ANSI STANDARDS ACTION

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Contents

American National Standards

Call for comment on proposals listed

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

Ordering Instructions for "Call-for-Comment" Listings

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

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

* Standard for consumer products

ISSN 0038-9633

Comment Deadline: August 16, 2020

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

1791 Tullie Circle NE, Atlanta, GA 30329 ph: (678) 539-2114 www.ashrae.org

Addenda

BSR/ASHRAE Addendum m to BSR/ASHRAE 34-202x, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2019)

This addendum adds the zeotropic refrigerant blend R-472A to Tables 4-2 and D-2.

Click here to view these changes in full
Send comments (with optional copy to psa@ansi.org) to: Online Comment Database at https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts

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

1791 Tullie Circle NE, Atlanta, GA 30329 ph: (678) 539-2114 www.ashrae.org

Addenda

BSR/ASHRAE Addendum k to BSR/ASHRAE Standard 15-202x, Safety Standard for Refrigeration Systems (addenda to ANSI/ASHRAE Standard 15-2019)

This addendum modifies the existing listing requirement in ANSI/ASHRAE Standard 15 by clarifying the acceptable product safety listing standards.

Click here to view these changes in full
Send comments (with optional copy to psa@ansi.org) to: Online Comment Database at https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts

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

1791 Tullie Circle NE, Atlanta, GA 30329 ph: (678) 539-2114 www.ashrae.org

Addenda

BSR/ASHRAE Addendum n to BSR/ASHRAE Standard 34-202x, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2019)

This proposed addendum adds an informative note to Section 9.5.2 which references the new Informative Appendix I.

Click here to view these changes in full
Send comments (with optional copy to psa@ansi.org) to: Online Comment Database at https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts

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

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

Addenda

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

This addendum removes confusing language regarding setback requirements for HVAC systems in hotel guest rooms and replaces it with a reference to Section 6.4.3.3.5.1 in Standard 90.1 that has identical intent.

Click here to view these changes in full
Send comments (with optional copy to psa@ansi.org) to: http://www.ashrae.org/standards-research--technology/public-review-drafts

Comment Deadline: August 16, 2020

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

1791 Tullie Circle, NE, Atlanta, GA 30329-2305 ph: (678) 539-1125 www.ashrae.org

Addenda

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

The ISC corrects a mistake found during review by the Mechanical Subcommittee. The instruction to multiply by the efficiency value in Table 6.5.1-2 has been corrected.

Click here to view these changes in full

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

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

1791 Tullie Circle, NE, Atlanta, GA 30329-2305 ph: (678) 539-1125 www.ashrae.org

Addenda

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

This proposed addendum makes several editorial changes to Appendix G requirements related to the area and orientation of the vertical fenestration in the baseline design. In addition, it describes the methodology that must be used by projects where the baseline vertical fenestration area that must be allocated to a certain building face exceeds the gross above grade wall area of that building face.

Click here to view these changes in full

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

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

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Addenda

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

This proposed addendum adds a requirement for motorized dampers on shaft vents used for temperature control. These were shown to be cost effective for outdoor air and exhaust air openings in Section 6.4.3.4.2. This proposed addendum reduces stringency and costs in mild climates and short buildings by allowing nonmotorized dampers in lieu of motorized dampers, mirroring Exception 1 to Section 6.4.3.4.2.

Click here to view these changes in full

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

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

1791 Tullie Circle, NE, Atlanta, GA 30329-2305 ph: (678) 539-1125 www.ashrae.org

Addenda

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

This addendum adds an exception for units that use only series energy recovery for reheating dehumidified air to the requirements in Section 6.5.2.6.

Click here to view these changes in full

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

Comment Deadline: August 16, 2020

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Addenda

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

This addendum reduces the minimum connected load for daylighting responsive controls (9.4.1.1) for sidelighting (e) and toplighting (f).

Click here to view these changes in full
Send comments (with optional copy to psa@ansi.org) to: Online Comment Database at http://www.ashrae.org/standards-research--technology/public-review-drafts

ASME (American Society of Mechanical Engineers)

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

Revision

BSR/ASME STS-1-202x, Steel Stacks (revision of ANSI/ASME STS-1-2017)

The Standard applies to steel stacks; i.e., those stacks where the primary supporting shell is made of steel. It outlines the consideration that must be made for both the mechanical and structural design, such as what consideration must be taken for wind- and seismic-induced vibrations. The document provides guidelines for the selection of material, linings, and coatings, and gives the requirements for lighting and lightning protection based upon existing building and federal codes. Additionally, this Standard gives the requirements for climbing and access based upon current Occupational Safety and Health Administration (OSHA) standards, emphasizes the important areas regarding fabrication and construction, and outlines areas requiring maintenance and inspection following initial operation. Although many of the topics within these guidelines may be used for all stacks, this Standard is intended to provide design guidelines for stacks containing nonflammable gases, such as combustion exhaust gases at low internal pressures.

Click here to view these changes in full
Send comments (with optional copy to psa@ansi.org) to: Justin Cassamassino: (212) 591-8404; cassasmassinoj@asme.org

NSF (NSF International)

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

Revision

BSR/NSF 42-202x (i105r1), Drinking Water Treatment Units - Aesthetic Effects (revision of ANSI/NSF 42-2019)

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

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

NSF (NSF International)

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

Revision

BSR/NSF 53-202x (i123r1), Drinking Water Treatment Units - Health Effects (revision of ANSI/NSF 53-2019)

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

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

Comment Deadline: August 16, 2020

NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 ph: (734) 827-6866 www.nsf.org

Revision

BSR/NSF 173-202x (i67r1), Dietary Supplements (revision of ANSI/NSF 173-2019)

The purpose of NSF/ANSI 173 is to serve as an evaluation tool for analyzing dietary supplements. Certification to this Standard serves as a communication tool between manufacturers of ingredients and finished product, retailers, healthcare practitioners, and consumers. This Standard provides test methods and evaluation criteria to allow for the determination that a dietary supplement contains the ingredients claimed on the label, either qualitatively or quantitatively, and that it does not contain specific undeclared contaminants. In some instances, validated laboratory methods are not yet available for analyzing certain ingredients. In such cases, new methods will be added to this Standard as they become available.

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

NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 ph: (734) 827-6866 www.nsf.org

Revision

BSR/NSF 173-202x (i68r2), Dietary Supplements (revision of ANSI/NSF 173-202x (i68r1))

The purpose of NSF/ANSI 173 is to serve as an evaluation tool for analyzing dietary supplements. Certification to this Standard serves as a communication tool between manufacturers of ingredients and finished product, retailers, healthcare practitioners, and consumers. This Standard provides test methods and evaluation criteria to allow for the determination that a dietary supplement contains the ingredients claimed on the label, either qualitatively or quantitatively, and that it does not contain specific undeclared contaminants. In some instances, validated laboratory methods are not yet available for analyzing certain ingredients. In such cases, new methods will be added to this Standard as they become available.

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

NSF (NSF International)

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

Revision

BSR/NSF 244-202x (i9r1), Supplemental Microbiological Water Treatment Systems - Filtration (revision of ANSI/NSF 244-2019)

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

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

NSF (NSF International)

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

Revision

BSR/NSF 350-202x (i50r1), Onsite Residential and Commercial Water Reuse Treatment Systems (revision of ANSI/NSF 350-2019)

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

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

Comment Deadline: August 16, 2020

NSF (NSF International)

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

Revision

BSR/NSF 401-202x (i17r1), Drinking Water Treatment Units - Emerging Compounds / Incidental Contaminants (revision of ANSI/NSF 401-2019)

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

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

UL (Underwriters Laboratories)

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

Revision

BSR/UL 621-202x, Standard for Safety for Ice Cream Makers (revision of ANSI/UL 621-2005)

This proposal for UL 621 covers: (1) 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.

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

UL (Underwriters Laboratories)

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

Revision

BSR/UL 1082-202x, Standard for Safety for Household Electric Coffee Makers and Brewing-Type Appliances (revision of ANSI/UL 1082-2017)

This proposal for UL 1082 covers: (1) Circuit interrupters with fire extinguishing agent for use in electrical appliances.

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

UL (Underwriters Laboratories)

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

Revision

BSR/UL 1389-202x, Standard for Safety for Plant Oil Extraction Equipment for Installation and Use in Ordinary (Unclassified) Locations and Hazardous (Classified) Locations (revision of ANSI/UL 1389-2019)

Recirculation of the following topics: (1) UL 1389 clarifications; (2) Area classification; (3) Addition of referenced UL 508A; (7) Addition of new Sections 18A – 18H; (10) Revisions to Section 28, Mechanical Strength Tests for Sight Glass; (11) Revisions to Section 46, Permanence of Marking; and (12) Revisions to Section 47, Manual.

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

Comment Deadline: August 16, 2020

UL (Underwriters Laboratories)

333 Pfingsten Road, Northbrook, IL 60062 ph: (847) 664-3198 https://ul.org/

Revision

BSR/UL 1576-202x, Standard for Safety for Flashlights and Lanterns (revision of ANSI/UL 1576-2018)

(1) Proposed revisions to the scope and addition of photobiological safety assessment to clarify requirements with ultraviolet (UV) radiation sources; (2) Proposed revisions to the Mechanical Strength Test to clarify the conditioning time for products stored in unheated spaces prior to the Drop or Impact Test; (3) Proposed revisions to correct the intent of the marking location on permanently connected products; (4) Proposed revisions to correct the indent instructions for the Water Spray Test.

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

Comment Deadline: August 31, 2020

AGMA (American Gear Manufacturers Association)

1001 N Fairfax Street, 5th Floor, Alexandria, VA 22314-1587 ph: (703) 684-0211 www.agma.org

New Standard

BSR/AGMA 6134-CXX-202x, Practice for Enclosed Cylindrical Wormgear Speed Reducers and Gearmotors - Metric Edition (new standard)

This standard covers the wear rating and strength rating of wormgearing. This standard applies to the rating and design of enclosed cylindrical wormgear speed reducers and gearmotors having either solid or hollow output shafts and single or multiple reductions that may include other types of gearing used in conjunction with cylindrical wormgearing. The rating and design considerations contained in this standard are valid for rotational speeds of the worm not greater than 3600 RPM and sliding velocities at the mesh of not more than 30 m/s.

Single copy price: $60.00
Obtain an electronic copy from: tech@agma.org
Order from: tech@agma.org
Send comments (with optional copy to psa@ansi.org) to: aboutaleb@agma.org

AGMA (American Gear Manufacturers Association)

1001 N Fairfax Street, 5th Floor, Alexandria, VA 22314-1587 ph: (703) 684-0211 www.agma.org

Revision

BSR/AGMA 6000-CXX-202x, Specification for Measurement of Linear Vibration on Gear Units (revision and redesignation of ANSI/AGMA 6000-B96 (R2016))

This standard presents a method for measuring steady-state-filtered linear vibrations of a gear unit. Types of instrumentation, measurement methods, and testing procedures for the determination of linear vibration levels for specific types of gear units are provided. Vibration limits at discrete frequencies are recommended for acceptance testing.

Single copy price: $76.00
Obtain an electronic copy from: tech@agma.org
Order from: tech@agma.org
Send comments (with optional copy to psa@ansi.org) to: aboutaleb@agma.org

Comment Deadline: August 31, 2020

ASABE (American Society of Agricultural and Biological Engineers)

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

Reaffirmation

BSR/ASABE/ISO 14269-2-2006 (R202x), Tractors and self-propelled machines for agriculture and forestry - Operator enclosure environment - Part 2: Heating, ventilation and air-conditioning test method and performance (reaffirm a national adoption ANSI/ASABE/ISO 14269-2-2006 (R2017))

Specifies a uniform test method for measuring the contribution to operator environmental temperature and humidity provided by an air-conditioning, heating, and ventilation system operating in a specific ambient environment for tractors and self-propelled machines for agriculture and forestry. This method may not determine the complete climatic environment of the operator since this is also affected by heat load from sources other than those on the machine, for example solar heating. It is recommended that part 3 of ISO 14269 be used in conjunction with this part to determine more accurately the complete heat loading on the operator enclosure. Minimum performance levels for the machine's operator enclosure air conditioning, heating, and ventilation systems are established in this part.

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

ASABE (American Society of Agricultural and Biological Engineers)

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

Reaffirmation

BSR/ASABE/ISO 3463-2006 SEP2017 (R202x), Tractors for agriculture and forestry - Roll-over protective structures (ROPS) - Dynamic test method and acceptance conditions (reaffirm a national adoption ANSI/ASABE/ISO 3463-SEP2017)

Specifies a dynamic test method and the acceptance conditions for roll-over protective structures (cab or frame) of wheeled tractors for agriculture and forestry. It is applicable to tractors having at least two axles for wheels mounted with pneumatic tires, or having tracks instead of wheels, with an unballasted tractor mass of not less than 600 kg, but generally less than 6000 kg, and with a minimum track width of the rear wheels greater than 1150 mm.

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

ASC X9 (Accredited Standards Committee X9, Incorporated)

275 West Street, Suite 107, Annapolis, MD 21401 ph: (410) 267-7707 www.x9.org

Reaffirmation

BSR X9.99-2009 (R202x), Privacy Impact Assessment (reaffirmation of ANSI X9.99/ISO 22307-2009)

This International Standard recognizes that a privacy impact assessment (PIA) is an important financial services and banking management tool to be used within an organization, or by "contracted" third parties, to identify and mitigate privacy issues and risks associated with processing consumer data using automated, networked information systems. This International Standard describes the privacy impact assessment activity in general, defines the common and required components of a privacy impact assessment, regardless of business systems affecting financial institutions, and provides informative guidance to educate the reader on privacy impact assessments.

Single copy price: $60.00
Order from: Ambria Frazier, (410) 267-7707, Ambria.frazier@x9.org
Send comments (with optional copy to psa@ansi.org) to: Same

Comment Deadline: August 31, 2020

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

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

Revision

BSR/ASHRAE Standard 111-202x, Measurement, Testing, Adjusting and Balancing of Building Heating, Ventilation and Air-Conditioning Systems (revision of ANSI/ASHRAE Standard 111-2008 (R2017))

ASHRAE Standard 111 provides uniform procedures for measurement, testing, adjusting, balancing, evaluating, and reporting the performance of building heating, ventilating, and air-conditioning systems in the field.

Single copy price: $35.00
Obtain an electronic copy from: http://www.ashrae.org/standards-research--technology/public-review-drafts
Order from: standards.section@ashrae.org
Send comments (with optional copy to psa@ansi.org) to: http://www.ashrae.org/standards-research--technology/public-review-drafts

ASME (American Society of Mechanical Engineers)

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

Revision

BSR/ASME NM.1-202x, Thermoplastic Piping Systems (revision of ANSI/ASME NM.1-2018)

(a) This standard prescribes requirements for the design, materials, fabrication, erection, examination, testing, and inspection of thermoplastic piping systems. (b) Thermoplastic piping as used in this standard includes pipe, flanges, bolting, gaskets, valves, fittings, special connecting components, and the pressure-containing portions of other piping components, whether manufactured in accordance with Standards referenced in this standard or specially designed. It also includes hangers and supports and other equipment items necessary to prevent overstressing the pressure-containing components.

Single copy price: Free
Obtain an electronic copy from: http://cstools.asme.org/publicreview
Send comments (with optional copy to psa@ansi.org) to: Jihoon Oh, (212) 591-8544; ohj@asme.org

AWS (American Welding Society)

8669 NW 36th Street, # 130, Miami, FL 33166 ph: (305) 443-9353 www.aws.org

New Standard

BSR/AWS A5.29/A5.29M-202x, Specification for Low-Alloy Steel Electrodes for Flux Cored Arc Welding (new standard)

This specification prescribes the requirements for classification of low-alloy steel electrodes for flux-cored arc welding. The requirements include chemical composition and mechanical properties of the weld metal and certain usability characteristics. Optional supplemental designators are also included for improved toughness and diffusible hydrogen. Additional requirements are included for standard sizes, marking, manufacturing, and packaging. A guide is appended to the specification as a source of information concerning the classification system employed and the intended use of low-alloy steel flux-cored 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: $36.00
Obtain an electronic copy from: gupta@aws.org
Order from: Not Available during Covid-19
Send comments (with optional copy to psa@ansi.org) to: Questions may be directed to: Rakesh Gupta, (305) 443-9353; gupta@aws.org

Comment Deadline: August 31, 2020

AWS (American Welding Society)

8669 Doral Blvd, Suite 130, Doral, FL 33166 ph: (305) 443-9353 www.aws.org

New Standard

BSR/AWS D8.10M-202x, Specification for Automotive Weld Quality - Laser Beam Welding of Steel (new standard)

This document contains both visual and measurable acceptance criteria for laser beam welds in steels. The information contained in this standard may be used as an aid by designers, laser-beam welding equipment manufacturers, welded product producers, and others involved in the automotive industry and laser-beam welding of steels.

Single copy price: $36.00
Obtain an electronic copy from: mdiaz@aws.org
Order from: Mario Diaz, (305) 443-9353; mdiaz@aws.org
Send comments (with optional copy to psa@ansi.org) to: Same

AWS (American Welding Society)

8669 NW 36th Street, Suite 130, Doral, FL 33166 ph: (305) 443-9353 www.aws.org

New Standard

BSR/AWS D10.22/D10.22M-202x, Specification for Local Heating of Welds in Creep Strength-Enhanced Ferritic Steels, in Piping and Tubing Using Electric Resistance Heating (new standard)

This specification establishes the requirements for local heating of welds in creep strength-enhanced ferritic steels, in piping and tubing using electric resistance heating. 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: $32.00
Obtain an electronic copy from: sborrero@aws.org
Order from: Stephen Borrero, (305) 443-9353; sborrero@aws.org
Send comments (with optional copy to psa@ansi.org) to: Same

AWS (American Welding Society)

8669 Doral Blvd, Suite 130, Doral, FL 33166 ph: (305) 443-9353 www.aws.org

Revision

BSR/AWS D8.8M-202x, Specification for Automotive Weld Quality - Arc Welding of Steel (revision of ANSI/AWS D8.8M-2014)

This specification provides the minimum quality requirements for arc welding of various types of automotive and light truck components. This specification covers the arc and hybrid arc welding of coated and uncoated steels.

Single copy price: $32.00
Obtain an electronic copy from: mdiaz@aws.org
Order from: Mario Diaz, (305) 443-9353; mdiaz@aws.org
Send comments (with optional copy to psa@ansi.org) to: Same

CSA (CSA America Standards Inc.)

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

Revision

BSR/CSA HGV 2-202x, Compressed hydrogen gas vehicle fuel containers (revision of ANSI/CSA HGV 2-2014 (R2019))

This Standard contains requirements for the material, design, manufacture, marking, and testing of serially produced, refillable Type HGV2 containers intended only for the storage of compressed hydrogen gas for on-road vehicle operation. These containers: (a) are to be permanently attached to the vehicle; (b) have a capacity of up to 1000 liters (35.4 ft3) water capacity; and c) have a nominal working pressure that does not exceed 70 MPa.

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

Comment Deadline: August 31, 2020

PLASTICS (Plastics Industry Association)

1425 K Street, NW, Suite 500, Washington, DC 20005 ph: (202) 974-5217 www.plasticsindustry.org

New Standard

BSR/PLASTICS B151.11-202X, Safety Requirements for Granulators, Strand Pelletizers and Dicers Used for Size Reduction of Plastics (new standard)

The requirements of this standard apply to the manufacture, care, and use of all granulators, strand pelletizers, dicers, and single-shaft rotary grinders used for the size reduction of plastics through the use of a rotary cutting action.

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

UL (Underwriters Laboratories)

47173 Benicia Street, Fremont, CA 94538 ph: (510) 319-4297 https://ul.org/

New Standard

BSR/UL 83B-202X, Standard for Safety for Switchboard and Switchgear Wires and Cables (new standard)

Requirements cover 14 - 4/0 AWG sizes of 600-V, single-conductor, switchboard and switchgear wires and cables for use in accordance with the National Electrical Code.

Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/Home/ProposalsDefault.aspx
Order from: http://www.shopulstandards.com
Send comments (with optional copy to psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

UL (Underwriters Laboratories)

171 Nepean Street, Suite 400, Ottawa, ON K2P 0B4 Canada ph: (613) 368-4417 https://ul.org/

New Standard

BSR/UL 2152-202x, Standard for Special Purpose Nonmetallic Containers and Tanks for Specific Combustible or Noncombustible Liquids (new standard)

This standard will cover special-purpose nonmetallic containers and tanks (vessels) for specific aboveground-use applications for combustible or non-combustible liquids as indicated for each special-purpose type, which is intended to address the specific designs, features, limitations, use factors, and other unique characteristics of each type. The basic types of different special-purpose vessels covered by this Standard will be: Liquid Chemical Containers and Tanks designed for stationary storage of combustible or non-combustible liquids in non-residential applications; Cooking Oil Tanks designed for storage of cooking oils and fats typically found in restaurant or similar commercial food-preparing applications; Lube Oil Tanks designed for storage, dispensing, and collection of Class IIIB motor oils, working oils, and other petroleum or synthetic oils with similar chemical and physical properties used in equipment applications; and Vehicle Fluid Tanks for storage, dispensing and collection of non-combustible fluids such as antifreeze/coolants (ethylene-glycol and water mixtures), windshield washer (alcohol, water, and detergent mixtures), DEF (nom 1/3 urea and 2/3 water diesel exhaust solution), and other optional fluid types typically used in vehicles.

Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/Home/ProposalsDefault.aspx
Order from: http://www.shopulstandards.com
Send comments (with optional copy to psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

Comment Deadline: August 31, 2020

UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 ph: (919) 549-0956 https://ul.org/

Reaffirmation

BSR/UL 1897-2015 (R202x), UL Standard for Safety for Uplift Tests for Roof Covering Systems (reaffirmation of ANSI/UL 1897-2015)

(1) Reaffirmation and continuance of the Seventh Edition of the Standard for Uplift Tests for Roof Covering Systems, UL 1897, as an American National Standard.

Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/Home/ProposalsDefault.aspx
Order from: http://www.shopulstandards.com
Send comments (with optional copy to psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

UL (Underwriters Laboratories)

47173 Benicia Street, Fremont, CA 94538 ph: (510) 319-4297 https://ul.org/

Revision

BSR/UL 66-202X, Standard for Safety for Fixture Wire (revision of ANSI/UL 66-2018)

Addition of FFHH-2 throughout the Standard; Updated references to UL 2556; Revised Oil Test temperatures in Table 26.1 Oven Definition; Revised 8.2.1.2, 10.3.2.1, 20.2, and Table 14.1.

Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/Home/ProposalsDefault.aspx
Order from: http://www.shopulstandards.com
Send comments (with optional copy to psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 ph: (919) 549-1054 https://ul.org/

Revision

BSR/UL 508-202X, Standard for Safety for Industrial Control Equipment (revision of ANSI/UL 508-2018)

(1) Correction of Fahrenheit temperature values in Table 45.2. (2) Update to lithium battery requirements; (3) Clarification of the use of Table 45.2 (Maximum enclosure surface temperature rises); (4) Correction to DC Offset Test for dimmers; (5) Addition of LED driver rating; (6) Revision of scope to reflect effective UL 60947 standards; (7) Ground current requirement for flush-device box switches controlling lighting loads; (8) Withdrawal of UL 508C reference in UL 508, replacing UL 508C with UL 61800-5-1.

Single copy price: Contact comm2000 for pricing and delivery options
Obtain an electronic copy from: https://csds.ul.com/Home/ProposalsDefault.aspx
Order from: http://www.shopulstandards.com
Send comments (with optional copy to psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

Comment Deadline: August 31, 2020

UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 ph: (613) 368-4432 https://ul.org/

Revision

BSR/UL 681-202X, Standard for Safety for Installation and Classification of Burglar and Holdup Alarm Systems (revision of ANSI/UL 681-2014 (R2018))

Unify Nomenclature and Correct Cellular DACT References. There are two fundamental suggestions being presented: (1) Modify the nomenclature used to describe the transmission methods employed between the protected premises and supervising station across all the applications used in support of this function, including UL 681. (This is being done with an eye on looking to harmonize the several UL standards that cover this subject, such as UL 2610 and UL 864.); and (2) Modify those sections of UL 681 that are out of date with cellular technology of today. When the current version was published, cellular technology was much like DACT technology.

Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/Home/ProposalsDefault.aspx
Order from: http://www.shopulstandards.com
Send comments (with optional copy to psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

Correction

Error in Project Intent

BSR/ASHRAE Addendum 62.2b-200x

The July 10, 2020 Standards Action Public Review notice for BSR/ASHRAE Addendum 62.2b-202x had an error in the date referenced in the project description and should have read as follows: (addenda to ANSI/ASHRAE Standard 62.2-2019).

Call for Members (ANS Consensus Bodies)

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

AGMA (American Gear Manufacturers Association)

Contact: Amir Aboutaleb
1001 N Fairfax Street, 5th Floor
Alexandria, VA 22314-1587
p: (703) 684-0211
e: tech@agma.org

BSR/AGMA 6000-CXX-202x, Specification for Measurement of Linear Vibration on Gear Units (revision and redesignation of ANSI/AGMA 6000-B96 (R2016))

BSR/AGMA 6134-CXX-202x, Practice for Enclosed Cylindrical Wormgear Speed Reducers and Gearmotors - Metric Edition (new standard)

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

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

BSR/AHRI Standard 411P (SI)-202x, Forced-Circulation Air-Cooling and Air-Heating Coils (new standard)

ASABE (American Society of Agricultural and Biological Engineers)

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

BSR/ASABE/ISO 14269-2-2006 (R202x), Tractors and self-propelled machines for agriculture and forestry - Operator enclosure environment - Part 2: Heating, ventilation and air-conditioning test method and performance (reaffirm a national adoption ANSI/ASABE/ISO 14269-2-2006 (R2017))

BSR/ASABE/ISO 3463-2006 SEP2017 (R202x), Tractors for agriculture and forestry - Roll-over protective structures (ROPS) - Dynamic test method and acceptance conditions (reaffirm a national adoption ANSI/ASABE/ISO 3463-SEP2017)

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

Contact: Tanisha Meyers-Lisle
1791 Tullie Circle NE
Atlanta, GA 30329
p: (678) 539-1111
e: tmlisle@ashrae.org

BSR/ASHRAE Standard 125-202X, Method of Testing Thermal Energy Meters for Liquid Streams in HVAC Systems (revision of ANSI/ASHRAE Standard 125-2016)

BSR/ASHRAE Standard 129-202X, Measuring Air-Change Effectiveness (new standard)

BSR/ASHRAE Standard 184-202X, Method of Test for Field Performance of Liquid-Chilling Systems (revision of ANSI/ASHRAE Standard 184-2016)

ASME (American Society of Mechanical Engineers)

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

BSR/ASME NM.1-202x, Thermoplastic Piping Systems (revision of ANSI/ASME NM.1-2018)

BSR/ASME STS-1-202x, Steel Stacks (revision of ANSI/ASME STS -1-2017)

NSF (NSF International)

Contact: Jason Snider
789 N. Dixboro Road
Ann Arbor, MI 48105-9723
p: (734) 418-6660
e: jsnider@nsf.org

BSR/NSF 350-202x (i50r1), Onsite Residential and Commercial Water Reuse Treatment Systems (revision of ANSI/NSF 350 -2019)

Call for Members (ANS Consensus Bodies)

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

Contact: Monica Leslie
789 N. Dixboro Road
Ann Arbor, MI 48105-9723
p: (734) 827-5643
e: mleslie@nsf.org

BSR/NSF 42-202x (i105r1), Drinking Water Treatment Units - Aesthetic Effects (revision of ANSI/NSF 42-2019)

BSR/NSF 53-202x (i123r1), Drinking Water Treatment Units - Health Effects (revision of ANSI/NSF 53-2019)

BSR/NSF 244-202x (i9r1), Supplemental Microbiological Water Treatment Systems - Filtration (revision of ANSI/NSF 244 -2019)

BSR/NSF 401-202x (i17r1), Drinking Water Treatment Units - Emerging Compounds / Incidental Contaminants (revision of ANSI/NSF 401-2019)

Contact: Rachel Brooker
789 N. Dixboro Road
Ann Arbor, MI 48105-9723
p: (734) 827-6866
e: rbrooker@nsf.org

BSR/NSF 173-202x (i67r1), Dietary Supplements (revision of ANSI/NSF 173-2019)

BSR/NSF 173-202x (i68r2), Dietary Supplements (revision of ANSI/NSF 173-202x (i68r1))

PLASTICS (Plastics Industry Association)

Contact: Jennifer Jones
1425 K Street, NW, Suite 500
Washington, DC 20005
p: (202) 974-5217
e: jjones@plasticsindustry.org

BSR/PLASTICS B151.11-202X, Safety Requirements for Granulators, Strand Pelletizers and Dicers Used for Size Reduction of Plastics (new standard)

Call for Members (ANS Consensus Bodies)
Hydraulic Institute (HI)
Response Deadline: August 15, 2020

Directly and materially affected parties who are interested in participating as a member of an ANS consensus body for the standards listed below are requested to contact the sponsoring standards developer directly and in a timely manner.
The (HI) Hydraulic Institute (www.pumps.org) is actively seeking participation in the following standards development work and in the interest categories specified:

HI 9.1-9.5 Pumps – General Guidelines

- This standard supports all industrial/commercial pumps of positive displacement and rotodynamic types. It includes types; definitions; design and application; airborne sound measurement and decontamination.
- Seeking volunteers in the Users and Producers interest categories to participate in the standards development work.
    - User Interest: Those who are predominantly involved in the operations or supervise the operation of products, materials or services. This category usually includes industrial and commercial consumers, safety associations, certification agencies, distributors and retailers.
    - Producer Interest: Those who are predominantly involved with production (manufacturing) of products, materials, or services. This category typically includes manufacturers, trade associations, manufacturers associations, etc.

HI 9.6.2 Rotodynamic Pumps for Assessment of Applied Nozzle Loads

- This standard includes recommendations for assessment of applied nozzle loads for the following pump types: Horizontal end suction single stage, vertical in-line single stage, axially split one and two stage, and vertically suspended pump single casing discharge through column with diffuser and volute.
- Seeking volunteers in the Users and Producers interest categories to participate in the standards development work.
    - User Interest: Those who are predominantly involved in the operations or supervise the operation of products, materials or services. This category usually includes industrial and commercial consumers, safety associations, certification agencies, distributors and retailers.
    - Producer Interest: Those who are predominantly involved with production (manufacturing) of products, materials, or services. This category typically includes manufacturers, trade associations, manufacturers associations, etc.

HI 9.6.8 Rotodynamic Pumps – Guideline for Dynamics of Pumping Machinery

- This standard describes and recommends the means to appropriately evaluate pumping machinery construction attributes and relevant site characteristics in order to determine the effects of dynamic performance on equipment life and reliability. It describes and recommends various levels of detailed evaluation and validation that are commensurate with the degree of equipment uncertainty and application risk, and provides sample specification language.
- Seeking volunteers in the Users and Producers interest categories to participate in the standards development work.

- User Interest: Those who are predominantly involved in the operations or supervise the operation of products, materials or services. This category usually includes industrial and commercial consumers, safety associations, certification agencies, distributors and retailers.
- Producer Interest: Those who are predominantly involved with production (manufacturing) of products, materials, or services. This category typically includes manufacturers, trade associations, manufacturers associations, etc.

To apply or obtain additional information, please contact Susanna De Bel at sdebel@pumps.org by August 15, 2020.

Call for Members (ANS Consensus Bodies)

Call for Committee Members

ASC O1 – Safety Requirements for Woodworking Machinery

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

- General Interest
- Government
- Producer
- User

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

Final Actions on American National Standards

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

ASME (American Society of Mechanical Engineers)

Reaffirmation

ANSI/ASME B30.26-2015 (R2020), Rigging Hardware (reaffirmation of ANSI/ASME B30.26-2015): 7/9/2020

Revision

ANSI/ASME B30.6-2020, Derricks (revision of ANSI/ASME B30.6-2015): 7/9/2020

ASSP (Safety) (American Society of Safety Professionals)

Reaffirmation

ANSI/ASSP Z244.1-2016 (R2020), The Control of Hazardous Energy Lockout, Tagout and Alternative Methods (reaffirmation of ANSI/ASSE Z244.1 -2016): 7/9/2020

ATIS (Alliance for Telecommunications Industry Solutions)

Reaffirmation

ANSI/ATIS 0300074-2015 (R2020), Guidelines and Requirements for Security Management Systems (reaffirmation of ANSI/ATIS 0300074-2015): 7/10/2020

ANSI/ATIS 0300202-2015 (R2020), Internetwork Operations - Guidelines for Network Management of Public Telecommunications Networks under Disaster Conditions (reaffirmation of ANSI/ATIS 0300202-2015): 7/10/2020

ANSI/ATIS 0300210-2015 (R2020), OAM&P Principles of Functions, Architectures, and Protocol for Telecommunications Management Network Interfaces and enhanced Telecom Operations Map (eTOM) (reaffirmation of ANSI/ATIS 0300210-2015): 7/10/2020

ANSI/ATIS 0300212-2015 (R2020), Enhanced Telecommunications Charge Card Physical Characteristics and Numbering Structure (reaffirmation of ANSI/ATIS 0300212-2015): 7/10/2020

ANSI/ATIS 0300230-2015 (R2020), Telecommunications - Charge Card and Billed Number Screening Validation Message Components (reaffirmation of ANSI/ATIS 0300230-2015): 7/10/2020

Revision

ANSI/ATIS 0600010.01-2020, Temperature, Humidity, Altitude, and Salt Fog Requirements for Information and Communications Technology (ICT) Equipment Utilized in Outside Plant Environments (revision of ANSI/ATIS 0600010.01-2017): 7/10/2020

ANSI/ATIS 0600010-2020, Temperature, Humidity, and Altitude Requirements for Information and Communications Technology (ICT) Equipment Utilized in Controlled Environmental Spaces (revision of ANSI/ATIS 0600010-2014): 7/10/2020

Stabilized Maintenance

ANSI/ATIS 0300264-2010 (S2020), Alarm Surveillance in Telecommunications Management Network (TMN) (stabilized maintenance of ANSI/ATIS 0300264-2010 (R2015)): 7/10/2020

AWS (American Welding Society)

New Standard

ANSI/AWS C3.9M/C3.9-2020, Specification for Resistance Brazing (new standard): 7/9/2020

Revision

ANSI/AWS C3.8M/C3.8-2020, Specification for the Ultrasonic Pulse-Echo Examination of Brazed Joints (revision of ANSI/AWS C3.8M/C3.8-2011): 7/9/2020

NEMA (ASC C136) (National Electrical Manufacturers Association)

Revision

ANSI C136.14-2020, Elliptically Shaped, Enclosed Side-Mounted Luminaires (revision of ANSI C136.14-2014): 7/9/2020

ANSI C136.15-2020, Roadway and Area Lighting Equipment - Luminaire Field Identification (revision of ANSI C136.15-2015): 7/9/2020

ANSI C136.46-2020, Concrete Lighting Poles (revision of ANSI C136.46-2013): 7/9/2020

NEMA (ASC W1) (National Electrical Manufacturers Association)

Reaffirmation

ANSI/NEMA/IEC 60974-11-2009 (R2020), Arc Welding Equipment - Part 11: Electrode Holders (reaffirmation of ANSI/NEMA/IEC 60974-11-2009): 7/10/2020

NSF (NSF International)

Revision

ANSI/NSF 52-2020 (i8r1), Supplemental Flooring (revision of ANSI/NSF 52 -2017): 7/7/2020

SERI (Sustainable Electronics Recycling International)

New Standard

ANSI/SERI R2-V3-2020, The Sustainable Electronics Reuse & Recycling (R2) Standard (new standard): 7/10/2020

UL (Underwriters Laboratories)

Revision

ANSI/UL 153-2020, Standard for Safety for Portable Electric Luminaires (revision of ANSI/UL 153-2018): 7/8/2020

ANSI/UL 508A-2020b, Standard for Safety for Industrial Control Panels (revision of ANSI/UL 508A-2020): 7/9/2020

ANSI/UL 588-2020a, Standard for Safety for Seasonal and Holiday Decorative Products (revision of ANSI/UL 588-2018): 7/9/2020

VITA (VMEbus International Trade Association (VITA))

New Standard

ANSI/VITA 62.2-2020, Modular Power Supply Standard for 270v Applications (new standard): 7/10/2020

Revision

ANSI/VITA 42.3-2020, XMC PCI Express Protocol Layer Standard (revision of ANSI/VITA 42.3-2014): 7/10/2020

ANSI/VITA 48.0-2020, Mechanical Specification for Microcomputers using Ruggedized Enhanced Design Implementation (REDI) (revision of ANSI/VITA 48.0-2010): 7/10/2020

ANSI/VITA 48.1-2020, Mechanical Specification for Microcomputers Using REDI Air Cooling (revision of ANSI/VITA 48.1-2010): 7/10/2020

ANSI/VITA 48.2-2020, Mechanical Specification for Microcomputers using REDI Conduction Cooling Applied to VITA 46 (revision of ANSI/VITA 48.2 -2010): 7/10/2020

X12 (X12 Incorporated)

Revision

ANSI X12.EDI 008000-2020, Standards for Electronic Data Interchange (revision, redesignation and consolidation of ANSI X12.1-2008 (R2013), ANSI X12.3-2008 (R2013), ANSI X12.5-2004 (R2013), ANSI X12.6-2004 (R2013), ANSI X12.22-2008 (R2013), ANSI X12.56-2004 (R2013), ANSI X12.58-2004 (R2013), and ANSI X12.59-2004 (R2013)): 7/9/2020

Project Initiation Notification System (PINS)

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

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

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

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

Contact: Karl Best: (703) 293-4887; kbest@ahrinet.org
2311 Wilson Boulevard, Suite 400, Arlington, VA 22201-3001 www.ahrinet.org

New Standard

BSR/AHRI Standard 411P (SI)-202x, Forced-Circulation Air-Cooling and Air-Heating Coils (new standard)

Stakeholders: Groups and individuals such as manufacturers, trade organizations, technical societies, professional associations, and associations representing users or owners of the equipment involved, appropriate government agencies or offices and consumer organizations or private.
Project Need: The purpose of this standard is to establish for Forced-Circulation Air-Cooling and Air-Heating Coils: definitions; classifications; test requirements; rating requirements; minimum data requirements for Published Ratings; symbols and units; reference properties and conversion factors; marking and nameplate data; and conformance conditions.
This standard applies to Forced-Circulation Air-Cooling and Air-Heating Coils, for application under non-frosting conditions.

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

Contact: Susan LeBlanc: (678) 539-1175; sleblanc@ashrae.org
1791 Tullie Circle NE, Atlanta, GA 30329 www.ashrae.org

New Standard

BSR/ASHRAE Standard 231-202X, CDL - A Control Description Language for Building Environmental Control Sequences (new standard)

Stakeholders: Manufacturers: Manufacturers of direct digital control systems;
Designers: Engineers and control sequence specialists such as consulting engineers, design/build engineers, energy specialists, etc. General Interest: Others with an interest in CDL such as those representing academic and government institutions.
Project Need: While the development of CDL has already begun by LBNL, it requires further development and feedback from the industry as would occur if it became a Standard. The standard status also will give CDL more legitimacy which will improve its acceptance and use.
The purpose of this standard is to define a declarative graphical programming language for building environmental control sequences that is both human and machine readable, designed for specification, implementation through machine-to-machine translation, documentation, and simulation.

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

Contact: Tanisha Meyers-Lisle: (678) 539-1111; tmlisle@ashrae.org
1791 Tullie Circle NE, Atlanta, GA 30329 www.ashrae.org

New Standard

BSR/ASHRAE Standard 129-202X, Measuring Air-Change Effectiveness (new standard)

Stakeholders: Test and balance professionals.
Project Need: The standard includes measurement procedures and criteria for assessing the suitability of the test space for measurements of air-change effectiveness.
This standard prescribes a method for measuring air-change effectiveness in mechanically ventilated spaces and buildings that meet specified criteria. The air-change effectiveness is a measure of the effectiveness of outdoor air distribution to the breathing level within the ventilated space.

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

Contact: Tanisha Meyers-Lisle: (678) 539-1111; tmlisle@ashrae.org
1791 Tullie Circle NE, Atlanta, GA 30329 www.ashrae.org

Revision

BSR/ASHRAE Standard 125-202X, Method of Testing Thermal Energy Meters for Liquid Streams in HVAC Systems (revision of ANSI/ASHRAE Standard 125-2016)

Stakeholders: Apartment or multifamily building owners, local code officials, and consumers (renters).
Project Need: The test methods, procedures, and facility descriptions in this standard are intended for use in determining measurement accuracy, pressure losses, service flow rate limits, temperature difference limits, and reliability effects of mounting attitude.
The purpose of this standard is to provide a method of testing factory-assembled thermal energy meters used to measure the thermal energy added to or extracted from a liquid stream supplying an HVAC system.

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

Contact: Tanisha Meyers-Lisle: (678) 539-1111; tmlisle@ashrae.org
1791 Tullie Circle NE, Atlanta, GA 30329 www.ashrae.org

Revision

BSR/ASHRAE Standard 184-202X, Method of Test for Field Performance of Liquid-Chilling Systems (revision of ANSI/ASHRAE Standard 184-2016)

Stakeholders: Chilled water plant design engineers and consultants, energy performance contracting consultants, companies that provide testing services for chillers, chiller manufacturers, and chiller owners and operators.
Project Need: The purpose of this standard is to prescribe methods of field performance testing of liquid-chilling systems (a.k.a. “chillers”). After a very long development period, the first edition of Standard 184 was published in 2016, followed by errata in 2017 and an addendum in late 2018 to complete some loose ends (adding two informative appendices and companion electronic Microsoft Excel files).
The purpose of this standard is to prescribe methods of field performance testing for liquid-chilling systems.

NSAA (ASC B77) (National Ski Areas Association)

Contact: Michael Lane: (720) 963-4210; mlane@nsaa.org
133 S Van Gordon Street, Suite 300, Lakewood, CO 80228

Supplement

BSR B77.1a-202x, Passenger Ropeways - Aerial Tramways, Aerial Lifts, Surface Lifts, Tows and Conveyors - Safety Standard (supplement to ANSI B77.1-2017)

Stakeholders: Manufacturers, operators, authorities having jurisdiction on passenger ropeways.
Project Need: Prepare a short supplement to correct technical references, supply additional technical direction, and editorial corrections to the ANSI B77.1-2017 Standard.
This standard deals with passenger transportation systems that use cables, ropes, or other flexible elements for power transmission in the system. These systems include aerial tramways, detachable and fixed-grip aerial lifts, surface lifts, tows, and conveyors.

American National Standards Maintained Under Continuous Maintenance

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

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

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

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

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 Contact Information

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

AGMA
American Gear Manufacturers Association
1001 N Fairfax Street
5th Floor
Alexandria, VA 22314-1587
Phone: (703) 684-0211
Web: www.agma.org

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

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

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

ASHRAE
American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.
1791 Tullie Circle NE
Atlanta, GA 30329
Phone: (678) 539-1111
Web: www.ashrae.org

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

ASSP (Safety)
American Society of Safety Professionals
520 N. Northwest Hwy
Park Ridge, IL 60068
Phone: (847) 768-3475
Web: www.assp.org

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

AWS
American Welding Society
8669 NW 36th Street
130
Miami, FL 33166
Phone: (305) 443-9353
Web: www.aws.org

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

NEMA (ASC C136)
National Electrical Manufacturers Association
1300 North 17th Street
Suite 900
Rosslyn, VA 22209
Phone: (703) 841-3234
Web: www.nema.org

NEMA (ASC W1)
National Electrical Manufacturers Association
1300 North 17th Street
Rosslyn, VA 22209
Phone: (703) 841-3278
Web: www.nema.org

NSAA (ASC B77)
National Ski Areas Association
133 S Van Gordon Street
Suite 300
Lakewood, CO 80228
Phone: (720) 963-4210

NSF
NSF International
789 N. Dixboro Road
Ann Arbor, MI 48105-9723
Phone: (734) 827-6866
Web: www.nsf.org

PLASTICS
Plastics Industry Association
1425 K Street, NW
Suite 500
Washington, DC 20005
Phone: (202) 974-5217
Web: www.plasticsindustry.org

SERI
Sustainable Electronics Recycling International
P.O. Box 721
Hastings, MN 55033
Phone: (248) 891-2837
Web: www.sustainableelectronics.org

UL
Underwriters Laboratories
171 Nepean Street
Suite 400
Ottawa, ON K2P 0B4 Canada
Phone: (613) 368-4417
Web: https://ul.org/

VITA
VMEbus International Trade Association (VITA)
929 W. Portobello Avenue
Mesa, AZ 85210
Phone: (602) 281-4497
Web: www.vita.com

X12
X12 Incorporated
24654 N. Lake Pleasant Pkwy.
Peoria, AZ 85383
Phone: (425) 562-2245
Web: www.x12.org

IEC Draft International Standards

This section lists proposed standards that the International Electrotechnical Commission (IEC) is considering for approval. The proposals have received substantial support within the technical committees or subcommittees that developed them and are now being circulated to 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 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

IEC Drafts can be made available by contacting ANSI's Customer Service department. Please e-mail your request for an 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.

JTC1-SC41/172/NP, PNW JTC1-SC41-172: Internet of Things (IoT) - Trustworthiness Principles, 020/9/4/

JTC1-SC25/2967/CD, ISO/IEC 10192-4-1 ED1: Information technology - Home Electronic System (HES) Interfaces - Part 4-1: Common user interface and cluster-to-cluster interface to support interworking among home cluster systems - Architecture., 020/9/4/

JTC1-SC25/2968/CD, ISO/IEC 15067-3-51 ED1: Information technology - Home Electronic System (HES) application model - Part 51: Framework of a Protected On-Premises AI Engine for an Energy Management System using Energy Management Agents (EMAs), 2020/10/2

18A/429/CDV, IEC 60092-360 ED2: Electrical installations in ships - Part 360: Insulating and sheathing materials for shipboard and offshore units, power, control, instrumentation and telecommunication cables, 2020/10/2

22F/585/CD, IEC TR 62001-1 ED2: High-voltage direct current (HVDC) systems - Guidance to the specification and design evaluation of AC filters - Part 1: Overview, 020/9/4/

22F/586/CD, IEC TR 62001-4 ED2: High-voltage direct current (HVDC) systems - Guidance to the specification and design evaluation of AC filters - Part 4: Equipment, 020/9/4/

23A/904/CDV, IEC 61386-21 ED2: Conduit systems for cable management - Part 21: Particular requirements - Rigid conduit systems, 2020/10/2

23A/905/CDV, IEC 61386-22 ED2: Conduit Systems for cable management - Part 22: Particular requirements - Pliable conduit systems, 2020/10/2

23A/906/CDV, IEC 61386-23 ED2: Conduit systems for cable management - Part 23: Particular requirements - Flexible conduit systems, 2020/10/2

34C/1492/CD, IEC 61347-1 ED4: Lamp controlgear - Part 1: General and safety requirements, 2020/10/2

34C/1493/CD, IEC 61347-2-1 ED2: Lamp controlgear - Part 2-1: Particular requirements for starting devices (other than glow starters), 2020/10/2

34C/1494/CD, IEC 61347-2-2 ED3: Controlgear for electric light sources - Part 2-2: Particular requirements for DC or AC supplied electronic step-down convertors for filament lamps, 2020/10/2

34C/1495/CD, IEC 61347-2-3 ED3: Lamp control gear - Part 2-3: Particular requirements for a.c. and/or d.c. supplied electronic control gear for fluorescent lamps, 2020/10/2

34C/1496/CD, IEC 61347-2-8 ED2: Lamp controlgear - Part 2-8: Particular requirements for ballasts for fluorescent lamps, 2020/10/2

34C/1498/CD, IEC 61347-2-11 ED2: Lamp controlgear - Part 2-11: Particular requirements for miscellaneous electronic circuits used with luminaires, 2020/10/2

34C/1499/CD, IEC 61347-2-12 ED2: Lamp controlgear - Part 2-12: Particular requirements for d.c. or a.c. supplied electronic controlgear for discharge lamps (excluding fluorescent lamps), 2020/10/2

34C/1500/CD, IEC 61347-2-13 ED3: Controlgear for electric light sources - Part 2-13: Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules, 2020/10/2

62C/763/CD, IEC 61675-1 ED3: Radionuclide imaging devices - Characteristics and test conditions - Part 1: Positron emission tomographs, 020/9/4/

62B/1170/CDV, IEC 60601-2-65/AMD2 ED1: Amendment 2 - Medical electrical equipment - Part 2-65: Particular requirements for the basic safety and essential performance of dental intra-oral X-ray equipment, 2020/10/2

62B/1171/CDV, IEC 62563-2 ED1: Medical electrical equipment - Medical image display systems - Acceptance and constancy tests, 2020/10/2

62D/1778/FDIS, ISO 80601-2-67 ED2: Medical electrical equipment - Part 2-67: Particular requirements for basic safety and essential performance of oxygen-conserving equipment, 2020/8/21

65E/739/FDIS, IEC 62769-100 ED1: Field Device Integration (FDI) - Part 100: Profiles - Generic protocols, 2020/8/21

65E/740/FDIS, IEC 62769-115-2 ED1: Field Device Integration (FDI) - Part 115-2: Profiles - Modbus-RTU, 2020/8/21

77A/1086/CD, IEC TS 61000-3-16 ED1: Electromagnetic compatibility (EMC) - Part 3-16: Limits - Limits for harmonic currents produced by energy supplying equipment with a rated current less than or equal to 75 A per phase connected to public low-voltage systems, 2020/10/2

86C/1671/CDV, IEC 61290-1-3 ED4: Optical amplifiers - Test methods - Part 1-3: Power and gain parameters - Optical power meter method, 2020/10/2

86C/1680/CD, IEC 61757-2-1 ED1: Fibre Optic Sensors - Part 2-1: Temperature measurement - Temperature sensors based on fibre Bragg gratings, 2020/10/2

86B/4299/CDV, IEC 61300-2-14 ED4: Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-14: Tests - High optical power, 2020/10/2

86B/4324/FDIS, IEC 61753-071-02 ED1: Fibre optic interconnecting devices and passive components - Performance standard - Part 071 -02: Non-connectorized single-mode fibre optic 1 × 2 and 2 × 2 spatial switches for category C - Controlled environments, 2020/8/21

2/2010/FDIS, IEC 60034-7 ED3: Rotating electrical machines - Part 7: Classification of types of construction, mounting arrangements and terminal box position (IM Code), 2020/8/21

2/2011/FDIS, IEC 60034-11 ED3: Rotating electrical machines - Part 11: Thermal protection, 2020/8/21

26/702/CDV, IEC 60974-8 ED3: Arc welding equipment - Part 8: Gas consoles for welding and plasma cutting systems, 2020/10/2

26/703/CDV, IEC 60974-11 ED4: Arc welding equipment - Part 11: Electrode holders, 2020/10/2

26/704/CDV, IEC 60974-13 ED2: Arc welding equipment - Part 13: Welding clamp, 2020/10/2

44/882/NP, PNW TS 44-882: IEC/TS 62061-2 - Guidelines on application of IEC 62061 (including evaluation of PFH-Formulas), 2020/10/2

85/727/DTS, IEC TS 63297 ED1: Sensing Devices for Non-Intrusive Load Monitoring (NILM) Systems, 2020/10/2

115/243/NP, PNW TS 115-243: High voltage direct current (HVDC) power transmission - System requirements for DC-side equipment - Part 2: Using voltage sourced converters, 020/9/4/

21/1064/NP, PNW TS 21-1064 ED1: Opportunity-charging of lead-acid traction batteries, 020/9/4/

40/2760/CD, IEC 60393-3 ED3: Potentiometers for use in electronic equipment - Part 3: Sectional specification: Rotary precision potentiometers, 2020/10/2

40/2761/CD, IEC 60115-8 ED3: Fixed resistors for use in electronic equipment - Part 8: Sectional specification - Fixed surface mount resistors, 2020/10/2

57/2248/DC, Proposed revision of IEC 61968-8 ED1.0: Application integration at electric utilities - System interfaces for distribution management - Part 8: Interfaces for customer operations, 2020/8/21

82/1735/CDV, IEC 60891 ED3: Photovoltaic devices - Procedures for temperature and irradiance corrections to measured I-V characteristics, 2020/10/2

82/1759(F)/FDIS, IEC 60904-10 ED3: Photovoltaic devices - Part 10: Methods of linear dependence and linearity measurements, 020/8/7/

100/3461/CD, IEC 61966-2-4/AMD2 ED1: Amendment 2 - Multimedia systems and equipment - Colour measurement and management - Part 2-4: Colour management - Extended-gamut YCC colour space for video applications - xvYCC (TA 2), 020/9/4/

CABPUB/186/CD, ISO/IEC CD 17030 Conformity assessment - General requirements for third-party marks of conformity, 2020/9/25

Newly Published ISO & IEC Standards

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

ISO Standards

ACOUSTICS (TC 43)

ISO 16283-2:2020, Acoustics - Field measurement of sound insulation in buildings and of building elements - Part 2: Impact sound insulation, $185.00

AGRICULTURAL FOOD PRODUCTS (TC 34)

ISO 16140-4:2020, Microbiology of the food chain - Method validation - Part 4: Protocol for method validation in a single laboratory, $185.00

ISO 16140-5:2020, Microbiology of the food chain - Method validation - Part 5: Protocol for factorial interlaboratory validation for non-proprietary methods, $162.00

BAMBOO AND RATTAN (TC 296)

ISO 21625:2020, Vocabulary related to bamboo and bamboo products, $45.00

BUILDING CONSTRUCTION (TC 59)

ISO 23387:2020, Building information modelling (BIM) - Data templates for construction objects used in the life cycle of built assets - Concepts and principles, $103.00

DOCUMENT IMAGING APPLICATIONS (TC 171)

ISO 23504-1:2020, Document management applications - Raster image transport and storage - Part 1: Use of ISO 32000 (PDF/R-1), $103.00

EARTH-MOVING MACHINERY (TC 127)

ISO 19014-4:2020, Earth-moving machinery - Functional safety - Part 4: Design and evaluation of software and data transmission for safety-related parts of the control system, $185.00

GEOGRAPHIC INFORMATION/GEOMATICS (TC 211)

ISO 19165-2:2020, Geographic information - Preservation of digital data and metadata - Part 2: Content specifications for Earth observation data and derived digital products, $162.00

MACHINE TOOLS (TC 39)

ISO 14955-3:2020, Machine tools - Environmental evaluation of machine tools - Part 3: Principles for testing metal-cutting machine tools with respect to energy efficiency, $162.00

PAINTS AND VARNISHES (TC 35)

ISO 4625-1:2020, Binders for paints and varnishes - Determination of softening point - Part 1: Ring-and-ball method, $68.00

ISO 13885-1:2020, Gel permeation chromatography (GPC) - Part 1: Tetrahydrofuran (THF) as eluent, $138.00

ISO 13885-2:2020, Gel permeation chromatography (GPC) - Part 2: N, N-Dimenthylacetamide (DMAC) as eluent, $138.00

ISO 13885-3:2020, Gel permeation chromatography (GPC) - Part 3: Water as eluent, $138.00

PLAIN BEARINGS (TC 123)

ISO 12131-3:2020, Plain bearings - Hydrodynamic plain thrust pad bearings under steady-state conditions - Part 3: Guide values for the calculation of thrust pad bearings, $45.00

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

ISO 8521:2020, Glass-reinforced thermosetting plastic (GRP) pipes - Test methods for the determination of the initial circumferential tensile wall strength, $138.00

RAILWAY APPLICATIONS (TC 269)

ISO 19659-2:2020, Railway applications - Heating, ventilation and air conditioning systems for rolling stock - Part 2: Thermal comfort, $162.00

ROAD VEHICLES (TC 22)

ISO 4925:2020, Road vehicles - Specification of non-petroleum-based brake fluids for hydraulic systems, $138.00

ISO 4926:2020, Road vehicles - Hydraulic braking systems - Non-petroleum-based reference fluid, $45.00

ISO 23132:2020, Road vehicles - Extended Vehicle (ExVe) time critical applications - General requirements, definitions and classification methodology of time-constrained situations related to Road and ExVe Safety (RExVeS), $138.00

ISO 25981:2020, Road vehicles - Connectors for the electrical connection of towing and towed vehicles - Connectors for electronically monitored charging systems with 12 V or 24 V nominal supply voltage, $68.00

RUBBER AND RUBBER PRODUCTS (TC 45)

ISO 22768:2020, Raw rubber and rubber latex - Determination of the glass transition temperature by differential scanning calorimetry (DSC), $68.00

ISO 23464:2020, Nitrile cleanroom gloves - Specification, $45.00

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

ISO 128-2:2020, Technical product documentation (TPD) - General principles of representation - Part 2: Basic conventions for lines, $209.00

TRADITIONAL CHINESE MEDICINE (TC 249)

ISO 21292:2020, Traditional Chinese medicine - Electric heating moxibustion equipment, $45.00

TYRES, RIMS AND VALVES (TC 31)

ISO 4209-2:2020, Truck and bus tyres and rims (metric series) - Part 2: Rims, $68.00

WELDING AND ALLIED PROCESSES (TC 44)

ISO 24034:2020, Welding consumables - Solid wire electrodes, solid wires and rods for fusion welding of titanium and titanium alloys - Classification, $68.00

ISO Guides

OTHER

ISO Guide 84:2020, Guidelines for addressing climate change in standards, $209.00

ISO Technical Reports

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

ISO/TR 20416:2020, Medical devices - Post-market surveillance for manufacturers, $185.00

ISO Technical Specifications

GEOGRAPHIC INFORMATION/GEOMATICS (TC 211)

ISO/TS 19163-2:2020, Geographic information - Content components and encoding rules for imagery and gridded data - Part 2: Implementation schema, $103.00

PLASTICS (TC 61)

ISO/TS 21488:2020, Plastics - Test method for exposing polyolefins outdoors combining natural weathering and artificial irradiation, $103.00

ISO/IEC JTC 1, Information Technology

ISO/IEC 23396:2020, Systems and software engineering - Capabilities of review tools, $162.00

ISO/IEC 14543-4-301:2020, Information technology - Home Electronic System (HES) architecture - Part 4-301: Application protocols for home air conditioners and controllers, $138.00

IEC Standards

ELECTRICAL ACCESSORIES (TC 23)

IEC 62020-1 Ed. 1.0 b cor.1:2020, Corrigendum 1 - Electrical accessories - Residual current monitors (RCMs) - Part 1: RCMs for household and similar uses, $0.00

ELECTROMAGNETIC COMPATIBILITY (TC 77)

IEC 61000-3-2 Ed. 5.1 en:2020, Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤16 A per phase), $469.00

IEC 61000-3-2 Amd.1 Ed. 5.0 en:2020, Amendment 1 - Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤16 A per phase), $117.00

INDUSTRIAL-PROCESS MEASUREMENT AND CONTROL (TC 65)

IEC 62541-4 Ed. 3.0 b:2020, OPC Unified Architecture - Part 4: Services, $410.00

IEC 62541-5 Ed. 3.0 b:2020, OPC Unified Architecture - Part 5: Information Model, $410.00

IEC 62541-6 Ed. 3.0 b:2020, OPC Unified Architecture - Part 6: Mappings, $410.00

S+ IEC 62541-4 Ed. 3.0 en:2020 (Redline version), OPC Unified Architecture - Part 4: Services, $534.00

S+ IEC 62541-5 Ed. 3.0 en:2020 (Redline version), OPC Unified Architecture - Part 5: Information Model, $534.00

S+ IEC 62541-6 Ed. 3.0 en:2020 (Redline version), OPC Unified Architecture - Part 6: Mappings, $534.00

INSULATORS (TC 36)

IEC 60471 Ed. 3.0 b:2020, Clevis and tongue couplings of string insulator units - Dimensions, $47.00

NUCLEAR INSTRUMENTATION (TC 45)

IEC 62755 Amd.1 Ed. 1.0 en:2020, Amendment 1 - Radiation protection instrumentation - Data format for radiation instruments used in the detection of illicit trafficking of radioactive materials, $23.00

IEC 62755 Ed. 1.1 en:2020, Radiation protection instrumentation - Data format for radiation instruments used in the detection of illicit trafficking of radioactive materials, $586.00

OTHER

IEC 63152 Ed. 1.0 en:2020, Smart cities - City service continuity against disasters - The role of the electrical supply, $164.00

PERFORMANCE OF HOUSEHOLD ELECTRICAL APPLIANCES (TC 59)

IEC 63252 Ed. 1.0 b:2020, Energy consumption of vending machines, $164.00

IEC 62885-4 Ed. 1.0 b:2020, Surface cleaning appliances - Part 4: Cordless dry vacuum cleaners for household or similar use - Methods for measuring the performance, $164.00

POWER TRANSFORMERS (TC 14)

IEC 60076-24 Ed. 1.0 b:2020, Power transformers - Part 24: Specification of voltage regulating distribution transformers (VRDT), $47.00

SAFETY OF MACHINERY - ELECTROTECHNICAL ASPECTS (TC 44)

IEC 61496-1 Ed. 4.0 b:2020, Safety of machinery - Electro-sensitive protective equipment - Part 1: General requirements and tests, $317.00

SEMICONDUCTOR DEVICES (TC 47)

IEC 62433-1 Ed. 1.0 b:2019, EMC IC modelling - Part 1: General modelling framework, $317.00

IEC 62433-1 Ed. 1.0 en cor.1:2020, Corrigendum 1 - EMC IC modelling - Part 1: General modelling framework, $0.00

IEC 63068-3 Ed. 1.0 b:2020, Semiconductor devices - Non-destructive recognition criteria of defects in silicon carbide homoepitaxial wafer for power devices - Part 3: Test method for defects using photoluminescence, $199.00

IEC 60749-15 Ed. 3.0 b:2020, Semiconductor devices - Mechanical and climatic test methods - Part 15: Resistance to soldering temperature for through-hole mounted devices, $47.00

IEC 60747-16-5 Ed. 1.1 en:2020, Semiconductor devices - Part 16-5: Microwave integrated circuits - Oscillators, $410.00

IEC 60747-16-5 Amd.1 Ed. 1.0 en:2020, Amendment 1 - Semiconductor devices - Part 16-5: Microwave integrated circuits - Oscillators, $23.00

S+ IEC 60749-15 Ed. 3.0 en:2020 (Redline version), Semiconductor devices - Mechanical and climatic test methods - Part 15: Resistance to soldering temperature for through-hole mounted devices, $61.00

SURFACE MOUNTING TECHNOLOGY (TC 91)

IEC 61760-1 Ed. 3.0 b:2020, Surface mounting technology - Part 1: Standard method for the specification of surface mounting components (SMDs), $281.00

SWITCHGEAR AND CONTROLGEAR (TC 17)

IEC 62271-108 Ed. 2.0 b:2020, High-voltage switchgear and controlgear - Part 108: High-voltage alternating current disconnecting circuit-breakers for rated voltages above 52 kV, $164.00

SWITCHGEAR AND CONTROLGEAR AND THEIR ASSEMBLIES FOR LOW VOLTAGE (TC 121)

IEC 60947-4-3 Ed. 3.0 en:2020, Low-voltage switchgear and controlgear - Part 4-3: Contactors and motor-starters - Semiconductor controllers and semiconductor contactors for non-motor loads, $352.00

WIND TURBINE GENERATOR SYSTEMS (TC 88)

IEC 61400-27-2 Ed. 1.0 en:2020, Wind energy generation systems - Part 27-2: Electrical simulation models - Model validation, $352.00

IEC Technical Reports

FLAT PANEL DISPLAY DEVICES (TC 110)

IEC/TR 62595-1-4 Ed. 1.0 en:2020, Display lighting unit - Part 1-4: Glass light guide plate, $164.00

Registration of Organization Names in the United States

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

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

PUBLIC REVIEW

Southern California Edison (SCE)

Public Review Ends: August 28, 2020

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

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

Proposed Foreign Government Regulations

Call for Comment

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

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

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

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

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

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

Information Concerning

American National Standards

Call for Members

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

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

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

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

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

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

Society of Cable Telecommunications

ANSI Accredited Standards Developer

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

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

Membership in the SCTE Standards Program is open to all directly a materially affected parties as defined in SCTE's membership rules and operating procedures. More information is available at www.scte.org or by e-mail from standards@scte.org.

International Organization for Standardization (ISO)

Establishment of ISO Technical Committee

ISO/TC 330 - Surfaces with Biocidal and Antimicrobial Properties

A new ISO Technical Committee, ISO/TC 330 - Surfaces with biocidal and antimicrobial properties, has been formed. The Secretariat has been assigned to France (AFNOR).

ISO/TC 330 operates under the following scope:

Standardization of test methods used to assess the biocidal performance and efficacy of any surfaces with antimicrobial activities, including their compatibility with different families of disinfectants and cleaning agents. Such methods aim at evaluating the biocidal activity (i.e. that which irreversibly inactivates microorganism) and at differentiating it from the biostatic activity (i.e. the inhibition of the growth of microorganisms).

The field covers the assessment of surfaces displaying intrinsic biocidal properties and of surfaces processed by any means so as to deliver biocidal properties under normal environmental conditions for human beings The field targets only surfaces, regardless of their final use.

Areas of interest include medical and veterinary applications, aerospace, agriculture, food, hygiene and other industrial fields, institutional and domestic applications.

Excluded: Toxicological and ecotoxicological surface testing methods, disinfection processes, antimicrobial activities of textile and porous products (including footwear), photocatalysis and nanotechnologies. component and not a material, which can be directly used in electric vehicles, digital cameras, electric motorcycles, etc.

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).

ISO/TC 331 - Biodiversity

A new ISO Technical Committee, ISO/TC 331 - Biodiversity, has been formed. The Secretariat has been assigned to France (AFNOR).

ISO/TC 331 operates under the following scope:

Standardization in the field of Biodiversity to develop requirements, principles, framework, guidance and supporting tools in a holistic and global approach for all relevant organizations, to enhance their contribution to Sustainable Development.

Excluded: standardization of test and measurement methods for ecological quality of water, air, soil and marine environment.

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).

ISO/TC 332 - Security Equipment for Financial Institutions

A new ISO Technical Committee, ISO/TC 332 - Security equipment for financial institutions, has been formed. The Secretariat has been assigned to India (BIS).

ISO/TC 332 operates under the following scope:

Standardization in the field of safes, cash boxes, strong room doors and safe deposit locker cabinets, ventilation equipment for strong room used in banks, financial institutions and commercial organization etc.

The standards formulated by this technical committee deals with specification and test methods of physical security products used in banks, financial institutions, commercial organization and by jewelers.

Excluded are the fields covered by ISO/TC 68 (Financial services).

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).

ISO/TC 333 - Lithium

A new ISO Technical Committee, ISO/TC 333 - Lithium, has been formed. The Secretariat has been assigned to China (SAC).

ISO/TC 333 operates under the following scope:

Standardization in the field of lithium mining, concentration, extraction, separation and conversion to useful lithium compounds/materials (including oxides, salts, metals, master alloys, lithium-ion battery materials, etc.) The work program includes terminology, technical conditions of delivery to overcome transport difficulties, unified testing and analysis methods to improve the general quality of lithium products.

Excluded: Battery

Note: Battery is a component and not a material, which can be directly used in electric vehicles, digital cameras, electric motorcycles, etc.

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).

ISO Proposal for a New Field of ISO Technical Activity

Reference Materials

Comment Deadline: August 14, 2020

For a number of years, ISO has had a policy development committee named ISO REMCO which has developed a series of ISO Guides for Reference Materials. Recently, the ISO/TMB noted that most, if not all, ISO REMCO Guides should be issued as ISO standards rather than ISO Guides by the nature of their content and intended user community, Therefore, the agreement of ISO REMCO, the ISO/TMB is proposal this new ISO TC on Reference Materials, which is essentially the conversion of ISO REMCO into a TC, with the following scope statement:

Standardization in the competent production and use of reference materials, including the concepts, terms and definitions related to reference materials.

Anyone wishing to review the proposal can request a copy by contacting ANSI's ISO Team (isot@ansi.org), with a submission of comments to Steve Cornish (scornish@ansi.org) by close of business on Friday, August 14, 2020.

Information Concerning

International Organization for Standardization (ISO)

ISO Proposal for a New Field of ISO Technical Activity

Laboratory Design

Comment Deadline: August 14, 2020

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

> *Standardization in the field of laboratory design including site selection, design of internal layout of space and services with the objective to provide functional, safe, energy efficient and sustainable laboratories taking into account environmental impact, the practical division of experimental and support areas and layouts plus model selection of laboratory furniture. It includes standardization of apparatus and devices for personal safety aspects that are an integral part of the laboratory. Design of devices and apparatus for experiment purposes covered by ISO/TC 48 as well as design of measuring instruments are excluded from the scope.*
>
> *Excluded:*
>
> *• ISO/TC 48 (laboratory equipment);*
>
> *• ISO/TC 212 (Clinical laboratory testing and in vitro diagnostic test systems);*
>
> *• CASCO;*
>
> *• IEC/TC 66 (Safety of measuring, control and laboratory equipment);*
>
> *• ISO/TC 209 (Clean rooms).*
>
> *Note:*
>
> *Once the new TC is established, liaisons with other relevant ISO technical committees will be established, including:*
>
> *• ISO/TC 48 (laboratory equipment);*
>
> *• ISO/TC 212 (Clinical laboratory testing and in vitro diagnostic test systems);*
>
> *• CASCO;*
>
> *• ISO/TC 136 (Furniture);*

- *ISO TC 307 (Blockchain and distributed ledger technologies);*
- *ISO/TC 159 (Ergonomics);*

as well as relevant IEC technical committees:

- *IEC/TC 64 (Electrical installations and protection against electric shock);*
- *IEC/TC 81 (Lightning protection);*
- *IEC/TC 85 (Measuring equipment for electrical and electromagnetic quantities);*
- *IEC/TC 45 (Nuclear instrumentation);*
- *IEC/TC 62 (Electrical equipment in medical practice);*
- *IEC/TC 65 (Industrial-process measurement, control and automation);*
- *IEC/TC 76 (Optical radiation safety and laser equipment);*
- *IEC/TC 104 (Environmental conditions, classification and methods of test);*
- *and ISO/IEC JTC 1 (Information technology).*

Anyone wishing to review the proposal can request a copy by contacting ANSI's ISO Team (isot@ansi.org), with a submission of comments to Steve Cornish (scornish@ansi.org) by close of business on Friday, August 14, 2020.

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

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:

- *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: www.ansi.org/PSAWebForms
- Information about standards Incorporated by Reference (IBR): www.ansi.org/ibr
- ANSI - Education and Training: www.standardslearn.org

If you have a question about the ANS process and cannot find the answer quickly, please send an email to psa@ansi.org .

Please also visit Standards Boost Business at www.standardsboostbusiness.org for resources about why standards matter, testimonials, case studies, FAQs and more.

If you are interested in purchasing an American National Standard, please visit https://webstore.ansi.org/

BSR/ASHRAE Addendum m
to ANSI/ASHRAE Standard 34-2019

Public Review Draft

Proposed Addendum m to Standard 34-2019, Designation and Safety Classification of Refrigerants

First Public Review (July 2020)
(Draft shows Proposed Changes to Current Standard)

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

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

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FOREWORD

This addendum adds the zeotropic refrigerant blend R-472A to Tables 4-2 and D-2.

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

Addendum m to Standard 34-2019

Modify Tables 4-2 and D-2 as shown.

Table 4-2 Data and Safety Classifications for Refrigerant Blends

Refrigerant Number = 472A
Composition (Mass %) = R-744/32/134a (69.0/12.0/19.0)
Composition tolerances = ±1.0, ±1.0, ±1.0
OEL = 2700 ppm v/v
Safety Group = A1
RCL = 35,000 ppm v/v; 4.5 lb/Mcf; 72 g/m^3
Highly Toxic or Toxic Under Code Classification = Neither

Table D-2 Data Classifications for Refrigerant Blends

Refrigerant Number = 472A
Composition (Mass %) = R-744/32/134a (69.0/12.0/19.0)
Average Relative Molar Mass = 50.39 g/mol
Bubble Point (°F) = -119.7
Dew Point (°F) = -78.7
Bubble Point (°C) = -84.3
Dew Point (°C) = -61.5

BSR/ASHRAE Addendum k
to ANSI/ASHRAE Standard 15-2019

First Public Review Draft

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

First Public Review (July 2020)
(Draft shows Proposed Changes to Current Standard)

This draft has been recommended for public review by the responsible project committee. To submit a comment on this proposed standard, go to the ASHRAE website at 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

This addendum modifies the existing listing requirement in ANSI/ASHRAE Standard 15 by clarifying the acceptable product safety listing standards.

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

Addendum k to Standard 15-2019

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

7. RESTRICTIONS ON REFRIGERANT USE

[…]

7.6.2 Listing and Installation Requirements. *Refrigeration systems shall* be listed in accordance with UL 484[16] or UL/CSA 60335-2-40[17]. ~~and~~ The *refrigeration system shall* be installed in accordance with the listing, the manufacturer's instructions, and any markings on the equipment restricting the installation.

Modify Normative Appendix B as follows. The remainder of Normative Appendix B remains unchanged.

[***Note to Reviewers:*** Proposed Addendum f to ANSI/ASHRAE Standard 15-2019 proposes to change Normative Appendix B into Section 14 of the normative body of the standard. This proposed Addendum k shows modifications to ANSI/ASHRAE Standard 15-2019, and the changes below will be put into Section 14 of the next full revision of ANSI/ASHRAE Standard 15.]

[…]

NORMATIVE APPENDIX B—NORMATIVE REFERENCES

[…]

16. UL. 2018. UL 484, *Standard for Room Air Conditioners*, 9th Edition. Northbrook, IL: Underwriters Laboratories, LLC.

17. UL. 2019. UL/CSA 60335-2-40, *Household and Similar Electrical Appliances — Safety — Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers*, 3rd Edition. Northbrook, IL: Underwriters Laboratories, Inc.

BSR/ASHRAE Addendum n
to ANSI/ASHRAE Standard 34-2019

Public Review Draft

Proposed Addendum n to Standard 34-2019, Designation and Safety Classification of Refrigerants

First Public Review (July 2020)
(Draft shows Proposed Changes to Current Standard)

This draft has been recommended for public review by the responsible project committee. To submit a comment on this proposed standard, go to the ASHRAE website at 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

This proposed addendum adds an informative note to Section 9.5.2 which references the new Informative Appendix I.

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

Addendum n to Standard 34-2019

Revise Section 9 as shown. The remainder of Section 9 is unchanged.

9.5.2 Refrigerant Data

Informative Note: Recommended Precision and Specification of Source: The numerical data required in Section 9.5.2 are recommended to conform to the levels of precision stated in Informative Appendix I, "Recommended Significant Figures Reporting of Quantities in Applications to ASHRAE SSPC 34."

Add new Informative Appendix I as shown.

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

INFORMATIVE APPENDIX I—RECOMMENDED SIGNIFICANT FIGURES REPORTING OF QUANTITIES IN APPLICATIONS TO ASHRAE SSPC 34

This appendix provides guidance on the recommended number of significant figures for refrigerant data in applications for designation and safety group classifications for refrigerants, including blends, in addenda or revisions to the standard on new compounds or blends to be added to the standard.

I1. Recommended Significant Figures

Table I-1 Recommended Significant Figures

Property	Recommended Data Reporting	Examples
Temperatures (normal boiling point, critical point, azeotropic, bubble point, dew point, and temperature glide)	0.1	23.0°C (73.4°F)
Application Temperatures	1	–40 to + 10°C
Pressures	3 Significant Figures	5.78 MPa
Specific Volume	3 Significant Figures	0.00195 m^3/kg
Density	3 Significant Figures	472 kg/m^3
Latent Heat of Vaporization	3 Significant Figures	125 kJ/kg
Specific Heat Ratio	3 Significant Figures	1.53
Compositions (Nominal, WCF, WCFF, Tolerances)	0.1	(23.0/25.0/52.0)
Molecular Weights	0.01	102.03 g/mole

I2. Specification of Sources

The source of all of the quantities required in Section 9.5.2 are recommended to be stated and documented. Examples include:

1. direct experimental measurement; state method used and experimental uncertainty
2. calculation by an equation of state model; state the program used (e.g., NIST REFPROP, version 10.0)
3. literature references for the underlying equations of state for each of the components (e.g., for R-134a: Tillner-Roth, R. and Baehr, H.D., An international standard formulation of the thermodynamic properties of 1,1,1,2-tetrafluoroethane (HFC-134a) for temperatures from 170 K to 455 K at pressures up to 70 MPa, *J. Phys. Chem. Ref. Data*, 23:657-729, 1994.) and, in the case of mixtures, the mixing rule and associated parameter values.
4. calculation by an approximate method, such as the calculation of critical properties given by Section 9.5.2.5 in ANSI/ASHRAE Standard 34 or the calculation of the heat of combustion given by the method in Normative Appendix B of ANSI/ASHRAE Standard 34.

Public Review Draft

Proposed Addendum bw to Standard 189.1-2017

Standard for the Design of High-Performance Green Buildings

Except Low-Rise Residential Buildings

First Public Review (July 2020)
(Draft Shows Proposed Changes to Current Standard)

This draft has been recommended for public review by the responsible project committee. To submit a comment on this proposed standard, go to the ASHRAE website at 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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BSR/ASHRAE/ICC/USGBC/IES Addendum bw to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings* First Public Review Draft**.**

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

Foreword

This addendum removes confusing language regarding setback requirements for HVAC systems in hotel guest rooms and replaces it with a reference to Section 6.4.3.3.5.1 in Standard 90.1 that has identical intent.

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

Addendum bw to 189.1-2017

Revise Section 7.4.3.9.3 as follows:

7.4.3.9.3 HVAC Set-Point Control. HVAC systems shall be in accordance with ANSI/ASHRAE/IES Standard 90.1, Section 6.4.3.3.5.1. ~~Within 30 minutes of all occupants leaving the guest room, HVAC set points shall be automatically raised by at least 5°F (3°C) from the occupant set point in the cooling mode and automatically lowered by at least 5°F (3°C) from the occupant set point in the heating mode. When the guest room is unrented and unoccupied, HVAC set points shall be automatically reset to 80°F (27°C) or higher in the cooling mode and to 60°F (16°C) or lower in the heating mode. Unrented and unoccupied guest rooms shall be determined by either of the following criteria:~~

~~a. The guest room has been continuously unoccupied for up to 16 hours.~~

~~b. A *networked guest-room control system* indicates the guest room is unrented and the guest room is unoccupied for no more than 30 minutes.~~

~~**Exceptions to 7.4.3.9.3:**~~

~~1. A *networked guest-room control system* may return the thermostat set points to their default set points 60 minutes prior to the time the room is scheduled to be occupied.~~

~~2. Cooling for humidity control shall be permitted during unoccupied periods.~~

Note to reviewers:

BSR/ASHRAE/ICC/USGBC/IES Addendum bw to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings* First Public Review Draft**.**

- *Addendum ad, published on the ASHRAE website, deleted a section within Section 7.4.3 and changed the subsequent section numbers including those above.*
- *Addendum bt, pending publication, changed the time in this section from 30 minutes to 20 minutes as follows:*

7.4.3.9.3 HVAC Set-Point Control. Within ~~30~~ 20 minutes of all occupants leaving the guest room, HVAC set points shall be automatically raised by at least 5°F (3°C) from the occupant set point in the cooling mode and automatically lowered by at least 5°F (3°C) from the occupant set point in the heating mode.

BSR/ASHRAE/IES Addendum f
to ANSI/ASHRAE/IES Standard 90.1-2019

Public Review Draft

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

Second ISC Public Review (July 2020)
(Draft Shows Proposed Independent Substantive Changes to Previous Public Review Draft)

This draft has been recommended for public review by the responsible project committee. To submit a comment on this proposed standard, go to the ASHRAE website at 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

This ISC is being prepared to correct an error in the original 1st public review document. Only the changes made by this ISC are shown in strike-out and underline text.

The following is the foreword from the first public review.

Historically, the required efficiency increases to eliminate economizer has been a point of confusion for the industry. The confusion stems from whether you need to increase both the full load efficiency and part load efficiency or just the part load efficiency of the equipment. Additionally, if the metric is not in the format of work out divided by energy in (ex. IPLV), then you could get different efficiency levels required based on how you do the math. This change should address both issues. (Note: the values in the table are not underlined and not up for public review/comment.). The language was also changed to allow for a broader range of rating metrics that are being utilized in different rating standards.

The ISC corrects a mistake found during review by the Mechanical Subcommittee. The instruction to multiply by the efficiency value in Table 6.5.1-2

There is no cost impact to this revision as it just clarifies the use of the standard.

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Addendum f to 90.1-2019

Modify the standard as follows (IP Units)

Table 6.5.1-2 Eliminate Required Economizer for Comfort Cooling by Increasing Cooling *Efficiency*

Climate Zone	*Efficiency* Improvement[a]
2A	17%
2B	21%
3A	27%
3B	32%
3C	65%
4A	42%
4B	49%
4C	64%
5A	49%
5B	59%
5C	74%
6A	56%
6B	65%
7	72%
8	77%

a. If a unit is rated with an annualized or part-load metric, then to eliminate the required economizer, only the annualized or part-load minimum cooling efficiency of the unit must be increased by the percentage shown. If the unit is only rated with a full-load metric like EER cooling, then these must be increased by the percentage shown. To determine the efficiency required to eliminate the economizer~~,~~ when the unit *equipment efficiency* is rated with an energy-input divided by work-output metric, the metric shall first be converted to COP and then the COP shall be increased ~~prior to multiplying~~ by the *efficiency* improvement percentage shown. The COP shall ~~and~~ then be converted back to the original rated metric to establish the efficiency required to eliminate the economizer.

Informative note: Some examples of annualized or part-load metrics are: IPLV.IP, IEER, and SEER.

No changes are made to the SI requirements in the ISC. There were changes in the 1st public review which can be seen in the reference sections below.

Note to Reviewers: The following is the final version of the addendum as it would appear with the 1st full public review and 2nd ISC public review combined. It is provided for reference only:

Modify the standard as follows (IP Units)

Table 6.5.1-2 Eliminate Required Economizer for Comfort Cooling by Increasing Cooling *Efficiency*

Climate Zone	*Efficiency* Improvement[a]
2A	17%
2B	21%
3A	27%
3B	32%
3C	65%
4A	42%
4B	49%
4C	64%
5A	49%
5B	59%
5C	74%
6A	56%
6B	65%
7	72%
8	77%

a. If a unit is rated with an annualized or part-load metric~~IPLV, IEER, or SEER~~, then to eliminate the required economizer, only the annualized or part-load minimum cooling efficiency of the ~~HVAC~~ unit must be increased by the percentage shown. If the ~~HVAC~~ unit is only rated with a full-load metric like EER cooling, then these must be increased by the percentage shown. To determine the efficiency required to eliminate the economizer when the unit *equipment efficiency* is rated with an energy-input divided by work-output metric, the metric shall first be converted to COP by the *efficiency* improvement percentage shown. The COP shall then be converted back to the original rated metric to establish the efficiency required to eliminate the economizer.

Informative note: Some examples of annualized or part-load metrics are: IPLV.IP, IEER, and SEER.

Modify the standard as follows (SI Units)

Table same as I-P version

a. If a unit is rated with an annualized or part-load metric~~IPLV, ICOP, or SEER~~, then to eliminate the required economizer, only the annualized or part-load minimum cooling efficiency of the ~~HVAC~~unit must be increased by the percentage shown. If the ~~HVAC~~unit is only rated with a full-load metric like COP cooling, then these must be increased by the percentage shown.

Informative note: Some examples of annualized or part-load metrics are: IPLV.SI, $ISCOP_C$, and $SCOP_C$.

BSR/ASHRAE/IES Addendum l
to ANSI/ASHRAE/IES Standard 90.1-2020

Public Review Draft

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

First Public Review (July 2020)
(Draft Shows Proposed Changes to Current Standard)

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BSR/ASHRAE/IES Addendum l to ANSI/ASHRAE Standard 90.1-2019, *Energy Standard for Buildings Except Low-Rise Residential Buildings*
First Public Review Draft

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FOREWORD

This proposed addendum makes several editorial changes to Appendix G requirements related to the area and orientation of the vertical fenestration in the baseline design. In addition, it describes the methodology that must be used by projects where the baseline vertical fenestration area that must be allocated to a certain building face exceeds the gross above grade wall area of that building face.

For example, a grocery store with 500 ft^2 gross above-grade exterior wall area facing East and West, and 4,000 ft^2 gross above-grade exterior wall area facing South and North must have baseline vertical fenestration area of 7% x (4,000 x 2 + 500 x 2) = 630 ft^2 following Table G3.1.1-1. If proposed design has vertical fenestration only on East facing wall, then all vertical fenestration in the baseline must also be allocated to that face. However, it was previously unclear can this requirement be met since the gross exterior above grade wall area of this face (500 ft^2) is less than the baseline vertical fenestration area (630 ft^2). The proposed addendum clarifies that the spill-over fenestration area must be assigned to other faces of the building (West, South and North) in proportion to their area.

This addendum impacts an optional performance path in the standard designed to provide increased flexibility and therefore was not subjected to cost effectiveness analysis.

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

BSR/ASHRAE/IES Addendum l to ANSI/ASHRAE Standard 90.1-2019, *Energy Standard for Buildings Except Low-Rise Residential Buildings*
First Public Review Draft

Addendum l to 90.1-2020

Revise the Standard as follows (IP Units)

Table G3.1 Modeling Requirements for Calculating Proposed and *Baseline Building Performance*

No.	Proposed *Building* Performance	Baseline *Building* Performance
5. *Building Envelope*		
		…….. c. ***Vertical Fenestration Areas*****.** For *building* area types included in Table G3.1.1-1, *vertical fenestration areas* for new *buildings* and additions shall equal the percentage ~~that~~ in Table G3.1.1-1 ~~based on the area~~ multiplied by the gross area of ~~gross~~ *above-grade walls* that separate *conditioned spaces* and *semiheated spaces* from the exterior. Where a *building* has multiple *building* area types, each type shall use the values in the table. ~~The *vertical fenestration* shall be distributed on each face of the *building* in the same proportion as in the *proposed design*.~~ For *building* areas not shown in Table G3.1.1-1, *vertical fenestration areas* for new *buildings* and additions shall equal that in the *proposed design* or 40% of gross *above-grade wall* area, whichever is smaller. The *vertical fenestration* shall be distributed on each face of the *building* in the same proportion as in the *proposed design*~~.~~, ~~and shall be distributed on each face of the *building* in the same proportions in the *proposed design*~~. If this would cause the combined *vertical fenestration* and opaque *door* area on a given face to exceed the *gross above grade wall* area on that face, then the *vertical fenestration area* on other faces shall be increased in proportion to the *gross above grade wall* area of these faces such that the total baseline building *vertical fenestration area* is equal to that calculated following Table G3.1.1-1. The *fenestration area* for an *existing building* shall equal the existing *fenestration area* prior to the proposed work and shall be distributed on each face of the *building* in the same proportions as the *existing building*. ……

Table G3.1.1-1 Baseline *Building Vertical Fenestration* ~~Percentage of Gross *Above-Grade Wall*~~ Area

***Building* Area Types**[a]	**Baseline *Building* Vertical Fenestration Area as a Percentage of *Gross Above-Grade Wall* Area**

Note to ASHRAE Staff, the rest of the table remains the same.

BSR/ASHRAE/IES Addendum m
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FOREWORD

Section 6.4.3.4.1 requires motorized dampers on vents that might be used at the top of elevator shafts and stairwells. The language of the requirement suggests that these vents are used for smoke control. Issues with the current language:

1. Stairwell vents are used in high rise buildings as part of stair pressurization systems usually not to vent smoke but instead to provide more stable stair pressure as stair doors are opened and closed when stair pressurization fans are running. When stair doors are all closed, air is relieved out of this vent due to the pressure in the stair created by the pressurization fan. When a door is opened, the stair pressure drops as air is relieved through the door and not through the vent. Because these changes occur so quickly, using a motorized damper with active pressure control is not practical – the control loop would be too erratic as doors rapidly open and close. So nonmotorized counter-balanced gravity relief dampers are used instead. These would not meet the current wording because they are not motorized nor are they "interlocked" to the fire alarm system. However, it is possible to use both a gravity damper and a 2-position motorized damper in series, the latter damper interlocked to open when the stair pressurization fan is running. But in mild climates and in low rise buildings, there is little benefit to this added damper – it will not be cost effective − so this addendum proposes to include an exception that is almost identical to Exception 1 to Section 6.4.3.4.2 (the parts of that exception about supply air are left out since these vents are for relief air).
2. Elevator shaft vents are no longer required by most model codes, but many machine-room-less elevator manufacturers insist on a vent to help maintain shaft temperatures that may rise due to heat produced by the cab-mounted elevator machinery. Vents are not likely necessary or even useful for temperature control in most applications given heat losses to the conditioned spaces adjacent to the elevator shaft should result in acceptable shaft temperatures, but they are being used nonetheless. Therefore this addendum expands this requirement to include vents that are thermostatically controlled.
3. A minor change – removal of parenthesis around "gravity backdraft dampers" – is made to exception 1 of Section 6.4.3.4.2 to improve the language. It makes no substantive change to the exception. The proposal does not include other language is that section.

In summary, this revision:

1. Adds a requirement for motorized dampers on shaft vents used for temperature control. These were shown to be cost effective for outdoor air and exhaust air openings in Section 6.4.3.4.2.

2. Reduces stringency and costs in mild climates and short buildings by allowing nonmotorized dampers in lieu of motorized dampers, mirroring Exception 1 to Section 6.4.3.4.2.

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

Addendum m to 90.1-2019

Modify the standard as follows (IP and SI Units)

6.4.3.4.1 Stair and Elevator Shaft Vent Dampers

Where s~~S~~tair and elevator shafts have vents, they shall be equipped with motorized dampers that are capable of and configured to *automatically* close during normal *building* operation and are interlocked to only open as required by fire and smoke detection systems, or by *thermostatic control systems*.

Exception to 6.4.3.4.1

Nonmotorized gravity back draft dampers are acceptable in *buildings* less than three stories in height and for *buildings* of any height located in Climate Zones 0, 1, 2, and 3.

6.4.3.4.2 Shutoff Damper Controls

All *outdoor air* intake and exhaust *systems* shall be equipped with motorized dampers that will *automatically* shut when the *systems* or *spaces* served are not in use. *Outdoor air* and exhaust/relief dampers shall be capable of and configured to *automatically* shut off during preoccupancy *building warm-up*, *cooldown*, and *setback*, except when the supply of *outdoor air* reduces *energy* costs or when *outdoor air* must be supplied to meet code requirements.

Exceptions to 6.4.3.4.2

1. Nonmotorized ~~(~~gravity back draft~~)~~ dampers are acceptable for exhaust and relief in *buildings* less than three stories in height and for *outdoor air* intakes and exhaust and relief dampers in *buildings* of any height located in Climate Zones 0, 1, 2, and 3. Nonmotorized dampers for *outdoor air* intakes must be protected from direct exposure to wind.

…

BSR/ASHRAE/IES Addendum n
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FOREWORD

This addendum adds an exception for units that use only series energy recovery for reheating dehumidified air to the requirements in Section 6.5.2.6. For reference, the text of 6.5.2.6 is shown below. The existing text of the section is not part of this addendum.

> **6.5.2.6 Ventilation Air Heating Control**
> Units that provide *ventilation* air to multiple zones and operate in conjunction with zone heating and cooling *systems* shall not use heating or heat recovery to warm supply air above 60°F [16°C] when representative *building* loads or *outdoor air* temperature indicate that the majority of zones require cooling.

The rational for this section is that when the ventilation airstream is reheated when the building needs sensible cooling energy is wasted, even with free condenser reheat. Work done by the ventilation unit compressor is unnecessarily destroyed by the reheat and increase load on the zone unit compressors.

There is a form of reheating, series energy recovery, that reheats using energy pulled from upstream of the cooling coil. A definition was added in the 2019 version of the standard. It is shown here for reference. The definition is not part of this addendum.

> **energy recovery, series**: A three-step process in which the first step is to remove energy from a single airstream without the use of mechanical cooling. In the second step the air stream is mechanically cooled for the purpose of dehumidification. In the third step the energy removed in step one is reintroduced to the air stream.

Any reheating of the airstream with series energy recovery results in an equivalent reduction of the load on the unit's compressor, so the rational for 6.5.2.6 no longer applies. The exception is only allowed in Climate Zones 0A, 1A, 2A, 3A, and 4A because the additional fan power required by series energy recovery is likely to outweigh the energy saving provided in cool or dry climates.

Reviewers should note that the exception is written so that units that combine series energy recovery with other forms of heating are not excluded from using the exception as long as only the series energy recovery is employed when the representative building loads or outdoor air temperature indicate that the majority of zones require cooling. For example, a commercial warm air furnace can be included with the unit as long as it is designed to only be used to provide space heating and not used for dehumidification reheat.

COST EFFECTIVENESS – This addendum would lower the cost of using series energy recovery, since the expensive controls that are currently required can be eliminated. It does not affect the cost of using other forms of reheating during dehumidification.

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Addendum n to 90.1-2019

Modify the standard as follows (IP and SI Units)

6.5.2.6 Ventilation Air Heating Control
Units that provide *ventilation* air to multiple zones and operate in conjunction with zone heating and cooling *systems* shall not use heating or heat recovery to warm supply air above 60°F [16°C] when representative *building* loads or *outdoor air* temperature indicate that the majority of zones require cooling.

Exception to 6.5.2.6: Units that heat the airstream using only *series energy recovery* when representative *building* loads or *outdoor air* temperature indicate that the majority of zones require cooling in Climate Zones 0A, 1A, 2A, 3A, and 4A.

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FOREWORD

This addendum reduces the minimum connected load for daylighting responsive controls (9.4.1.1) for sidelighting (e) and toplighting (f). In 2013, the Standard was amended and established a wattage threshold. If the connected load in the daylighted area is less than this minimum threshold, daylight responsive lighting controls are not required. The primary sidelighted area minimum wattage is 150 W and the primary and secondary sidelighted areas is 300 W. Similarly, the minimum wattage for toplighted spaces is also set at 150 W.

A study was conducted and found that most spaces no longer have connected load in the daylighted zones that would require daylight responsive controls. This reduced load is because of the shift to LEDs. Therefore, an analysis was conducted to determine a wattage threshold that is both cost effective and spaces would meet the wattage threshold.

Costs have shifted since 2013. In 2013, the fluorescent system needed either a dimming ballast or multiple ballasts adding between ($30 - $100 per fixture adder). Dimming drivers are a standard no-cost feature of LED equipment. Other costs have changed between 2013 and now because of the advent of sensors that are integral to the fixtures.

Table 9.6.1 details the allowed lighting power density as well as control requirements for each space. Daylight responsive controls are potentially required for 89 space types (84 spaces for toplighting, 89 spaces for sidelighting, and virtually all overlap). This addendum does not change any of the space types that may or may not be required to consider daylight responsive controls. Note, retail spaces are addressed in Table 9.6.1. This addendum removes exception 3 in 9.4.1.1(e) where retail spaces are mentioned because these spaces are addressed in the table.

***Energy Savings**:*

- *This addendum maintains energy saving requirements established in 2013.*

***Cost Effectiveness**:*

- *This addendum meets the scalar threshold prescribed by Standard 90.1 practices. This addendum assumed a 15-year device life (same life used in the previous analysis) using the standard blended rate.*

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Addendum o to 90.1-2016

Modify the standard as follows (IP and SI Units)

9.4.1.1

e. *Automatic daylight responsive controls for sidelighting:* In any *space* where the combined input power of all *general lighting* completely or partially within the *primary sidelighted* areas is 75 ~~150~~ W or greater, the *general lighting* in the *primary sidelighted* areas shall be controlled by photocontrols.

In any *space* where the combined input power of all *general lighting* completely or partially within the *primary sidelighted area* and *secondary sidelighted area* is 150 ~~300~~ W or greater, the *general lighting* in the *primary sidelighted area* and *secondary sidelighted area* shall be controlled by photocontrols. *General lighting* in the *secondary sidelighted area* shall be controlled independently of the general lighting in the *primary sidelighted area*.

The *control system* shall have the following characteristics:

1. The calibration adjustment *control* shall be located no higher than 11 ft above the finished *floor*. Calibration shall not require the physical presence of a person at the sensor while it is processing.
2. The photocontrol shall reduce electric lighting power in response to available daylight using continuous dimming to 20% or less and off.
3. When an automatic partial OFF control has reduced the lighting power to the unoccupied *set point* in accordance with Section 9.4.1(g), the daylight responsive control shall adjust the electric light in response to available daylight, but it shall not allow the lighting power to be above the unoccupied *set point*.

Exception to 9.4.1.1(e)
The following areas are exempted from Section 9.4.1.1(e):

1. *Primary sidelighted areas* where the top of any existing adjacent structure or natural object is at least twice as high above the windows as its horizontal distance away from the windows.

2. Sidelighted areas where the total glazing area is less than 20 ft^2.

3. ~~Retail *spaces.*~~

~~*4.*~~ *Primary sidelighted areas* adjacent to *vertical fenestration* that have external projections and no *vertical fenestration* above the external projection, where the external projection has a *projection factor* greater than 1.0 for *north-oriented* projections or where the external projection has a *projection factor* greater than 1.5 for all other orientations (see Figure 3.2-6).

f. *Automatic daylight responsive controls for toplighting:* In any *space* where the combined input power for all *general lighting* completely or partially within *daylight area under skylights* and *daylight area under roof monitors* is 75 ~~150~~ W or greater, *general lighting* in the *daylight area* shall be controlled by photocontrols. The *control system* shall have the following characteristics:

1. The calibration adjustment *control* shall be located no higher than 11 ft above the finished *floor*. Calibration shall not require the physical presence of a person at the sensor while it is processing.
2. The photocontrol shall reduce electric lighting power in response to available daylight using continuous dimming to 20% or less and off.
3. When an *automatic* partial OFF control has reduced the lighting power to the unoccupied *set point*

in accordance with Section 9.4.1(g), the daylight responsive control shall adjust the electric light in response to available daylight, but it shall not allow the lighting power to be above the unoccupied *set point*.

4. *General lighting* in overlapping toplighted and sidelighted *daylight areas* shall be controlled together with *general lighting* in the *daylight area under skylights* or *daylight area under roof monitors.*

Exception to 9.4.1.1(f)

The following areas are exempted from Section 9.4.1.1 (f):

1. *Daylight area under skylights* where it is documented that existing adjacent structures or natural objects block direct sunlight for more than 1500 daytime hours per year between 8 a.m. and 4 p.m.
2. *Daylight area under skylights* where the overall *skylight effective aperture* for the *enclosed space* is less than 0.006.
3. In each *space* within *buildings* in Climate Zone 8 where the input power of the *general lighting* within *daylight areas* is less than 200 W.

ASME Record #19-2867 – Revision ASME STS-1-2016 – Ladder Requirements

Underlined additions, Strikethrough deletions

6.3 Fixed Ladders

6.3.1 Application. This section applies to new fixed ladders, permanently attached to the stack or structure, on new or existing steel stacks. Ladders used for steel stack access must conform to ANSI A14.3 (latest edition), Safety Code for Fixed Ladders.

6.3.7 Caged Ladders and Ladder Safety System Length of Climb

A description of the permissible length of climb is provided below for the different ladder configurations presented in Figure 6.3.7-1.

(a) A cage or ladder safety system is not required where the length of climb is 24 ft or less above a ground level, floor or roof. See Figure 6.3.7-1, illustration (a).

(b) A cage or ladder safety system shall be provided where the length of climb is less than 24 ft, but the top of the ladder is at a distance greater than 24 ft above a ground level, floor or roof. See Figure 6.3.7-1, illustration (b).

(c) A ladder safety system shall be provided where a single length of climb is greater than 24 ft. See Figure 6.3.7-1, illustration (c).

(d) Multiple sections of ladders having all single length of climbs not exceeding 24 ft shall be provided with a cage or ladder safety system. See Figure 6.3.7-1, illustration (d). Refer to Par. 6.3.8-3 and 6.3.11-8 for landing requirements when caged ladders are used.

(e) Multiple sections of ladders having at least one single length of climb exceeding 24 ft shall be provided with a ladder safety system in place of a cage. The ladder safety system shall be provided throughout the length of climb. See Figure 6.3.7-1, illustration (d).

(f) Ladders equipped with a ladder safety system shall have rest platforms at maximum intervals of 150 ft. See Figure 6.3.7-1, illustration (e).

(g) When a ladder safety system is combined with a cage the maximum single length of climb shall not exceed 50 ft.

6.3.~~7~~8 Landing [Rest] Platforms. ~~When caged ladders are used to ascend to heights exceeding 50 ft (except as provided in para. 6.3.10), landing platforms shall be spaced at intervals of 50 ft or less. Where installation conditions (even for a short, unbroken length) require that adjacent sections be offset, landing platforms shall be provided at each offset.~~ The requirements for landing [rest] platforms are provided below.

(a) Landing platforms shall be provided at intervals such that the maximum single length of climb provided in para. 6.3.7 is not exceeded.

(b) The total depth of platform shall provide a minimum space of 30 in. from the ladder on the climbing side. The width of the platform shall not be less than 30 in.

(c) Landing platforms for caged ladders shall use additional guarding to prevent fall exposure to the climber on railings adjacent to the side of the ladder and within 4 ft from the center line of the rung, unless otherwise protected. The descending ladder and swing gate placed at the ladder opening shall be so offset to show that it is not reasonably possible for a person to fall past the platform.

(d) The grating and ~~straight~~ structural requirements for landing platforms shall be the same as work platforms (see ~~para.~~ Section 6.4~~.3~~).

6.3.~~8~~9 Access/Egress

6.3.11~~9 Safety~~ Cage~~s~~d Ladders. ~~Except as provided in para. 6.3.10, safety cages shall be provided for all ladders to a maximum unbroken length of 50 ft (see para. 6.3.7).~~ The requirements for a cage ladder are provided below.

ASME Record #19-2867 – Revision ASME STS-1-2016 – Ladder Requirements

Underlined additions, Strikethrough deletions

(a) The top of the ~~C~~cage~~s~~ shall be ~~extend to~~ a minimum of 3 ft.~~in. to~~ 6 in. above the top of the~~a~~ landing unless other acceptable protection is provided.

(b) Cages shall extend down the ladder to a point not less than 7 ft or more than 8 ft above the base of the ladder with the bottom flared not less than 4 in.~~, or the portion of the cage opposite the ladder shall be carried to the base.~~

(c) Cages shall not extend less than 27 in. or more than 30 in. from the centerline of the rungs of the ladder. Cages shall not be less than 27 in. in width. The inside shall be clear of projections. Vertical bars shall be located at maximum spacing of 40 deg around the circumference of the cage. This will give a maximum spacing of approximately 9 ½ in. center-to-center of the vertical bars. There shall be seven vertical bars located inside the hoops.

(d) Hoop bars shall be 2 in. x ¼ in.~~ x 2 in. steel~~ minimum with a maximum spacing of 4 ft on centers.

(e) Vertical bars shall be ~~sized 3/16 in. to~~ 1 ½ in. x $^{3}/_{16}$ in. minimum. Vertical bars shall be welded or bolted together and to the hoops with bolt heads countersunk on the inside.

(f) Where a caged ladder is so located that it could be ascended on the uncased side, a sheet steel baffle shall be erected extending from the ground or floor level to a height of at least 8 ft to prevent access to the uncased side of the ladder.

(g) ~~Climbing protection devices may be used in combination with cages if additional protection is desired.~~When a caged ladder system is combined with a ladder safety device, the cage cannot interfere with the person or the operation of the ladder safety system. A larger cage system may be required.

(h) When a cage is used, each section of ladder shall be horizontally offset from the adjacent sections with sufficient clearances. A landing platform shall be provided for safe access/egress with appropriate clearances to protect the user.

6.3.10 ~~Climbing Protection Devices.~~Ladder Safety System. The design requirements and other considerations when using a Ladder Safety System are provided below.~~ Climbing protection devices may be used on ladders in lieu of cage protection. Landing platforms shall be provided at a maximum of 150 ft intervals in these cases. Climbing protection devices that incorporate friction brakes and sliding attachments shall meet the requirements of ANSI A14.3. Special consideration shall be given to increased possibility of corrosion at the top of stacks resulting from the action of stack gases.~~

(a) A ladder safety system can be used as a fall protection on ladders without the use of a cage barrier. All components of the ladder safety system shall meet the requirements of Section 7 of ANSI A14.3 Standard for Fixed Ladders. Any system used on a steel stack shall meet the design and testing requirements of this Standard.

(b) The installation of a ladder safety system shall be per the manufacturer's installation guidelines.

(c) Individuals using ladder safety systems shall be protected from fall hazards during the process of connecting and disconnecting (transitioning) from the ladder safety system. A suitable anchor point accessible from the ladder shall be used to connect the fall protection system when transitioning.

(d) Special consideration shall be given to increased possibility of corrosion at the top of stacks resulting from exposure to stack exhaust gases.

~~**6.3.11 Short Ladders.** All stack ladders over 10 ft in height shall be caged or have a safety device, unless the ladder extends less than 15 ft above ground.~~

6.3.12 Siderails. The siderails shall be of flat bar stock and not be less than 2½ in. x 3/8 in. If siderails of other cross sections are desired, they shall be at least equal in strength to the above-sized steel bar. For additional load concentrations, attachment of ladder safety systems, or for spacing of supports that exceeds the maximum spacing recommended, the maximum size of siderails shall be increased in accordance with recognized design practices.

ASME Record #19-2867 – Revision ASME STS-1-2016 – Ladder Requirements

Underlined additions, Strikethrough deletions

6.3.13 Rungs. Rungs shall not be less than ¾ in. in diameter. For ladders exposed to unusually corrosive atmospheres, rungs shall be of at least 1 in. diameter solid bars. Spacing of rungs shall not exceed 12 in. center-to-center and shall be spaced uniformly throughout the length of the ladder. For additional load concentrations or attachment of ladder safety systems, and for clear widths exceeding 16 in., the minimum size (cross section) of steps and rungs shall be increased in accordance with recognized design practices. Rungs shall be inserted through holes in the siderails and shall be welded completely around the circumference of the rung to the outside of the siderails.

6.3.14 Ladder Support~~s~~. Ladder supports shall be of steel at least equivalent to the siderails in strength. Ladder supports may be bolted or welded ~~to the siderails but must be welded to the stack shell~~. Ladder supports shall not be more than 10 ft apart based on the size of the siderail recommended. For additional load concentrations, attachment of ladder safety systems, or for variations in size (cross section) of siderails, the spacing of supports shall be adjusted in accordance with recognized design practices. Anchorage of ladders must account for the thermal growth of the stack.

Record #19-2867 THESE ARE PROPOSED ADDITIONS

6.2.6 Definitions: [Added]

Lower level means a surface or area to which a person could fall. Such surfaces or areas include, but are not limited to, ground levels, floors, roofs, equipment, and similar surfaces and structures, or portions thereof. The lower level shall be of sufficient size and strength such that a person cannot fall beyond this surface.

Fall protection means any equipment, device, or system that prevents a person from falling from an elevation or mitigates the effect of such a fall.

Guardrail system means a barrier erected along an unprotected or exposed side, edge, or other area of a walking-working surface to prevent employees from falling to a lower level.

Ladder safety system means an assembly of components whose function is to arrest the fall of a user, including the carrier and its associate attachment elements (brackets, fasteners, etc.), safety sleeve, full body harness and connectors, wherein the carrier is permanently attached to the climbing face of the ladder or immediately adjacent to the structure. A cage is not a ladder safety device.

Opening means a gap or open space in a wall, walking-working surface, or similar surface that is at least 30 inches high and at least 18 inches wide, through which a person can fall to a lower level.

Unprotected sides and edges mean any side or edge of a walking-working surface (except an entrance and other points of access) where there is no wall, or guardrail system to protect a person from falling to a lower level.

Single length of climb means the vertical distance travelled on a ladder from a lower level to the top of a landing or platform in which the person must exit the ladder.

Record #19-2867 THESE ARE PROPOSED ADDITIONS

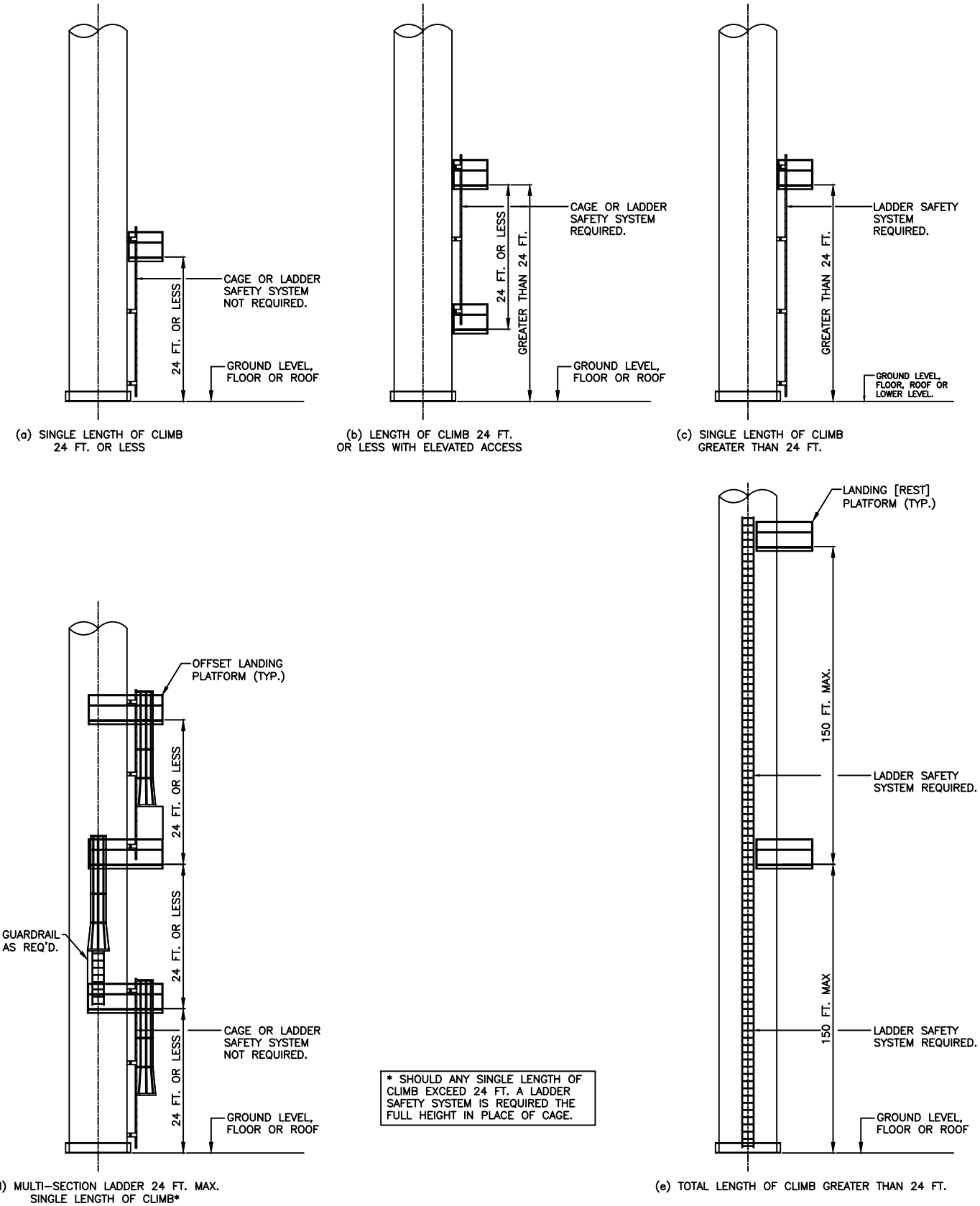

FIGURE 6.3.7-(a-e) LENGTH OF CLIMB

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

NSF/ANSI Standards for Drinking Water Treatment Units

NSF/ANSI 42: Drinking Water Treatment Units – Aesthetic Effects

NSF/ANSI 53: Drinking Water Treatment Units — Health Effects

NSF/ANSI 244: Supplemental Microbiological Water Treatment Systems – Filtration

NSF/ANSI 401: Drinking Water Treatment Units – Emerging Compounds / Incidental Contaminants

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4.2 Materials evaluation

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4.2.3 Exposure

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4.2.3.4 All samples collected shall be composited and analyzed in accordance with Section 4.2.1. For multiple outlet systems, a composite sample shall be collected from all potable water outlets. The unit volume of the system shall be divided by the total number of potable water outlets and this amount shall be collected from each outlet. Systems that are designed to heat or cool the product water shall be connected to an appropriate power source and operated to heat or cool the water. The system shall be operated at the manufacturer's default temperature setting. If adjustable, the system shall be operated at the highest setting available.

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Rationale: Revised to provide guidance for water treatment devices that have been installed in hot & cold dispensers per 2020 DWTU JC meeting discussion (May 13, 2020).

Tracking number 173i67r1 **Revision to NSF/ANSI 173-2019**
 Issue 67 Revision 1 (June 2020)

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

NSF/ANSI Standard
for Dietary Supplements –

Dietary Supplements

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2 Normative references

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

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ABC/AHP/NCNPR, *Botanical Adulterants Prevention Program*[4,5,6]

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5 Product requirements

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5.3 Contaminants

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[4] American Botanical Council. 6200 Manor Rd, Austin, TX 78723. <www.abc.herbalgram.org>

[5] American Herbal Pharmacopoeia ~~(AHP)~~. PO Box 66809, Scotts Valley, CA 95067. <www.herbal-ahp.org>

[6] National Center for Natural Products Research. University of Mississippi, 1558 University Circle, University, MS 38677. <https://pharmacy.olemiss.edu/ncnpr/>

5.3.5 Known adulterants

~~Products shall be evaluated to ensure that they do not contain known adulterants including, but not limited to, the following:~~

- ~~*Eleutherococcus senticosus* shall not contain *Periploca sepium;*~~
- ~~*Plantago lanceolata* shall not contain *Digitalis lanata;* and~~
- ~~*Scutellaria lateriflora* shall not contain *Teucrium chamaedrys.*~~

Products and their components shall have specifications to ensure that they do not contain contaminants that result in an adulterated finished product. Manufacturers shall consult sources of information on known adulterants or official compendia or other authoritative references, to set appropriate specifications.

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Tracking number 173i68r2
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Revision to NSF/ANSI 173-2019
Issue 68 Revision 2 (June 2020)

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NSF/ANSI Standard
for Dietary Supplements –

Dietary Supplements

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2 Normative references

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

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AHPA, *Herbs of Commerce*, 2nd Edition, 2000[1]

AHPA, *Organoleptic Analysis of Herbal Ingredients*[1]

AOAC, *Official Methods of Analysis*, 20th Edition (2016)[2]

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International Code of Botanical Nomenclature (Vienna Code), 2006[3]

ISO/TR 79:2015, *Reference materials – Examples of reference materials for qualitative properties*[4]

NTIS/IEC 17025:1999, *General requirements for the competence of testing and calibration laboratories*[5]

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[1] American Herbal Products Association. 8630 Fenton St., Suite 918, Silver Spring, MD 20910. <www.ahpa.org>

[2] AOAC International. 2275 Research Boulevard, Suite 300, Rockville, MD 20850-3250. <www.aoac.org>

[3] Koeltz Botanical Books. Kapellenbergstraße 75, Oberreifenberg, 61389 Schmitten, Germany. <www.koeltz.com>

[4] International Organization for Standardization. Chemin de Blandonnet 8, Case Postale 401, 1214 Vernier, Geneva, Switzerland. <www.iso.org>

[5] National Technical Information Service. 5301 Shawnee Road, Alexandria VA 22312. <www.ntis.gov>

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

6.1 Identification test methods

6.1.1 Botanicals

The identity of botanical dietary ingredients and components shall be verified with one or more tests or examinations in accordance with the most appropriate analytical method(s) as described in Sections 6.1.1.1 through 6.1.1.4. The selected test(s) or examination(s) shall be performed by an appropriately qualified individual using documented procedures and shall be scientifically valid and fit for the purpose of analysis of the specific sample type being tested. The qualified individual in each case shall identify and record reference(s) and in-house procedures used.

6.1.1.1 ~~Macroscopic and organoleptic / sensory evaluation~~Morphological test methods

~~The identity of botanical dietary ingredients shall be evaluated by an appropriately qualified individual based on the information contained in applicable monographs (AHP, BHP, USP and other compendial references). When no applicable monograph exists, the qualified individual shall confirm identity according to documented procedures and scientific references.~~ Morphological test methods verify conformity to identity specifications of non-extract botanical dietary ingredients and components (whole plants, plant parts, or cut forms) by visual examination of morphological features. Scientifically valid and fit for purpose approaches include comparison to authentic reference materials (see ISO/TR 79:2015), official compendia, or other appropriate references, including botanical or pharmacognosy literature.

6.1.1.2 Microscopic test methods

~~The identity of nonextract botanical ingredients shall be evaluated by an appropriately qualified individual based on the information contained in applicable monographs (AHP, BHP, USP and other compendial references). When no applicable monograph exists, the qualified individual shall confirm identity according to documented procedures and scientific references.~~ Microscopic test methods verify conformity to identity specifications of non-extract botanical dietary ingredients and components (whole plants, plant parts, cut or powdered forms) by examination of microscopic and/or microchemical features. Scientifically valid and fit for purpose approaches include comparison to authentic reference materials (see ISO/TR 79:2015), official compendia, or other appropriate references, such as pharmacognosy literature.

6.1.1.3 Sensory methods

Sensory evaluations[6] verify conformity to identity specifications of botanical dietary ingredients and components in any form by examination of sensory characteristics such as appearance, aroma, and flavor / taste. These methods are highly dependent on individual training, experience, and sensory sensitivity. Guidance on their use, such as AHPA's *Organoleptic Analysis of Herbal Ingredients*, can be consulted. The qualifications of each individual using sensory evaluations shall be documented.

[6] Also known as organoleptic analysis.

6.1.1.~~3~~4 Chemical test methods

~~The identity of dietary ingredients shall be evaluated using methods that are scientifically valid and suitable for the intended purpose. Sources for methods should include AOAC International6, AHP4, USP17, and other method sources. Modification of an existing method to better suit the sample under test is allowable. If no appropriate method exists, development of a new method is allowable. The use of any modified or new method shall require that an assessment be performed which includes evaluation of the method specificity.~~ Chemical test methods verify conformity to identity specifications of botanical dietary ingredients and components (all forms) by examination using analytical methods including but not limited to spectroscopic, spectrometric, chromatographic, and genomic tests. Methods and approaches used shall be scientifically valid and fit for purpose. Performance of all methods used must be verified and that verification documented.

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Tracking #350i50r1 **Revision to NSF/ANSI 350-2019**

Draft 1, Issue 50 (July 2020)

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

NSF/ANSI Standard
For Wastewater Technology –

Onsite Residential and Commercial Water Reuse Treatment Systems

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8 Performance testing and evaluation

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8.1.2.2 Hydraulic loading and schedules

During the minimum 6 mo (26 wk [182 d]) testing and evaluation period, the system shall be subjected to periods of design loading, followed by stress loading, and then additional weeks of design loading. Class R and Class C systems claiming service intervals of greater than 6 mo (26 wk [182 d]) shall be loaded beginning in Week 27 at design loading, according to the time frame and percent rated daily hydraulic capacity as shown below, and shall continue dosing such that the test period equals the prescribed service interval.

Loading of the systems will be based on the following matrix:

~~System design~~	~~Design loading[1]~~					~~Stress tests~~				
	~~First 16 weeks~~	~~First 20 weeks~~	~~Last 4 weeks~~	~~Last 3.5 weeks~~	~~Last 2.5 weeks~~	~~Wash-day surge~~	~~Power / equipment failure~~	~~Vacation~~	~~Water efficiency~~	~~Cleaning solution[2]~~
~~R – bathing only~~	~~X~~	~~—~~	~~—~~	~~X~~	~~—~~	~~—~~	~~X~~	~~X~~	~~X~~	~~—~~
~~R – laundry only~~	~~X~~	~~—~~	~~—~~	~~—~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~—~~
~~R – combined~~	~~X~~	~~—~~	~~—~~	~~—~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~—~~
~~C – bathing only~~	~~—~~	~~X~~	~~X~~	~~—~~	~~—~~	~~—~~	~~X~~	~~X~~	~~—~~	~~—~~
~~C – laundry only~~	~~—~~	~~X~~	~~X~~	~~—~~	~~—~~	~~—~~	~~X~~	~~X~~	~~—~~	~~—~~
~~C – combined~~	~~—~~	~~X~~	~~X~~	~~—~~	~~—~~	~~—~~	~~X~~	~~X~~	~~—~~	~~X~~

~~[1] For 6 mo (26 wk [182 d]) test.~~

~~[2] Addition of cleaning solution during final 4.5 wk (31 d) of test.~~

System Design	Design Loading[1] Weeks		Stress Tests Weeks				
	Before Stress	After Stress	Wash-Day Surge	Power/ Equipment Failure	Vacation	Water Efficiency	Cleaning Solution
R – bathing only	#1-16	#22-26	—	#17	#18-19	#21	—
R – laundry only	#1-15	#24-26	#16-17	#19	#20-21	#23	—
R – combined	#1-15	#24-26	#16-17	#19	#20-21	#23	—
C – bathing only	#1-20	#24-26	—	#21	#22-23	—	—
C – laundry only	#1-20	#24-26	—	#21	#22-23	—	—
C – combined	#1-17	none	—	#18	#19-20	—	#22-26
R&C – bathing only	#1-16	#22-26	—	#17	#18-19	#21	—
R&C – laundry only	#1-15	#24-26	#16-17	#19	#20-21	#23	—
R&C - combined	#1-12	none	#13-14	#16	#17-18	#20	#22-26

[1] For 6 mo (26 wk [182 d]) test.

[2] Unlisted weeks are Design Loading between stress test

BSR/UL 621 Standard for Safety For Ice Cream Makers

1. Proposed Revision to Replace the References to the Standard For Power Conversion Equipment, UL 508C, With Reference to the Standard For Adjustable Speed Electric Power Drive Systems, UL 61800-5-1

RATIONALE

Proposal submitted by: Joe Musso, Underwriter's Laboratories, Inc.

The standard for Power Conversion Equipment, UL 508C, has been harmonized with the IEC standard for Adjustable Speed Electrical Power Drive Systems – Part 5-1: Safety Requirements – Electrical, Thermal, and Energy, IEC 61800-5-1, with the understanding that it would eventually replace UL 508C. UL 61800-5-1 was published on June 8, 2012. UL 508C is no longer being maintained, has not been updated to reflect the latest National Electrical Code revisions, and has been withdrawn.

The proposed changes replace the reference to UL 508C with reference to UL 61800-5-1, as an additional alternative in the related list of component standard references.

PROPOSAL

Table 17.2
Controls – standards for inherent safety

Purpose of the control	Applicable standards
Temperature sensing control	UL 244A; or
	UL 60730-1 and UL 60730-2-9
Pressure controls	UL 244A; or
	UL 508; or
	UL 60730-1 and UL 60730-2-6
Motor and speed controls	UL 508; or
	~~UL 508C~~ UL 61800-5-1; or
	UL 244A; or
	UL 60730-1
Timers	UL 244A; or
	UL 60730-1 and UL 60730-2-7
Liquid level controls	UL 244A; or
	UL 508; or
	UL 60730-1 and UL 60730-2-15
Limit controls	UL 60730-1 and UL 60730-2-6 or UL 60730-2-9

19.2.2 Except as indicated in 19.2.1 (c) and (f), electronically protected motor circuits shall comply with one of the following:

a) The Standard for Tests for Safety-Related Controls Employing Solid-State Devices, UL 991. When the protective electronic circuit is relying upon software as a protective component, it shall comply with the requirements in the Standard for Software in Programmable Components, UL 1998. If software is relied upon to perform a safety function, it shall be considered software Class 1;

b) The Standard for Automatic Electrical Controls – Part 1: General Requirements, UL 60730-1, as well as the Standard for Automatic Electrical Controls – Part 2-9: Particular Requirements for Temperature Sensing Controls, UL 60730-2-9. If software is relied upon to perform a safety function, it shall be considered software Class B; or,

c) The Standard for ~~Power Conversion Equipment, UL 508C~~ Adjustable Speed Electrical Power Drive Systems – Part 5-1: Safety Requirements – Electrical, Thermal, and Energy, UL 61800-5-1 for a power conversion controller incorporating overcurrent protection with the percentage protection set as indicated in Table 19.1.

Exception: Compliance with the above standards is not required for an electronically protected motor circuit if there is no risk of fire, electric shock, or casualty hazard during abnormal testing with the motor electronic circuit rendered ineffective.

19.4.1 Hermetic refrigerant motor-compressors shall be protected in accordance with one or more of the following:

a) The applicable requirements in the Standard for Household and Similar Electrical Appliances, Part 2: Particular Requirements for Motor-Compressors, UL 60335-2-34; or

b) The Standard for ~~Power Conversion Equipment, UL 508C~~ Adjustable Speed Electrical Power Drive Systems – Part 5-1: Safety Requirements – Electrical, Thermal, and Energy, UL 61800-5-1 for power a conversion controller incorporating overcurrent protection with the percentage protection set as indicated in Table 19.1; or

c) A separate overload relay that is responsive to motor compressor current and will trip at not more than 140 percent of the rated load current of the motor compressor; or

d) An overcurrent device, such as a fuse or a circuit breaker, responsive to motor current, and rated at no more than 125 percent of the motor-compressor rated-load current of the motor-compressor; or

e) Electronic protection that complies with 19.2.2 and 19.2.3.

BSR/UL 1082, Standard for Safety for Household Electric Coffee Makers and Brewing-Type Appliances

1. Circuit Interrupters with Fire Extinguishing Agent for Use In Electrical Appliances

18.1 If an appliance is provided with a thermal cutoff or a circuit interrupter with fire extinguishing agent, it shall be secured in place and be located so that it is accessible for replacement without damaging connections or internal wiring. See 54.6.

18.2 If an appliance is provided with a thermal cutoff or a circuit interrupter with fire extinguishing agent, it shall be capable of opening the circuit in the intended manner without causing the short-circuiting of live parts and without causing live parts to become grounded to the enclosure when the appliance is connected to a circuit of voltage in accordance with 33.1.11, and operated in a normal position to cause abnormal heating in accordance with 47.4.

22A.4 A circuit interrupter with fire extinguishing agent shall comply with the Standard for Circuit Interrupters with Fire Extinguishing Agent for Use in Electrical Appliances and Components, UL 60692.

22C.3.1 A limiting-type device shall consist of one of the following:

a) A single thermal cutoff with an established TH-100 rating (which includes having a Conductive Heat Aging Test (CHAT) rating) as described in the Standard for Thermal-Links - Requirements and Application Guide, UL 60691, and as tested per 33.2.5.8 and 33.2.5.10;

b) Two thermal cutoffs such that one of the following conditions is met:

1) Each of the thermal cutoffs has a Conductive Heat Aging Test (CHAT) rating as described in UL 60691; or

2) One thermal cutoff has a Conductive Heat Aging Test (CHAT) rating:

i) and temperature on the stationary contact lead of the thermal cutoff without a CHAT rating is greater than or equal to the temperature on its case, as tested per 33.2.5.10; or

ii) the CHAT rated thermal cutoff has a set-point temperature equal to or higher than the thermal cutoff without a CHAT rating; or

3) The temperature on the stationary contact lead of both thermal cutoffs without a CHAT rating is greater than or equal to the temperature on their respective cases as tested per 33.2.5.10.

c) A single-operation thermostat; ~~or~~

d) A manual-reset thermostat that is inaccessible to the user without the use of tools~~.~~; or

e) A circuit interrupter with fire extinguishing agent such that one of the following conditions is met:

1) The circuit interrupter with fire extinguishing agent has a Conductive Heat Aging Test (CHAT) rating:

i) and temperature on the stationary contact lead of the circuit interrupter with fire extinguishing agent is greater than or equal to the temperature on its case, as tested per 33.2.5.10; or

ii) the CHAT rated thermal cutoff has a set-point temperature equal to or higher than the circuit interrupter with fire extinguishing agent; or

2) The temperature on the stationary contact lead of both devices without a CHAT rating is greater than or equal to the temperature on their respective cases as tested per 33.2.5.10.

UL 1389, Standard for Safety for Plant Oil Extraction Equipment for Installation and Use in Ordinary (Unclassified) Locations and Hazardous (Classified) Locations

1. UL 1389 Clarifications

1.2 Plant oil extraction equipment includes:

a) Preparatory equipment, for preparing the plant material for extraction of the oil, such as trimming, deseeding, and drying/curing;

b) Extractors, for removing the oil from the plant material by the use of ~~Liquefied Petroleum Gas (LPG),~~ butane, ~~propane solvents,~~ ethanol ~~(food grade)~~, n-hexane, liquefied petroleum gas (LPG), ~~or~~ pentane or propane (flammable solvents) and Carbon Dioxide (CO2) (non-flammable solvent);

c) Extraction booths or pods, for enclosing/protecting plant oil extraction equipment; and

d) Post-processing equipment, for finalizing the plant oil extraction process such as vacuum ovens, rotary evaporators, and solvent recovery pumps.

1.8 This standard does not cover the extraction or processing of cannabis oil in dwelling units or in basements.

6 Normative References

CSA Group

CSA C22.2 No. 286 *Industrial Control Panels and Assemblies*

CSA C22.2 No. 60079 series (all parts) *Explosive Atmospheres*, specifically including:

• CSA C22.2 No. 60079-0 *Explosive Atmospheres – Part 0: Equipment – General Requirements*
• CSA C22.2 No. 60079-7 *Explosive Atmospheres – Part 7: Equipment Protection by Increased Safety "e"*
• CSA C22.2 No. 60079-11 *Explosive Atmospheres – Part 11: Equipment Protection by Intrinsic Safety "i"*

Underwriters Laboratories (UL)

UL 969 *Marking and Labeling Systems*

19.1.3 In addition to the requirements of this standard, electrical parts that comprise the overall extractor shall comply with the applicable Division and Zone system hazardous locations standards in accordance with the CE Code and NEC, based on the intended installation. The following are some examples of Division and Zone system hazardous locations standards for the electrical parts of the overall extractor:

a) – f) (remain unchanged)

g) Industrial Control Panels (Relating to hazardous locations):

1) For CE Code-based Division installations: CSA C22.2 No. 157 or CSA C22.2 No. 60079-11 and 60079-0; and

2) For NEC-based Division installations: UL 698A.

h) – k) (remain unchanged)

20.1 Materials in contact with the solvents anticipated by these requirements, shall be resistant to the action of the solvents if degradation of the material will result in leakage of the solvent or if it will impair the function of the device~~, refer to Section 34~~.

24.2.4 A lid or a cover ~~that may cause injury upon~~ shall have a means to prevent unintentional closing. ~~shall have one or more of the following:~~

~~a) Counterweighted;~~

~~b) Spring-loaded;~~

~~c) Provided with an automatic latch to retain it in the open or closed position as needed; or~~

~~d) The action members of the latches shall be enclosed or guarded.~~

30.7 The temperature of any surface of an extractor for use in a hazardous location that might be exposed to the explosive atmosphere, for both electrical and non-electrical parts of the overall extractor, shall be considered. The maximum measured temperature on any such surface shall not exceed the auto ignition temperature of the marked flammable solvents as noted below:

a) Butane – 288°C (Temperature classification – T2).

b) Ethanol – 363°C (Temperature classification – T1).

c) n-Hexane – 225°C (Temperature classification – T2 or T2C).

~~c)~~ d) LP Gas – 405°C (Temperature classification – T1).

~~d)~~ e) Pentane – 243°C (Temperature classification – T2 or T2B).

~~e)~~ f) Propane – 450°C (Temperature classification – T1).

Table 34.1
Test liquids for synthetic rubber materials

Liquid in contact with part	Test liquid
LP-Gas, Butane, n-Hexane	n-Hexane
CO2	CO2
Ethanol	Ethanol
Pentane	Pentane

48.1 The booths covered under this ~~category~~ standard (including modified shipping containers, or "pods") incorporate the following attributes:

a) The extraction equipment enclosed by these booths use:

1) Where the area within the booth is an ordinary (unclassified) location, nonflammable materials to extract the oil such as carbon dioxide (CO2), or

2) ~~only use~~ Where the area within the booth is a hazardous (classified) location, flammable solvents such as butane, ethanol, n-hexane, LPG, pentane or propane solvents ~~(flammable solvents)~~;

b) These booths are provided with integral electrical equipment and factory-provided interconnections for electrical equipment that are suitable for the area classification;

c) This integral equipment may include control panels, power distribution, illumination, ventilation, vapor detection/alarming equipment, and fire extinguishing equipment, as applicable; and

d) Suitable ingress and egress are provided for authorized personnel to operate, service and maintain the intended extraction equipment enclosed by the booths.

2. Area Classification

7.5 Plant oil extraction equipment using flammable solvents that has its own potential source of release, either under normal or abnormal conditions, shall be provided with area classification documentation addressing the potential source of release. This classification documentation shall be in accordance with NFPA 497 ~~or NFPA 499, as applicable~~.

3. Addition of Referenced UL 508A

7.6 Control panels which form a portion of machines intended for General Use shall, either alone or in conjunction with the machinery, comply with the following requirements as applicable: ~~for General Use Panels in the Standard for Industrial Control Panels, UL 508A.~~

a) For CE Code-based installations: CSA-C22.2 No. 14 or CSA-C22.2 No. 286.

b) For NEC-based installations: UL 508A.

7. Addition of New Sections 18A – 18H

18A.1 Provisions shall be made for securely mounting components to a supporting surface. A bolt, screw, or other ~~part~~ fastener used to secure a part of a component shall not also be used to secure the component or another component to the supporting surface.

10. Revisions to Section 28, Mechanical Strength Tests for Sight Glass

28.2 A sample shall be tested as it is normally mounted on the system. A push force of 110 N shall be gradually applied and maintained for 1 min by means of a 12.7 mm (1/2 in) diameter steel hemisphere to the external surface most likely to impair the operation of the device, or create leakage. If the sight glass is small enough that the 12.7 mm (1/2 in) diameter steel sphere cannot contact the visible signaling device, the test is not conducted.

11. Revisions to Section 46, Permanence of Marking

46.1B For markings required by this section, a~~A~~ pressure-sensitive label, or a label secured by cement or adhesive, shall comply with the applicable requirements for indoor- or indoor- and outdoor-use labels specified in the following, as applicable:

a) For CE Code-based installations: CSA C22.2 No. 0.15.

b) for NEC-based installations ~~Standard for Marking and Labeling Systems,~~ UL 969, as appropriate to the installation location of the device, and, when required, the exposure conditioning described for Class I, Division 1 applications. ~~in the Exposure Conditions for Common Agents table, in the Standard for Marking and Labeling Systems, UL 969 or in 19.3 below.~~

~~46.1C When a label is exposed to unusual conditions in service, which are not covered in the Exposure Conditions for Common Agents table, in the Standard for Marking and Labeling Systems, UL 969, three samples of the label applied to test surfaces as in the intended application are to be conditioned for 24 hours in a controlled atmosphere maintained at 23 ±2°C (73 ±4°F) with a 50 ±5 percent relative humidity. The samples are then to be immersed for 48 hours in a solution representative of service use, maintained at the temperature the solution attains in service, but not less than 23 ±2°C (73 ±4°F).~~

~~46.1D After being subjected to the exposure test described in 46.1C, a pressure-sensitive label, or a label secured by cement or adhesive is determined to be permanent when it meets the requirements of the permanence and legibility tests described in the Permanence and Legibility table in the Standard for Marking and Labeling Systems, UL 969.~~

12. Revisions to Section 47, Manual

47.1A The instructions mentioned in 47.1 shall be:

a) In separate manuals, or

b) Combined in one or more manuals when the instructions pertaining to a risk of fire, electric shock, or injury to persons are separated in format and emphasized to distinguish them from the rest of the text; and

c) Available in the following formats:

1) Hard/printed copy, or

2) Electronic files accessible via the manufacturer's website only (full public access with no user restrictions) if in compliance with the markings required by 47.1B. ~~the internet link is identified in 47.1B(b)(i).~~

47.1B (remains unchanged)

47.1C Alternatively, the reference to the document number and revision level on the marking can be excluded if the location of the electronic documentation marked on the apparatus (e.g. URL, QRcode) involves an electronic search feature that makes the required documentation available by entering specific information that is required to be marked on the apparatus, such as any combination of model number, part number, serial number, date code, or other unique identifier.

~~47.1C~~ 47.1D Where a QRcode is used to provide the required instructional material, and the QRcode contains all the required instructional material (as opposed to merely referencing a URL that contains the required instructional material), a document number and revision level need not be indicated.

~~47.1D~~ 47.1E Where some or all of the required instructional material is provided by electronic media, the required instructional material shall be available in printed format upon request of the user.

NOTE 1: Where required instructional material, especially drawings, is provided in an electronic documentation format, consideration should be given by the manufacturer to its viewability and print capability by the user.

NOTE 2: Electronic medium is permitted for required instructions as part of standards supported by the NEC and CE Code.

BSR/UL 1576, Standard for Safety for Flashlights and Lanterns

1. Proposed Revisions To The Scope And Addition Of Photobiological Safety Assessment To Clarify Requirements With Ultraviolet (UV) Radiation Sources

1.4 These requirements do not cover:

a) Stand-alone battery chargers;

b) Cord and plug connected work lights and hand lights without batteries that are within the scope of UL 153;

c) Cord and plug connected portable luminaires other than work lights and hand lights, with or without batteries, that are within the scope of UL 153;

d) Aquarium lighting that is within the scope of UL 1018; ~~and~~

e) Emergency lighting that is within the scope of UL 925; and

f) Products with ultraviolet (UV) radiation sources greater than "Exempt Group" as specified in IEC 62471, for purposes of identifying, examining and investigating materials intended for commercial applications that are within the scope of UL 61010-1.

~~1.7 A product that generates ultraviolet (UV) radiation is intended for use in accordance with the Federal Radiation Control for Health and Safety Act of 1968, the Federal Food, Drug and Cosmetic Act, and the Code of Federal Regulations, Part 1040, 21 CFR, Chapter 1, Subchapter J, Radiological Health.~~

3 References

UL Standards

UL 61010-1
Electrical Equipment For Measurement, Control, and Laboratory Use; Part 1: General Requirements

18 Radiation ~~Test~~

18.1 A product that produces radiation, such as ~~X-rays, microwaves, ultrasonic sound~~, visible, ~~laser,~~ ultraviolet, or infrared light created by optical sources such as lasers, LEDs, or lamps, shall be investigated with respect to the effects of the radiation on users and service personnel.

18.6 For ~~light derived by~~ sources other than those specified in 18.5 the product shall be evaluated in accordance with 18A. ~~by the methods specified in IEC 62471 and the markings used on the product shall be determined with consideration of the guidance information in Labelling, Section 5.4 of IEC/TR 62471-2.~~

~~18.7 For the emission of other forms of radiation such as x-rays, microwaves and ultrasonic sound, the product shall comply with the applicable requirements specified in UL 61010-1.~~

18A Photobiological Safety Assessment

18A.1 An ultraviolet (UV) radiation source shall not pose a risk of optical injury to persons due to exposure necessary for the normal operation, maintenance and servicing of the equipment.

18A.2 In order to determine compliance, a UV radiation source shall be subjected to a photobiological safety assessment across the wavelength range from 200 nm through 400 nm in accordance with the requirements in IEC 62471. The assessment is to determine the level of optical radiation emitted, if any, within the spectral band. The measurement distance from the radiation source to the measuring

instrument shall be set at 20 cm (7.9 in) as recommended in IEC 62471 for a non-GLS (general lighting services) light source for ultraviolet hazard from the spectral band 200 nm to 400 nm;

18A.3 The assigned IEC 62471 risk group classification for the product resulting from the photobiological safety assessment shall not be greater than "Exempt Group" as specified in IEC 62471.

Note: "Exempt Group" is considered to be a lamp/LED that does not pose any photobiological hazard.

2. Proposed Revisions To The Mechanical Strength Test To Clarify The Conditioning Time For Products Stored In Unheated Spaces Prior To The Drop Or Impact Test

15.2 The product with any batteries connected is to be dropped in accordance with items (a), (b), or (c) at room ambient. A product intended for storage in unheated spaces shall additionally be dropped or impacted after conditioning at 0 ±1° C (32 ±1.8°) and maintained at this temperature for 3 hours. A solar powered product as specified in 6.6 shall be cooled to a temperature of minus 35.0 ±2.0°C (minus 31.0 ±3.6°F) and maintained at this temperature for 3 hours. While the product is still at the conditioned temperature, the product shall be subjected to the impact specified in (a) - (b), as applicable. For the test, the product shall be equipped and configured as specified in the instruction manual or as intended during normal use. After the test, compliance with this standard shall not be impaired. Batteries shall be fully charged prior to the test.

a) A product that is hand-held, body supported, or having a supporting device as specified in 9.6, with any detachable battery pack attached, is to withstand being dropped three times in total on a concrete surface from a height of 1 m (3.3 ft). For these three drops, the sample is to be tested in the three most unfavorable positions, the lowest point of the product being 1 m (3.3 ft) above the concrete surface.

b) A counter or bench supported product with the battery pack attached is to withstand three impacts of a 50 ±2 mm (2.0 ±0.08 in) steel ball dropped with a minimum impact energy of 1.02 J (0.75 ft-lbf). The point of impact is to be varied without striking the same location more than once in an effort to produce the most adverse results.

c) A floor supported product with the battery pack attached shall withstand three impacts of a 50 ±2 mm (2.0 ±0.08 in) steel ball dropped with a minimum impact energy of 6.8 J (5 ft-lbf). The point of impact shall be varied without striking the same location more than once in an effort to produce the most adverse results.

3. Proposed Revisions To Correct The Intent Of The Marking Location On Permanently Connected Products

27.1 General

27.1.1 A product shall be plainly and permanently marked where it will be readily visible ~~after installation, in the case of~~. For a permanently connected product, the marking shall be readily visible after installation with:

a) The manufacturer's name, trade name, or trademark, or other descriptive marking by which the organization responsible for the product may be identified;

b) A distinctive catalog number or the equivalent; and

c) The date or other dating period of manufacture not exceeding any three consecutive months.

Exception No. 1: The manufacturer's identification may be in a traceable code if the product is identified by the brand or trademark owned by a private labeler.

Exception No. 2: The date of manufacture may be abbreviated; or may be in a nationally accepted conventional code or in a code affirmed by the manufacturer, provided that the code does not:

a) Repeat in less than 10 years; and

b) Require reference to the production records of the manufacturer to determine when the product was manufactured.

4. Proposed Revisions To Correct The Indent Instructions For The Water Spray Test

31 Construction And Performance

31.1 Battery powered flashlights and lanterns, shall comply with the requirements specified in UL 2595, as applicable, and with the conditions and specifications as specified in Indent Instructions, Annex D of UL 2595 and as specified in items (a) - (i).

a) Indent A - The requirements in Part 2 of this standard do not apply in their entirety, except as amended below:

1) The portions of Water Spray Test, Section 67, that require the outcome of conditioning or testing to comply with dielectric voltage withstand and/or leakage current, and the wetting of any electrical components, shall instead consider increased risk of fire, shock, or injury to persons for those areas where the voltages are in excess of the hazardous voltage ~~shock~~. (See Protection Against Electric Shock, Section 8 of UL 2595. ~~In the application of Protection Against Electric Shock, Section 8, a part that is wetted during the testing specified in Water Spray Test, Section 67 of this standard, is considered an accessible part.~~

2) The test specified in Mechanical Strength Test, Section 15 applies to the product, but the acceptance/compliance criteria of the Mechanical Strength Test, Section 15 of UL 2595 is also to be applied.