), - Amendment 1: Plastics piping systems for hot and cold water installations - Polypropylene (PP) - Part 1: General - Amendment 1: Impact test, \$20.00

[ISO 15874-2:2013/Amd 2:2022](#), Plastics piping systems for hot and cold water installations - Polypropylene (PP) - Part 2: Pipes - Amendment 2: Impact test, \$20.00

Sterilization of health care products (TC 198)

[ISO 11137-2:2013/Amd 1:2022](#), Sterilization of health care products - Radiation - Part 2: Establishing the sterilization dose - Amendment 1, \$20.00

Textiles (TC 38)

[ISO 24461:2022](#), Textiles - Anti-mosquito performance test method using the attractive blood feeding apparatus, \$111.00

Thermal insulation (TC 163)

[ISO 12241:2022](#), Thermal insulation for building equipment and industrial installations - Calculation rules, \$225.00

Traditional Chinese medicine (TC 249)

[ISO 24571:2022](#), Traditional Chinese medicine - General requirements for the basic safety and essential performance of electro-acupuncture stimulators, \$73.00

ISO Technical Reports

Fire safety (TC 92)

[ISO/TR 24188:2022](#), Large outdoor fires and the built environment - Global overview of different approaches to standardization, \$149.00

Gas cylinders (TC 58)

[ISO/TR 13086-5:2022](#), Gas cylinders - Information for design of composite cylinders - Part 5: Impact testing of composite cylinders, \$149.00

ISO Technical Specifications

Steel (TC 17)

[ISO/TS 6084:2022](#), Steel and steel products - Vocabulary relating to chemical analysis, \$48.00

ISO/IEC JTC 1, Information Technology

[ISO/IEC 20248:2022](#), Information technology - Automatic identification and data capture techniques - Digital signature data structure schema, \$250.00

[ISO/IEC 27400:2022](#), Cybersecurity - IoT security and privacy - Guidelines, \$200.00

[ISO/IEC 23001-18:2022](#), Information technology - MPEG systems technologies - Part 18: Event message track format for the ISO base media file format, \$73.00

IEC Standards

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

[IEC 62702-1-1 Ed. 2.0 b:2022](#), Audio archive system - Part 1-1: DVD disk and data migration for long-term audio data storage, \$221.00

[IEC 62702-1-2 Ed. 2.0 b:2022](#), Audio archive system - Part 1-2: BD disk and data migration for long-term audio data storage, \$183.00

[S+ IEC 62702-1-1 Ed. 2.0 en:2022 \(Redline version\)](#), Audio archive system - Part 1-1: DVD disk and data migration for long-term audio data storage, \$288.00

[S+ IEC 62702-1-2 Ed. 2.0 en:2022 \(Redline version\)](#), Audio archive system - Part 1-2: BD disk and data migration for long-term audio data storage, \$239.00

Cables, wires, waveguides, r.f. connectors, and accessories for communication and signalling (TC 46)

[IEC 60153-4 Ed. 4.0 b:2022](#), Hollow metallic waveguides - Part 4: Relevant specifications for circular waveguides, \$89.00

Fibre optics (TC 86)

[IEC 61753-085-02 Ed. 1.0 b:2021](#), Fibre optic interconnecting devices and passive components - Performance standard - Part 085-02: Non-connectorized single-mode pigtailed CWDM devices for category C - Indoor controlled environment, \$89.00

Industrial-process measurement and control (TC 65)

[IEC 62657-2 Ed. 3.0 b:2022](#), Industrial communication networks - Coexistence of wireless systems - Part 2: Coexistence management, \$417.00

International Organization for Standardization (ISO)

Establishment of ISO Technical Committee

ISO/TC 339 – Small hydropower plants

Comment Deadline: July 8, 2022

A new ISO Technical Committee, ISO/TC 339 – *Small hydropower plants*, has been formed. The Secretariat has been assigned to China (SAC).

ISO/TC 339 operates under the following scope:

Standardization in the field of small hydropower plants

Organizations interested in serving as the U.S. TAG Administrator or participating on the U.S. TAG should contact ANSI's ISO Team (isot@ansi.org).

Establishment of ISO Technical Committee

ISO/TC 340 – Natural gas fueling stations

Comment Deadline: July 8, 2022

A new ISO Technical Committee, ISO/TC 340 – *Natural gas fueling stations*, has been formed. The Secretariat has been assigned to France (AFNOR).

ISO/TC 340 operates under the following scope:

Standardization in the field of design, construction and operation of stations for fuelling compressed natural gas (CNG) and liquefied natural gas (LNG) to vehicles. It includes equipment, safety devices and maintenance.

Organizations interested in serving as the U.S. TAG Administrator or participating on the U.S. TAG should contact ANSI's ISO Team (isot@ansi.org).

Registration of Organization Names in the United States

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

When organization names are submitted to ANSI for registration, they will be listed here alphanumerically.

Alphanumeric names appearing for the first time are printed in bold type. Names with confidential contact information, as requested by the organization, list only public review dates.

Public Review

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

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

Proposed Foreign Government Regulations

Call for Comment

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

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

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

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



Addendum f to ANSI/ASHRAE Standard 30-2019

Public Review Draft

Method of Testing Liquid Chillers

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

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

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Addendum f to ANSI/ASHRAE Standard 30-2019, *Method of Testing Liquid Chillers*
First Public Review Draft

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

FOREWORD

Addendum 'f' includes the following revision:

1. Adds a Microsoft[®] Excel[®] workbook to facilitate calculates in accordance with Section 8.4.
2. Adds a new Informative Appendix C with link and description to the supplemental Microsoft[®] Excel[®] workbook.

Note: In this addendum, changes to the current standard are indicated in the text by underlining (for additions) and ~~striketrough~~ (for deletions) unless the instructions specifically mention some other means of indicating the changes.

Addendum f to ANSI/ASHRAE Standard 30-2019

Add new Informative Appendix C as shown. Reletter existing Normative Appendix C and as Normative Appendix D.

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INFORMATIVE APPENDIX C **WATER PRESSURE DROP ADJUSTMENT WORKSHEET**

This appendix provides guidance on the calculations required to determine the additional liquid static pressure drop due to external piping as required in Section 8.4.

Equations included in the worksheet apply only to water, but the structure allows users to easily understand the required inputs for other liquids.

The workbook can be downloaded from ASHRAE at <https://www.ashrae.org/XXXX>.



**BSR/ASHRAE/IES Addendum bo
to ANSI/ASHRAE/IES Standard 90.1-2019**

Public Review Draft

**Proposed Addendum bo to
Standard 90.1-2019, Energy Standard
for Buildings Except Low-Rise
Residential Buildings**

**Third Public Review (June 2022)
(Draft Shows Proposed Independent Changes to
Previous Public Review Draft)**

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

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FOREWORD

SSPC 90.1 accepted or accepted in principle several comment comments to the second public review of addendum bo that require independent substantive changes. These are:

- A new pressure allowance for gas and oil furnaces with thermal efficiency or AFUE of greater than 90% were added. These furnaces save energy compared to standard furnaces but do create additional pressure drop.
- A fan power allowance for exhaust systems serving fume hoods was added. This value exists in the current standard but was overlooked.
- Additional fan power was added for renovations. The values increased significantly for exhaust systems, as there was a spreadsheet error in the table created for the second public review.
- Units were corrected in of Section 6.1.5.3.1(3)
- A footnote was added to the energy recovery section to each fan power table that states “Substitute sensible recovery ratio for enthalpy recovery ratio in when a sensible energy recovery device meets the requirements of Section 6.5.6.1.1.1(b) or Section 6.5.6.1.2.1(b).” A commenter suggested this to align the table with the changes in addendum bz. That addendum can be seen here [\(link\)](#).

Cost-effectiveness

All the changes allow extra fan power or have no effect on the cost. The cost justification from the second public review is still valid.

[Note to Reviewers: This public review draft makes proposed independent substantive changes to the previous public review draft. These changes are indicated in the text by underlining (for additions) and ~~strikethrough~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the previous 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 substantive changes.]

Addendum bo to 90.1-2019

Modify the standard as follows (I-P and SI Units)

Make the following changes in Section 3.2 - Definitions:

fan system airflow: is the sum of the airflow of all fans with *fan electrical input power* greater than 1 kW at *fan system design conditions*, excluding the airflow that passes through downstream fans with *fan electrical input power* ~~less not greater than~~ than 1 kW.

Make the following changes to the text of Section 6.1.5.3.1 (3) (I-P and SI):

- Multiply the *fan system* design airflow by the sum of the fan power allowances for the *fan system*, then divide by 1,000 to convert to *kW*.

$$FPL = \frac{Q_{sys} \cdot FPA_{sum}}{1,000}$$

Where:

FPL is the fan power limit in *kW*

Q_{sys} is the *fan system* airflow in cfm (L/s)

FPA_{sum} is the sum of the fan power allowances for the *system* in W/cfm (W/L/s).

1000 is the conversion from W to *kW*

Add or change these values in Table 6.5.3.1-1 (I-P)

Table 6.5.3.1-1 Fan Power Allowances for Supply Fan systems

Air System Component	Multi-Zone VAV Fan System ^a Airflow (cfm)			All Other Fan Systems Airflow (cfm)		
	<5,000	5,000 to <10,000	≥ 10,000	<5,000	5,000 to <10,000	≥ 10,000
	W/cfm					
Heating (select all that apply)						
Gas or oil furnace <90% E _t or <90% AFUE	0.071	0.060	0.073	0.061	0.063	0.075
Gas or oil furnace ≥90% E _t or ≥90% AFUE	0.117	0.099	0.092	0.122	0.104	0.094
Energy recovery^f						
Other						
Project is an <i>alteration</i> where the duct system is not replaced	0.313 0.358	0.320 0.386	0.306 0.372	0.334 0.460	0.334 0.468	0.305 0.434

f. Substitute *sensible recovery ratio* for *enthalpy recovery ratio* in when a sensible energy recovery device meets the requirements of Section 6.5.6.1.1.1(b) or Section 6.5.6.1.2.1(b).

Add or change these values in Table 6.5.3.1-2 (I-P):

Table 6.5.3.1-2 Fan Power Allowances for Exhaust, Return, Relief, Transfer Fan systems

Air System Component	Multi-Zone VAV Fan System ^a airflow (cfm)			All Other Fan Systems Airflow (cfm)		
	<5,000	5,000 to <10,000	≥ 10,000	<5,000	5,000 to <10,000	≥ 10,000
	W/cfm					
Energy recovery^d						
Special exhaust and return system requirements (select all that apply)						
Exhaust system serving fume hoods	0.085	0.074	0.066	0.085	0.075	0.067

Other						
Project is an <i>alteration</i> where the duct system is not replaced	0.106 <u>0.253</u>	0.119 <u>0.256</u>	0.110 <u>0.232</u>	0.109 <u>0.289</u>	0.126 <u>0.291</u>	0.113 <u>0.262</u>

d. Substitute *sensible recovery ratio* for *enthalpy recovery ratio* in when a sensible energy recovery device meets the requirements of Section 6.5.6.1.1(b) or Section 6.5.6.1.2.1(b).

Add or change these values in Table 6.5.3.1-1 (SI)

Table 6.5.3.1-1 Fan Power Allowances for Supply Fan systems

Air System Component	Multi-Zone VAV Fan System ^a airflow (L/s)			All Other Fan Systems Airflow (L/s)		
	<2,360	2360 to <4720	≥ 4,720	<2,360	2360 to <4720	≥ 4,720
W/L/s						
Heating (select all that apply)						
Gas or oil furnace <90% E_t or <90% AFUE	0.033	0.028	0.035	0.029	0.030	0.036
<u>Gas or oil furnace ≥90% E_t or ≥90% AFUE</u>	<u>0.055</u>	<u>0.047</u>	<u>0.043</u>	<u>0.057</u>	<u>0.049</u>	<u>0.044</u>
Energy recovery^d						
Other						
Project is an alteration where the duct system is not replaced	0.106 <u>0.169</u>	0.119 <u>0.182</u>	0.110 <u>0.176</u>	0.109 <u>0.217</u>	0.126 <u>0.221</u>	0.113 <u>0.205</u>

f. Substitute *sensible recovery ratio* for *enthalpy recovery ratio* in when a sensible energy recovery device meets the requirements of Section 6.5.6.1.1(b) or Section 6.5.6.1.2.1(b).

Add or change these values in Table 6.5.3.1-2 (SI)

Table 6.5.3.1-2 Fan Power Allowances for Exhaust, Return, Relief, Transfer Fan systems

Air System Component	Multi-Zone VAV Fan System ^a airflow (L/s)			All Other Fan Systems Airflow (L/s)		
	<2,360	≥2360 to <4720	≥ 4,720	<2,360	2360 to <4720	≥ 4,720
W/L/s						
Energy recovery^d						
Special exhaust and return system requirements (select all that apply)						
<u>Exhaust system serving fume hoods</u>	<u>0.040</u>	<u>0.035</u>	<u>0.031</u>	<u>0.040</u>	<u>0.035</u>	<u>0.032</u>
Other						
Project is an alteration where the duct system is not replaced	0.050 <u>0.119</u>	0.056 <u>0.121</u>	0.052 <u>0.109</u>	0.051 <u>0.136</u>	0.059 <u>0.137</u>	0.053 <u>0.124</u>

d. Substitute *sensible recovery ratio* for *enthalpy recovery ratio* in when a sensible energy recovery device meets the requirements of Section 6.5.6.1.1(b) or Section 6.5.6.1.2.1(b).



**BSR/ASHRAE/IES Addendum ca
to ANSI/ASHRAE/IES Standard 90.1-2019**

Public Review Draft

Proposed Addendum ca to Standard 90.1-2019, Energy Standard for Buildings Except Low-Rise Residential Buildings

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

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FOREWORD

Technologies have been in development for some time that allow active communication and interaction between buildings and building systems and their utility sources and energy grids. This interactive link offers opportunities for building energy designs to further energy saving goals.

This addendum will expand the scope of Standard 90.1 to allow the use of effective design strategies for buildings when interacting with their sources of energy. Future changes to the Standard would include criteria for buildings to utilize these interactive design strategies.

Note that Section 2.1 was previously modified by Addendum cb, which has been approved for publication. The changes introduced by Addendum cb are documented in the reference section titled “Below the line” (not open for public review.)

Addendum ca to 90.1-2019

2. SCOPE

2.1

This standard provides

- a. minimum *energy*-efficient requirements for the design and *construction*, and a plan for operation and maintenance of
 1. new *buildings* and their *systems*,
 2. new portions of *buildings* and their *systems*,
 3. new *systems* and *equipment* specifically identified in this standard that are part of a *site*,
 4. new *systems* and *equipment* in *existing buildings*, and
 5. new *equipment* or *building systems* specifically identified in this standard that are part of *process applications*, ~~and~~
- b. criteria for controlling *systems* in the *building* or on the *site* that modify *energy* usage based on communication with *energy suppliers* to facilitate the use of low-emissions energy sources,
and
- bc. criteria for determining compliance with these requirements.

...

Below the Line Addendum cb (TPS)

2.1

This standard provides

- a. minimum *energy*-efficient requirements for the design and *construction*, and a plan for operation and maintenance of
 1. new *buildings* and their *systems*,
 2. new portions of *buildings* and their *systems*,
 3. new *systems* and *equipment* specifically identified in this standard that are part of a *site*,
 - 3 4. new *systems* and *equipment* in *existing buildings*, and
 - 4 5. new *equipment* or *building systems* specifically identified in the this standard that are part of ~~industrial or manufacturing processes~~ applications and
- b. criteria for determining compliance with these requirements



**BSR/ASHRAE/IES Addendum g
to ANSI/ASHRAE/IES Standard 100-2018**

First Public Review Draft

**Proposed Addendum g to
Standard 100-2018, Energy
Efficiency in Existing Buildings**

**First Public Review (June 2022)
(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 draft, go to the ASHRAE website at www.ashrae.org/standards-research--technology/public-review-drafts and access the online comment database. The draft is subject to modification until it is approved for publication by the Board of Directors and ANSI. Until this time, the current edition of the standard (as modified by any published addenda on the ASHRAE website) remains in effect. The current edition of any standard or guideline may be purchased from the ASHRAE Online Store at www.ashrae.org/bookstore or by calling 404-636-8400 or 1-800-727-4723 (for orders in the U.S. or Canada).

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FOREWORD

This proposed addendum revises Section 5.2.1 to simplify and clarify the descriptive language for net energy consumption, deletes the existing Figure 5-1 illustrating the net energy use concept and replaces it with a new Figure 5-1, and deletes the existing Table 5-1 completely as it does not add any useful information with respect to a building's net energy consumption.

Note: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~striketrough~~ (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 g to Standard 100-2018

Modify Section 5 as shown. The remainder of Section is unchanged.

5. ENERGY MANAGEMENT PLAN

[...]

5.2 Building Energy Monitoring...

- 5.2.1** Provide measured *net energy* consumption data for each *building*, including all forms of imported and exported energy from at least 12 consecutive months of data monitored in a period not to exceed two years prior to the efficiency audit. The *net energy* concept is illustrated in Figure 5-1 ~~and Table 5-1~~ and is calculated in accordance with Section 5.2.4 ~~as follows~~:

Net energy use = Energy Delivered to the Building – Excess Energy Exported from Building for Beneficial Use

$$\text{Net energy use} = (1a + 1b + 1c + 1d) - (3a + 3b + 3c + 3d + 3e)$$

where 1a, 1b, 1c, and 1d are metered energy supplies that are used in the *building* (this includes bulk energy sources), and 3a, 3b, 3c, 3d, and 3e are metered energy excesses that are supplied to another *building* or grid as useful energy.

[...]

Note to Reviewers: Existing Figure 5-1, "Net Energy Concept," is deleted and replaced in its entirety by a new Figure 5-1, "Net Energy Concept" as shown.

BSR/ASHRAE/IES Addendum g to ANSI/ASHRAE/IES Standard 100-2018, *Energy Efficiency in Existing Buildings*
First Public Review Draft

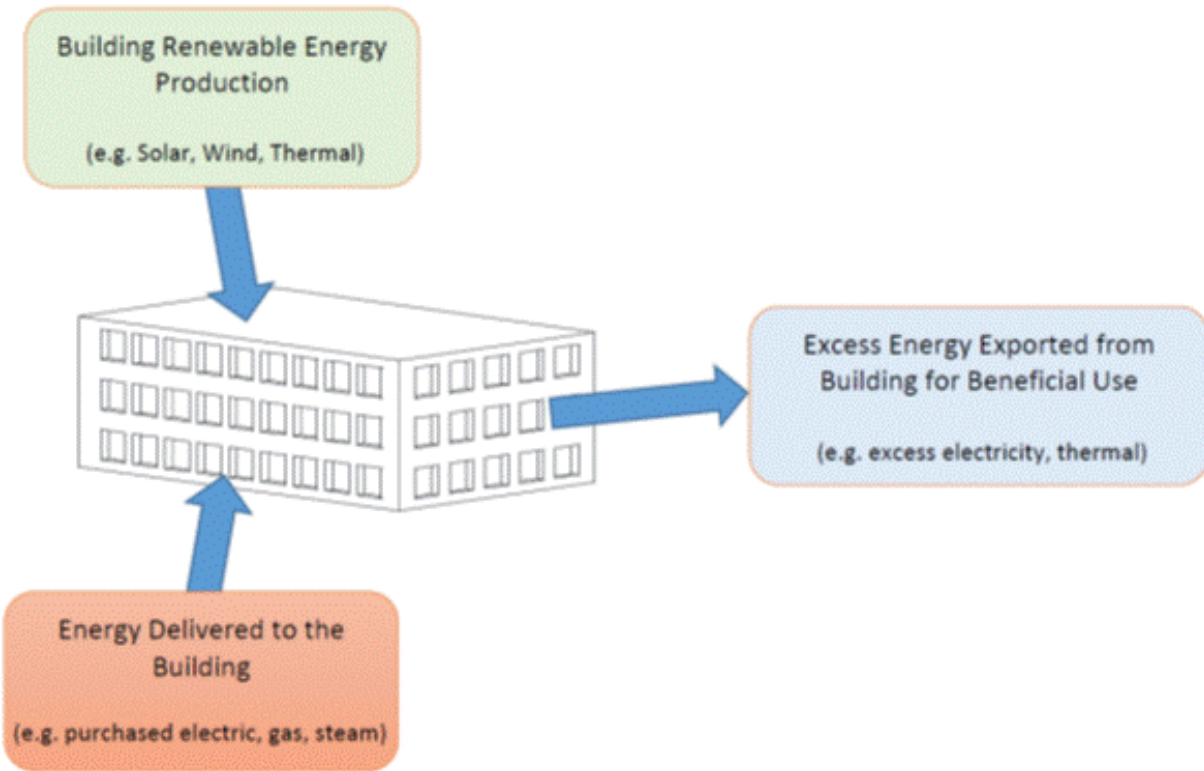


FIGURE 5-1 Net Energy Concept

Note to Reviewers: Table 5-1, "Energy Flow Definitions," is deleted in its entirety.

Alternatively, the requirements in ASME NM.1, NM.2, NM.3.1, NM.3.2, and NM.3.3 may be used in their entirety.

Chapter N-I Scope and Definitions

N-100 GENERAL

This Appendix provides requirements for the design, materials, fabrication, erection, testing, examination, and inspection of nonmetallic piping and metallic piping lined with nonmetals within the jurisdiction of the ASME B31.1 Power Piping Code. All references to the Code or to Code paragraphs in this Appendix are to ASME B31.1. In this Appendix, nonmetallic piping shall be limited to plastic and elastomer-based piping materials, with or without fabric or fibrous material added for pressure reinforcement. Metallic piping lined with nonmetals shall be limited to factory-made plastic-lined ferrous metal pipe, fittings, and flanges produced to one of the product standards for plastic-lined piping materials listed in [Table N-126.1-1](#).

Standards and specifications incorporated in this Appendix are listed in [Table N-126.1-1](#).

The provisions in [Chapters I](#) through [VI](#) and in [Mandatory Appendices A](#) through [F](#) are requirements of this Appendix only when specifically referenced herein.

N-100.1 Scope

N-100.1.1 All applicable requirements of [para. 100.1](#) and the limitations of [para. 105.3](#) shall be met in addition to those in this Appendix.

N-100.1.2 Use of this Appendix is limited to

- (a) water service.
- (b) nonflammable and nontoxic liquid, dry material, and slurry systems.
- (c) other services as specifically listed in [section N-122](#).
- (d) metallic piping lined with nonmetals. If used in accordance with [para. 122.9](#) for conveying corrosive liquids and gases, the design of the lined piping system shall meet the requirements of [para. 104.7](#).

N-100.1.3 Nonmetallic piping systems shall not be installed in a confined space where toxic gases could be produced and accumulate, either from combustion of the piping materials or from exposure to flame or elevated temperatures from fire.

N-100.2 Definitions and Abbreviations

N-100.2.1 Terms and definitions relating to plastic and other nonmetallic piping materials shall be in accordance with ASTM D883. The following terms and definitions are in addition to those provided in ASTM D883:

adhesive: a material designed to join two other component materials together by surface attachment (bonding).

adhesive joint: a bonded joint made using an adhesive on the surfaces to be joined.

bonder: one who performs a manual or semiautomatic bonding operation.

bonding operator: one who operates a machine or automatic bonding equipment.

bonding procedure: the detailed methods and practices involved in the production of a bonded joint.

Bonding Procedure Specification (BPS): the document that lists the parameters to be used in the construction of bonded joints in accordance with the requirements of this Code.

butt-and-wrapped joint: a joint made by applying plies of reinforcement saturated with resin to the surfaces to be joined.

chopped roving: a collection of noncontinuous glass strands gathered without mechanical twist. Each strand is made up of glass filaments bonded together with a finish or size for application by chopper gun.

chopped strand mat: a collection of randomly oriented glass fiber strands, chopped or swirled together with a binder in the form of a blanket.

continuous roving: a collection of continuous glass strands wound into a cylindrical package without mechanical twist.

curing agent: a reactive material that, when combined with a resin material, reacts or polymerizes (cross-links) with the resin; also referred to as a hardener.

diluent: a reactive modifying material, usually a liquid, that reduces the concentration of a resin material to facilitate handling characteristics and improve wetting.

electrofusion: a heat fusion joining process where the heat source is an integral part of the fitting, such that when electric current is applied, heat is produced that melts and joins the plastics.

fire retardant resin: a specially compounded material combined with a resin material designed to reduce or eliminate the tendency to burn.

flexibilizer: a modifying liquid material added to a resinous mixture designed to allow the finished component the ability to be flexed or less rigid and more prone to bending.

grout: a heavily filled paste material used to fill crevices and transitions between piping components.

Table N-126.1-1 Nonmetallic Material and Product Standards (Cont'd)

Designation [Notes (1), (2)]	Standard or Specification
Nonmetallic Pipe and Tube Products (Cont'd)	
*AWWA C900-97	Polyvinyl Chloride (PVC) Pressure Pipe, 4 in. Through 12 in., for Water Distribution
AWWA C906-99	Polyethylene (PE) Pressure Pipe and Fittings, 4 in. (100 mm) Through 63 in. (1,575 mm), for Water Distribution and Transmission
*AWWA C950-01	Fiberglass Pressure Pipe
Miscellaneous	
*ASME B16.40-2008	Manually Operated Thermoplastic Gas Shutoffs and Valves in Gas Distribution Systems
ASTM C301-04	Standard Test Methods for Vitrified Clay Pipe
ASTM C582-02	Contact-Molded Reinforced Thermosetting Plastic (RTP) Laminates for Corrosion-Resistant Equipment
ASTM D883-00	Standard Terminology Relating to Plastics
ASTM D1600-99	Standard Terminology for Abbreviated Terms Relating to Plastics
ASTM D2235-04	Solvent Cement for Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe and Fittings
ASTM D2412-02	Determination of External Loading Characteristics of Plastic Pipe by Parallel-Plate Loading
ASTM D2564-04	Solvent Cements for Poly(Vinyl Chloride) (PVC) Plastic Piping Systems
ASTM D2657-03	Heat Fusion Joining of Polyolefin Pipe and Fittings
ASTM D2837-04	Obtaining Hydrostatic Design Basis for Thermoplastic Pipe Materials or Pressure Design Basis for Thermoplastic Pipe Products
ASTM D2855-96(2005)	Making Solvent-Cemented Joints With Poly(Vinyl Chloride) (PVC) Pipe and Fittings
ASTM D2924-01	External Pressure Resistance of "Fiberglass" (Glass-Fiber-Reinforced Thermosetting-Resin) Pipe
ASTM D2992-01	Obtaining Hydrostatic or Pressure Design Basis for "Fiberglass" (Glass-Fiber-Reinforced Thermosetting-Resin) Pipe and Fittings
ASTM D3139-98(2005)	Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals
ASTM D3839-02 ^{e1}	Underground Installation of "Fiberglass" (Glass-Fiber-Reinforced Thermosetting-Resin) Pipe
ASTM F336-02	Design and Construction of Nonmetallic Enveloped Gaskets for Corrosive Service
ASTM F412-07	Standard Terminology Relating to Plastic Piping Systems
ASTM F493-04	Solvent Cements for Chlorinated Poly(Vinyl Chloride) (CPVC) Plastic Pipe and Fittings
ASTM F1290-98a	Electrofusion Joining Polyolefin Pipe and Fittings
ASTM F1498-00 ^{e1}	Taper Pipe Threads 60° for Thermoplastic Pipe and Fittings
AWWA M23-02	PVC Pipe — Design and Installation
AWWA M45-05	Fiberglass Pipe Design
MSS SP-122-2005	Plastic Industrial Ball Valves
PPI TR-4/2006B	Plastics Pipe Institute (PPI) Listing of Hydrostatic Design Basis (HDB), Hydrostatic Design Stress (HDS), Strength Design Basis (SDB), Pressure Design Basis (PDB) and Minimum Required Strength (MRS) Ratings for Thermoplastic Piping Materials or Pipe
PPI TR-9/2002	Recommended Design Factors and Design Coefficients for Thermoplastic Pressure Pipe
PPI TR-21/2001	Thermal Expansion and Contraction in Plastics Piping Systems

NOTES:

- (1) An asterisk (*) preceding the designation indicates that the standard has been approved as an American National Standard by the American National Standards Institute.
- (2) Numbers in parentheses are reapproval dates.

ASME NM.1-2020	Thermoplastic Piping Systems
ASME NM.2-2020	Glass-Fiber-Reinforced Thermosetting-Resin Piping Systems
ASME NM.3.1-2020	Nonmetallic Materials, Part 1--Thermoplastic Material Specifications
ASME NM.3.2-2020	Nonmetallic Materials, Part 2--Reinforced Thermoset Plastic Material Specifications
ASME NM.3.3-2020	Nonmetallic Materials, Part 3--Properties

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NSF/ANSI Standard
For Wastewater Technology –

Residential Wastewater Treatment Systems

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8.2 Testing and evaluation conditions, hydraulic loading, and schedules

8.2.1 Influent wastewater characteristics

~~The 30-d average BOD₅ concentration of the wastewater delivered to the system shall be between 100 mg/L and 300 mg/L.~~

~~The 30-d average TSS concentration of the wastewater delivered to the system shall be between 100 mg/L and 350 mg/L.~~

~~The average wastewater alkalinity of the wastewater delivered to the system over the course of the testing shall be greater than 175 mg/L as CaCO₃ (alkalinity may be adjusted if inadequate). Unless requested by the manufacturer, the raw influent shall be supplemented with sodium bicarbonate if the wastewater is found to be deficient in alkalinity.~~

The 30-d average wastewater characteristics delivered to the system over the course of the testing shall fall within:

- BOD₅: 100 to 300 mg/L;
- TSS: 100 to 350 mg/L;
- alkalinity: 175 mg/L as CaCO₃

The raw influent shall be supplemented with sodium bicarbonate to meet the required influent alkalinity.

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8.3.2 Design loading

During periods of design loading, ~~daily composite effluent~~ samples shall be collected and analyzed ~~5-d/week~~ according to the following schedule:

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Parameter	Collection frequency	Sample type	Influent	Effluent
CBOD ₅	5 days per week	24-hour composite	NA	x
BOD ₅	5 days per week	24-hour composite	x	NA
TSS	5 days per week	24-hour composite	x	x
pH	5 times per week	Grab	x	x
Alkalinity	1 day per week	24-hour composite	x	NA
Color, odor, oily film and foam	1 day first 16 weeks 1 day last 2.5 weeks	24-hour composite	NA	x

8.3.3 Stress loading

During stress loading, ~~influent and effluent 24-h composite~~ samples shall be collected on the day each stress condition is initiated. 24 h after the completion of wash day (WD), working-parent (WP), and vacation (V) stresses, ~~influent and effluent 24-h composite samples shall be collected for six consecutive days.~~ and 48 h after the completion of the power / equipment failure (PF) stress, ~~influent and effluent 24-h composite samples shall be collected for five consecutive days.~~ according to the following schedule:

Parameter	Collection frequency	Sample type	Influent	Effluent
CBOD ₅ (WD, WP, V)	6 consecutive days	24-hour composite	NA	x
CBOD ₅ (PF)	5 consecutive days	24-hour composite	NA	x
BOD ₅ (WD, WP, V)	6 consecutive days	24-hour composite	x	NA
BOD ₅ (PF)	5 consecutive days	24-hour composite	x	NA
TSS (WD, WP, V)	6 consecutive days	24-hour composite	x	x
TSS (PF)	5 consecutive days	24-hour composite	x	x
pH (WD, WP, V)	6 consecutive days	Grab	x	x
pH (PF)	5 day per week	Grab	x	x
Alkalinity	1 day per stress recovery	24-hour composite	x	NA
Color, odor, oily film and foam	1 day during stress sampling	24-hour composite	NA	x

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NSF/ANSI Standard
For Wastewater Technology –

Residential Wastewater Treatment Systems

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8 Performance testing and evaluation

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8.5 Criteria

8.5.1 General

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8.5.2.1.3 pH

The average pH of all individual effluent samples shall be between 6.0 and 9.0. The average pH is the sum of individual antilog (base-10) pH measurements taken during a given period, divided by the total number of measurements taken during the same period, transformed to a log (base-10) value.

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NSF/ANSI International Standard for Biosafety Cabinetry —

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

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Rationale: update of Informative Annex 1 and the Normative sections of Standard 49 that feed into Informative Annex 1.

5 Design and construction

5.25.5 Type C1 canopy exhaust alarm

Once the cabinet and canopy is set or certified in its acceptable airflow range, audible and visual alarms shall be required to indicate within 15 seconds a loss of capture of room air using a visible medium to verify at the canopy air intake(s):

- when the Type C1 is connected to a canopy that directs the BSC's exhaust air into the room during an exhaust system failure, the cabinet fan(s) must remain in operation for a maximum of 5 minutes when the alarm is activated; or
- when the Type C1 is connected to a canopy that directs the BSC's exhaust air into the exhaust duct during an exhaust system failure:
 - the cabinet downflow and exhaust blowers must shut down within 15 seconds of loss of capture of the visible medium; or
 - the default shut down time of 15 seconds may be lengthened to a maximum of 5 minutes if:
 - a risk assessment indicates the BSC, the work being done in it, and the exhaust system it is connected to is appropriate, as outlined in Section I-1.3; and
 - the BSC is connected to an exhaust duct that has been verified to meet or exceed Seal Class A, (a leakage of less than 3 ft³/min per 100 ft² of duct surface area at 1 inch w.g. (0.091 m³/min per 10 m² of duct surface area at 250 Pa) as described in HVACⁿ Air Duct Leakage Test Procedures – 2012;¹ and

¹ Sheet Metal and Air Conditioning Contractors National Association. 4201 Lafayette Center Drive, Chantilly, Virginia 20151-1219. www.smacna.org

ⁿ ASHRAE Laboratory Design Guide: Planning and Operation of Laboratory HVAC Systems, Second Edition. American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., Atlanta, GA. 2015 or latest edition.

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— the cabinet provides the user an indication of the remaining time until the BSC blowers shut off.

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Informative Annex 1

(formerly Annex E)

Biosafety cabinet selection, installation, use, lifespan, and decommissioning

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I-1.3.1.4 Question four: If the BSC requires an exhaust system, is there an appropriate location for the cabinet and its ductwork?

If a BSC is going to recirculate its HEPA/ULPA filtered air back into the laboratory, then the user has some freedom as to where the unit can be installed, provided it is out of major traffic areas, and there are no other air handling devices in the area, as shown in Figure 34.

If a BSC must be connected to an external mechanical exhaust system, their compatibility must be established *before* the BSC is selected. The exhaust system configurations of Type A, Type B, and Type C1 BSCs are shown in Figures 36, 39 and 41, respectively:

- directly ducting Types A and C1 cabinets is not permitted; they shall only be exhausted through a properly designed and fitted canopy exhaust system;
- canopy-connected Types A and C1 require a consistent, low static pressure. While a dedicated exhaust system is preferred, they may share a common exhaust system with other exhausted laboratory devices, if properly balanced;
- Type B BSCs require a higher static pressure that must increase as their exhaust filters load. They must be on a dedicated exhaust system, and not be ganged with other Type B BSCs, or other exhausted laboratory devices requiring a lower static pressure (e.g., fume hoods, canopy-connected BSCs);
- it is generally not an accepted practice to allow a BSC to positively pressurize an exhaust duct in normal operation. In some cases, however, it may be acceptable for the Type C1 to displace its exhaust air into a failing exhaust system for an interval of up to 5 minutes. To mitigate potential risks, the following procedures should be performed before configuring such an installation:
 - a) A risk assessment of the installation should be performed. The risk assessment should include evaluation of any other devices that are connected to the same exhaust system, such as other BSCs or laboratory fume hoods. Pressurizing a duct during an exhaust system failure may add risk with any other devices using the same exhaust system.
 - b) The duct must be verified to meet or exceed Seal Class A, as described in HVACⁿ Air Duct Leakage Test Procedures – 2012.¹
 - c) If these criterion cannot be met, the Type C1 may be reconfigured to either shut its blowers off within 15 seconds during exhaust system failure or the canopy may be reconfigured

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to direct exhaust air back into the laboratory during exhaust system failure. Alternatively, the Type C1 may be disconnected from the exhaust system if a risk assessment allows.

- the exhaust duct must be placed so it can penetrate ceilings and floors without disturbing other ventilation or plumbing systems; and
- the exhaust system must minimize excessive lengths and elbows.

I-1.3.1.5 Question five: If the exhaust system malfunctions, does the user understand its impact on the BSC's ability to maintain personnel and environmental protection, i.e., containment?

For a Type A BSC fitted with a properly designed canopy connection, reduction or elimination of the exhaust air should not significantly affect the airflow patterns within the BSC. Personnel and product protection of the BSC will remain unchanged; however, chemical vapors generated in the BSC will be exhausted into the laboratory via the openings or slots in the exhaust canopy.

For a Type B BSC, a significant loss of exhaust airflow will result in an alarm, turning off the cabinet blower(s). This stops the flow of air into the front of the BSC (inflow), negating personnel protection, potentially allowing materials in the total work area of the BSC to escape into the laboratory.

Type B BSCs have operational and maintenance issues that must be considered:

- these cabinets exhaust as much as 1200 cubic feet per minute of conditioned room air making them relatively expensive to operate; and
- the higher static air pressure required to operate Type B cabinets may also result in additional construction costs associated with heavier gauge ductwork and higher capacity exhaust fan.

For a Type C BSC fitted with a properly designed canopy connection, reduction or elimination of the exhaust air should not significantly affect the airflow patterns within the BSC while its blowers are in operation. Personnel and product protection of the BSC will remain unchanged, and chemical vapors generated in the BSC will be exhausted either back into the room, or into the exhaust system, depending on the configuration of the canopy.

If a Type C1 BSC directs its exhaust into the room during a system failure, the shutdown time of the BSC blowers can be lengthened from 15 seconds to up to 5 minutes.

If a Type C1 BSC directs its exhaust into the external exhaust system during a system failure, the default shutdown time of the BSC blowers can be lengthened from 15 seconds to up to 5 minutes, provided:

- a risk assessment indicates the BSC, the work being done in it, and the exhaust system it is connected to is appropriate; and
- the BSC is connected to an exhaust duct that has been verified to meet or exceed Seal Class A, as described in **HVACⁿ Air Duct Leakage Test Procedures – 2012**.¹

NOTE — air recirculation: An informational calculation comparing the volumes of air that are recirculated internally through the BSC's supply filter and total work area, as opposed to being exhausted from the BSC.

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Calculated by dividing the volume of air recirculated by the total volume of air directed to both the supply and exhaust HEPA filters, and expressed as a percentage, it provides a relative value for different cabinet types (70% for Type A, 30% for Type B1, 0% for a Type B2, etc.). Originally these relative values were calculated from the airflow specifications of NIH-03-112c: Class II Type 1 Safety Cabinet: 1974, and NCI Specification General Purpose Clean Air Biological Safety Cabinet: 1976.

As BSC design has evolved, inflow and downflow velocities and volumes have changed, thus changing the air (percent) recirculation values; they should not be used as a strict design requirement.

Rationale for this subsection: add footnote for HVAC Air Duct Leakage Test Procedures.

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I-1.7.5 BSC start up procedure

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p) This is a general operational guideline to control airborne contaminants of low to moderate risk.² Procedure protocols defined in terms of the barrier or control concepts unique to BSCs must be developed for maximum safety and protection; and

Rationale for this subsection: remove this footnote as it no longer exists.

q) For preparation of antineoplastic drugs, the following procedures summarize the OSHA Technical Manual TED 1-0.15A, Section VI, Chapter 2 "Controlling Occupational Exposure to Hazardous Drugs". This document should be reviewed before preparing antineoplastic drugs in a BSC.³

Rationale for this subsection: update link as previous link is no longer valid.

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² Technical Report No. FPS 56500000001, by Dow Chemical USA., National Cancer Institute, May 1, 1972.

³ ~~<www.osha.gov/dts/osta/otm/otm_vi/otm_vi_2.html>~~. <https://www.osha.gov/hazardous-drugs/controlling-occeex>

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Rationale: update to the terms “Class II” and “decontamination” in both Section 3 and Informative Annex 1

3.8.2 Class II: Class II (~~Type A1, A2, B1 and B2~~) (Type A1, A2, B1, B2 and C1) BSCs are partial barrier systems that rely on the movement of air to provide personnel, environmental, and product protection. Personnel and product protection are provided by the combination of inward and downward airflow captured by the front grille of the cabinet.

I-1.11.8.2 Class II: Class II (~~Type A1, A2, B1 and B2~~) (Type A1, A2, B1, B2 and C1) BSCs are partial barrier systems that rely on the movement of air to provide personnel, environmental, and product protection. Personnel and product protection are provided by the combination of inward and downward airflow captured by the front grille of the cabinet.

3.16 decontamination: ~~Inactivation or destruction of infectious agents or neutralization of toxic agents.~~ Destruction or removal of microorganisms to some lower level, not necessarily zero. Any activity that reduces the microbial contamination of materials or surfaces to prevent inadvertent infection. The term is also applied to removal or neutralization of toxic agents.

I-1.11.16 decontamination: ~~Inactivation or destruction of infectious agents or neutralization of toxic agents.~~ Destruction or removal of microorganisms to some lower level, not necessarily zero. Any activity that reduces the microbial contamination of materials or surfaces to prevent inadvertent infection. The term is also applied to removal or neutralization of toxic agents.

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Issue 29 Revision 1 (June 2022)

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NSF/ANSI Standard
for GMP for Over-the-Counter Drugs –

Good Manufacturing Practices for Over-the-Counter Drugs

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4 Audit requirements

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4.4 Support

~~4.4.6 Production facility~~ Facility is maintained in a clean and sanitary condition and in a proper state of repair. [21 CFR § 211.58]

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****The following is only listed here as a reference and is not part of the ballot above.***

NSF/ANSI Standard
for GMP for Dietary Supplements –

Good Manufacturing Practices for Dietary Supplements

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5 Audit process

5.2 Audit and certification process outline

a) Educate / inform

- audit preparation;
- review and understand normative references (see section 2) 21 CFR § 111 & 21 CFR § 117:
 - visit <www.ecfr.gov/current/title-21/chapter-I/subchapter-B/part-111>; and
 - visit <www.ecfr.gov/current/title-21/chapter-I/subchapter-B/part-117>.
- audit types (certification audit, monitoring audit);
- self-assessment of compliance with the standard;
- selection of a CB; and
- determine the scope of the audit.

Commented [RB1]: A link to section 2 will be added to the standard.

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5.3.2 Self-assessment of compliance with the Standard

The company shall assure that it is operating in compliance with ~~21 CFR Part 111 Current Good Manufacturing Practice in Manufacturing, Packaging, Labeling, or Holding Operations for Dietary Supplements~~ and ~~21 CFR Part 117 Current Good Manufacturing Practice, Hazard Analysis, and Risk-Based Preventive Controls for Human Food~~ as applicable and the ~~21 CFR Part 1 Subpart L Foreign Supplier Verification Program~~ to their production of dietary supplements. The company shall comply with these normative references (see section 2). US FDA guidance is available on the US FDA website: <www.fda.gov/food/guidanceregulation/guidancedocumentsregulatoryinformation/dietarysupplements/default.htm>.

Commented [RB2]: A link to section 2 will be added to the standard.

The company shall read and understand the documents and the requirements contained therein. A self-assessment shall be conducted by the company against the Standard to prepare for the audit. Gaps identified shall be addressed by the facility prior to a certification audit.

An optional gap analysis audit of the site may be conducted by a third-party consultant other than the CB.

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NSF/ANSI Standard
for GMP for Cosmetics –

Good Manufacturing Practices for Cosmetics

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5 Audit process

5.2 Audit and certification process outline

a) Educate / inform

— audit preparation;

— review and understand ~~ISO 22716: Cosmetics – Good Manufacturing Practices (GMP) – Guidelines on Good Manufacturing Practices, and US FDA Draft Guidance for Industry: Cosmetic Good Manufacturing Practices;~~ normative references (see section 2)

— audit types (certification audit, monitoring audit);

— self-assessment of compliance with the Standard;

— selection of a CB; and

— determine the scope of the audit.

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5.3.2 Self-assessment of compliance with the Standard

The company shall assure that it is operating in compliance with ~~21 CFR Part 111 Current Good Manufacturing Practice in Manufacturing, Packaging, Labeling, or Holding Operations for Dietary Supplements and 21 CFR Part 117 Current Good Manufacturing Practice, Hazard Analysis, and Risk-Based Preventive Controls for Human Food~~ as applicable and the ~~21 CFR Part 1 Subpart L Foreign Supplier Verification Program~~ to their production of dietary supplements. The company shall comply with these normative references (see section 2). ~~US FDA guidance is available on the US FDA website.~~

Commented [RB3]: A link to section 2 will be added to the standard.

Commented [RB4]: A link to section 2 will be added to the standard.

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~~<www.fda.gov/food/guidanceregulation/guidancedocumentsregulatoryinformation/dietarysupplements/default.htm>~~

The company shall read and understand the documents and the requirements contained therein. A self-assessment shall be conducted by the company against the Standard to prepare for the audit. Gaps identified shall be addressed by the facility prior to a certification audit.

An optional gap analysis audit of the site shall be conducted by a third party consultant other than the CB.

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BSR/UL 295, Standard for Safety for Commercial-Industrial Gas Burners

1. Addition of conduit standard reference

PROPOSAL

12.2.2 Except as permitted by 12.2.15, conductors shall be:

- a) Enclosed within conduit that complies with the Standard for Flexible Metal Conduit, UL 1, the Standard for Liquid-Tight Flexible Metal Conduit, UL 360, or the Standard for Electrical Rigid Metal Conduit - Steel, UL 6, as applicable;
- b) Enclosed within electrical metallic tubing that complies with the Standard for Electrical Metallic Tubing - Steel, UL 797 or the Standard for Extruded Insulating Tubing, UL 224, ~~metal raceway electrical enclosure~~;
- c) Enclosed within a metal raceway electrical enclosure;
- ~~b~~ d) Within metal-clad cable that complies with the Standard for Metal-Clad Cables, UL 1569; or
- e) Exposed Run Tray Cable, Type TC-ER, that complies with the requirements for Electrical Power and Control Tray Cables with Optional Optical-Fiber Members, UL 1277 or, for applications not exceeding 150 volts and/or 5 amps, Exposed Run Instrumentation Tray Cable, Type ITC-ER, that complies with the requirements of Instrumentation Tray Cable, UL 2250. The cable utilized shall:
 - 1) Comply with the crush and impact requirements of the Standard for Metal-Clad Cables, UL 1569;
 - 2) Be secured and supported at intervals not exceeding 6 feet (1.8 m).
 - 3) Have voltage and temperature ratings suitable for the intended application.

Exception: Factory wiring involving a potential of not more than 300 volts between parts attached to the same assembly with a predetermined fixed relationship one to the other may be done with Type SO or ST cord, provided all of the following conditions are fulfilled:

- a) *It is not practical to do the wiring in accordance with 12.2.2;*
- b) *The cord is not required to be bent, twisted, or otherwise displaced to render normal maintenance and service; and*
- c) *The length of cord exterior to the assembly is not more than 4 inches (102 mm) and strain relief is provided.*

UL 508A, Standard for Safety for Industrial Control Panels

6. Clarification of the Requirements for an Air Outlet from a Forced Ventilation System Located in the Area Occupied by an Operator

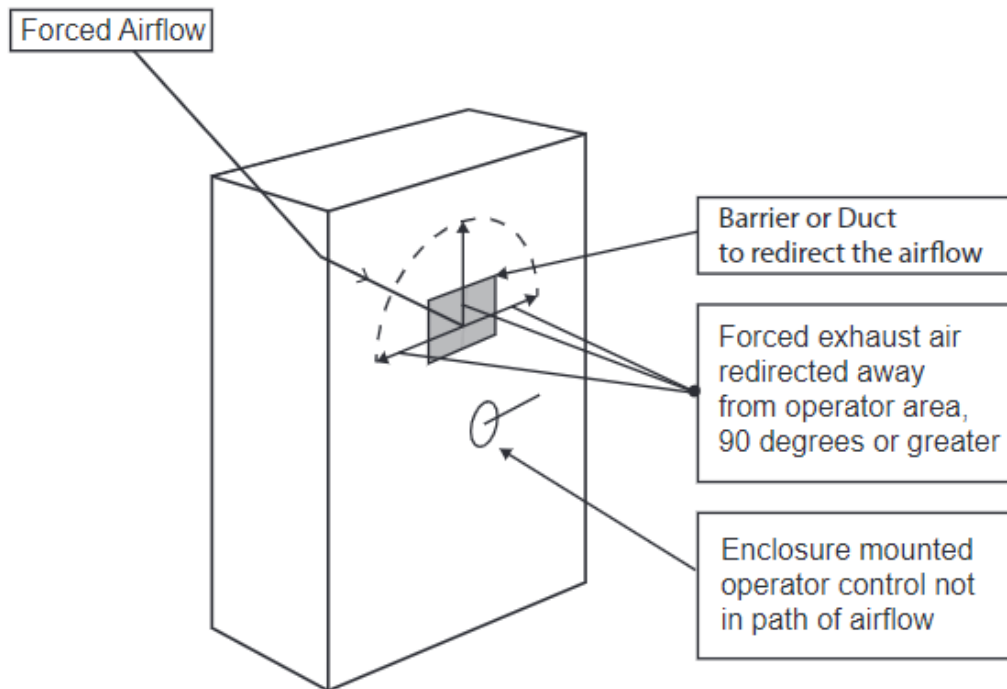
21.2.2 A ventilation opening that serves as an air outlet of exhaust air from a forced ventilation system shall not direct air at the area occupied by the equipment operator. The area occupied by the operator in front of the industrial control panel shall be 30 inches wide (horizontal) centered on any operator control, display, or disconnect handle over the entire (vertical) height of the enclosure for wall mounted equipment or up to 6-1/2 feet above the floor for floor mounted equipment.

Exception No. 1: When an air outlet from a forced ventilation system is directed at the area occupied by an operator, a barrier or duct shall be provided to redirect the airflow by 90 degrees or greater so that the exhaust air is directed away from the operator area. See Figure 21.1 for permitted air directions. If a barrier is used, it shall be provided in addition to the barrier that may be required per 22.1. Redirecting airflow upward is only permitted if the construction ensures that water and/or solid objects cannot enter the enclosure.

Exception No. 2: Air filters ~~as a possible means of baffling~~ which baffle the airflow are permitted, provided they meet the requirements in 22.4.

Figure 21.1 (NEW)

Enclosure with **redirected** forced **exhaust** air **directions in** **redirected away from** the operator area



8U4370a

8. Alignment with NFPA 79 and NEC Regarding the Term Used to Indicate the Full-load Current

Table 52.1
Locations of required markings

Paragraph	General description	Location categories (see notes)	
		Enclosed	Open
52.1	General markings Nameplate stating: manufacturer, maximum voltage, Full Load Current rating (FLC), largest motor FLC rating, phase, frequency, field wiring diagram, environmental type rating, short circuit current rating	a	f
67.1.1	Nameplate stating: manufacturer, maximum voltage, Full Load Current rating (FLC) , total FLA , largest motor FLC rating FLA , phase, frequency, field wiring diagram, environmental type rating, short circuit current rating	a	

Table 52.1 truncated for clarity.

16. Alternate Enclosure Types

Table 19.2
Enclosure rating/derating table

Enclosure Type (Column 1)	Component rating (Column 2)										
	1	2	3R	Wet Loc	Rain Tight	Rain Proof	WeatherProof	3RX	3	3S	
1	1	1	1	1	1	1	1	1	1	1	
2	2 or 1a	2	2	2	2	1	1	2	2	2	
3R	1	2	3R	3R	3R	3Rb	3Rb	3R	3R	3R	
3RX	1	2	3R	3R	3R	3Rb	3Rb	3RX	3R	3R	
3	1	2	3Re	3Re	3Re	3Rb,e	3Rb,e	3R	3	3	
3S	1	2	3Re	3Re	3Re	3Rb,e	3Rb,e	3R	3c	3S	
3SX	1	2	3Re	3Re	3Re	3Rb,e	3Rb,e	3RX	3	3S	
3X	1	2	3Re	3Re	3Re	3Rb,e	3Rb,e	3RX	3	3Sc	
4	1	2	3Re	3Re	3Re	3Rb,e	3Rb,e	3R	3	3	
4X	1	2	3Re	3Re	3Re	3Rb,e	3Rb,e	3RX	3	3	
4X Indoor Use Only	1	2	5f	5f	5f	1	1	5f	5f	5f	

Enclosure Type (Column 1)	Component rating (Column 2)										
	1	2	5	5		5	1	1	5	5	5
5	1	2	5	5		5	1	1	5	5	5
6	1	2	3Re	3Re		3Re	3Re	3Re	3Re	3	3
6P	1	2	3Re	3Re		3Re	3Re	3Re	3RXe	3	3
12	1	2	5f	5f		5f	1	1	5f	5f	5f
12K	1	1	1	5f		5f	1	1	1	5f	5f
13	1	1	1	5f		5f	1	1	1	5f	5f
	3SX	3X	4	4X	<u>4X Indoor Use Only</u>	5	6	6P	12	12K	13
1	1	1	1	1	<u>1</u>	1	1	1	1	1	1
2	2	2	2	2	<u>2</u>	2	2	2	2	2	2
3R	3R	3R	3R	3R	<u>1</u>	1	3R	3R	1	1	1
3RX	3RX	3RX	3R	3RX	<u>1</u>	1	3R	3RX	1	1	1
3	3	3	3	3	<u>5f</u>	5f	3	3	1	1	1
3S	3S	3Sc	3Sc	3Sc	<u>5f</u>	5f	3Sc	3Sc	1	1	1
3SX	3SX	3SXd	3d	3SXd	<u>5d,f</u>	5d,f	3Sc,d	3SXc,d	1	1	1
3X	3X	3X	3	3X	<u>5f</u>	5f	3	3X	1	1	1
4	3	3	4	4	<u>5f</u>	5f	4	4	1	1	1
4X	3RX	3RX	4	4X	<u>4X Indoor Use Only</u>	5f	4	4X	1	1	1
<u>4X Indoor Use Only</u>	<u>5f</u>	<u>5f</u>	<u>5f</u>	<u>4X Indoor or Use Only</u>	<u>4X Indoor Use Only</u>	<u>5f</u>	<u>5f</u>	<u>4X Indoor or Use Only</u>	<u>1</u>	<u>1</u>	<u>1</u>
5	5	5	5	5	<u>5</u>	5	5	5	5	5	5
6	3	3	4	4	<u>5f</u>	5f	6	6	1	1	1
6P	3X	3X	4	4X	<u>4X Indoor Use Only</u>	5f	6	6P	1	1	1
12	5f	5f	5f	5f	<u>5f</u>	5f	5f	5f	12	12	12
12K	1	1	5f	5f	<u>5f</u>	5f	5f	5f	12K	12K	12K
13	1	1	5f	5f	<u>5f</u>	5f	5f	5f	12	12	13

Enclosure Type (Column 1)	Component rating (Column 2)
	<p>a Type 1 Components, ventilation openings, or windows under a drip shield are allowed to be used as Type 2.</p> <p>b Components marked Weatherproof, or Rainproof are allowed to be installed below all other live parts in enclosure.</p> <p>c Components with external operating mechanisms must be Type 3S or 3SX for use on 3S, otherwise rating becomes Type 3.</p> <p>d Components with external operating mechanisms must be Type 3SX for use on 3SX, otherwise rating becomes Type 3.</p> <p>e Must add drain, and locking mechanism or require tool entry.</p> <p>f Must add locking mechanism or require tool entry.</p>

17. Enclosure Access

66.1.2 Opening of an enclosure (e.g. opening doors, lids, covers, and the like) containing live parts operating at or above 50 volts rms ac or 60 volts dc, shall be possible only under one or more of the following conditions:

- a) The use of a key or tool is necessary for access. All live parts mounted on the inside of doors or covers that are operating at or above 50 volts rms ac or 60 volts dc shall be protected from unintentional direct contact by the inherent design of components or by the application of barriers or obstacles such that a 50 mm (2 in) sphere cannot contact any live parts. Cautionary marking shall be provided in accordance with 67.4.3.
- b) The disconnecting means supplying the enclosure is interlocked (mechanically, electrically or both) with the enclosure door(s) in accordance with 66.1.3.
- c) Opening without the use of a key or a tool and without disconnection of live parts shall be possible only when all live parts that are operating at or above 50 volts rms ac or 60 volts dc are separately enclosed or guarded such that there cannot be any contact with live parts.

Exception: An industrial control panel that is disconnected by an attachment plug is not required to be interlocked with the enclosure door when the construction complies with 66.1.2 (a) or (c). Cautionary marking shall be provided in accordance with 67.4.2.

67.4.2 An industrial control panel that is disconnected by an attachment plug and constructed as in [the exception to 66.1.2 \(a\) or \(c\)](#) shall be marked on the outside of the door or cover with "CAUTION – Disconnect power before opening enclosure", or the equivalent.

67.4.3 An industrial control panel that is disconnected by a remote disconnecting means and constructed as in 66.1.2 (a) ~~or (c)~~ shall be marked on the outside of the door or cover with "CAUTION – Disconnect power before opening enclosure. Close the enclosure before restoring power", or the equivalent.

26. Internal Conductor Ampacity Requirements for Power Circuits

29.6 Sizing

29.6.1 Internal wiring of a power circuit shall not be smaller than 14 AWG (2.1 mm²) and shall be determined by:

a) Calculating the required ampacity by adding the full-load current ratings of all external loads being carried by the conductor based on the marked load ratings of the industrial control panel. For motor loads rated in horsepower, the equivalent full-load ampere rating shall be determined from [Table 50.1](#) or [Table 50.2](#); and

b) Determining the minimum internal wiring conductor size from [Table 28.1](#), having a corresponding ampacity not less than the required ampacity from (a). ~~The conductor size shall be determined using the ampacities in the 60°C column in Table 28.1 when the required ampacity is 100 amps or less, and the 75°C column in Table 28.1 when the required ampacity is greater than 100 amps.~~

The wire temperature rating(s) marked on the component or in the instructions shall be used to select the appropriate column(s) from Table 28.1 as follows :

1) For a 60°C component marking : A conductor with a temperature rating of 90°C or higher shall be used but the conductor size shall be determined using the ampacities in the 60°C column;

2) For a 75°C component marking : A conductor with a temperature rating of 90°C or higher shall be used but the conductor size shall be determined using the ampacities in the 75°C column;

3) For a 60°C / 75°C component marking : A conductor with a temperature rating of 90°C or higher shall be used but the conductor size shall be determined using the ampacities in the 60°C column or the 75°C column.

4) If the component markings or instructions do not specify a wire temperature rating, the conductor size shall be determined using the ampacities in the 60°C column in Table 28.1 when the component is rated 100 amps or less, and the 75°C column in Table 28.1 when the component is rated greater than 100 amps.

If the wire temperature ratings marked on components at both ends of the conductor differ, the more restrictive wire temperature rating shall be used.

~~If the component markings or instructions do not specify a wire temperature rating, the conductor size shall be determined using the ampacities in the 60°C column in Table 28.1 when the required ampacity is 100 amps or less, and the 75°C column in Table 28.1 when the required ampacity is greater than 100 amps.~~

Exception: Lead wires integral to a component, such as a transformer, are not required to comply with this requirement.

BSR/UL 521, Standard for Safety for Heat Detectors for Fire Protective Signaling Systems

1. Test Equipment Reference

PROPOSAL

23 Rate-of-Rise Operation Test

23.1 Heat detectors that operate on the rate-of-rise principle shall be calibrated so that the devices will function at the rate of rise for which they are intended, but shall not operate when subjected to a rate of temperature rise of 12 °F (6.7 °C) per minute or less until a temperature of at least 130 °F (54 °C) is reached [starting from a temperature of 85 to 90 °F (29.4 to 32.2 °C)].

23.2 Five samples of rate-of-rise heat detectors are to be tested in a testing oven specified in Figure 19.2 or other test equipment capable of creating equivalent test conditions under various uniform temperature-rise conditions. Typical rates of rise of temperature such as 12, 15, and 20 °F (6.7, 8.3, and 11.1 °C) per minute and the intended (rated) temperature rate of rise are to be employed. Each unit is to remain in the oven ambient at least 5 minutes prior to a test run.

Figure 19.2
Typical Heat detector testing oven

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