ANSI STANDARDS ACTION

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American National Standards

Call for comment on proposals listed

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

Ordering Instructions for "Call-for-Comment" Listings

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

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

* Standard for consumer products

ISSN 0038-9633

Comment Deadline: April 24, 2016

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

Addenda

BSR/ASHRAE/IES Addendum bd to Standard 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

This proposal requires monitoring chiller-plant efficiency in large-electric-motor-driven chilled water plants for plants with a peak chilled water output based upon equipment type and climate zone, and is designed to help commissioning and ongoing operations of the aforementioned chilled water plants.

Click here to view these changes in full

Send comments (with 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.)

Addenda

BSR/ASHRAE/IES Addendum do to Standard 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

Currently, lighting in dwelling units in high-rise buildings is exempt in both ASHRAE 90.1 and 90.2. The proposed requirements are similar to those in Energy Star for high-efficacy lighting. For this 90.1 proposal, they are simplified to apply to anticipated dwelling units in commercial buildings, support compliance, and are conservative to allow design flexibility. In general, the efficacy requirements will eliminate the use of INC/Halogen sources as well as less efficacious CFL and LED products.

Click here to view these changes in full

Send comments (with 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.)

Addenda

BSR/ASHRAE/IES Addendum dw to Standard 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

The efficiency for the motors used in hydraulic elevators is substantially different than the motor efficiencies used for traction elevators. In addition, the hydraulic elevator motors are usually not a type covered by the standard. This change to Addendum dw adds efficiencies for hydraulic elevator motors.

Click here to view these changes in full

Send comments (with 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.)

Addenda

BSR/ASHRAE/IES Addendum dz to Standard 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

The purpose of this addendum is to provide clarifications only that are related to changes made as a result of addendum cp. This addendum does not change the criteria of the standard. The base assembly for metal building walls is clarified and reference to all insulation methods recognized in Section A3.2 rather than indicating one insulation methodology as the “base assembly”, which is not intended.

Click here to view these changes in full

Send comments (with 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.)

Addenda

BSR/ASHRAE/IES Addendum ea to Standard 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

This revision to Standard 90.1 generally addresses minor inconsistencies in terminology in sections 5 thru 11 that have developed over time. Terminology is coordinated with the definitions in Section 3.

Click here to view these changes in full

Send comments (with 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.)

Addenda

BSR/ASHRAE/IES Addendum eb to Standard 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

This revision to Standard 90.1 generally addresses minor inconsistencies in terminology in Appendices C and G that have developed over time. Terminology is coordinated with the definitions in Section 3.

Click here to view these changes in full

Send comments (with 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.)

Addenda

BSR/ASHRAE/IES Addendum ec to Standard 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

When preparing documentation to explain the derivation of each number in Table 4.2.1.1 (Building Performance Factors), a single number was found to be inconsistent with the derived values.

Click here to view these changes in full

Send comments (with 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.)

Addenda

BSR/ASHRAE/IES Addendum ed to Standard 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

The HVAC System Types that apply to Section G.3.1.3.18 Dehumidification did not include some logical system types. This addendum adds HVAC System Types 11, 12, and 13 to that section.

Click here to view these changes in full

Send comments (with 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.)

Addenda

BSR/ASHRAE/IES Addendum ef to Standard 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

This addendum proposes changes to Table G3.1.1-2, based on updated 2012 CBECS information for baseline service water heating systems.

Click here to view these changes in full

Send comments (with 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.)

Addenda

BSR/ASHRAE/IES Addendum eg to Standard 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

The sentence that is being removed is no longer necessary since the most common building energy modeling programs are able to simulate integrated water economizers.

Click here to view these changes in full

Send comments (with 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.)

Addenda

BSR/ASHRAE/IES Addendum ei to Standard 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

Currently, the historic building exemption can allow for exempting the entire building including parts that may be new additions or not part of the historic element. This proposal will tighten that to ensure that non-historic elements or building parts will have to meet the applicable requirements.

Click here to view these changes in full

Send comments (with 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.)

Addenda

BSR/ASHRAE/IES Addendum ej to Standard 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

This addendum modifies the text to use correct terminology for LED drivers.

Click here to view these changes in full

Send comments (with 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.)

Addenda

BSR/ASHRAE/IES Addendum ek to Standard 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

This addendum establishes baseline commercial refrigeration limits for Appendix G, which are based on the California Energy Commission Appliance Efficiency Regulations 2005.

Click here to view these changes in full

Send comments (with 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.)

Addenda

BSR/ASHRAE/IES Addendum el to Standard 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

This proposal adds a mandatory requirement for air-cooled direct expansion cooling units with economizers to have basic fault detection and diagnostic (FDD) systems, and were developed in consultation with unitary system and economizer control manufacturers.

Click here to view these changes in full

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

HPVA (Hardwood Plywood & Veneer Association)

Revision

BSR/HPVA LTDD 1.0-2015, Standard for Due Diligence in Procuring/Sourcing Legal Timber (revision of ANSI/HPVA LTDD 1.0-2015)

This proposed revision is part of the current ANS, but was not specifically submitted as a revision in a prior public review. The Standard is intended to assist companies in establishing a quality management system to significantly reduce the risk of illegal timber and wood products entering their supply chain and to demonstrate the level of due diligence in controlling associated risk.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Brian Sause (bsause@hpva.org)

NSF (NSF International)

Revision

BSR/NSF 49-201x (i90r1), Biosafety Cabinetry: Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-2014)

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

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Allan Rose, (734) 827 -3817, arose@nsf.org

NSF (NSF International)

Revision

BSR/NSF 173-201x (i60r1), Dietary Supplements (revision of ANSI/NSF 173 -2013)

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 the 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.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Rachel Brooker, (734) 827 -6866, rbrooker@nsf.org

UL (Underwriters Laboratories, Inc.)

New National Adoption

BSR/UL 60335-2-3-201x, Standard for Household and Similar Electrical Appliances - Part 2: Particular Requirements for Electric Irons (national adoption of IEC 60335-2-3 with modifications and revision of ANSI/UL 60335 -2-3-2013)

(1) Electric-iron cord flexing; (2) Allowable cord types for stands of cordless irons.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Amy Walker, (847) 664 -2023, Amy.K.Walker@ul.com

UL (Underwriters Laboratories, Inc.)

Revision

BSR/UL 746A-201x, Standard for Safety for Polymeric Materials - Short Term Property Evaluations (revision of ANSI/UL 746A-2016)

This proposal for UL 746A covers the enhancement of conformance criteria in polymer variations program in section 9.9 of the standard.

Click here to view these changes in full

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

UL (Underwriters Laboratories, Inc.)

Revision

BSR/UL 746E-201x, Standard for Safety for Polymeric Materials - Industrial Laminates, Filament Wound Tubing, Vulcanized Fibre, and Materials Used In Printed-Wiring Boards (revision of ANSI/UL 746E-2013c)

This proposal for UL 746E covers the addition of ANSI grade definition of Type CEM-3 with Filler to table 7.4 of the standard.

Click here to view these changes in full

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

UL (Underwriters Laboratories, Inc.)

Revision

BSR/UL 1004-1-201X, Standard for Safety for Rotating Electrical Machines - General Requirements (Proposal dated 3-25-16) (revision of ANSI/UL 1004 -1-2015)

The following is proposed: (1) Addition of requirements for a generator grounding method, (2) Revision to narrow the scope of UL 1004-1 to motors rated 1,000 V or less, and (3) Revision to temperature calculation method for high ambients.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Jonette Herman, (919) 549 -1479, Jonette.A.Herman@ul.com

UL (Underwriters Laboratories, Inc.)

Revision

BSR/UL 2580-201x, Standard for Batteries for Use In Electric Vehicles (revision of ANSI/UL 2580-2013)

(2) Clarification of the Overcharge Test and revision of the Isolation Test and External Fire Exposure Test; (3) Revision of samples numbers for cell testing in 16.2 and 16.3.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Megan Van Heirseele, (847) 664-2881, Megan.M.VanHeirseele@ul.com

Comment Deadline: May 9, 2016

ABYC (American Boat and Yacht Council)

New Standard

BSR/ABYC P-14-201x, Mechanical Propulsion Control Systems (new standard)

This standard is a guide for the design, construction, testing, and installation of systems for mechanical remote control of the forward and reverse thrust, speed, and trim/tilt of propulsion machinery on boats.

Single copy price: $50.00

Obtain an electronic copy from: www.abycinc.org

Order from: www.abycinc.org

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

ABYC (American Boat and Yacht Council)

Revision

BSR/ABYC H-28-201x, Inflatable Boats (revision of ANSI/ABYC H-28-2010)

This standard is a guide for the design, construction, material and testing of inflatable boats, including RIBS.

Single copy price: $50.00

Obtain an electronic copy from: www.abycinc.org

Order from: www.abycinc.org

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

ASABE (American Society of Agricultural and Biological Engineers)

New National Adoption

BSR/ASABE AD5675-2008 MONYEAR-201x, Agricultural tractors and machinery - General purpose quick-action hydraulic couplers (national adoption with modifications of ISO 5675:2008)

Specifies the essential interface dimensions, as defined in ISO 7241-1, and the operating requirements for hydraulic couplers employed to transmit hydraulic power from agricultural tractors to agricultural machinery. It is applicable to couplers used in hydraulic lines other than those used for braking circuits.

Single copy price: $58.00

Obtain an electronic copy from: walsh@asabe.org

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

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

ASABE (American Society of Agricultural and Biological Engineers)

Revision

BSR/ASAE S396.3 MONYEAR, Combine Capacity and Performance Test Procedure (revision of ANSI/ASAE S396.2 APR1990 (R2013))

Intended to provide the basic requirements for a uniform procedure to measure and report combine capacity, as defined in ANSI/ASAE S343, Terminology for Combines and Grain Harvesting. Because crop conditions are variable and uncontrollable, the procedure provides only for the comparative testing of one combine, or one combine configuration, relative to another, in a particular crop condition. It is also intended to provide the basic requirements for evaluating the uniformity of material spread from harvest residue spreading or chopping devices. Harvest residue spreaders may be evaluated for spreading either straw or chaff separately or as a system for spreading together.

Single copy price: $58.00

Obtain an electronic copy from: vangilder@asabe.org

Order from: Carla VanGilder, (269) 932-7015, vangilder@asabe.org

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

ASC X9 (Accredited Standards Committee X9, Incorporated)

Revision

BSR X9.119-1-201x, Retail Financial Services - Requirements for Protection of Sensitive Payment Card Data - Part 1: Using Encryption Methods (revision of ANSI X9.119-1-2013)

Theft of sensitive card data during a retail payment transaction is increasingly becoming a major source of financial fraud. Besides an optional encrypted PIN, this data includes magnetic stripe track 2 data: PAN, expiration date, card verification value, and issuer private data. While thefts of this data at all segments of the transaction processing system have been reported, the most vulnerable segments are between the point of transaction device capturing the magnetic stripe data and the processing systems at the acquirer. This document would standardize the security requirements and implementation for a method for protecting this sensitive card data over these segments. Several implementations exist to address this situation. This document would provide guidance for evaluating these implementations.

Single copy price: $100.00

Obtain an electronic copy from: janet.busch@x9.org

Order from: Janet Busch, (410) 267-7707, janet.busch@x9.org

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

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

New Standard

BSR/ASHRAE Standard 209P-201x, Energy Simulation Aided Design for Buildings except Low-Rise Residential Buildings (new standard)

The purpose of ASHRAE Standard 209P is to define minimum requirements for providing energy design assistance using building energy simulation and analysis.

Single copy price: $35.00

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

Order from: standards.section@ashrae.org

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

AWEA (American Wind Energy Association)

New National Adoption

BSR/AWEA 61400-12-1-201x, Power performance measurements of electricity producing wind turbines (identical national adoption of IEC 61400-12-1 (2005))

This standard is the expedited national adoption of the IEC 61400-12-1 (2005)

Single copy price: Free

Obtain an electronic copy from: standards@awea.org

Order from: Michele Mihelic, (202) 249-7344, mmihelic@awea.org

Send comments (with copy to psa@ansi.org) to: Michele Mihelic, (202) 249-7344, mmihelic@awea.org

AWEA (American Wind Energy Association)

New Standard

BSR/AWEA SWT-1-201x, AWEA Small Wind Turbine Standard (new standard)

The standard will provide standardized performance ratings and ensure that small wind turbines that meet the standard have been engineered to meet carefully considered requirements for safety and operation. The standard will reference and specify modifications to IEC 61400-2, IEC 61400-12-1, and IEC 61400-11. The standard will apply to electricity-producing wind-turbine systems having a rotor swept area of 200 m2 or less.

Single copy price: Free

Obtain an electronic copy from: Standards@awea.org

Order from: Michele Mihelic, (202) 249-7344, mmihelic@awea.org

Send comments (with copy to psa@ansi.org) to: Michele Mihelic, (202) 249 -7344, mmihelic@awea.org

AWS (American Welding Society)

Revision

BSR/AWS C4.2/C4.2M-201x, Recommended Practices for Safe Oxyfuel Gas Cutting Torch Operation (revision of ANSI/AWS C4.2/C4.2M-2009)

This document contains the procedures to be used in conjunction with oxyfuel gas cutting equipment and the latest safety requirements. Complete lists of equipment are available from individual manufacturers.

Single copy price: $38.00

Obtain an electronic copy from: anaumann@aws.org

Order from: Andre Naumann, (305) 443-9353, anaumann@aws.org

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

AWS (American Welding Society)

Revision

BSR/AWS C4.3/C4.3M-201x, Recommended Practices for Safe Oxyfuel Gas Heating Torch Operation (revision of ANSI/AWS C4.3/C4.3M-2007)

This document contains the procedures to be used in conjunction with oxyfuel gas heating equipment and the latest safety requirements. Complete lists of equipment are available from individual manufacturers.

Single copy price: $32.00

Obtain an electronic copy from: anaumann@aws.org

Order from: Andre Naumann, (305) 443-9353, anaumann@aws.org

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

CAPA (Certified Automotive Parts Association)

Reaffirmation

BSR/CAPA 201-001-2011 (R201x), Standard Test Method for Full Part Dimensional Stability Testing of Automotive Replacement Bumper Covers (reaffirmation of ANSI/CAPA 201-001-2011)

Covers the procedure for testing the dimensional stability of replacement bumper covers (full parts) when exposed to cold and heat, and identifies the criteria for acceptance.

Single copy price: Free

Obtain an electronic copy from: debbie@CAPAcertified.org

Order from: Deborah Klouser, (202) 737-2212, debbie@CAPAcertified.org

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

CSA (CSA Group)

Revision

BSR Z83.19-201x, Gas-Fired High Intensity Infrared Heaters (same as CSA 2.35) (revision of ANSI Z83.19-2009 (R2014))

Details test and examination criteria for gas-fired high-intensity infrared heaters for use with natural, manufactured, mixed, and liquefied petroleum (propane) gases and may be convertible for use with natural and LP-gases. Applies to heaters for installation in and heating of outdoor spaces or nonresidential indoor spaces where flammable gases or vapors are not generally present.

Single copy price: Free

Obtain an electronic copy from: cathy.rake@csagroup.org

Order from: Cathy Rake, (216) 524-4990 x88321, cathy.rake@csagroup.org

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

HL7 (Health Level Seven)

Revision

BSR/HL7 CDAR2L3IG EMSRUNRPT, R2-201x, HL7 Version 3 Implementation Guide for CDA Release 2 - Level 3: Emergency Medical Services; Patient Care Report, Release 2 - US REALM (revision of ANSI/HL7 CDAR2L3IG EMSRUNRPT, R1-2014)

This CDA implementation guide supports emergency medical service in the pre-hospital setting. Specifically, it defines a Patient Run Report from the EMS Agency to the ED. Version 2 adds ten data elements not previously included in scope, and modifies the value sets for an additional 32 elements, to be listed in the document change log. See the ballot announcement for full details.

Single copy price: Free to members; free to non-members 90 days following ANSI approval and HL7 publication

Obtain an electronic copy from: Karenvan@HL7.org

Order from: Karen Van Hentenryck, (734) 677-7777, Karenvan@HL7.org

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

UL (Underwriters Laboratories, Inc.)

Reaffirmation

BSR/UL 60950-21-2007 (R201x), Standard for Safety for Information Technology Equipment - Safety - Part 21: Remote Power Feeding (reaffirmation of ANSI/UL 60950-21-2007 (R2012))

Reaffirmation and continuance of the first edition of the Standard for Information Technology Equipment - Safety - Part 21: Remote Power Feeding, UL 60950-21, as an American National Standard.

Single copy price: Contact comm2000 for pricing and delivery options

Obtain an electronic copy from: http://www.comm-2000.com

Order from: comm2000

Send comments (with copy to psa@ansi.org) to: Barbara Davis, Barbara.J. Davis@ul.com

UL (Underwriters Laboratories, Inc.)

Revision

BSR/UL 1086-201x, Standard for Safety for Household Trash Compactors (revision of ANSI/UL 1086-2015)

(1) Proposed addition of an alternate method for evaluating protective electronic circuits and controls using requirements based on the Standard for Safety of Household and Similar Electrical Appliances, Part 1: General Requirements, UL 60335-1.

Single copy price: Contact comm2000 for pricing and delivery options

Obtain an electronic copy from: http://www.comm-2000.com

Order from: comm2000

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

UL (Underwriters Laboratories, Inc.)

Revision

BSR/UL 2353-201X, Standard for Safety for Single- and Multi-Layer Insulated Winding Wire (Proposal dated 3-25-16) (revision of ANSI/UL 2353 -2015a)

This proposal contains the following revisions: (1) Revision of requirements to specify solvent-based enamel; (2) Revision of requirements for taped wrapped wire; and (3) Revision of requirements to incorporate fully insulated wire (FIW).

Single copy price: Contact comm2000 for pricing and delivery options

Obtain an electronic copy from: http://www.comm-2000.com

Order from: comm2000

Send comments (with copy to psa@ansi.org) to: Ross Wilson, (919) 549 -1511, Ross.Wilson@ul.com

VITA (VMEbus International Trade Association (VITA))

Revision

BSR/VITA 62-201x, Power Supply Standard (revision of ANSI/VITA 62 -2012)

This proposed standard will provide guidelines to building a power supply module that can be used to power a VPX chassis. The module will fit within the standard envelope defined for VPX modules using the VITA 48 specifications.

Single copy price: $25.00

Obtain an electronic copy from: admin@workspace.vita.com

Order from: admin@workspace.vita.com

Send comments (with copy to psa@ansi.org) to: Jing Kwok, (602) 281-4497, jing.kwok@vita.com

Comment Deadline: May 24, 2016

ASME (American Society of Mechanical Engineers)

Reaffirmation

BSR/ASME B1.7-2006 (R201x), Nomenclature, Definitions, and Letter Symbols for Screw Threads (reaffirmation of ANSI/ASME B1.7-2006 (R2011))

The purpose of this Standard is to establish a uniform practice for standard screw threads with regard to the following:

(a) screw thread nomenclature;

(b) letter symbols for designating features of a screw thread for use on drawings, in tables that set forth dimensional standards, in other records, and for expressing mathematical relationship.

Single copy price: $35.00

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

Order from: Mayra Santiago, ASME; ansibox@asme.org or http://catalog. asme.org (hard copy)

Send comments (with copy to psa@ansi.org) to: April Amaral, AmaralA@asme.org

ASME (American Society of Mechanical Engineers)

Reaffirmation

BSR/ASME B1.8-1988 (R201x), Stub Acme Screw Threads (reaffirmation of ANSI/ASME B1.8-1988 (R2011))

This Standard specifies the thread form, allowance, tolerance, designation, and gaging for Stub ACME threads. Stub ACME threads are used in those applications where a coarse-pitch thread of shallow depth is required due to mechanical or metallurgical considerations.

Single copy price: $37.00

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

Order from: Mayra Santiago, ASME; ansibox@asme.org, http://catalog. asme.org (hard copy)

Send comments (with copy to psa@ansi.org) to: April Amaral, AmaralA@asme.org

ASME (American Society of Mechanical Engineers)

Reaffirmation

BSR/ASME B1.11-1958 (R201x), Microscopic Objective Thread (reaffirmation of ANSI/ASME B1.11-1958 (R2011))

This standard covers the screw thread used for mounting the objective assembly to the body or lens turret of microscopes. It is based on, and intended to be interchangeable with, the screw thread introduced and adopted many years ago by the Royal Microscopical Society of Great Britain, generally known as the rms thread and now almost universally accepted as the basic standard for microscope objective mountings.

Single copy price: $32.00

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

Order from: Mayra Santiago, ASME; ansibox@asme.org or http://catalog. asme.org (hard copy)

Send comments (with copy to psa@ansi.org) to: April Amaral, AmaralA@asme.org

ASME (American Society of Mechanical Engineers)

Revision

BSR/ASME B18.13-201x, Screw and Washer Assemblies - SEMS (Inch) (revision of ANSI/ASME B18.13-1996 (R2013))

This Standard covers general and dimensional data pertinent to the various types of screw and captive washer assemblies, otherwise known as SEMS. SEMS can include unhardened, through hardened machine screws or bolts and case-hardened tapping screws in sizes #0 through ½-inch diameters. The word SEMS is recognized in the United States as a generic term applicable to screw and washer assemblies.

Single copy price: Free

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

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

Send comments (with copy to psa@ansi.org) to: Calvin Gomez, (212) 591 -7021, gomezc@asme.org

UL (Underwriters Laboratories, Inc.)

New Standard

BSR/UL 2518-201X, Standard for Safety for Air Dispersion Systems (new standard)

UL proposes the first edition of the Standard for Air Dispersion Systems, UL 2518.

Single copy price: Contact comm2000 for pricing and delivery options

Obtain an electronic copy from: http://www.comm-2000.com

Order from: Comm2000, 151 Eastern Avenue, Bensenville, IL 60106 USA, 1 -888-853-3503

Send comments (with copy to psa@ansi.org) to: Nicolette Allen, (919) 549 -0973, Nicolette.Allen@ul.com

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.

ACMA (American Composites Manufacturers Association)

Office: 3033 Wilson Boulevard, Suite 420
Arlington, VA 22201

Contact: *Larry Cox*

Phone: (740) 928-3286

Fax: (703) 525-0743

E-mail: Lcox1225@gmail.com

BSR/ACMA/UCSC- FRP Composite Utility Poles-1-201x, Standard Specification for FRP Composite Utility Poles (new standard)

ASME (American Society of Mechanical Engineers)

Office: Two Park Avenue
New York, NY 10016

Contact: *Mayra Santiago*

Phone: (212) 591-8521

Fax: (212) 591-8501

E-mail: ansibox@asme.org

BSR/ASME PTC 22-201x, Gas Turbines (revision of ANSI/ASME PTC 22-2014)

BSR/ASME RT-2-2014, Safety Standard for Structural Requirements for Heavy Rail Transit Vehicles (revision of ANSI/ASME RT-2-2014)

FM (FM Approvals)

Office: 1151 Boston-Providence Turnpike
Norwood, MA 02062

Contact: *Josephine Mahnken*

Phone: (781) 255-4813

Fax: (781) 762-9375

E-mail: josephine.mahnken@fmapprovals.com

BSR/FM 7730-201x, Explosion Venting Devices (new standard)

HI (Hydraulic Institute)

Office: 6 Campus Drive
Parsippany, NJ 07054

Contact: *Denielle Giordano*

Phone: (973) 267-9700 x115

E-mail: dgiordano@pumps.org

BSR/HI 7.1-7.5-201x, Controlled-Volume Metering Pumps - Nomenclature, Definitions, Application & Operation (revision of ANSI/HI 7.1-7.5-2013)

BSR/HI 7.6-201x, Controlled-Volume Metering Pump Tests (revision of ANSI/HI 7.6-2012)

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

Office: 1101 K Street NW
Suite 610
Washington, DC 20005-3922

Contact: *Rachel Porter*

Phone: (202) 626-5741

Fax: 202-638-4922

E-mail: comments@itic.org

BSR/INCITS 550-201x, Information technology - Zoned Block Commands - 2 (ZBC-2) (new standard)

BSR/INCITS 551-201x, Information technology - SCSI RDMA Protocol - 2 (SRP-2) (new standard)

TAPPI (Technical Association of the Pulp and Paper Industry)

Office: 15 Technology Parkway South
Peachtree Corners, GA 30092

Contact: *Laurence Womack*

Phone: (770) 209-7277

Fax: (770) 446-6947

E-mail: standards@tappi.org

BSR/TAPPI T 281 sp-201x, Open drum washer mat sampling technique (revision and redesignation of ANSI/TAPPI T 281 sp-2012)

UL (Underwriters Laboratories, Inc.)

Office: 47173 Benicia Street
Fremont, CA 94538

Contact: *Derrick Martin*

Phone: (510) 319-4271

E-mail: Derrick.L.Martin@ul.com

BSR/UL 746E-201x, Standard for Safety for Polymeric Materials - Industrial Laminates, Filament Wound Tubing, Vulcanized Fibre, and Materials Used In Printed-Wiring Boards (revision of ANSI/UL 746E -2013c)

Obtain an electronic copy from: www.comm-2000.com

BSR/UL 1086-201x, Standard for Safety for Household Trash Compactors (revision of ANSI/UL 1086-2015)

Obtain an electronic copy from: http://www.comm-2000.com

VITA (VMEbus International Trade Association (VITA))

Office: 929 W. Portobello Avenue
Mesa, AZ 85210

Contact: *Jing Kwok*

Phone: (602) 281-4497

E-mail: jing.kwok@vita.com

BSR/VITA 48.8-201x, Mechanical Standard for 3U, 6U AFT (new standard)

BSR/VITA 49.2-201x, VITA Radio Transport (VRT) Standard for Electromagnetic Spectrum: Signals and Applications (new standard)

BSR/VITA 62-201x, Power Supply Standard (revision of ANSI/VITA 62 -2012)

Obtain an electronic copy from: admin@workspace.vita.com

Call for Members (ANS Consensus Bodies)

Call for Committee Members

ASC O1

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.

Call for Members (ANS Consensus Bodies)

ASC Z87 Committee on Safety Requirements for Occupational Eye and Face Protection

The International Safety Equipment Association (ISEA), as Secretariat of the ANSI Z87 Committee on Safety Requirements for Occupational Eye and Face Protection, is soliciting interested parties to apply for membership on the committee representing the following interest categories:

User: An organization (company, association, government agency, individual) that uses and/or purchases the product covered by this standard.

Government: A government agency or department that has an interest in the use of products covered by this standard. (Agencies or departments that use such products should select the User category).

Technical/professional: An entity (individual expert, professional society, test lab, etc.) that has specialized knowledge and expertise in the *products, components or testing covered in this standard.*

The Committee is responsible for the development of ANSI/ISEA Z87.1, *American National Standard for Occupational and Educational Personal Eye and Face Protection Devices.* Planning for an updated edition is underway. Stakeholders interested in applying for committee membership should contact:

Cristine Z. Fargo
Director, Member and Technical Services
ISEA
1901 N. Moore Street, Suite 808
Arlington, VA 22209
Phone: 703-525-1695; Fax: 703-582-2148
cfargo@safetyequipment.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.

AAMI (Association for the Advancement of Medical Instrumentation)

New National Adoption

ANSI/AAMI/ISO 80369-6-2016, Small-bore connectors for liquids and gases in healthcare applications -- Part 6: Connectors for neuraxial applications (identical national adoption of ISO 80369-6): 3/15/2016

AGMA (American Gear Manufacturers Association)

Reaffirmation

ANSI/AGMA 2101-D04-2010 (R2016), Fundamental Rating Factors and Calculation Methods for Involute Spur and Helical Gear Teeth (reaffirmation of ANSI/AGMA 2101-D04 (R2010)): 3/16/2016

ANSI/AGMA 6000-B96 (R2016), Specification for Measurement of Linear Vibration on Gear Units (reaffirmation of ANSI/AGMA 6000-B96 (R2010)): 3/16/2016

ANSI/AGMA 6025 D98 (R2016), Sound for Enclosed Helical, Herringbone and Spiral Bevel Gear Drives (reaffirmation of ANSI/AGMA 6025-D98 (R2010)): 3/16/2016

ASTM (ASTM International)

New Standard

ANSI/ASTM F3165-2016, Specification for Throat Protective Equipment for Hockey Goaltenders (new standard): 3/15/2016

Revision

ANSI/ASTM C838-2016, Test Method for Bulk Density of As-Manufactured Carbon and Graphite Shapes (revision of ANSI/ASTM C838-2001 (R2010)): 3/15/2016

ANSI/ASTM E2708-2016, Terminology for Personnel Credentialing (revision of ANSI/ASTM E2708-2010): 3/15/2016

IESNA (Illuminating Engineering Society of North America)

Reaffirmation

ANSI/IESNA RP-29-2006 (R2016), Lighting for Hospitals and Health Care Providers (reaffirmation of ANSI/IESNA RP-29-2006): 3/17/2016

ISA (International Society of Automation)

Revision

ANSI/ISA 18.2-2016, Management of alarm systems for the process industries (revision of ANSI/ISA 18.2-2009): 3/17/2016

ANSI/ISA 96.02.01-2016, Guidelines for the Specification of Electric Valve Actuators (revision of ANSI/ISA 96.02.01-2008): 3/17/2016

TIA (Telecommunications Industry Association)

Revision

ANSI/TIA 102.CCAA-B-2016, Project 25, Phase 2 Two-Slot Time Division Multiple Access, Transceiver Measurement Methods (revision and redesignation of ANSI/TIA 102.CCAA-A-2014): 3/17/2016

UL (Underwriters Laboratories, Inc.)

New National Adoption

ANSI/UL 60079-18-2016a, Standard for Safety for Explosive Atmospheres - Part 18: Equipment Protection by Encapsulation "m" (Proposal dated 01-29-16) (national adoption of IEC 60079-18 with modifications and revision of ANSI/UL 60079-18-2016): 3/14/2016

Revision

ANSI/UL 796F-2016, Standard for Safety for Flexible Materials Interconnect Constructions (revision of ANSI/UL 796F-2015): 3/16/2016

ANSI/UL 1449-2016, Standard for Safety for Surge Protective Devices (revision of ANSI/UL 1449-2015): 3/17/2016

VC (ASC Z80) (The Vision Council)

New Standard

ANSI Z80.36-2016, Light Hazard Protection for Ophthalmic Instruments (new standard): 3/17/2016

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. To view information about additional standards for which a PINS has been submitted and to search approved ANS, please visit www.NSSN.org, which is a database of standards information. Note that this database is not exhaustive.

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.

ACMA (American Composites Manufacturers Association)

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Arlington, VA 22201

Contact: *Larry Cox*

Fax: (703) 525-0743

E-mail: Lcox1225@gmail.com

BSR/ACMA/UCSC- FRP Composite Utility Poles-1-201x, Standard Specification for FRP Composite Utility Poles (new standard)

Stakeholders: General interest, manufacturers, end-users, material suppliers, government/regulators.

Project Need: The purpose is to provide education to end users on the design, the materials and the processing aspects of FRP utility poles so they can select the best product solution for their application. It will also help them understand the differences relative to wood, concrete, and steel when considering the application and use, as well as the important aspects of attachments and pole installation specific to FRP materials.

This specification encompasses the design, materials, properties, manufacturing, quality control, assembly and installation, and inspection of direct-embedded FRP utility poles. The applications include cantilevered, framed, and combined structures. This specification does not cover crossarms, lattice structures, conductors, insulators, stand-offs, or other FRP components used in the electrical grid. For transmission applications, a civil engineer and a geotechnical expert shall confirm the foundation requirements for a given loading criteria.

ASABE (American Society of Agricultural and Biological Engineers)

Office: 2950 Niles Road
St Joseph, MI 49085

Contact: *Carla VanGilder*

Fax: (269) 429-3852

E-mail: vangilder@asabe.org

BSR/ASAE S390.6 MONYEAR (Adoption of ISO 12934:2013), Tractors and machinery for agriculture and forestry - Basic types - Definitions (national adoption of ISO 12934:2013 with modifications and revision of ANSI/ASAE S390.5 JAN2011 (R2016))

Stakeholders: U.S. federal and state governments, Canadian Standards Association (CSA) which endorses ASAE S390.4, and Association of Equipment Manufacturers (AEM).

Project Need: Many ISO standards are being adopted as U.S. national standards. To avoid confusion, the U.S. should update the vocabulary to harmonize with the ISO vocabulary.

This standard provides terms and definitions for agricultural field equipment designed primarily for use in agricultural operations for the production of food and fiber. Other terms commonly used for agricultural field equipment are farm machinery, farm implements, implements of husbandry, and agricultural machinery. This standard also applies to agricultural tractors used in forestry applications. Purpose-built forestry machines, as defined by ISO 6814, are not included.

ASME (American Society of Mechanical Engineers)

Office: Two Park Avenue
New York, NY 10016

Contact: *Mayra Santiago*

Fax: (212) 591-8501

E-mail: ansibox@asme.org

BSR/ASME HST-6-201x, Performance Standard for Air Wire Rope Hoists (revision of ANSI/ASME HST-6-2015)

Stakeholders: manufacturers, users, navy, government, inspectors, construction, shippers/distributers

Project Need: To revise the requirements of HST-6 to keep up with current technological advancements.

(a) This Standard establishes performance requirements for air wire rope hoists for vertical lifting service involving material handling of freely suspended (unguided) loads using wire rope as the lifting medium with one of the following types of suspension: (1) lug; (2) hook or clevis; (3) trolley; (4) base or deck mounted (not including winches covered by ASME B30.7); and (5) wall or ceiling mounted (not including winches covered by ASME B30.7).
(b) This Standard is applicable to hoists manufactured after the date on which this Standard is issued. It is not applicable to the following: (1) damaged or malfunctioning hoists; (2) hoists that have been misused or abused; (3) hoists that have been altered without authorization of the manufacturer or a qualified person; (4) hoists used for lifting or supporting people; (5) hoists used for the purpose of drawing both the load and the hoist up or down the hoist's own wire rope; and (6) hoists used for marine and other applications as required by the U.S. DOD.
(c) The requirements of this Standard shall be applied together with the requirements of ASME B30.16. Please also refer to ASME B30.16 for requirements pertaining to marking, construction, and installation; inspection, testing, and maintenance; and operations.

BSR/ASME PTC 4-201x, Fired Steam Generators (revision of ANSI/ASME PTC 4-2013)

Stakeholders: Users, manufacturers, designers, consultants, and government agencies associated industries that use fired steam generators.

Project Need: Revisions to the current Standard are needed as a result of technological changes and advancements.

This Code provides rules and instructions for conducting performance tests of fuel-fired steam generators. These include coal-, oil-, and gas-fired steam generators as well as steam generators fired by other hydrocarbon fuels. The scope also includes steam generators with integral fuel-sulfur capture utilizing chemical sorbents.

BSR/ASME PTC 22-201x, Gas Turbines (revision of ANSI/ASME PTC 22-2014)

Stakeholders: Gas turbine owners, manufacturers, testing services, regulators.

Project Need: Updates the current standard to include guidelines for testing gas turbines while under control limit operation and guidelines for testing aeroderivative gas turbines.

This Code provides for the testing of gas turbines supplied with gaseous or liquid fuels (or solid fuels converted to liquid or gas prior to entrance to the gas turbine).

BSR/ASME P30.1-201x, Planning for Load Handling Activities (revision of ANSI/ASME P30.1-2014)

Stakeholders: This standard would be applicable to lifting equipment and rigging users in all industries including: nuclear power, oil and gas refining, coal-fired and hydroelectric power, mining, construction, manufacturing, machinery moving, pulp and paper, chemical, shipbuilding, wind energy, aerospace, maritime, defense, as well as many other areas.

Project Need: Updates to this document are required to incorporate proposed revisions.

This Standard establishes planning considerations and practices that apply to load-handling equipment (LHE), other associated equipment, and activities when moving loads vertically or horizontally. The planning guidance contained in this Standard is divided into two categories dependent upon the nature of the load-handling activity and the degree of exposure to the issues that impact safety. The categories are designated as standard lift plan and critical lift plan. This Standard does not preclude the user of this Standard from creating subcategories based on their specific load-handling activity considerations.

BSR/ASME RT-2-2014, Safety Standard for Structural Requirements for Heavy Rail Transit Vehicles (revision of ANSI/ASME RT-2-2014)

Stakeholders: Heavy rail transit vehicle manufacturers, purchaser/owner/operators, consultants, general interest, employees/union interest, regulatory/trade association.

Project Need: Updates to this document are required to incorporate proposed revisions.

This Standard applies to car bodies of newly constructed heavy rail transit vehicles for transit passenger service. It defines requirements for the incorporation of passive safety design concepts related to the performance of the car body of heavy rail transit vehicles in conditions such as collisions, so as to enhance passenger safety, and limit and control damage.

AWS (American Welding Society)

Office: 8669 NW 36th Street, Suite 130
Miami, FL 33166

Contact: *Andre Naumann*

Fax: (305) 443-5951

E-mail: anaumann@aws.org

BSR/AWS D10.13/D10.13M-201x, Recommended Practices for the Brazing of Copper Tubing and Fittings for Medical Gas Systems (new standard)

Stakeholders: Suppliers, fabricators, and end-users of medical gas copper tubing systems.

Project Need: The project is needed to provide recommended practices for the Brazing of Copper Tubing and fittings for the medical gas industry.

This document presents a recommended practice for fabrication and installation of copper tubing used in the distribution of medical gas and vacuum lines in health care facilities. It provides guidance for implementation of the requirements of NFPA 99C, Gas and Vacuum Systems. This Standard does not include qualification procedures for brazing procedures and brazers.

AWWA (American Water Works Association)

Office: 6666 W. Quincy Ave.
Denver, CO 80235
Contact: *Paul Olson*
Fax: (303) 795-7603
E-mail: polson@awwa.org; vdavid@awwa.org

BSR/AWWA F111-201x, Ultraviolet Disinfection of Wastewater Effluent (new standard)

Stakeholders: Wastewater treatment and supply industry. wastewater utilities, consulting engineers, wastewater treatment equipment manufacturers, etc.

Project Need: This standard is intended to assist with the design, procurement, installation, and commissioning of Ultraviolet disinfection systems for wastewater treatment.

This standard will describe the minimum requirements for materials, design, testing, installation, operation, and maintenance of equipment needed for Ultraviolet disinfection of wastewater effluent.

CSA (CSA Group)

Office: 8501 East Pleasant Valley Rd.
Cleveland, OH 44131
Contact: *Cathy Rake*
Fax: (216) 520-8979
E-mail: cathy.rake@csagroup.org

* BSR/CSA B214-201x, Installation Code for Hydronic Heating (same as CSA B214) (new standard)

Stakeholders: Consumers/end-users, manufacturers, installers, designers, building inspectors.

Project Need: To address the installation, extension, alteration, and renewal of hydronic heating systems.

This Code sets out the minimum provisions for the installation, extension, alteration, and renewal of hydronic heating systems. It applies to open and closed hydronic heating systems, and it includes: hydronic space heating; radiant heating (wall, floor, ceiling); convectors; fan coils; combination potable water heating and space heating (combo) systems; integrated mechanical systems; indirect-fired domestic water heating; pool and spa heating; snow melt systems; and other auxiliary systems.

FM (FM Approvals)

Office: 1151 Boston-Providence Turnpike
Norwood, MA 02062
Contact: *Josephine Mahnken*
Fax: (781) 762-9375
E-mail: josephine.mahnken@fmapprovals.com

BSR/FM 7730-201x, Explosion Venting Devices (new standard)

Stakeholders: Any industrial facility utilizing closed vessels containing combustible dust hazards, such as dust collectors and process vessels, as well as manufacturers of explosion venting devices.

Project Need: To protect vessels containing combustible dust hazards from explosions caused by deflagration by rapidly venting through a device, with or without flame-arresting capabilities, to ensure that the maximum pressure reached in the vessel does not exceed the maximum pressure the vessel is designed to resist.

This standard contains requirements for devices used to protect vessels by venting internal pressure caused by deflagrations arising from the rapid burning of suspended dust in the protected volume. These devices are commonly referred to as explosion venting devices. The standard includes requirements for both standard and flameless explosion venting device product categories.

GTESS (Georgia Tech Energy & Sustainability Services)

Office: 75 Fifth Street N.W
Suite 300
Atlanta, GA 30308
Contact: *Moon Kim*
Fax: (404) 894-8194
E-mail: Moon.Kim@gtri.gatech.edu

BSR/MSE 50028-201x, Superior Energy Performance - Requirements for verification bodies for use in accreditation or other forms of recognition (revision of ANSI/MSE 50028-2012)

Stakeholders: Organizations seeking certification of their energy performance and energy management system, including industrial, commercial, transportation, institutional, and energy supply sectors.

Project Need: Revisions to ANSI/MSE 50028 is needed to reflect changes present in ISO/IEC 17021-1:2015.

In response to changes reflected in ISO/IEC 17021-1:2015, this revision to ANSI/MSE 50028 makes substantive changes to technical areas, audit program, and other sections. The Standard provides updated, specific principles and requirements for competence, consistency, and impartiality of the audit and certification of energy management systems and Superior Energy Performance.

HI (Hydraulic Institute)

Office: 6 Campus Drive
Parsippany, NJ 07054
Contact: *Denielle Giordano*
E-mail: dgiordano@pumps.org

BSR/HI 7.1-7.5-201x, Controlled-Volume Metering Pumps - Nomenclature, Definitions, Application & Operation (revision of ANSI/HI 7.1-7.5-2013)

Stakeholders: Pump manufacturers, specifiers, purchasers, and users.

Project Need: To improve upon the existing ANSI/HI Standard for Nomenclature, Definitions, Design and Application and Operation.

The Controlled Volume Metering Pump Section will limit its activity to reciprocating positive-displacement metering pumps including, but not limited to the following: (A) Hydraulic-coupled disc diaphragm; (B) Hydraulic-coupled tubular diaphragm; (C) Mechanical coupled disc diaphragm; (D) Pack piston; and (E) Plunger. Technical documents developed shall include, but are not limited to: types and nomenclature; definitions; design and application; installation; operation and maintenance.

BSR/HI 7.6-201x, Controlled-Volume Metering Pump Tests (revision of ANSI/HI 7.6-2012)

Stakeholders: Pump specifiers, purchasers, users, and manufacturers.

Project Need: To assist pump purchasers and manufacturers it determines the appropriate test requirements for Controlled Volume Metering Pumps.

This standard is applicable to Controlled Volume Metering Pumps, CVMP, (also known as metering pumps, proportioning pumps, chemical injection/feed pumps, or dosing pumps), which are driven by power from an outside source. The standard applies to the mechanical pump performance test, NPSH test, and the recording to the test results for CVMP.

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

Office: 1101 K Street NW
Suite 610
Washington, DC 20005-3922

Contact: *Rachel Porter*

Fax: 202-638-4922

E-mail: comments@itic.org

BSR/INCITS 550-201x, Information technology - Zoned Block Commands - 2 (ZBC-2) (new standard)

Stakeholders: ICT industry.

Project Need: This project complements the SCSI Block Command standards (e.g., currently SBC-4). SBC-4 devices typically allow random writing. ZBC-2 devices require writing at specific points on their media but allow random reading.

Storage devices are embracing fundamental changes in technology. New devices based on this technology allow random reading of data that is already written, while requiring writing to occur at specific locations on their media. The proposed new standard builds on the work accomplished in ZBC to continue and improve support for the new technology. The following items should be considered for inclusion into the ZBC-2 standard: corrections for difficulties discovered during the development of first-adopter products based on ZBC; enhanced command and error handling definitions to support new customer requirements for the technology; and other capabilities that may fit within the scope of this project.

BSR/INCITS 551-201x, Information technology - SCSI RDMA Protocol - 2 (SRP-2) (new standard)

Stakeholders: ICT industry.

Project Need: Recent advances in RDMA technology have highlighted areas where SRP should be improved.

Remote Direct Memory Access (RDMA) is a feature of some transport protocols like Virtual Interface (VI) and InfiniBand™. SRP and SRP-2 allow devices to directly access memory in other devices on a fabric. VI has been mapped to Fibre Channel and other fabrics. The following items should be considered for inclusion into the SRP-2 standard: More efficient usage of the information units defined by SRP; and other capabilities that may fit within the scope of this project. InfiniBand is a trademark and service mark of the InfiniBand Trade Association.

TAPPI (Technical Association of the Pulp and Paper Industry)

Office: 15 Technology Parkway South
Peachtree Corners, GA 30092

Contact: *Laurence Womack*

Fax: (770) 446-6947

E-mail: standards@tappi.org

BSR/TAPPI T 281 sp-201x, Open drum washer mat sampling technique (revision and redesignation of ANSI/TAPPI T 281 sp -2012)

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

Project Need: To conduct required five-year review of an existing TAPPI/ANSI standard in order to revise it, if needed to address new technology or correct errors.

This practice provides a means to collect pulp mat and liquor samples from open drum washers.

UL (Underwriters Laboratories, Inc.)

Office: 12 Laboratory Drive
Research Triangle Park, NC 27709-3995

Contact: *Vickie Hinton*

E-mail: Vickie.T.Hinton@ul.com

BSR/UL 61010-2-011-201X, Standard for Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-011: Particular Requirements for Refrigerating Equipment (identical national adoption of IEC 61010-2-011)

Stakeholders: Producers and users of laboratory equipment, producers of components for laboratory equipment, insurance companies, building owners, electrical inspectors, government, electricians.

Project Need: UL is seeking ANSI approval on a new standard, UL 61010-2-011, which will be a national adoption of IEC 61010-2-011.

UL 61010-2-011 constitutes Part 2-011 of a planned series of standards on industrial-process measurement, control and automation equipment. This part of IEC 61010 applies to refrigerating equipment and any test, measurement, control, or laboratory equipment that incorporates a refrigerating system as part of the integrated design of the equipment. This Part 2 covers refrigerating systems that can be either an integral part of or remote to the equipment being assessed, provided that the equipment under question is in direct control of the refrigerating system.

BSR/UL 61010-2-012-201X, Standard for Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-012: Particular Requirements for Climatic and Environmental Testing and Other Conditioning Equipment (identical national adoption of IEC 61010-2-012)

Stakeholders: Producers and users of laboratory equipment, producers of components for laboratory equipment, insurance companies, building owners, electrical inspectors, government, electricians.

Project Need: UL is seeking ANSI approval on a new standard, UL 61010-2-012, which will be a national adoption of IEC 61010-2-012.

UL 61010-2-012 constitutes Part 2-012 of a planned series of standards on industrial-process measurement, control and automation equipment. This Part 2 of IEC 61010 specifies safety requirements for electrical climatic and environmental testing and other conditioning equipment relative to hazards of refrigerating systems.

BSR/UL 61010-2-034-201X, Standard for Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-034: Particular Requirements for Measurement Equipment for Insulation Resistance and Test Equipment for Electric Strength (identical national adoption of IEC 61010-2-034)

Stakeholders: Producers and users of laboratory equipment, producers of components for laboratory equipment, insurance companies, building owners, electrical inspectors, government, electricians.

Project Need: UL is seeking ANSI approval on a new standard, UL 61010-2-034, which will be a national adoption of IEC 61010-2-034.

UL 61010-2-034 constitutes Part 2-034 of a planned series of standards on industrial-process measurement, control and automation equipment. This part of IEC 61010 specifies safety requirements for measurement equipment for insulation resistance and test equipment for electric strength with an output voltage exceeding 50 V a.c. or 120 V d.c. which are connected to other devices or circuits for test or measurement purposes. This part also applies to combined measuring equipment which has an insulation resistance measurement function or an electric strength test measurement function.

BSR/UL 61010-2-120-201X, Standard for Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-120: Particular Safety Requirements for Machinery Aspects of Equipment (identical national adoption of IEC 61010-2-120)

Stakeholders: Producers and users of laboratory equipment, producers of components for laboratory equipment, insurance companies, building owners, electrical inspectors, government, electricians.

Project Need: UL is seeking ANSI approval on a new standard, UL 61010-2-120, which will be a national adoption of IEC 61010-2-120.

UL 61010-2-120 constitutes Part 2-120 of a planned series of standards on industrial-process measurement, control and automation equipment. This Part 2 of IEC 61010 specifies particular safety requirements for partly completed assemblies of electrical equipment and their accessories, wherever they are intended to be used, which present hazards from the power-driven moving parts used by the equipment for a specific application. The purpose of the requirements of this standard is to ensure that hazards to the operator, service personnel, and the surrounding area are reduced to a tolerable level.

VITA (VMEbus International Trade Association (VITA))

Office: 929 W. Portobello Avenue
Mesa, AZ 85210

Contact: *Jing Kwok*

E-mail: jing.kwok@vita.com

BSR/VITA 48.8-201x, Mechanical Standard for 3U, 6U AFT (new standard)

Stakeholders: Manufacturers, system integrators, end-users of critical embedded systems.

Project Need: Develop standard implementation for air-flow-through for critical embedded modules.

Develop an open standard for the design requirements of an air-flow-through (AFT) cooled plug-in module having a 3U or 6U form factor, while retaining the VITA 46 connector layout. Both 3U and 6U standard form factors are offered using three defined pitch spacings, with an option to have alternate air flow intake and exhaust paths. The intention of this standard is to optimize SWAP-C.

BSR/VITA 49.2-201x, VITA Radio Transport (VRT) Standard for Electromagnetic Spectrum: Signals and Applications (new standard)

Stakeholders: Manufacturers and users of VITA Radio Transport.

Project Need: Provide standard for use on VITA Radio Transport.

The VITA 49.2 dot standard which is part of the VITA Radio Transport (VRT) family of standards defines a signal/spectrum protocol that expresses spectrum observation, spectrum operations, and capabilities of RF devices. This is done independent of manufacturer, equipment type, point-of-use in an architecture and application. The intent of the VRT protocol is to enable RF systems to migrate from proprietary stovepipe architectures to interoperable multifunction architectures.

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)
- AAMVA (American Association of Motor Vehicle Administrators)
- 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 (The Green Building Initiative)
- GEIA (Greenguard Environmental Institute)
- HL7 (Health Level Seven)
- IESNA (The Illuminating Engineering Society of North America)
- MHI (ASC MH10) (Material Handling Industry)
- NAHBRC (NAHB Research Center, Inc.)
- NBBPVI (National Board of Boiler and Pressure Vessel Inspectors)
- NCPDP (National Council for Prescription Drug Programs)
- NISO (National Information Standards Organization)
- NSF (NSF International)
- PRCA (Professional Ropes Course Association)
- RESNET (Residential Energy Services Network)
- TIA (Telecommunications Industry Association)
- UL (Underwriters Laboratories, Inc.)

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

Alternatively, you may contact the Procedures & Standards Administration department (PSA) at psa@ansi.org or via fax at 212-840-2298. If you request that information be provided via E-mail, please include your E-mail address; if you request that information be provided via fax, please include your fax number. Thank you.

ANSI-Accredited Standards Developers Contact Information

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

AAMI
Association for the Advancement of Medical Instrumentation

4301 N Fairfax Drive
Suite 301
Arlington, VA 22203-1633
Phone: (703) 253-8261
Fax: (703) 276-0793
Web: www.aami.org

ABYC
American Boat and Yacht Council

613 Third Street, Suite 10
Annapolis, MD 21403
Phone: (410) 990-4460
Web: www.abycinc.org

ACMA
American Composites Manufacturers Association

3033 Wilson Boulevard, Suite 420
Arlington, VA 22201
Phone: (740) 928-3286
Fax: (703) 525-0743
Web: www.icpa-hq.org

AGMA
American Gear Manufacturers Association

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

ASABE
American Society of Agricultural and Biological Engineers

2950 Niles Road
St Joseph, MI 49085
Phone: (269) 932-7015
Fax: (269) 429-3852
Web: www.asabe.org

ASC X9
Accredited Standards Committee X9, Incorporated

275 West Street
Suite 107
Annapolis, MD 21401
Phone: (410) 267-7707
Fax: (410) 267-0961
Web: www.x9.org

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

1791 Tullie Circle
Atlanta, GA 30329
Phone: (404) 636-8400
Fax: (678) 539-2138
Web: www.ashrae.org

ASME
American Society of Mechanical Engineers

Two Park Avenue
New York, NY 10016
Phone: (212) 591-8521
Fax: (212) 591-8501
Web: www.asme.org

ASTM
ASTM International

100 Barr Harbor Drive
West Conshohocken, PA 19428-2959
Phone: (610) 832-9744
Fax: (610) 834-3683
Web: www.astm.org

AWEA
American Wind Energy Association

1501 M Street, NW,
Suite 1000
Washington, DC 20005
Phone: (202) 249-7344
Web: www.awea.org

AWS
American Welding Society

8669 NW 36th Street, Suite 130
Miami, FL 33166
Phone: (305) 443-9353
Fax: (305) 443-5951
Web: www.aws.org

AWWA
American Water Works Association

6666 W. Quincy Ave.
Denver, CO 80235
Phone: (303) 347-6178
Fax: (303) 795-7603
Web: www.awwa.org

CAPA
Certified Automotive Parts Association

1000 Vermont Avenue N.W.
Suite 1010
Washington, DC 20005
Phone: (202) 737-2212
Fax: (202) 737-2214
Web: www.CAPAcertified.org

CSA
CSA Group

8501 East Pleasant Valley Rd.
Cleveland, OH 44131
Phone: (216) 524-4990 x88321
Fax: (216) 520-8979
Web: www.csa-america.org

FM
FM Approvals

1151 Boston-Providence Turnpike
Norwood, MA 02062
Phone: (781) 255-4813
Fax: (781) 762-9375
Web: www.fmglobal.com

GTESS
Georgia Tech Energy & Sustainability Services

75 Fifth Street N.W
Suite 300
Atlanta, GA 30308
Phone: (404) 407-6404
Fax: (404) 894-8194
Web: www.innovate.gatech.edu

HI
Hydraulic Institute

6 Campus Drive
Parsippany, NJ 07054
Phone: (973) 267-9700 x115
Web: www.pumps.org

HL7
Health Level Seven

3300 Washtenaw Avenue
Suite 227
Ann Arbor, MI 48104
Phone: (734) 677-7777
Fax: (734) 677-6622
Web: www.hl7.org

HPVA
Hardwood Plywood & Veneer Association

1825 Michael Faraday Drive
Reston, VA 20190
Phone: (703) 435-2900
Fax: (703) 435-2537
Web: www.hpva.org

IESNA
Illuminating Engineering Society of North America

120 Wall St. 17th Floor
New York, NY 10005
Phone: (212) 248-5000
Web: www.iesna.org

ISA (Organization)
International Society of Automation

67 Alexander Drive
Research Triangle Park, NC 27709
Phone: (919) 990-9213
Fax: (919) 549-8288
Web: www.isa.org

ITI (INCITS)
InterNational Committee for Information Technology Standards

1101 K Street NW
Suite 610
Washington, DC 20005-3922
Phone: (202) 626-5741
Fax: 202-638-4922
Web: www.incits.org

NSF
NSF International

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

TAPPI
Technical Association of the Pulp and Paper Industry

15 Technology Parkway South
Peachtree Corners, GA 30092
Phone: (770) 209-7277
Fax: (770) 446-6947
Web: www.tappi.org

TIA
Telecommunications Industry Association

1320 North Courthouse Road
Suite 200
Arlington, VA 22201
Phone: (703) 907-7743
Web: www.tiaonline.org

UL
Underwriters Laboratories, Inc.

12 Laboratory Drive
Research Triangle Park, NC 27709
-3995
Phone: (919) 549-1851
Web: www.ul.com

VC (ASC Z80)
The Vision Council

225 Reinekers Lane
Suite 700
Alexandria, VA 22314
Phone: (703) 740-1094
Fax: (703) 548-4580
Web: www.z80asc.com

VITA
VMEbus International Trade Association (VITA)

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

Announcement of Proposed Procedural Revisions
Comment Deadline: April 25, 2016

Comments with regard to these proposed revisions should be submitted to psa@ansi.org or via fax to the Recording Secretary of the ANSI Executive Standards Council (ExSC) at 212-840-2298.

Public comments received in connection with these proposed revisions will be made available to the public in the ANSI Online public library (http://publicaa.ansi.org/sites/apdl/default.aspx) one week after the close of the comment deadline. The ANSI Executive Standards Council (ExSC) will consider all public comments received by the comment deadline at its next regularly scheduled meeting. Shortly thereafter, all commenters will be provided with a written disposition of their respective comments.

Questions should be directed to psa@ansi.org.

ExSC_033_2016

Annex B of the *ANSI Essential Requirements* (www.ansi.org/essentialrequirements) contains the *Procedures for the Development of a Provisional American National Standard (ANS) or a Provisional Amendment to an ANS (PA).* This includes *B.1.1 Public Notice* and *B.1.7 Processing the Provisional ANS as an American National Standard*, both of which do not address a PINS requirement.

The intent of the proposed revision that follows is to clarify that a PINS is required in connection with a proposed ANS even if a PA or PS has been announced and approved.

B.1.7 Processing the Provisional ANS as an American National Standard

The ASD shall initiate the processing, as an ANS, of the Provisional ANS, or the revision to an amended ANS, within 45 days of its approval date. This processing shall be in accordance with the ASD's accredited procedures and shall include publication of a PINS, either before or after publication of the initial announcement in Standards Action that identified the Provisional Standard or Provisional Amendment and described the circumstances that warranted its issuance per B.1.1 and before ANSI public review of the draft proposed ANS or amendment in *Standards Action* and consensus body ballot. Following the publication of this PINS all of the other requirements of *2.5 Notification of standards and coordination* associated with a PINS apply.

ISO & IEC Draft International Standards

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

Comments

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

Ordering Instructions

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

ISO Standards

AGRICULTURAL FOOD PRODUCTS (TC 34)

ISO/DIS 13722, Microbiology of the food chain - Enumeration of Brochothrix spp. - Colony-count technique - 6/18/2016, $53.00

ISO/DIS 21872, Microbiology of the food chain - Horizontal method for the detection of potentially enteropathogenic Vibrio parahaemolyticus, Vibrio cholerae and Vibrio vulnificus - 4/18/2016, $102.00

ANAESTHETIC AND RESPIRATORY EQUIPMENT (TC 121)

ISO/DIS 19223, Lung ventilators and related equipment - Vocabulary and semantics - 4/19/2016, $175.00

ERGONOMICS (TC 159)

ISO/DIS 9241-333, Ergonomics of human-system interaction - Part 333: Stereoscopic displays using glasses - 4/18/2016, $102.00

GEOGRAPHIC INFORMATION/GEOMATICS (TC 211)

ISO/DIS 19155-2, Geographic information - Place Identifier (PI) architecture - Part 2: Place Identifier (PI) linking - 6/23/2016, $107.00

GRAPHIC TECHNOLOGY (TC 130)

ISO/DIS 19593-1, Graphic technology - Use of PDF to associate processing steps and content data - Part 1: Processing steps 2016 - 6/18/2016, $67.00

GRAPHICAL SYMBOLS (TC 145)

ISO 7001/DAmd96, PI TF 042: Meeting point - 6/18/2016, $29.00

ISO 7001/DAmd97, PI TF 043: Tour group meeting point - 6/18/2016, $29.00

NICKEL AND NICKEL ALLOYS (TC 155)

ISO/DIS 9725, Nickel and nickel alloy forgings - 4/16/2016, $67.00

OPTICS AND OPTICAL INSTRUMENTS (TC 172)

ISO 15798/DAmd1, Ophthalmic implants - Ophthalmic viscosurgical devices - Amendment 1 - 4/17/2016, $29.00

ISO/DIS 11554, Optics and photonics - Lasers and laser-related equipment - Test methods for laser beam power, energy and temporal characteristics - 6/19/2016, $77.00

ISO/DIS 11979-8, Ophthalmic implants - Intraocular lenses - Part 8: Fundamental requirements - 4/18/2016, $46.00

PETROLEUM PRODUCTS AND LUBRICANTS (TC 28)

ISO/DIS 6246, Petroleum products - Gum content of light and middle distillate fuels - Jet evaporation method - 4/17/2016, $58.00

PLASTICS (TC 61)

ISO/DIS 12992, Plastics - Vertical flame spread determination for film and sheet - 4/17/2016, $58.00

ROAD VEHICLES (TC 22)

ISO/DIS 15082, Road vehicles - Tests for rigid plastic safety glazing materials - 1/2/2039, $112.00

RUBBER AND RUBBER PRODUCTS (TC 45)

ISO/DIS 4649, Rubber - Determination of abrasion resistance using a rotating cylindrical drum device - 11/8/2006, $82.00

ISO/DIS 11237, Rubber hoses and hose assemblies - Compact wire-braid-reinforced hydraulic types for oil-based or water-based fluids - Specification - 6/23/2016, $62.00

ISO/DIS 20851, Synthetic rubber latex - Examination for micro-organisms - 6/18/2016, $40.00

TIMBER STRUCTURES (TC 165)

ISO/DIS 8375, Timber structures - Glued laminated timber - Test methods for determination of physical and mechanical properties - 4/16/2016, $82.00

TOBACCO AND TOBACCO PRODUCTS (TC 126)

ISO/DIS 13276, Tobacco and tobacco products - Determination of nicotine purity - Gravimetric method using tungstosilicic acid - 6/23/2016, $40.00

TRADITIONAL CHINESE MEDICINE (TC 249)

ISO/DIS 19824, Traditional chinese medicine - Schisandra chinensis (Turcz.) baill seeds and seedlings - 4/17/2016, $58.00

ISO/DIS 20408, Traditional chinese medicine-panax notoginseng seeds and seedlings - 4/16/2016, $58.00

TRANSPORT INFORMATION AND CONTROL SYSTEMS (TC 204)

ISO 12813/DAmd1, Electronic fee collection - Compliance check communication for autonomous systems - Amendment 1 - 4/18/2016, $40.00

ISO 13141/DAmd1, Electronic fee collection - Localisation augmentation communication for autonomous systems - Amendment 1 - 4/18/2016, $40.00

WATER QUALITY (TC 147)

ISO/DIS 20595, Water quality - Determination of selected easily volatile organic compounds in water - Method using gas chromatography and mass spectrometry by static headspace technique (HS-GC-MS) - 6/26/2016, $93.00

WELDING AND ALLIED PROCESSES (TC 44)

ISO/DIS 17640, Non-destructive testing of welds - Ultrasonic testing - Techniques, testing levels, and assessment - 4/18/2016, $98.00

ISO/IEC JTC 1, Information Technology

ISO/IEC 14496-3/DAmd6, Information technology - Coding of audio-visual objects - Part 3: Audio - Amendment 6: Profiles, levels and downmixing method for 22.2 channel programs - 6/23/2016, $46.00

ISO/IEC 15693-3/DAmd4, Identification cards - Contactless integrated circuit cards - Vicinity cards - Part 3: Anticollision and transmission protocol - Amendment 4: Security framework - 4/16/2016, $93.00

ISO/IEC DIS 20741, Systems and Software Engineering - Guideline for the evaluation and selection of software engineering tools - 6/23/2016, $102.00

ISO/IEC DIS 23000-17, Information technology - Multimedia application format (MPEG-A) - Part 17: Multiple sensorial media application format - 6/23/2016, $71.00

OTHER

ISO/IEC DGuide 46, Comparative testing of consumer products and related services - General principles - 7/17/2016, $51.00

IEC Standards

8/1422/CD, IEC/TS 62898-1 Ed.1: Guidelines for general planning and design of microgrids, 06/10/2016

8/1424/CD, IEC/TS 62898-2 Ed.1: Technical requirements for operation and control of microgrids, 06/10/2016

9/2127/CDV, IEC 60077-1 Ed.2: Railway applications - Electric equipment for rolling stock - Part 1: General service conditions and general rules, 06/10/2016

9/2128/CDV, IEC 60077-2 Ed.2: Railway applications - Electric equipment for rolling stock - Part 2: Electrotechnical components - General rules, 06/10/2016

14/852/DTS, IEC 60076-20 TS Ed.1: Power transformers - Part 20: Energy efficiency, 06/10/2016

23/742/DTR, IEC/TR 61916 Ed.4: Electrical accessories - Harmonization of general rules, 05/13/2016

34A/1895/CD, IEC 62031 Ed.2: LED modules for general lighting - Safety specifications, 05/13/2016

36/378/FDIS, IEC 61466-1 Ed2: Composite String Insulator Units for Overhead Lines with a Nominal Voltage Greater than 1 000 V - Part 1: Standard strength classes and end fittings, 04/29/2016

46/599/FDIS, IEC 60966-2-4 Ed4.0: Radio Frequency and Coaxial Cable Assemblies - Part 2-4: Detail specification for cable assemblies for radio and TV receivers - Frequency range 0 MHz to 3 000 MHz, IEC 61169-2 connectors, 04/29/2016

48B/2486/CD, IEC 61076-3-119/Ed1: Connectors for electronic equipment - Product requirements - Part 3-119: Rectangular connectors - Detail specification for unshielded, free and fixed 10-way connectors with push-pull coupling for industrial environments with frequencies up to 100 MHz, 06/17/2016

48B/2488/CD, IEC-60512-8-3/Ed2: Connectors for electronic equipment-tests and measurements - Part 8-3: Static load tests (fixed connectors) test 8c: Robustness of actuating lever, 06/17/2016

57/1688/DTR, IEC 62357-1 TR Ed.2: Power systems management and associated information exchange - Part 1: Reference architecture, 05/13/2016

57/1689/FDIS, IEC 62325-451-6 Ed.1: Framework for energy market communications - Part 451-6: Publication of information on market, contextual and assembly models for European style market, 04/29/2016

57/1690/DC, Proposed revision of IEC 62325-301 Edition 1: Framework for energy market communications - Part 301: Common Information Model (CIM) extensions for markets, 05/13/2016

57/1693/DC, Proposed revision of IEC 61850-5 Ed.2: Communication networks and systems for power utility automation - Part 5: Communication requirements for functions and device models, 04/29/2016

59A/204/CDV, IEC 60704-2-3 Ed.3: Household and similar electrical appliances - Test code for the determination of airborne acoustical noise - Part 2-3: Particular requirements for dishwashers, 06/10/2016

61/5135/FDIS, IEC 60335-2-23/Ed6: Household and similar electrical appliances - Safety - Part 2-23: Particular requirements for appliances for skin or hair care, 04/29/2016

61/5136/FDIS, IEC 60335-2-14/Ed6: Household and similar electrical appliances - Safety - Part 2-14: Particular requirements for kitchen machines, 04/29/2016

61H/321/FDIS, IEC 60335-2-87/Ed3: Household and similar electrical appliances - Safety - Part 2-87: Particular requirements for electrical animal stunning equipment, 04/29/2016

65A/790/FDIS, IEC 61069-2 Ed. 2.0: Industrial-process measurement, control and automation - Evaluation of system properties for the purpose of system assessment - Part 2: Assessment methodology, 04/29/2016

65A/791/FDIS, IEC 61069-3 Ed. 2.0: Industrial-process measurement, control and automation - Evaluation of system properties for the purpose of system assessment - Part 3: Assessment of system functionality, 04/29/2016

65A/792/FDIS, IEC 61069-4 Ed. 2.0: Industrial-process measurement, control and automation - Evaluation of system properties for the purpose of system assessment - Part 4: Assessment of system performance, 04/29/2016

77B/757/CD, IEC 61000-4-12: Electromagnetic Compatibility (EMC) - Part 4-12: Testing and measurement techniques - Ring wave immunity test, 06/10/2016

78/1152/CD, IEC 61482-1-1: Live working - Protective clothing against the thermal hazards of an electric arc - Part 1-1: Test methods - Method 1: Determination of the arc rating (ELIM, ATPV and/or EBT) of clothing materials and of protective clothing using an open arc, 06/10/2016

81/515/CD, IEC/TS 62561-8 Ed.1: Lightning Protection System Components (LPSC) - Part 8: Requirements for components for isolated LPS, 06/10/2016

86B/3972/CDV, IEC 61300-2-52/Ed2: Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-52: Tests - Bending test for cords, 06/10/2016

90/364/CD, IEC 61788-23: Superconductivity - Part 23: Residual resistance ratio measurement - Residual resistance ratio of Nb superconductors, 06/10/2016

91/1336/CDV, IEC 61189-5-503 Ed.1: Test methods for electrical materials, printed boards and other interconnection structures and assemblies - Part 5-503: General test methods for materials and assemblies - Conductive Anodic Filaments (CAF) testing of circuit boards, 06/10/2016

91/1353/NP, Future IEC 61189-5-504 Ed.1: Test methods for electrical materials, interconnection structures and assemblies - Part 5-504: General test methods for materials and assemblies - Process ionic contamination testing (PICT), 06/10/2016

101/506/CD, IEC/TR 61340-5-2 Ed.2: Electrostatics - Part 5-2: Protection of electronic devices from electrostatic phenomena - User guide, 06/10/2016

110/730/CDV, IEC 62679-4-2 Ed.1: Electronic paper displays - Part 4 -2: Environmental test methods, 06/10/2016

110/753/FDIS, IEC 61747-30-4 Ed.1: Liquid crystal display devices - Part 30-4: Measuring methods for liquid crystal display modules - Dynamic backlight units, 05/20/2016

110/755/CD, IEC 62908-12-10 Ed.1: Touch and interactive displays - Part 12-10: Measurement methods of touch displays - Touch and electrical performance, 05/13/2016

111/418/CD, IEC 62321-3-2 Ed. 2.0: Determination of certain substances in electrotechnical products - Part 3-2: Screening of the halogens (fluorine, bromine and chlorine) in polymer and electronics by Combustion - Ion Chromatography (C-IC), 05/13/2016

112/357/CD, IEC/TR 60493-3 Ed.1: Guide for the statistical analysis of aging test data - Part 3: Minimum specimen numbers at different test conditions with given experimental data, 06/10/2016

112/358/NP, Future IEC 61857-41: Electrical insulation systems- Procedures for thermal evaluation - Part 41: Specific requirements for electrical insulation systems for use in dry-type high-voltage transformers with operating voltages of 1kV and above, 06/10/2016

113/312/NP, IEC TS 62607-5-2: Nanomanufacturing - Key control characteristics - Part 5-2: Thin-film organic/nano electronic devices - Measuring Alternating Current characteristics, 06/10/2016

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

ISO/IEC JTC 1 Technical Reports

ISO/IEC TR 19566-1:2016, Information technology - JPEG Systems - Part 1: Packaging of information using codestreams and file formats, $149.00

AGRICULTURAL FOOD PRODUCTS (TC 34)

ISO 13299:2016, Sensory analysis - Methodology - General guidance for establishing a sensory profile, $200.00

ISO 16577:2016, Molecular biomarker analysis - Terms and definitions, $51.00

BANKING AND RELATED FINANCIAL SERVICES (TC 68)

ISO 13491-1:2016, Financial services - Secure cryptographic devices (retail) - Part 1: Concepts, requirements and evaluation methods, $173.00

ISO 13491-2:2016, Financial services - Secure cryptographic devices (retail) - Part 2: Security compliance checklists for devices used in financial transactions, $200.00

CINEMATOGRAPHY (TC 36)

ISO 12612:2016, Cinematography - Interchange of post-production sprocket-based materials, $88.00

CRYOGENIC VESSELS (TC 220)

ISO 24490:2016, Cryogenic vessels - Pumps for cryogenic service, $123.00

ENVIRONMENTAL MANAGEMENT (TC 207)

ISO 14021:2016, Environmental labels and declarations - Self-declared environmental claims (Type II environmental labelling), $173.00

FERTILIZERS AND SOIL CONDITIONERS (TC 134)

ISO 18643:2016, Fertilizers and soil conditioners - Determination of biuret content of urea-based fertilizers - HPLC method, $88.00

ISO 18645:2016, Fertilizers and soil conditioners - Water soluble fertilizer - General requirements, $88.00

METALLIC AND OTHER INORGANIC COATINGS (TC 107)

ISO 2178:2016, Non-magnetic coatings on magnetic substrates - Measurement of coating thickness - Magnetic method, $200.00

ISO 18535:2016, Diamond-like carbon films - Determination of friction and wear characteristics of diamond-like carbon films by ball-on-disc method, $88.00

PALLETS FOR UNIT LOAD METHOD OF MATERIALS HANDLING (TC 51)

ISO 8611-2/Amd1:2016, Pallets for materials handling - Flat pallets - Part 2: Performance requirements and selection of tests - Amendment 1, $22.00

PHOTOGRAPHY (TC 42)

ISO 22028-1:2016, Photography and graphic technology - Extended colour encodings for digital image storage, manipulation and interchange - Part 1: Architecture and requirements, $240.00

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

ISO 15225:2016, Medical devices - Quality management - Medical device nomenclature data structure, $123.00

ISO 80369-6:2016, Small bore connectors for liquids and gases in healthcare applications - Part 6: Connectors for neuraxial applications, $200.00

SMALL CRAFT (TC 188)

ISO 16315:2016, Small craft - Electric propulsion system, $149.00

SURFACE CHEMICAL ANALYSIS (TC 201)

ISO 18554:2016, Surface chemical analysis - Electron spectroscopies - Procedures for identifying, estimating and correcting for unintended degradation by X-rays in a material undergoing analysis by X-ray photoelectron spectroscopy, $123.00

ISO Technical Reports

WELDING AND ALLIED PROCESSES (TC 44)

ISO/TR 25901-1:2016, Welding and allied processes - Vocabulary - Part 1: General terms, $51.00

ISO/TR 25901-3:2016, Welding and allied processes - Vocabulary - Part 3: Welding processes, $51.00

ISO/TR 25901-4:2016, Welding and allied processes - Vocabulary - Part 4: Arc welding, $51.00

ISO Technical Specifications

NANOTECHNOLOGIES (TC 229)

ISO/TS 80004-12:2016, Nanotechnologies - Vocabulary - Part 12: Quantum phenomena in nanotechnology, $51.00

ISO/IEC JTC 1, Information Technology

ISO/IEC 14888-3:2016, Information technology - Security techniques - Digital signatures with appendix - Part 3: Discrete logarithm based mechanisms, $265.00

ISO/IEC 23005-2:2016, Information technology - Media context and control - Part 2: Control information, $265.00

ISO/IEC 23005-4:2016, Information technology - Media context and control - Part 4: Virtual world object characteristics, $265.00

ISO/IEC 23005-5:2016, Information technology - Media context and control - Part 5: Data formats for interaction devices, $265.00

ISO/IEC 23005-6:2016, Information technology - Media context and control - Part 6: Common types and tools, $265.00

IEC Standards

IEC Technical Reports

FIBRE OPTICS (TC 86)

IEC/TR 62901 Ed. 1.0 en:2016, Guide for the selection of drop cables, $254.00

IEC Technical Specifications

POWER SYSTEM CONTROL AND ASSOCIATED COMMUNICATIONS (TC 57)

IEC/TS 61850-80-4 Ed. 1.0 en:2016, Communication networks and systems for power utility automation - Part 80-4: Translation from the COSEM object model (IEC 62056) to the IEC 61850 data model, $121.00

Proposed Foreign Government Regulations

Call for Comment

U.S. manufacturers, exporters, regulatory agencies and standards developing organizations may be interested in proposed foreign technical regulations issued 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 report proposed technical regulations that may significantly affect trade to the WTO Secretariat in Geneva, Switzerland. In turn, the Secretariat disseminates the information to all WTO Members. The purpose of this requirement is to provide global trading partners with an opportunity to review and comment on the regulations before they become final.

The National Center for Standards and Certification Information (NCSCI) at the National Institute of Standards and Technology (NIST), distributes these proposed foreign technical regulations to U.S. stakeholders via an online service, Notify U.S. Notify U.S. is an e-mail and Web service that allows interested U.S. parties to register, obtain notifications, and read full texts of regulations from countries and for industry sectors of interest to them. To register for Notify U.S., please go to Internet URL: http://www.nist.gov/notifyus/ and click on "Subscribe".

NCSCI is the WTO TBT Inquiry Point for the U.S. and receives all notifications and full texts of regulations to disseminate to U.S. Industry. For further information, please contact: NCSCI, NIST, 100 Bureau Drive, Gaithersburg, MD 20899-2160; Telephone: (301) 975-4040; Fax: (301) 926-1559; E-mail: ncsci@nist.gov or notifyus@nist.gov.

Information Concerning

American National Standards

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 its oversight of programs of its 40+ Technical Committees. Additionally, the INCITS Executive Board exercises international leadership in its role as the US Technical Advisory Group (TAG) to ISO/IEC JTC 1, Information Technology.

The INCITS Executive Board has eleven membership categories that can be viewed at http://www.incits.org/participation/membership-info. Membership in all categories is always welcome. INCITS also seeks to broaden its membership base and looks to recruit new participants in the following under-represented membership categories:

- **Producer – Hardware**

  This category primarily produces hardware products for the ITC marketplace.

- **Producer – Software**

  This category primarily produces software products for the ITC marketplace.

- **Distributor**

  This category is for distributors, resellers or retailers of conformant products in the ITC industry.

- **User**

  This category includes entities that primarily reply on standards in the use of a products/service, as opposed to producing or distributing conformant products/services.

- **Consultants**

  This category is for organizations whose principal activity is in providing consulting services to other organizations.

- **Standards Development Organizations and Consortia**

  o "Minor" an SDO or Consortia that (a) holds no TAG assignments; or (b) holds no SC TAG assignments, but does hold one or more Work Group (WG) or other subsidiary TAG assignments.

- **Academic Institution**

  This category is for organizations that include educational institutions, higher education schools or research programs.

- **Other**

  This category includes all organizations who do not meet the criteria defined in one of the other interest categories.

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, please contact Jennifer Garner at 202-626-5737 or jgarner@itic.org. Visit www.INCITS.org for more information regarding INCITS activities.

Calls for Members

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

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

ANSI Accredited Standards Developers

Additional Revisions to Accredited Operating Procedures

SSPC – The Society for Protective Coatings

Comment Deadline: April 25, 2016

SSPC – The Society for Protective Coatings, an ANSI member and Accredited Standards Developer, has submitted additional revisions to its currently accredited operating procedures for documenting consensus on SSPC-sponsored American National Standards, under which it was last reaccredited in 2013. These additional revisions supplement those originally announced in the December 4, 2015 issue of Standards Action.

To obtain a copy of the revised procedures or to offer comments, please contact: Ms. Aimee Beggs, Standards Development Specialist, The Society for Protective Coatings, 40 24th Street, 6th Floor, Pittsburgh, PA 15235-4656; phone: 412.281.2331, ext. 2223; e-mail: beggs@sspc.org. You may view/download a copy of the revisions during the public review period at the following URL: www.ansi.org/accredPR. Please submit any public comments on the revised procedures to SSPC by April 25, 2016, with a copy to the ExSC Recording Secretary in ANSI's New York Office (jthompso@ANSI.org).

Approval of Reaccreditation

IEEE

ANSI's Executive Standards Council has approved the reaccreditation of IEEE, an ANSI Member and Accredited Standards Developer, under its recently revised operating IEEE-SA Standards Board Bylaws and IEEE-SA Standards Board Operating Manual for documenting consensus on IEEE-sponsored American National Standards, effective March 16, 2016. For additional information, please contact: Mr. David Ringle, Director, SA Governance, IEEE Standards Association, 445 Hoes Lane, Piscataway, NJ 08854-4141; phone: 732.562.3806; e-mail: d.ringle@ieee.org.

Kitchen Cabinet Manufacturers Association (KCMA)

ANSI's Executive Standards Council has approved the reaccreditation of the Kitchen Cabinet Manufacturers Association (KCMA), an ANSI Member and Accredited Standards Developer, under its recently revised operating procedures for documenting consensus on KCMA-sponsored American National Standards, effective March 22, 2016. For additional information, please contact: Mr. Chuck Arnold, Director of Certification, Kitchen Cabinet Manufacturers Association, 1899 Preston White Drive, Reston, VA 20191; phone: 703.264.1690; e-mail: carnold@kcma.org.

Portable Generator Manufacturers Association (PGMA)

ANSI's Executive Standards Council has approved the reaccreditation of the Portable Generator Manufacturers Association (PGMA), an ANSI Member and Accredited Standards Developer, under its recently revised operating procedures for documenting consensus on PGMA-sponsored American National Standards, effective March 23, 2016. For additional information, please contact: Mr. Joseph Harding, Technical Director, Portable Generator Manufacturers Association, 1300 Sumner Avenue, Cleveland, OH 44115-2851; phone: 216.241.7333 ext. 7721; e-mail: jharding@thomasamc.com.

ANSI Accreditation Program for Third Party Product Certification Agencies

Application for Product Certification Accreditation Program

AgroManagement

Comment Deadline: April 25, 2016

Applicant
Inge Bodil Jochumsen
Manager - Headquarters
AgroManagement
Osterbro 4,
Tommerup DK 5690, Denmark
ibj@agromanagement.dk

Certification body has submitted formal application for accreditation by ANSI of the following certification program of this certification body:

GlobalG.A.P. V5, General Regulations Integrated Farm Assurance: Option 1 - Individual Producer Certification:

- Crops Base: Combinable Crops
- Crops Base: Flowers & Ornamentals
- Crops Base: Fruit & Vegetables
- Crops Base: Plant Propagation Materials

GlobalG.A.P. V5, General Regulations Integrated Farm Assurance: Option 2 - Producer Group Certification

Crops Base: Combinable Crops

- Crops Base: Flowers & Ornamentals
- Crops Base: Fruit & Vegetables
- Livestock Base: Diary
- Livestock Base: Others
- Livestock Base: Poultry

GlobalG.A.P. General Regulations: Chain of Custody (COC)

Please send your comments by April 25, 2016 to Reinaldo Balbino Figueiredo, Senior Program Director, Product Certifier Accreditation, American National Standards Institute, 1899 L Street, NW, 11th Floor, Washington, DC 20036, Fax: 202-293 9287 or e-mail: rfigueir@ansi.org, or Nikki Jackson, Program Manager, Product Certifier Accreditation, American National Standards Institute, 1899 L Street, NW, 11th Floor, Washington, DC 20036, Fax: 202-293 9287 or e-mail: njackson@ansi.org.

Cradle to Cradle Products Innovation Institute

Comment Deadline: April 25, 2016

Applicant
Michael Wolfe
Strategic Advisor, Headquarters
Cradle to Cradle Products Innovation Institute
221 Main St. ,Suite 650,
San Francisco, CA 94105
mrwlobo@gmail.com

Certification body has submitted formal application for accreditation by ANSI of the following certification program of this certification body:

- Cradle to Cradle Certified Products Certification Scheme.

Please send your comments by April 25, 2016 to Reinaldo Balbino Figueiredo, Senior Program Director, Product Certifier Accreditation, American National Standards Institute, 1899 L Street, NW, 11th Floor, Washington, DC 20036, Fax: 202-293 9287 or e-mail: rfigueir@ansi.org, or Nikki Jackson, Program Manager, Product Certifier Accreditation, American National Standards Institute, 1899 L Street, NW, 11th Floor, Washington, DC 20036, Fax: 202-293 9287 or e-mail: njackson@ansi.org.

Dicentra

Comment Deadline: April 25, 2016

Applicant
Nancy MacLeod Grove
Dicentra
SQF High Risk Consultant/Auditor -Senior Regulatory Specialist
44 Gristmill Lane, Unit 200,
Toronto , ON M5A 3C4, Canada
nancy@dicentra.com

Certification body has submitted formal application for accreditation by ANSI of the following certification program and scopes:

SQF Code 7.2 Edition, July 2014

- Module 02: SQF System elements
- Module 03: Animal Feed Safety Fundamentals GMP for Compound Feed Production
- Module 04: Pet food Safety Fundamentals GMP for Processing of Pet Food Products
- Module 05: Food Safety Fundamentals GAP for farming of animal products
- Module 06: Food Safety Fundamentals GAP for farming of fish
- Module 07: Food Safety Fundamentals GAP for farming of plant products (fruit and vegetables)
- Module 07H: Food Safety Standard GAP for farming of plant products
- Module 08: Food Safety Fundamentals GAP for farming of grains and pulses
- Module 09: Food Safety Fundamentals GMP for pre-processing of animal products
- Module 10: Food Safety Fundamentals GMP for pre-processing of plant products
- Module 11: Food Safety Fundamentals GMP for processing of food products
- Module 12: Food Safety Fundamentals GDP for transport and distribution of food Products
- Module 13: Food Safety Fundamentals GMP for production of food packaging
- Module 16: Requirements for SQF multi-site programs managed by a central site

Please send your comments by April 25, 2016 to Reinaldo Balbino Figueiredo, Senior Program Director, Product Certifier Accreditation, American National Standards Institute, 1899 L Street, NW, 11th Floor, Washington, DC 20036, Fax: 202-293 9287 or e-mail: rfigueir@ansi.org, or Nikki Jackson, Program Manager, Product Certifier Accreditation, American National Standards Institute, 1899 L Street, NW, 11th Floor, Washington, DC 20036, Fax: 202-293 9287 or e-mail: njackson@ansi.org.

TUV NORD CERT GmbH

Comment Deadline: April 25, 2016

Applicant
Hakan Sen
TUV NORD CERT GmbH
Head of Certification Service
Langemarckstrae 20 , D-45141
Essen, Germany
hsen@tuev-nord.de

Certification body has submitted formal application for accreditation by ANSI of the following certification program and scopes :

SQF Code 7.2 Edition, July 2014

- Module 02: SQF System elements
- Module 03: Animal Feed Safety Fundamentals GMP for Compound Feed Production
- Module 04: Pet food Safety Fundamentals GMP for Processing of Pet Food Products
- Module 05: Food Safety Fundamentals GAP for farming of animal products
- Module 06: Food Safety Fundamentals GAP for farming of fish
- Module 07: Food Safety Fundamentals GAP for farming of plant products (fruit and vegetables)
- Module 07H: Food Safety Standard GAP for Farming of Plant Products
- Module 08: Food Safety Fundamentals GAP for farming of grains and pulses
- Module 09: Food Safety Fundamentals GMP for pre-processing of animal products
- Module 10: Food Safety Fundamentals GMP for pre-processing of plant products
- Module 11: Food Safety Fundamentals GMP for processing of food products
- Module 12: Food Safety Fundamentals GDP for transport and distribution of food Products
- Module 13: Food Safety Fundamentals GMP for production of food packaging

Please send your comments by April 25, 2016 to Reinaldo Balbino Figueiredo, Senior Program Director, Product Certifier Accreditation, American National Standards Institute, 1899 L Street, NW, 11th Floor, Washington, DC 20036, Fax: 202-293 9287 or e-mail: rfigueir@ansi.org, or Nikki Jackson, Program Manager, Product Certifier Accreditation, American National Standards Institute, 1899 L Street, NW, 11th Floor, Washington, DC 20036, Fax: 202-293 9287 or e-mail: njackson@ansi.org.

Request for Scope Extension

ACB, Inc.

Comment Deadline: April 25, 2016

Ms. Susan Holman
Financial & HR Manager/Quality Assurance Rep.
ACB, Inc.
6731 Whittier Avenue, Suite C110
McLean, VA 22101
Phone: 703-847-4700
Fax: 703-847-6888
E-mail: susan@acbcert.com
Web: www.ACBcert.com

ACB, Inc., an ANSI-accredited certification body, has requested an extension of ANSI accreditation to include the following:

Office of the Communications Authority of Hong Kong

OFCA Radio Equipment Specifications (HKCA 10XX)

HKCA 1008
HKCA 1020
HKCA 1033
HKCA 1035
HKCA 1039
HKCA 1044
HKCA 1048
HKCA 1054
HKCA 1056
HKCA 1057
HKCA 1061
HKCA 1065
HKCA 1072
HKCA 1073

Please send your comments by April 25, 2016 to Reinaldo Balbino Figueiredo, Senior Program Director, Product Certifier Accreditation, American National Standards Institute, 1899 L Street, NW, 11th Floor, Washington, DC 20036, Fax: 202-293 9287 or e-mail: rfigueir@ansi.org, or Nikki Jackson, Program Manager, Product Certifier Accreditation, American National Standards Institute, 1899 L Street, NW, 11th Floor, Washington, DC 20036, Fax: 202-293 9287 or e-mail: njackson@ansi.org.

International Organization for Standardization (ISO)

Establishment of ISO Subcommittee

ISO/TC 83/SC 6 – Martial Arts

ISO/TC 83, Sports and Other Recreational Facilities and Equipment, has created a new ISO Subcommittee on Martial arts (ISO/TC 83/SC 6). The Secretariat has been assigned to Germany (DIN).

ISO/TC 83/SC 6 operates under the following scope:

Development of standards in the field of martial arts within the scope of ISO/TC 83:

Standardization of terms, dimensions, tolerances, functional, operational and performance requirements and safety requirements, as well as their testing, for sports and recreational facilities and equipment (e.g. ropes courses, playgrounds, inflatables, water slides, camping tents, floating leisure articles, sleeping bags, winter sports equipment, ice hockey equipment and facilities). Excluded are amusement rides and amusement devices covered by International Standards within the scope of ISO/TC 254.

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

Establishment of ISO Technical Committee

ISO/TC 301 – Energy Management and Energy Saving

A new ISO Technical Committee, ISO/TC 301– Energy management and energy saving, has been formed. The Secretariat has been assigned to United States (ANSI) and China (SAC).

ISO/TC 301 operates under the following scope:

Standardization in the field of energy management and energy saving.

Georgia Tech Energy & Sustainability Services has committed to administer the U.S. TAG. Organizations interested in participating on the U.S. TAG should contact ANSI's ISO Team (isot@ansi.org).

Establishment of ISO Project Committees

ISO/PC 302 – Guidelines for Auditing Management Systems

A new ISO Project Committee, ISO/PC 302 – Guidelines for auditing management systems, has been formed. The Secretariat has been assigned to United States (ANSI).

ISO/PC 302 operates under the following scope:

Standardization in the field of guidelines for auditing management

American Society for Quality (ASQ) has committed to administer the U.S. TAG. Organizations interested in participating on the U.S. TAG should contact ANSI's ISO Team (isot@ansi.org).

ISO/PC 303 – Guidelines on Consumer Warrantees and Guarantees

A new ISO Project Committee, ISO/PC 303– Guidelines on consumer warrantees and guarantees, has been formed. The Secretariat has been assigned to Malaysia (DSM).

ISO/PC 303 operates under the following scope:

The standard is intended for use by producers or sellers of goods and services to offer best practices and requirements for effective warranties when these are provided with goods and 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).

New Work Item Proposal for a New Field of ISO Technical Activity

Safety Management of Complex Technical Systems

Comment Deadline: April 8, 2016

GOST R, the ISO member body for the Russian Federation, has submitted to ISO a new work item proposal for a new field of ISO technical activity on Safety Management of Complex Technical Systems, with the following scope statement:

Standardization in the field of complex technical systems, such as aerospace systems, including all their constituent elements (operators, manufacturers of industrial products, industrial infrastructures, maintenance and repair organizations, training centers, etc.) throughout the full Life Cycle – definition, classification of threats and risk factors, procedures for determining Safety Efficiency, including predictive risk modeling; recommendations on the practical application of risk management.

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, April 8, 2016.

Meeting Notices

AHRI Standards

Revision of ANSI/AHRI Standards 1060 (I-P) and 1061 (SI)-2014, Performance Rating of Air-to-Air Exchangers for Energy Recovery Ventilation Equipment

The Air-Conditioning, Heating, and Refrigeration Institute (AHRI) will be holding an online meeting every two weeks between Thursdays, April 7 and July 28, from 2 p.m. to 4 p.m. (April 7, May 5, May 19, June 2, June 16, June 30, July 14, and July 28). If you are interested in participating in the meeting or providing comments on the standard, please contact AHRI staff member Mikelann Scerbo at mscerbo@ahrinet.org.

Revision of ANSI/AHRI Standard 1230-2010, Performance Rating of Variable Refrigerant Flow Multi-Split Air Conditioning and Heat Pump Equipment

The Air-Conditioning, Heating, and Refrigeration Institute (AHRI) will be holding an online meeting on April 22 from 9 a.m. to 2 p.m. If you are interested in participating in the meeting or providing comments on the standard, please contact AHRI staff member Richie Mohan at rmohan@ahrinet.org.

Revision of ANSI/AHRI Standard 1230-2010, Performance Rating of Variable Refrigerant Flow Multi-Split Air Conditioning and Heat Pump Equipment

The Air-Conditioning, Heating, and Refrigeration Institute (AHRI) will be holding an online meeting on March 28 from 9 a.m. to 2 p.m. If you are interested in participating in the meeting or providing comments on the standard, please contact AHRI staff member Richie Mohan at rmohan@ahrinet.org.

Information Concerning

International Organization for Standardization (ISO)

Call for International (ISO) Secretariat
ISO/TC 131/SC 9 – *Installations and systems*
Comment Deadline: April 22, 2016

Currently, the U.S. holds a leadership position as Secretariat of ISO/TC 131/SC 9 – *Installations and systems*. ANSI has delegated the responsibility for the administration of the Secretariat for ISO/TC 131/SC 9 to the National Fluid Power Association (NFPA). NFPA has advised ANSI of its intent to relinquish its role as delegated Secretariat for this committee.

ISO/TC 131/SC 9 operates under the following scope:

> *Development of standards in the field of Installations and systems within the scope of ISO/TC 131:*
>
> *Standardization in the field of fluid power systems and components, comprising terminology, construction, principal dimensions, safety requirements and testing and inspection methods.*
>
> *To include such components as : accumulators, compressed air dryers, conductors (rigid and flexible), cylinders, electro-hydraulic and electro-pneumatic components and systems, fittings, fluidic devices, hose fittings and assemblies, filters and separators, fluids, hydraulic pumps, motors, moving-part fluid- controls, pneumatic lubricators, regulators, quick-action couplings, reservoirs, sealing devices, valves.*

ANSI is seeking organizations in the U.S. that may be interested in assuming the role of delegated Secretariat for ISO/TC 131/SC 9. Alternatively, ANSI may be assigned the responsibility for administering an ISO Secretariat. Any request that ANSI accept the direct administration of an ISO Secretariat shall demonstrate that:

1. The affected interests have made a financial commitment for not less than three years covering all defined costs incurred by ANSI associated with holding the Secretariat;
2. the affected technical sector, organizations or companies desiring that the U.S. hold the Secretariat request that ANSI perform this function;
3. the relevant U.S. TAG has been consulted with regard to ANSI's potential role as Secretariat; and
4. ANSI is able to fulfill the requirements of a Secretariat.

If no U.S. organization steps forward to assume the ISO/TC 131/SC 9 Secretariat, or if there is insufficient support for ANSI to assume direct administration of this activity by April 25, 2016, then ANSI will inform the ISO Central Secretariat that the U.S. will relinquish its leadership of the committee. This will allow ISO to solicit offers from other countries interested in assuming the Secretariat role.

Information concerning the United States retaining the role of international Secretariat may be obtained by contacting ANSI's ISO Team (isot@ansi.org).

Information Concerning

International Organization for Standardization (ISO)

Call for U.S. TAG Administrator

ISO/TC 282 (and Subcommittees) – Water Reuse

ANSI has been informed that the American Society of Plumbing Engineers (ASPE), the ANSI-accredited U.S. TAG Administrator for ISO/TC 282 and Subcommittees, wishes to relinquish their role as U.S. TAG Administrator.

ISO/TC 282 operates under the following scope:

> *Standardisation of water re-use of any kind and for any purpose. It covers both centralised and decentralised or on-site water re-uses, direct and indirect ones as well as intentional and unintentional ones. It includes technical, economic, environmental and societal aspects of water re-use. Water re-use comprises a sequence of the stages and operations involved in uptaking, conveyance, processing, storage, distribution, consumption, drainage and other handling of wastewater, including the water re-use in repeated, cascaded and recycled ways. The scope of ISO/PC 253 (Treated wastewater re-use for irrigation) is merged into the proposed new committee.*
>
> *Excluded:*
> - *the limit of allowable water quality in water re-use, which should be determined by the governments, WHO and other relevant competent organizations.*
> - *all aspects of TC 224 scope (service activities relating to drinking water supply systems and wastewater systems -- Quality criteria of the service and performance indicators)*
> - *methods for the measurement of water quality, which are covered by TC 147.*

ISO/TC 282/SC 1 operates under the following scope:

> *Treated wastewater reuse for Irrigation*

ISO/TC 282/SC 2 operates under the following scope:

> *Standardization in the field of water reuse in urban areas. It addresses wastewater reclamation and reuse in urban areas. It includes guidelines for design and management of water reuse systems taking into consideration safety, reliability and efficiency. It covers both centralized (community-wide) and decentralized (on-site) water reuse systems. The standardization process covers the reclamation, storage and distribution parts of water reuse systems in urban areas.*

ISO/TC 282/SC 3 operates under the following scope:

> *Risk and performance evaluation of water reuse systems*

Organizations interested in serving as the U.S. TAG Administrator for any of these committees should contact ANSI's ISO Team (isot@ansi.org).

BSR/ASHRAE/IES Addendum bd
to ANSI/ASHRAE/IES Standard 90.1-2013

Public Review Draft

Proposed Addendum bd to Standard 90.1-2013, *Energy Standard for Buildings Except Low-Rise Residential Buildings*

Second Public Review (March 2016)
(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).

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

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

ASHRAE, 1791 Tullie Circle, NE, Atlanta GA 30329-2305

(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 proposal requires monitoring chiller plant efficiency in large electric motor driven chilled water plants. The requirement is for plants with a peak chilled water output based upon equipment type and climate zone. This proposal is designed to help commissioning and ongoing operations of the aforementioned chilled water plants. By provided data on plant efficiency in Kw/ton (COP) so the operators and those responsible for management of the plant can easily determine if the chilled water plant is performing efficiently. This is a prescriptive requirement, not mandatory.
The installation cost of additional measurement equipment and software enhancements is offset by an improvement in kw/ton (COP) consumption during the operation of the chiller plant.
This change clarifies the plant size threshold for monitoring to cooling capacity.

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.

Addendum bd to 90.1-2013

Revise the Standard as follows (I-P and SI units)

6.4.3.11 Chilled Water Plant Monitoring
6.4.3.11.1 Electric Motor Driven Chiller System Monitoring. For electric motor driven chilled water plants in new buildings or for new plants in existing buildings, measurement devices shall be installed and shall measure the electric energy use and efficiency of the chilled water plant for:

a. water cooled chilled water plants larger than 1,500 tons (5,275 kW) peak ~~load~~ cooling capacity for climate zones 5-8 , 3C and 4C and larger than 1,000 tons (3,517 kW) peak cooling capacity for all other zones and,
b. air cooled chilled water plants larger than 860 tons (3,024 kW) peak ~~load~~ cooling capacity for climate zones 5-8 , 3C and 4C and larger than 570 tons (2,005 kW) peak cooling capacity for all other zones.

The efficiency shall be calculated in kW/ton (COP) (see Appendix E).

6.4.3.11.2 Electric Motor Driven Chiller System Recording and Reporting. The electrical energy usage and efficiency shall be recorded a minimum of every 15 minutes and reported at least hourly, daily, monthly, and annually. The system shall maintain all data collected for a minimum of 36 months.

Informative Reference

6.4.3.11 ASHRAE GUIDELINE 22-2012 -- INSTRUMENTATION FOR MONITORING CENTRAL CHILLED-WATER PLANT EFFICIENCY

BSR/ASHRAE/IES Addendum do
to ANSI/ASHRAE/IES Standard 90.1-2013

DRAFT

Proposed Addendum do Standard 90.1-2013, Energy Standard for Buildings Except Low-Rise Residential Buildings

First Draft (March 2016)
(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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ASHRAE, 1791 Tullie Circle, NE, Atlanta GA 30329-2305

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FOREWORD

Currently, lighting in dwelling units in high-rise buildings is exempt in both ASHRAE 90.1 and 90.2. The proposed requirements below are similar to those in Energy Star for high efficacy lighting. For this 90.1 proposal, they are simplified to apply to anticipated dwelling units in commercial buildings, support compliance, and are conservative to allow design flexibility. In general, the efficacy requirements will eliminate the use of INC/Halogen sources as well as less efficacious CFL and LED products.

Cost Justification:

The three likely and common applications of this requirements include typical mixture of controls, no controls with high efficacy lighting, and all auto controls. All cases are easily cost effective based on scalar ratio analysis or NPV (Net Present Value) life cycle cost analysis. The calculated scalars range from 1.3 to 4.5 which are below the scalar ratio limit of 14.1 for 23 year life analysis. Net present values were also positive for all three cases.

[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 do to 90.1-2013

Modify the standard as follows:

Modify Section 3.2 Definitions:

……

dimmer: A lighting control device that is capable of varying the light output and energy usage of light sources.

Modify Section 9 as follows:

9.1.1 Scope:

Scope. This section shall apply to the following:

…….

Emergency lighting that is automatically off during normal building operation
Lighting within dwelling units
Lighting that is specifically designated as required by a health or life safety statute, ordinance, or regulation

Decorative gas lighting systems

Add new Section 9.4.4:

9.4.4. Dwelling Units. Not less than 75 percent of the permanently installed lighting fixtures shall utilize lamps with an efficacy of at least 55 lumen/watt, or have a total luminaire efficacy of at least 45 lumen/watt.

Exception to 9.4.4:
Lighting that is controlled with dimmers or automatic control devices.

BSR/ASHRAE/IES Addendum dw
to ANSI/ASHRAE/IES Standard 90.1-2013

Public Review Draft

Proposed Addendum dw to Standard 90.1-2013, *Energy Standard for Buildings Except Low-Rise Residential Buildings*

Second Public Review (March 2016)
(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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BSR/ASHRAE/IES Addendum dw to ANSI/ASHRAE/IES Standard 90.1-2013, *Energy Standard for Buildings Except Low-Rise Residential Buildings*
Second Public Review Draft (Independent Substantive Change Public Review)

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

FOREWORD

The efficiency for the motors used in hydraulic elevators is substantially different than the motor efficiencies used for traction elevators. In addition the hydraulic elevator motors are usually not a type covered by the standard. This change to Addendum dw adds efficiencies for hydraulic elevator motors.

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.

Addendum dw to 90.1-2013

Revise the Standard as follows (I-P and SI units)

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

Part 16. Elevators – Baseline Building Performance

h_{motor} = the motor efficiency in accordance with ~~from~~ Table G.3.9.2. ~~X.X.X For the next motor size greater than the bhp (kW) using a totally enclosed motor at 1800 rpm~~

TABLE G3.9.2~~X.X~~ Performance Rating Method Baseline Elevator ~~Motor Power~~

Number of Stories (including basement)	*Motor Type*	*Counterweight*	*Mechanical Efficiency*	*Motor Efficiency*[a]
<= 4	Hydraulic	None	58%	Table G3.9.3
> 4	Traction	Proposed design counterweight, if not specified use weight of the car plus 40% of the rated load	64%	Table G3.9.1

a. Use the efficiency for the next motor size greater than the calculated bhp (kW)

TABLE G3.9.3 Performance Rating Method Hydraulic Elevator Motor Efficiency

HP	*Full-Load Efficiency*
10 (7.5 kW)	72%
20 (15 kW)	75%
30 (22 kW)	78%
40 (30 kW)	78%
100 (75 kW)	80%

(The following table was introduced in Addendum DI and is referenced by this addendum. If this addendum is published this table will be renumbered G3.9.1. This table is only included for reference and is not open for public review at this time.)

TABLE G3.9 Performance Rating Method Motor Efficiency Requirements

Motor Horsepower	Minimum Nominal Full-Load Efficiency (%)
1.0 (0.8 kW)	82.5
1.5 (1.1 kW)	84.0
2.0 (1.5 kW)	84.0
3.0 (2.2 kW)	87.5
5.0 (3.7 kW)	87.5
7.5 (5.6 kW)	89.5
10.0 (7.5 kW)	89.5
15.0 (11.1 kW)	91.0
20.0 (14.9 kW)	91.0
25.0 (18.7 kW)	92.4
30.0 (22.4 kW)	92.4
40.0 (29.8 kW)	93.0
50.0 (37.3 kW)	93.0
60.0 (44.8 kW)	93.6
75.0 (56.0 kW)	94.1
100.0 (74.6 kW)	94.5
125.0 (93.3 kW)	94.5
150.0 (111.9 kW)	95.0
200.0 (149.2 kW)	95.0

BSR/ASHRAE/IES Addendum dz
to ANSI/ASHRAE/IES Standard 90.1-2013

DRAFT

Proposed Addendum dz

Standard 90.1-2013, Energy Standard for Buildings Except Low-Rise Residential Buildings

First Draft (March 2016)
(Draft shows Proposed Changes to Current Standard)

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FOREWORD

The purpose of this addendum is to provide clarifications only that are related to changes made as a result of addendum cp. This addendum does not change the criteria of the standard. The base assembly for metal building walls is clarified and reference to all insulation methods recognized in Section A3.2 rather than indicating one insulation methodology as the "base assembly" which is not intended. Because continuous insulation is included in the calculation methods, mention is added to the scope of insulation methods to which the equations may be applied (rather than only mentioning all other insulation methods). Clarification also is made to Section A9.4.5.3 to include insulation terms newly defined in addendum cp via Sections A3.2.2.3 and A3.2.2.4, respectfully.

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Addendum dz to 90.1-2013

Modify the standard as follows (IP and SI Units):

A3.2 Metal Building Walls

A3.2.1 General. For the purpose of Section A1.2, the base assembly is a wall ~~where the insulation is compressed between~~ with metal wall panels and a ~~the~~ metal structure. Insulation is installed in accordance with this section. ~~Additional assemblies include continuous insulation, uncompressed and uninterrupted by framing.~~ Insulation exposed to a conditioned space or semiheated space shall have a facing with seams overlapped or sealed.

…

A9.2 Required Procedures. Two- or three-dimensional finite difference and finite volume computer models shall be an acceptable alternative method to calculating the thermal performance values for all assemblies and constructions listed below. The following procedures shall also be permitted to determine all alternative U-factors, F-factors, and C-factors.

a Roofs
(requirements unchanged)

b Above-Grade Walls

1 Mass walls: testing or isothermal planes calculation method or two-dimensional calculation method. The parallel path calculation method is not acceptable.

2 Metal building walls: testing, or for single layer compressed, single layer in cavity, ~~and~~ double-layer systems, and continuous insulation, calculation method in Section A9.4.5.

3 Steel-framed walls: testing or parallel path calculation method using the insulation/framing layer adjustment factors in Table A9.2-2 or the modified zone method.

4 Wood-framed walls: testing or parallel path calculation method.

5 Other walls: testing or two-dimensional calculation method.

(remainder unchanged)

…

A9.4.5 Metal Building U-Factor Equations. For single-layer metal building roof and single layer compressed metal building wall systems, the calculation procedure outlined in Section A9.4.5.1 shall be used to calculate the assembly U-factor. For double-layer metal building roof systems, the calculation procedure outlined in Section A9.4.5.2 shall be used to calculate the assembly U-factor. For single layer in cavity and double layer metal building wall systems the calculation procedure outlined in Section A9.4.5.3 shall be used to calculate the assembly U-factor. Each of the above insulation methods and calculation procedures also shall be used where continuous insulation is applied to the assembly. The calculation procedures outlined in this section shall not be used for other metal building roof and wall systems.

…

A9.4.5.3 Single ~~Double~~ Layer in ~~Filled~~ Cavity and Double Layer ~~or Liner System~~ Walls. The U-factor of metal building walls that are insulated with a single layer in cavity or multiple layers of mineral fiber insulation (see Figure A9.4.5.3-1) shall be calculated using the procedure outlined in this section. For double layer walls the procedure assumes that the outer layer of insulation is compressed between the wall panel and girt. There may also be a thermal spacer block or continuous insulation present. Air spaces may also exist depending upon the specific drape profiles….*(remainder of paragraph unchanged)*

BSR/ASHRAE/IES Addendum ea
to ANSI/ASHRAE/IES Standard 90.1-2013

DRAFT

Proposed Addendum ea Standard 90.1-2013, Energy Standard for Buildings Except Low-Rise Residential Buildings

First Draft (March 2016)
(Draft shows Proposed Changes to Current Standard)

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FOREWORD

This revision to Standard 90.1 generally addresses minor inconsistencies in terminology in sections 5 thru 11 that have developed over time. Terminology is coordinated with the definitions in Section 3..

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Addendum ea to 90.1-2013

Revise the Standard as follows (IP and SI Units)

SECTION 3

Revise Section 3 as follows:

…

building: ~~a structure wholly or partially enclosed within exterior walls or within exterior and party walls, and a roof, affording shelter to persons, animals, or property~~ any structure used or intended for supporting or sheltering any use or occupancy.

…

exterior wall: see *building envelope* and *wall*.

…

floor area, gross: the sum of the floor areas of the spaces within the building, including basements, mezzanine and intermediate-floored tiers, and penthouses with a headroom height of 7.5 ft (2.3 m) or greater. It is measured from the exterior faces of ~~exterior~~ walls or from the centerline of walls separating buildings, but excluding covered walkways, open roofed-over areas, porches and similar spaces, pipe trenches, exterior terraces or steps, chimneys, roof overhangs, and similar features.

…

grade: the finished ground level adjoining a building at all ~~exterior~~ walls.

…

nonweatherized space constrained single-package vertical unit: a single-package vertical air conditioner (SPVAC) or single-package vertical heat pump (SPVHP) that meets all of the following requirements:

a. Is for indoor use only
b. Has rated cooling capacities no greater than 36,000 Btu/h (11 kW)
c. Is a single-package unit requiring opening in an exterior wall or *semi-exterior wall* with overall exterior dimensions that requires or uses an existing sleeve that meets one of the following criteria:
    1. Has a width of less than 32 in. (813 mm) and height of less than 45 in. (1143 mm)
    2. Fits inside an existing 1310 $in.^2$ (845,160 mm^2) opening
d. Is commonly installed in site-built commercial buildings
e. Is of a similar cooling capacity and, if a heat pump, similar heating capacity

f. Draws outdoor air for heat exchange directly through an existing opening, used for both inlet and outlet, in the exterior wall or *semi-exterior wall*
g. Is restricted to applications where an existing air conditioner, heat pump, or gas/electric unit, installed in an existing exterior wall or *semi-exterior wall* opening, is to be replaced
h. …

…

semi-exterior wall: see *building envelope* and *wall*.

SECTION 5

Revise Section 5.1.2 as follows:

5.1.2 Space-Conditioning Categories

5.1.2.1 Separate ~~exterior~~ building envelope requirements are specified for: (a) nonresidential conditioned space, (b) residential conditioned space, and (c) semiheated space.

…

5.1.2.3 Spaces shall be assumed to be conditioned spaces and shall comply with the requirements for conditioned spaces at the time of construction, regardless of whether mechanical or electrical equipment is included in the building permit application or installed at that time.

~~5.1.2.4~~ **Exception:** In Climate Zones 3 through 8, a space may be designated as either a semiheated space or an unconditioned space only if approved by the building official.

Revise Section 5.4.3.1 as follows:

5.4.3.1 Continuous Air Barrier. ….

5.4.3.1.1 Air Barrier Design. The air barrier shall be designed and noted in the following manner:

a. All air barrier components of each building envelope assembly shall be clearly identified or otherwise noted on construction documents.
b. The joints, interconnections, and penetrations of the air barrier components, including lighting fixtures, shall be detailed or otherwise noted.
c. The continuous air barrier shall extend over all surfaces of the building envelope (at the lowest floor, ~~exterior~~ walls, and ~~ceiling or~~ roof)
d. …

(no changes to the remainder of the text in Section 5.4.3.1)

SECTION 6

Revise Section 6.4.3.1 as follows:

6.4.3.1 Zone Thermostatic Controls

6.4.3.1.1 General. The supply of heating and cooling energy to each zone shall be individually controlled by thermostatic controls responding to temperature within the zone. For the purposes of this section, a dwelling unit shall be permitted to be considered a single zone.

Exceptions: Independent perimeter systems that are designed to offset only building envelope loads shall be permitted to serve one or more zones also served by an interior system, provided that

1. the perimeter system includes at least one thermostatic control zone for each building exposure having ~~exterior~~ walls facing only one orientation for 50 contiguous feet (15 contiguous meters) or more and
2. the perimeter system heating and cooling supply is controlled by a thermostatic control(s) located within the zones(s) served by the system.

Exterior walls and *semi-exterior walls* are considered to have different orientations if the ~~directions~~ exposures they face differ by more than 45 degrees.

(no changes to the remainder of the text in Section 6.4.3.1)

Revise Table 6.8.2-1 as follows:

Table 6.8.2-1 Minimum Duct Insulation R-Value,[a] Cooling- and Heating-Only Supply Ducts and Return Ducts

…

[a] Insulation R-values, measured in (h·ft^2·°F)/Btu (, are for the insulation as installed and do not include film resistance. The required minimum thicknesses do not consider water vapor transmission and possible surface condensation. Where ~~exterior walls~~ portions of the *building envelope* are used as a plenum enclosure ~~walls~~, ~~wall~~ *building envelope* insulation shall be as required by the most restrictive condition of Section 6.4.4.2 or Section 5, depending on whether the plenum is located in the roof, wall, or floor. Insulation resistance measured on a horizontal plane in accordance with ASTM C518 at a mean temperature of 75°F (23.9°C) at the installed thickness

(no changes to the remainder of the Table 6.8.2-1)

Revise Table 6.8.2-2 as follows:

Table 6.8.2-2 Minimum Duct Insulation R-Value,[a] Combined Heating and Cooling Supply Ducts and Return Ducts

…

[a] Insulation R-values, measured in (h·ft^2·°F)/Btu ((, are for the insulation as installed and do not include film resistance. The required minimum thicknesses do not consider water vapor transmission and possible surface condensation. Where ~~exterior walls~~ portions of the *building envelope* are used as a plenum enclosure ~~walls~~, ~~wall~~ *building envelope* insulation shall be as required by the most restrictive condition of Section 6.4.4.2 or Section 5, depending on whether the plenum is located in the roof, wall, or floor. Insulation resistance measured on a horizontal plane in accordance with ASTM C518 at a mean temperature of 75°F (23.9°C) at the installed thickness

(no changes to the remainder of the Table 6.8.2-2)

SECTION 9

Revise Section 9.6.1 as follows:

9.6.1 Space-by-Space Method of Calculating Interior Lighting Power Allowance. Use the following steps to determine the interior lighting power allowance by the Space-by-Space Method:

a. …

b. In calculating the area of each space and subspace, the limits of the area are defined by the centerline of interior walls, the dividing line between subspaces, and the outside surface of *exterior walls* or *semi-exterior walls*. For the purposes of this section semi-exterior walls that separate semi-conditioned space from conditioned space shall be considered interior walls.

c. …

SECTION 11

Revise Table 11.5.1 as follows:

Table 11.5.1 Modeling Requirements for Calculating Design Energy Cost and Energy Cost Budget

…

5. Building Envelope,
Budget Building Design (Column B) Energy Cost Budget (ECB)
The budget building design shall have identical conditioned floor area and identical exterior dimensions and orientations as the proposed building design, except as follows:

a. …

b. …

c. No shading projections are to be modeled; fenestration shall be assumed to be flush with the ~~exterior~~ wall or roof. …

(no changes to the remainder of this subsection.)

…

7. Thermal Blocks—HVAC Zones Designed,
Proposed Building Design (Column A) Design Energy Cost (DEC)
Where HVAC zones are defined on HVAC design drawings, each HVAC zone shall be modeled as a separate thermal block.

Exceptions: Different HVAC zones may be combined to create a single thermal block or identical thermal blocks to which multipliers are applied, provided all of the following conditions are met:

1. The space-use classification is the same throughout the thermal block.
2. All HVAC zones in the thermal block that are adjacent to glazed *exterior walls* <u>and glazed *semi-exterior walls*</u> face the same orientation or their orientations are within 45 degrees of each other.
3. All of the zones are served by the same HVAC system or by the same kind of HVAC system.

…

8. Thermal Blocks— HVAC Zones Not Designed,
Proposed Building Design (Column A) Design Energy Cost (DEC)
Where the HVAC zones and systems have not yet been designed, thermal blocks shall be defined based on similar internal load densities, occupancy, lighting, thermal and space temperature schedules, and in combination with the following:

a. Separate thermal blocks shall be assumed for interior and perimeter spaces. Interior spaces shall be those located more than 15 ft (5 m) from an exterior wall <u>or *semi-exterior wall*</u>. Perimeter spaces shall be those located closer than 15 ft (5 m) from an exterior wall <u>or *semi-exterior wall*. A separate thermal zone does not need to be modeled for areas adjacent to semi-exterior walls that separate semi-conditioned space from conditioned space.</u>

b. Separate thermal blocks shall be assumed for spaces adjacent to glazed exterior walls <u>or glazed *semi-exterior walls*</u>; a separate zone shall be provided for each orientation, except that orientations that differ by no more than 45 degrees may be considered to be the same orientation. Each zone shall include all floor area that is 15 ft (5 m) or less from a glazed perimeter wall, except that floor area within 15 ft (5 m) of glazed perimeter walls having more than one orientation shall be divided proportionately between zones.

c. Separate thermal blocks shall be assumed for spaces having floors that are in contact with the ground or exposed to ambient conditions from zones that do not share these features.

d. Separate thermal blocks shall be assumed for spaces having ~~exterior ceiling or~~ roof assemblies from zones that do not share these features.

…

<u>APPENDIX A</u>

BSR/ASHRAE/IES Addendum ea to ANSI/ASHRAE Standard 90.1-2013, *Energy Standard for Buildings Except Low-Rise Residential Buildings*
First public review draft

Revise Section A2.4.1 as follows:

A2.4 General. For the purpose of Section A1.2, the base attic roof assembly is a roof with nominal 4 in. (100 mm) deep wood as the lower chord of a roof truss or ceiling joist. … U-factors are provided for the following configurations:

a. …

b. Attic roof, advanced framing: full and even depth of insulation extending to the outside edge of ~~exterior~~ walls. Weighting factors are 90% full-depth insulation and 10% joists.

BSR/ASHRAE/IES Addendum eb
to ANSI/ASHRAE/IES Standard 90.1-2013

DRAFT

Proposed Addendum eb

Standard 90.1-2013, Energy Standard for Buildings Except Low-Rise Residential Buildings

First Draft (March 2016)
(Draft shows Proposed Changes to Current Standard)

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FOREWORD

This revision to Standard 90.1 generally addresses minor inconsistencies in terminology in Appendices C and G that have developed over time. Terminology is coordinated with the definitions in Section 3..

[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 eb to 90.1-2013

Modify the standard as follows:
Revise the Standard as follows (IP and SI Units)

SECTION 3

Revise Section 3 as follows:

…

building: ~~a structure wholly or partially enclosed within exterior walls or within exterior and party walls, and a roof, affording shelter to persons, animals, or property~~ any structure used or intended for supporting or sheltering any use or occupancy.

…

exterior wall: see *building envelope* and *wall*.

…

floor area, gross: the sum of the floor areas of the spaces within the building, including basements, mezzanine and intermediate-floored tiers, and penthouses with a headroom height of 7.5 ft (2.3 m) or greater. It is measured from the exterior faces of ~~exterior~~ walls or from the centerline of walls separating buildings, but excluding covered walkways, open roofed-over areas, porches and similar spaces, pipe trenches, exterior terraces or steps, chimneys, roof overhangs, and similar features.

…

grade: the finished ground level adjoining a building at all ~~exterior~~ walls.

…

semi-exterior wall: see *building envelope* and *wall*.

APPENDIX C

Revise Section C1.2 as follows:

C1.2 At the Exterior and Semi-Exterior Surface Level. The *building envelope* assembly type, gross area, orientation, tilt, and associated space-conditioning category and building area type shall be specified. The surface shall be designated as exterior or semi-exterior. A semi-exterior surface separating a conditioned space from a

~~semi-exterior~~ semiheated space shall be specified with two associated space-conditioning categories. A semi-exterior surface separating a conditioned space from an unconditioned space shall be specified with an associated space-conditioning category and with an adjacency to an unconditioned space. Exterior surfaces with the same building envelope assembly type and associated space-conditioning category and building area type whose orientations differ by no more than 22.5 degrees and whose tilts differ by no more than 22.5 degrees are allowed to be described as a single surface.

Revise Section C3.5.5.3 as follows:

C3.5.5.3~~Infiltration~~ Air Leakage. The ~~peak infiltration~~ air leakage rate of the *building envelope* (I_{75Pa}) at a ~~fixed building~~ pressure differential of 0.3 in. H_2O shall be 0.4 cfm/ft^2 (2.03 L/s·m^2) of ~~exterior~~ *building* ~~enclosure~~ *envelope* area. The ~~peak infiltration rate~~ air leakage rate of the *building envelope* shall be converted to the appropriate units to describe the ~~peak infiltration~~ air leakage as a function of the area of ~~exterior~~ walls ~~area~~ that separate conditioned spaces and semiheated spaces from the exterior as follows:

$$I_{\sout{EW}AGW} = 0.112 \times I_{75Pa} \times S/A_{\sout{EW}AGW}$$

where

I_{75Pa} = air leakage rate of the *building envelope* ~~expressed in,~~ cfm/ft^2 (L/s·m^2), at a fixed building pressure differential of 0.3 in. wc, or 1.57 psf (75 Pa)

S = ~~the~~ total area of the *building envelope*, ft^2 (m^2), ~~air pressure boundary~~ including the lowest floor, any below-~~grade walls,~~ or above-grade walls, and roof ~~(or ceiling)~~ (including ~~windows~~ vertical fenestration and skylights). ~~, separating the interior conditioned spaces and semiheated spaces from the unconditioned environment exterior measured in square feet (square meters), ft^2 (m^2)~~

$I_{\sout{EW}AGW}$ = adjusted air leakage rate of the *building envelope* ~~in,~~ cfm/ft^2 (L/s·m^2), at a reference wind speed of 10 mph (4.47 m/s) and relative to the area of the above-~~ground~~ grade ~~exterior~~ walls ~~area~~

$A_{\sout{EW}AGW}$ = ~~the~~ total area of above-grade ~~exterior~~ walls ~~area~~ that comprise the *building envelope*, ft^2 (m^2)

Exception: If the simulation program cannot simulate ~~infiltration~~ air leakage as a function of the area of ~~exterior~~ walls ~~area~~ that separate conditioned spaces and semiheated spaces from the exterior, the ~~peak infiltration~~ air leakage of the *building envelope* shall be converted to the appropriate units to describe the ~~peak infiltration~~ air leakage as a function of gross floor area as follows:

$$I_{FLR} = 0.112 \times I_{75Pa} \times S/A_{FLR}$$

where

I_{FLR} = adjusted air leakage rate of the *building envelope* ~~in,~~ cfm/ft^2 (L/s·m^2), at a reference wind speed of 10 mph (4.47 m/s) and relative to the ~~above ground exterior wall~~ gross floor area

A_{FLR} = ~~the total~~ gross floor area, ft^2 (m^2)

(no changes to the remainder of the Section C3.5.5.3)

Revise Section C3.6 as follows:

C3.6 Calculation of Base Envelope Performance Factor. The simulation model for calculating the base envelope performance factor shall modify the simulation model for calculating the proposed envelope performance factor as follows:

a. …

b. …

c. Fenestration shall be assumed to be flush with the ~~exterior~~ wall or roof. …

d. …

e. …

APPENDIX G

Revise Section Table G3.1 as follows:

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

…

5. Building Envelope
Baseline Building Performance

Equivalent dimensions shall be assumed for each ~~exterior~~ *building envelope* component type as in the proposed design; i.e., the total gross area of ~~exterior~~ walls shall be the same in the proposed and baseline building designs. The same shall be true for the areas of roofs, floors, and doors, and the exposed perimeters of concrete slabs on grade shall also be the same in the proposed and baseline building designs. The following additional requirements shall apply to the modeling of the baseline building design:

a. …

b. …

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 that in Table G3.1.1-1 based on the area of gross above-grade ~~exterior~~ walls ~~area~~ that separate conditioned spaces and semiheated spaces from the exterior. …

d. …

e. …

f. …

g. …

…

7. Thermal Blocks—HVAC Zones Designed,
Proposed Building Performance

Where HVAC zones are defined on HVAC design drawings, each HVAC zone shall be modeled as a separate thermal block.

Exceptions: Different HVAC zones may be combined to create a single thermal block or identical thermal blocks to which multipliers are applied, provided all of the following conditions are met:

1. The space-use classification is the same throughout the thermal block.
2. All HVAC zones in the thermal block that are adjacent to glazed *exterior walls* and glazed *semi-exterior walls* face the same orientation or their orientations are within 45 degrees of each other.
3. All of the zones are served by the same HVAC system or by the same kind of HVAC system.

…

8. Thermal Blocks— HVAC Zones Not Designed,
Proposed Building Performance

Where the HVAC zones and systems have not yet been designed, thermal blocks shall be defined based on similar internal load densities, occupancy, lighting, thermal and space temperature schedules, and in combination with the following:

a. Separate thermal blocks shall be assumed for interior and perimeter spaces. Interior spaces shall be those located more than 15 ft (5 m) from an exterior wall or *semi-exterior wall*. Perimeter spaces shall be those located closer than 15 ft (5 m) from an exterior wall or *semi-exterior wall*. A separate thermal zone does not need to be modeled for areas adjacent to semi-exterior walls that separate semi-conditioned space from conditioned space.

b. Separate thermal blocks shall be assumed for spaces adjacent to glazed exterior walls or glazed *semi-exterior walls*; a separate zone shall be provided for each orientation, except that orientations that differ by no more

than 45 degrees may be considered to be the same orientation. Each zone shall include all floor area that is 15 ft (5 m) or less from a glazed perimeter wall, except that floor area within 15 ft (5 m) of glazed perimeter walls having more than one orientation shall be divided proportionately between zones.

c. …

d. …

…

Revise Section G3.1.1.4 as follows:

G3.1.1.4 Modeling Building Envelope Infiltration. The air leakage rate of the *building envelope* (I_{75Pa}) at a pressure differential of 0.3 in. H_2O (75 Pa) shall be converted to appropriate units for the simulation program using one of the following formulas:

For methods describing ~~infiltration~~ air leakage as a function of floor area,

$$I_{FLR} = 0.112 \times I_{75Pa} \times S/A_{FLR}$$

For methods describing ~~infiltration~~ air leakage as a function of the area of above grade ~~exterior~~ walls ~~area~~ that separate conditioned spaces and semiheated spaces from the exterior,

$I_{~~EW~~AGW} = 0.112 \times I_{75Pa} \times S/A_{~~EW~~AGW}$

When using the measured air leakage rate of the *building envelope* at a pressure differential of 0.3 in. H_2O (75 Pa) for the proposed design, the air leakage rate shall be calculated as follows:

$$I_{75Pa} = Q/S$$

where

I_{75Pa} = air leakage rate of the *building envelope* ~~expressed in,~~ cfm/ft^2 (L/s·m^2), at a fixed building pressure differential of 0.3 in. H_2O, or 1.57 psf (75 Pa)

Q = volume of air in cfm (L/s) flowing through the ~~whole~~ *building envelope* when subjected to a~~n~~ ~~indoor/outdoor~~ pressure differential of 0.3 in. H_2O, or 1.57 psf (75 Pa), in accordance with ASTM E 779

S = total area of the *building envelope* ~~air pressure boundary~~ ~~(expressed in,~~ ft^2 (m^2)~~)~~, including the lowest floor, any below- or above-grade walls, and roof ~~(or ceiling)~~ (including ~~windows~~ vertical fenestration and skylights)~~, separating the interior conditioned space from the unconditioned environment measured, in ft^2 (m^2).~~

I_{FLR} = adjusted air leakage rate ~~(expressed in cfm/ft^2 (L/s·m^2))~~ of the *building envelope* in cfm/ft^2 (L/s·m^2), at a reference wind speed of 10 mph (4.47 m/s) and relative to the ~~total~~ gross floor area

A_{FLR} = ~~total~~ gross floor area, ft^2 (m^2)

$I_{~~EW~~AGW}$ = adjusted air leakage rate ~~(expressed in cfm ft^2 (L/s·m^2))~~ of the *building envelope*~~, in~~ cfm/ft^2 (L/s·m^2), at a reference wind speed of 10 mph (4.47 m/s) and relative to the area of the above-~~ground~~grade ~~exterior~~ walls ~~area~~ of the *building envelope*

$A_{~~EW~~AGW}$ = total area of above-grade ~~exterior~~ walls ~~area~~ of the *building envelope* ~~in,~~ ft^2 (m^2)

Exception: A multizone airflow model alternate method to model *building envelope* ~~infiltration~~ air leakage may be used provided the following criteria are met:

1. If the calculations are made independently of the energy simulation program, the proposed method must comply with Section G2.5.

2. The method for converting the air ~~infiltration~~ leakage rate of the *building envelope* at 0.3 in. H_2O, or 1.57 psf (75 Pa), to the appropriate units for the simulation program is fully documented and submitted to the rating authority for approval.

BSR/ASHRAE/IES Addendum ec
to ANSI/ASHRAE/IES Standard 90.1-2013

Public Review Draft

Proposed Addendum eb to Standard 90.1-2013, Energy Standard for Buildings Except Low-Rise Residential Buildings

First Draft (March 2016)
(Draft shows Proposed Changes to Current Standard)

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FOREWORD

When preparing documentation to explain the derivation of each number in Table 4.2.1.1, a single number was found to be inconsistent with the derived values.

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Addendum ec to 90.1-2013

Modify the standard as follows (IP and SI Units)

TABLE 4.2.1.1 Building Performance Factor (BPF)

	Climate Zone																
Building Area Type[a]	1A	1B	2A	2B	3A	3B	3C	4A	4B	4C	5A	5B	5C	6A	6B	7	8
Multifamily	0.73	0.73	0.71	0.69	0.74	0.73	0.68	0.78	0.81	0.81	0.76	0.80	0.81	0.76	0.79	0.74	0.80
Healthcare/Hospital	0.64	0.56	0.60	0.56	0.60	0.56	0.54	0.57	0.53	0.55	0.59	0.52	0.55	0.57	0.52	0.56	0.56
Hotel/Motel	0.64	0.65	0.62	0.60	0.63	0.65	0.64	0.62	0.64	0.62	0.60	0.61	0.60	0.59	0.61	0.57	0.58
Office	0.58	0.62	0.57	0.62	0.60	0.64	0.54	0.58	0.60	0.58	0.60	0.61	0.58	0.61	0.61	0.57	0.61
Restaurant	0.62	0.62	0.58	0.61	0.60	0.60	0.61	0.58	0.55	0.60	0.62	0.58	0.60	0.63	0.60	0.65	0.68
Retail	0.52	0.58	0.53	0.58	0.54	0.62	0.60	0.55	0.60	0.60	0.55	0.59	0.61	0.55	0.58	0.53	0.53
School	0.46	0.53	0.47	0.53	0.49	0.52	0.50	0.49	0.50	0.49	0.50	0.50	0.50	0.49	0.50	0.47	0.51
Warehouse	0.51	0.52	0.56	0.58	0.57	0.59	0.63	0.58	0.60	0.63	0.60	0.61	0.65	0.66	0.66	0.67	0.67
All Others	0.62	0.61	0.55	0.57	0.56	0.61	0.59	0.58	0.57	0.61	0.~~60~~57	0.57	0.61	0.56	0.56	0.53	0.52

BSR/ASHRAE/IES Addendum ed
to ANSI/ASHRAE/IES Standard 90.1-2013

Public Review Draft

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FOREWORD

The HVAC System Types that apply to Section G.3.1.3.18 Dehumidification did not include some logical system types. This addendum adds HVAC System Types 11, 12 and 13 to that section.

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.

Addendum ed to 90.1-2013

Modify the standard as follows (IP and SI Units)

G3.1.3.18 Dehumidification (Systems 3 through 8 <u>and 11, 12 and 13</u>). If the proposed design HVAC system(s) have humidistatic controls, then the baseline building design shall use mechanical cooling for dehumidification and shall have reheat available to avoid overcooling. When the baseline building design HVAC system does not comply with any of the exceptions in Section 6.5.2.3, then only 25% of the system reheat energy shall be included in the baseline building performance. The reheat type shall be the same as the system heating type.

BSR/ASHRAE/IES Addendum ef
to ANSI/ASHRAE/IES Standard 90.1-2013

Public Review Draft

Proposed Addendum ef to Standard 90.1-2013, Energy Standard for Buildings Except Low-Rise Residential Buildings

First Public Review (??)

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FOREWORD

Data from the 2012 update of DOE's Commercial Building Energy Consumption Survey indicate that some of the baseline choices between gas or electric water heaters in Appendix G needed to be reexamined. After evaluating the new survey results some new building area types were added to Table G3.1.1-2 and some baseline water heater energy sources for the baseline were changed. While evaluating these changes, the charging language in Table G3.1 was also altered to be more consistent with other portions of Appendix G related to existing buildings, as well as making it clear that one service water heating system shall be modeled for each building area type in the proposed building.

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.

Addendum ef to 90.1-2013

Modify the standard as follows (IP and SI Units)

Table G3.1 Part 11 – Baseline Building Performance – Service Hot-Water Systems

The service hot-water system in the baseline building design shall be as specified in Table G3.1.1-2 and conform with the following conditions:

~~a.~~ ~~Where the complete service hot-water system exists, the baseline building design shall be as specified in Table G3.1.1-2 using the actual component capacities.~~

a. Where a complete service hot water system exists or a new service hot-water system has been specified, one service water heating system shall be modeled for each building area type in the proposed building. ~~the heating method shall be as specified in Table G3.1.1-2. The~~Each system shall be sized according to the provisions of Section 7.4.1 and the equipment shall match the minimum efficiency requirements in Section 7.4.2.

b. Where no service hot-water system exists or has been specified but the building will have service hot-water loads, ~~a~~one service water heating system~~(s)~~ shall be modeled for each anticipated building area type in the proposed building.~~using the heating method as specified in Table G3.1.1-2 and matching~~Each system shall meet the minimum efficiency requirements of Section 7.4.2 ~~shall be assumed~~ and be modeled identical~~ly~~ ~~in~~ to the proposed ~~and baseline~~ building design~~s~~.

Re-letter d. to j.

TABLE G3.1.1-2 Baseline Service Hot-Water System

Building Area Type	*Baseline Heating Method*
Automotive facility	Gas storage water heater
Convenience Store	Electric resistance storage water heater
Convention center	Electric resistance storage water heater
Courthouse	Electric resistance storage water heater
Dining: Bar lounge/leisure	Gas storage water heater
Dining: Cafeteria/fast food	Gas storage water heater
Dining: Family	Gas storage water heater
Dormitory	Gas storage water heater
Exercise center	Gas storage water heater
Fire station	Gas storage water heater
Grocery Store	Gas storage water heater
Gymnasium	Gas storage water heater
Health-care clinic	~~Gas~~ Electric resistance storage water heater
Hospital and outpatient surgery center	Gas storage water heater
Hotel	Gas storage water heater
Library	Electric resistance storage water heater
Manufacturing facility	Gas storage water heater
Motel	Gas storage water heater
Motion picture theater	Electric resistance storage water heater
Multifamily	Gas storage water heater
Museum	Electric resistance storage water heater
Office	Electric resistance storage water heater
Parking garage	Electric resistance storage water heater
Penitentiary	Gas storage water heater
Performing arts theater	Gas storage water heater
Police station	Electric resistance storage water heater
Post office	Electric resistance storage water heater
Religious building	Electric resistance storage water heater
Retail	Electric resistance storage water heater
School/university	Gas storage water heater
Sports arena	Gas storage water heater
Town hall	Electric resistance storage water heater
Transportation	Electric resistance storage water heater
Warehouse	Electric resistance storage water heater
Workshop	~~Gas~~ Electric resistance storage water heater
All Others	Gas storage water heater

BSR/ASHRAE/IES Addendum eg
to ANSI/ASHRAE/IES Standard 90.1-2013

Public Review Draft

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FOREWORD

The sentence that is being removed is no longer necessary since the most common building energy modeling programs are able to simulate integrated water economizers.

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Addendum eg to 90.1-2013

Modify the standard as follows (IP and SI Units)

G3.1.2.6.1 Computer Room Economizers. Systems that serve computer rooms that are HVAC System 3 or 4 shall not have an economizer. Systems that serve computer rooms that are HVAC System 11 shall include an integrated water~~side~~ economizer meeting the requirements of Section 6.5.1.2 in the *baseline building design*. ~~If the simulation software cannot model an integrated water-side economizer, then an air-side economizer shall be modeled.~~

BSR/ASHRAE/IES Addendum ei
to ANSI/ASHRAE/IES Standard 90.1-2013

DRAFT

Proposed Addendum ei

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FOREWORD

Currently, the historic building exemption can allow for exempting the entire building including parts that may be new additions or not part of the historic element. This proposal will tighten that to ensure that non-historic elements or building parts will have to meet the applicable requirements.

Cost Justification:
There is no cost implication to this proposal because the requirements do not change but only apply to additional applications.

[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 ei to 90.1-2013

Modify the standard as follows (IP and SI Units):

3.2 DEFINITIONS, ABBREVIATIONS, AND ACRONYMS

historic aspects: those aspects of a building or space in the National Register of Historic Places, or that has been specifically designated or certified as eligible for listing in a national, state, or local landmark registry by the national, state, or local authority, or is within a National Register-listed, state, or local authority designated landmark district. ~~historically significant by the adopting authority, or is listed in The National Register of Historic Places or has been determined to be eligible for such listing by the U.S. Secretary of the Interior.~~

4.2.1.3 Alterations of Existing Buildings. …….

…….

Exceptions:

1. The *historic aspects* of a building or portion of the building need not comply, when it has been demonstrated to the authority having jurisdiction, that compliance with Section 4.2.1.3 would threaten, degrade or destroy the form or function of those *historic aspects*. ~~that has been specifically designated as historically significant by the adopting authority or is listed in The National Register of Historic Places or has been determined to be eligible for listing by the U.S. Secretary of the Interior need not comply with these requirements.~~

……..

BSR/ASHRAE/IES Addendum ej
to ANSI/ASHRAE/IES Standard 90.1-2013

DRAFT

Proposed Addendum ej

Standard 90.1-2013, Energy Standard for Buildings Except Low-Rise Residential Buildings

First Draft (March 2016)
(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

Currently, the lighting section of 90.1 does not specifically address LED lighting technology. In most cases, this is not an issue as the requirements are generally technology neutral. However, in one case, the term for the electronics that make LED technology work is specific in the industry ("driver") and for clarity should be included in the standard.

Cost Justification:

There is no cost element to this proposal..

[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 ej to 90.1-2013

Modify the standard as follows (IP and SI Units):

3.2 Definitions

driver: A device designed to operate a solid-state (e.g. LED) light source.

fixture: the component of a luminaire that houses the lamp or lamps or positions the lamp, shields it from view, and distributes the light. The fixture also provides for connection to the power supply, which may require the use of a ballast/driver.

3.3 Abbreviations and Acronyms

…
kVA kilovolt-ampere
LED light emitting diode
lin linear
…

6.4.5 Walk-In Coolers and Freezers.

……
Exception:
…….

f. Lights shall use light sources with an efficacy of 40 lm/W or more, including ballast/*driver* losses (if any). Light sources with ~~an~~ lower efficacy ~~of less than 40 lm/W, including ballast losses (if any),~~ may be used in conjunction with a timer or device that turns off the lights within 15 minutes of when the walk-in cooler or walk-in freezer is not occupied by people.

9.1.2 Lighting Alterations. …….
……This requirement shall also be met for alterations that involve only the replacement of lamps plus ballasts/*drivers*. Alterations do not include routine maintenance or repair situations.

9.1.3 Installed Lighting Power. The luminaire wattage for all interior and exterior applications shall include all power used by the luminaires, including lamps, ballasts/*drivers*, transformers, and control devices, except as specifically exempted in Section 9.1.1, 9.2.2.3, or 9.4.2.

9.1.4 Interior and Exterior Luminaire Wattage. …..
……
b. The wattage of luminaires with permanently installed or remote ballasts/*drivers*, transformers, or similar devices shall be the operating input wattage of the maximum lamp/auxiliary combination based on values from the auxiliary manufacturers' literature or recognized testing laboratories or shall be the maximum labeled wattage of the luminaire.

BSR/ASHRAE/IES Addendum ek
to ANSI/ASHRAE/IES Standard 90.1-2013

Public Review Draft

Proposed Addendum ek to Standard 90.1-2013, *Energy Standard for Buildings Except Low-Rise Residential Buildings*

First Draft (March 2016)
(Draft shows Proposed Changes to Current Standard)

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FOREWORD

This addendum addresses one update. The update establishes baseline commercial refrigeration limits for Appendix G. The commercial refrigerator and freezer baseline values are based on the California Energy Commission Appliance Efficiency Regulations 2005 which prescribe minimum efficiency requirements for refrigerator and freezers purchased in 2004.
http://www.energy.ca.gov/2005publications/CEC-400-2005-012/CEC-400-2005-012.PDF

The Commercial Refrigeration – Minimum Efficiency Requirements are based on the 2008-12-24 Letter of approval for DOE-CRE Final Rule IBR with Docket No. EERE-2006-BT-STD-0126 CRE Final Rule DRAFT 2008-12-24.
http://www.regulations.gov/#!documentDetail;D=EERE-2006-STD-0126-0074

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Addendum ek to 90.1-2013

Modify 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*
……..		
16	*Refrigeration*	
	The *proposed building design* shall be modeled using the actual equipment capacities and efficiencies.	Where refrigeration equipment is specified in the *proposed building design* and listed in Tables G3.10.1-G3.10.2, the *baseline building design* shall be modeled as specified in Tables G3.10.1-G3.10.2 using the actual equipment capacities. If the refrigeration equipment is not listed in Tables G3.10.1-G3.10.2, the *baseline building design* shall be modeled the same as the proposed.

Insert new Tables G3.10.1 – G3.10.2:

TABLE G3.10.1 Performance Rating Method - Commercial Refrigerator and Freezers

Equipment Type	Application	Energy Use Limits, kWh/day	Test Procedure
Refrigerator with solid doors	Holding Temperature	0.125 × *V* + 2.76	AHRI 1200
Refrigerator with transparent doors		0.172 × *V* + 4.77	
Freezers with solid doors		0.398 × *V* + 2.28	
Freezers with transparent doors		0.94 × *V* + 5.10	
Refrigerators/freezers with solid doors		0.12 × *V* + 4.77	
Commercial refrigerators	Pulldown	0.181 × *V* + 5.01	

V = the chiller or frozen compartment volume (ft^3) as defined in Association of Home Appliance Manufacturers Standard HRF-1.

TABLE G3.10.2 Performance Rating Method - Commercial Refrigeration

Equipment Type				Energy Use Limits,[b,c] kWh/day	Test Procedure
Equipment Class[a]	Family Code	Operating Mode	Rating Temperature		
VOP.RC.M	Vertical open	Remote condensing	Medium temperature	1.01 × TDA + 4.07	AHRI 1200
SVO.RC.M	Semivertical open	Remote condensing	Medium temperature	1.01 × TDA + 3.18	
HZO.RC.M	Horizontal open	Remote condensing	Medium temperature	0.51 × TDA + 2.88	
VOP.RC.L	Vertical open	Remote condensing	Low temperature	2.84 × TDA + 6.85	
HZO.RC.L	Horizontal open	Remote condensing	Low temperature	0.68 × TDA + 6.88	
VCT.RC.M	Vertical transparent door	Remote condensing	Medium temperature	0.48 × TDA + 1.95	
VCT.RC.L	Vertical transparent door	Remote condensing	Low temperature	1.03 × TDA + 2.61	
SOC.RC.M	Service over counter	Remote condensing	Medium temperature	0.62 × TDA + 0.11	
VOP.SC.M	Vertical open	Self contained	Medium temperature	2.34 × TDA + 4.71	
SVO.SC.M	Semivertical open	Self contained	Medium temperature	2.23 × TDA + 4.59	
HZO.SC.M	Horizontal open	Self contained	Medium temperature	1.14 × TDA + 5.55	
HZO.SC.L	Horizontal open	Self contained	Low temperature	2.63 × TDA + 7.08	
VCT.SC.I	Vertical transparent door	Self contained	Ice cream	1.63 × TDA + 3.29	
VCS.SC.I	Vertical solid door	Self contained	Ice cream	0.55 × *V* + 0.88	
HCT.SC.I	Horizontal transparent door	Self contained	Ice cream	1.33 × TDA + 0.43	
SVO.RC.L	Semivertical open	Remote condensing	Low temperature	2.84 × TDA + 6.85	
VOP.RC.I	Vertical open	Remote condensing	Ice cream	3.6 × TDA + 8.7	
SVO.RC.I	Semivertical open	Remote condensing	Ice cream	3.6 × TDA + 8.7	
HZO.RC.I	Horizontal open	Remote condensing	Ice cream	0.87 × TDA + 8.74	
VCT.RC.I	Vertical transparent door	Remote condensing	Ice cream	1.2 × TDA + 3.05	

a. Equipment class designations consist of a combination (in sequential order separated by periods (AAA).(BB).(C)) of the following:
(AAA)—An equipment family code (VOP = vertical open, SVO = semivertical open, HZO = horizontal open, VCT = vertical transparent doors, VCS = vertical solid doors, HCT = horizontal transparent doors, HCS = horizontal solid doors, and SOC = service over counter); (BB)—An operating mode code (RC = remote condensing and SC = self contained); and (C)—A rating temperature code (M = medium temperature [38°F], L = lowtemperature [0°F], or I = ice cream temperature [15°F]). For example, "VOP.RC.M" refers to the "vertical open, remote condensing, medium temperature" equipment class.
b. V is the volume of the case (ft^3) as measured in AHRI Standard 1200, Appendix C.
c. TDA is the total display area of the case (ft^2) as measured in AHRI Standard 1200, Appendix D.

BSR/ASHRAE/IES Addendum ek to ANSI/ASHRAE/IES Standard 90.1-2013, *Energy Standard for Buildings Except Low-Rise Residential Buildings*

TABLE G3.10.2 Performance Rating Method - Commercial Refrigeration *(Continued)*

Equipment Type				Energy Use Limits,[b,c]	Test Procedure
Equipment Class[a]	Family Code	Operating Mode	Rating Temperature	kWh/day	
HCT.RC.M	Horizontal transparent door	Remote condensing	Medium temperature	0.39 × TDA + 0.13	AHRI 1200
HCT.RC.L	Horizontal transparent door	Remote condensing	Low temperature	0.81 × TDA + 0.26	
HCT.RC.I	Horizontal transparent door	Remote condensing	Ice cream	0.95 × TDA + 0.31	
VCS.RC.M	Vertical solid door	Remote condensing	Medium temperature	0.16 × *V* + 0.26	
VCS.RC.L	Vertical solid door	Remote condensing	Low temperature	0.33 × *V* + 0.54	
VCS.RC.I	Vertical solid door	Remote condensing	Ice cream	0.39 × *V* + 0.63	
HCS.RC.M	Horizontal solid door	Remote condensing	Medium temperature	0.16 × *V* + 0.26	
HCS.RC.L	Horizontal solid door	Remote condensing	Low temperature	0.33 × *V* + 0.54	
HCS.RC.I	Horizontal solid door	Remote condensing	Ice cream	0.39 × *V* + 0.63	
SOC.RC.L	Service over counter	Remote condensing	Low temperature	1.3 × TDA + 0.22	
SOC.RC.I	Service over counter	Remote condensing	Ice cream	1.52 × TDA + 0.26	
VOP.SC.L	Vertical open	Self contained	Low temperature	5.87 × TDA + 11.82	
VOP.SC.I	Vertical open	Self contained	Ice cream	7.45 × TDA + 15.02	
SVO.SC.L	Semivertical open	Self contained	Low temperature	5.59 × TDA + 11.51	
SVO.SC.I	Semivertical open	Self contained	Ice cream	7.11 × TDA + 14.63	
HZO.SC.I	Horizontal open	Self contained	Ice cream	3.35 × TDA + 9.0	
SOC.SC.I	Service over counter	Self contained	Ice cream	2.13 × TDA + 0.36	
HCS.SC.I	Horizontal solid door	Self contained	Ice cream	0.55 × *V* + 0.88	

a. Equipment class designations consist of a combination (in sequential order separated by periods (AAA).(BB).(C)) of the following:
(AAA)—An equipment family code (VOP = vertical open, SVO = semivertical open, HZO = horizontal open, VCT = vertical transparent doors, VCS = vertical solid doors, HCT = horizontal transparent doors, HCS = horizontal solid doors, and SOC = service over counter); (BB)—An operating mode code (RC = remote condensing and SC = self contained); and (C)—A rating temperature code (M = medium temperature [38°F], L = lowtemperature [0°F], or I = ice cream temperature [15°F]). For example, "VOP.RC.M" refers to the "vertical open, remote condensing, medium temperature" equipment class.
b. V is the volume of the case (ft^3) as measured in AHRI Standard 1200, Appendix C.
c. TDA is the total display area of the case (ft^2) as measured in AHRI Standard 1200, Appendix D.

Modify the standard as follows (SI Units):

TABLE G3.10.1 Performance Rating Method - Commercial Refrigerator and Freezers

Equipment Type	Application	Energy Use Limits, kWh/day	Test Procedure
Refrigerator with solid doors	Holding Temperature	1.35 × *V* + 2.76	AHRI 1200
Refrigerator with transparent doors		1.85 × *V* + 4.77	
Freezers with solid doors		4.28 × *V* + 2.28	
Freezers with transparent doors		10.12 × *V* + 5.10	
Refrigerators/freezers with solid doors		1.29 × *V* + 4.77	
Commercial refrigerators	Pulldown	1.95 × *V* + 5.01	

V = the chiller or frozen compartment volume (m^3) as defined in Association of Home Appliance Manufacturers StandardHRF-1.

TABLE G3.10.2 Performance Rating Method - Commercial Refrigeration

Equipment Type	Energy Use Limits,[b,c]	Test

Equipment Class[a]	Family Code	Operating Mode	Rating Temperature	kWh/day	Procedure
VOP.RC.M	Vertical open	Remote condensing	Medium temperature	35.67 × TDA + 4.07	
SVO.RC.M	Semivertical open	Remote condensing	Medium temperature	35.67 × TDA + 3.18	
HZO.RC.M	Horizontal open	Remote condensing	Medium temperature	18.01 × TDA + 2.88	
VOP.RC.L	Vertical open	Remote condensing	Low temperature	100.29 × TDA + 6.85	
HZO.RC.L	Horizontal open	Remote condensing	Low temperature	24.01 × TDA + 6.88	
VCT.RC.M	Vertical transparent door	Remote condensing	Medium temperature	16.95 × TDA + 1.95	
VCT.RC.L	Vertical transparent door	Remote condensing	Low temperature	36.37 × TDA + 2.61	
SOC.RC.M	Service over counter	Remote condensing	Medium temperature	21.90 × TDA + 0.11	
VOP.SC.M	Vertical open	Self contained	Medium temperature	82.64 × TDA + 4.71	
SVO.SC.M	Semivertical open	Self contained	Medium temperature	78.75 × TDA + 4.59	AHRI 1200
HZO.SC.M	Horizontal open	Self contained	Medium temperature	40.26 × TDA + 5.55	
HZO.SC.L	Horizontal open	Self contained	Low temperature	92.88 × TDA + 7.08	
VCT.SC.I	Vertical transparent door	Self contained	Ice cream	57.56 × TDA + 3.29	
VCS.SC.I	Vertical solid door	Self contained	Ice cream	5.92 × V + 0.88	
HCT.SC.I	Horizontal transparent door	Self contained	Ice cream	46.97 × TDA + 0.43	
SVO.RC.L	Semivertical open	Remote condensing	Low temperature	100.29 × TDA + 6.85	
VOP.RC.I	Vertical open	Remote condensing	Ice cream	127.13 × TDA + 8.7	
SVO.RC.I	Semivertical open	Remote condensing	Ice cream	127.13 × TDA + 8.7	
HZO.RC.I	Horizontal open	Remote condensing	Ice cream	30.72 × TDA + 8.74	
VCT.RC.I	Vertical transparent door	Remote condensing	Ice cream	42.38 × TDA + 3.05	

a. Equipment class designations consist of a combination (in sequential order separated by periods (AAA).(BB).(C)) of the following:
(AAA)—An equipment family code (VOP = vertical open, SVO = semivertical open, HZO = horizontal open, VCT = vertical transparent doors, VCS = vertical solid doors, HCT = horizontal transparent doors, HCS = horizontal solid doors, and SOC = service over counter); (BB)—An operating mode code (RC = remote condensing and SC = self contained); and (C)—A rating temperature code (M = medium temperature [3.3°C], L = lowtemperature [-17.3°C], or I = ice cream temperature [-9.4°C]). For example, "VOP.RC.M" refers to the "vertical open, remote condensing, medium temperature" equipment class.
b. V is the volume of the case (m^3) as measured in AHRI Standard 1200, Appendix C.
c. TDA is the total display area of the case (m^2) as measured in AHRI Standard 1200, Appendix D.

TABLE G3.10.2 Performance Rating Method - Commercial Refrigeration *(Continued)*

Equipment Type				Energy Use Limits,[b,c]	Test
Equipment Class[a]	Family Code	Operating Mode	Rating Temperature	kWh/day	Procedure
HCT.RC.M	Horizontal transparent door	Remote condensing	Medium temperature	13.77 × TDA + 0.13	
HCT.RC.L	Horizontal transparent door	Remote condensing	Low temperature	28.60 × TDA + 0.26	
HCT.RC.I	Horizontal transparent door	Remote condensing	Ice cream	33.55 × TDA + 0.31	
VCS.RC.M	Vertical solid door	Remote condensing	Medium temperature	1.72 × V + 0.26	
VCS.RC.L	Vertical solid door	Remote condensing	Low temperature	3.55 × V + 0.54	
VCS.RC.I	Vertical solid door	Remote condensing	Ice cream	4.20 × V + 0.63	AHRI 1200
HCS.RC.M	Horizontal solid door	Remote condensing	Medium temperature	1.72 × V + 0.26	
HCS.RC.L	Horizontal solid door	Remote condensing	Low temperature	3.55 × V + 0.54	
HCS.RC.I	Horizontal solid door	Remote condensing	Ice cream	4.20 × V + 0.63	
SOC.RC.L	Service over counter	Remote condensing	Low temperature	45.91 × TDA + 0.22	
SOC.RC.I	Service over counter	Remote condensing	Ice cream	53.68 × TDA + 0.26	
VOP.SC.L	Vertical open	Self contained	Low temperature	207.30 × TDA + 11.82	

VOP.SC.I	Vertical open	Self contained	Ice cream	263.09 × TDA + 15.02
SVO.SC.L	Semivertical open	Self contained	Low temperature	197.41 × TDA + 11.51
SVO.SC.I	Semivertical open	Self contained	Ice cream	251.09 × TDA + 14.63
HZO.SC.I	Horizontal open	Self contained	Ice cream	118.30 × TDA + 9
SOC.SC.I	Service over counter	Self contained	Ice cream	75.22 × TDA + 0.36
HCS.SC.I	Horizontal solid door	Self contained	Ice cream	5.92 × V + 0.88

a. Equipment class designations consist of a combination (in sequential order separated by periods (AAA).(BB).(C)) of the following:
(AAA)—An equipment family code (VOP = vertical open, SVO = semivertical open, HZO = horizontal open, VCT = vertical transparent doors, VCS = vertical solid doors, HCT = horizontal transparent doors, HCS = horizontal solid doors, and SOC = service over counter); (BB)—An operating mode code (RC = remote condensing and SC = self contained); and (C)—A rating temperature code (M = medium temperature [3.3°C], L = lowtemperature [-17.3°C], or I = ice cream temperature [-9.4°C]). For example, "VOP.RC.M" refers to the "vertical open, remote condensing, medium temperature" equipment class.
b. V is the volume of the case (m^3) as measured in AHRI Standard 1200, Appendix C.
c. TDA is the total display area of the case (m^2) as measured in AHRI Standard 1200, Appendix D.

BSR/ASHRAE/IES Addendum EL
to ANSI/ASHRAE/IES Standard 90.1-2013

DRAFT

Proposed Addendum EL

Standard 90.1-2013, Energy Standard for Buildings Except Low-Rise Residential Buildings

First Draft (March 2016)
(Draft shows Proposed Changes to Current Standard)

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FOREWORD

This proposal adds a mandatory requirement for air-cooled direct expansion cooling units with economizers to have basic fault detection and diagnostic (FDD) systems. These requirements have been in the prior editions of California Title 24 and the International Energy Conservation Code. The requirements were developed in consultation with unitary system and economizer control manufacturers. As a result of these requirements, basic economizer FDD systems have become a standard option for manufacturers. The requirements in this proposal are essentially the same as the Title 24 requirements that manufacturers have been designing equipment to since 2012. The temperature sensor tolerance from Title 24 is not included here as 90.1 already includes such requirements in Section 6.5.1.1.6 Sensor Accuracy. This would be a mandatory requirement where an economizer is required to be installed, so it is included in the mandatory section of the mechanical requirements. A reference to the FDD requirements is added to Section 6.3 Simplified Approach Option for HVAC Systems.

Energy Savings: *Based on a November 2011 analysis for Title 24 adjusted for current 90.1 adopted national average energy prices, average annual savings for a 54 MBH cooling unit—the smallest unit where FDD would be required—is $75 per year. The analysis used probabilities of economizer failure in various modes—based on field studies—to arrive at a conservative estimate of savings.*

Cost Impact: *The cost of the required fault diagnostics has reduced since the 2011 analysis that was based on separate add-on FDD. Now that manufacturers have integrated FDD into economizer controllers or unitary system controllers, the added cost is expected to range from $150 to $500 per unit.*

Cost-effectiveness: *A cost-effectiveness analysis using the ASHRAE SSPC 90.1 scalar methodology shows that the payback ranged from 2 to 7 years, with an average of 4 years; all of which are less than the scalar threshold of 11.3 for a 15 year measure life.*

[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 EL to 90.1-2013

Modify the standard as follows (IP and SI Units):
Revise Section 6.3.2, Section 6.4.3 title and add new Section 6.4.3.12 as follows:

6.3.2 Criteria. The HVAC system must meet all of the following criteria:

. . .

d. The system shall have an air economizer meeting the requirements of Sections 6.5.1 and 6.4.3.12.

6.4.3 Controls and Diagnostics

. . .

6.4.3.12 Economizer fault detection and diagnostics (FDD). Air-cooled direct-expansion cooling units listed in Tables 6.8.1-1 and 6.8.1-2 where an air economizer is installed in accordance with Section 6.5.1 shall include a fault detection and diagnostics (FDD) system complying with the following:

a. The following temperature sensors shall be permanently installed to monitor system operation:
   1. Outside air
   2. Supply air
   3. Return air where required for economizer control

b. The system shall have the capability of displaying the value of each sensor.

c. The FDD system or unit controls shall be capable of and configured to provide system status by indicating the following:
   1. Free cooling available
   2. Economizer enabled
   3. Compressor enabled
   4. Heating enabled
   5. Mixed air low limit cycle active

d. The FDD system or unit controls shall have provisions to manually initiate each operating mode so that the operation of compressors, economizers, fans and the heating system can be independently tested and verified.

e. The FDD system shall be capable of and configured to detect the following faults:
   1. Air temperature sensor failure/fault
   2. Not economizing when the unit should be economizing
   3. Economizing when the unit should not be economizing
   4. Damper not modulating
   5. Excess outdoor air

f. The FDD system shall be capable of and configured to report faults to a fault management application or DDC system accessible by operating or service personnel, or annunciated locally on zone thermostats.

BSR/HPVA LTDD 1.0-2015

The following revisions to the BSR/LTDD 1.0 standard were found to be substantive and are provided for purposes of public comment. Both revisions were included in the draft for final ballot as approved by the canvass committee and incorporated into ANS LTDD 1.0 2015. Only the noted text is within the scope of this public review for comment, as it was not noted in the prior public review.

REVISION #1: SECTION 5.1: Add Section 5.4

5.4 Update – The Coordinator shall update its risk assessment every three years or before its next transaction involving the particular Country of Harvest if later than three years."

REVISION #2: SECTION 6.1: Delete section 6.1.3

Deleted Section:

~~6.1.3 The Coordinator *shall* periodically assess whether circumstances have changed materially affecting its risk assessment for the relevant Country of Harvest or legal compliance by its supplier. The Coordinator may ask its suppliers to notify the Entity of any material findings of legal violations, if the supplier does not otherwise report this information publicly.~~

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Revision to NSF/ANSI 49-2014
Issue 90, Draft 1 (March 2016)

NSF/ANSI - 49
Biosafety Cabinetry: Design, Construction, Performance, and Field Certification

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5 Design and construction

•
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5.19 Doors and covers

Doors and covers shall fit properly and close completely. Horizontal sliding doors shall not be used for the work area. When used for storage areas, doors shall slide easily and be readily removable. Piano and butt-type hinges are acceptable. Handles shall be designed, constructed, and installed to eliminate sharp edges or unnecessary projections. Latches and hold-open mechanisms shall provide even and secure support.

5.19.1 Single panel

Single panel doors (see figure 8) and covers shall be fabricated to minimize the collection of foreign matter and be designed without channel sections at the bottom. Channel sections, if used, shall be inverted or shallow and wide enough to be easily cleanable. Clean-out holes shall be provided in all channels that are not inverted.

5.19.2 Double panel

Double panel doors and covers shall be fabricated to minimize the collection of foreign matter. Openings to hollow sections shall be closed. If subject to splash, spillage, or both, openings shall be sealed.

5.19.3 Viewing panel

Viewing panels shall be fabricated to prevent particles from entering the workspace by induction through joints, tracks, or guides.

~~**5.19.4 Sliding sash alarm**~~

~~Sliding sash enclosures shall include an audible and visual alarm activated when the sash is raised (1.0 in (25 mm)) above or positioned (1.0 in (25 mm)) below the manufacturer's specified opening height.~~

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5.25 Alarms

5.25.1 Sliding sash alarm

Sliding sash enclosures shall include an audible and visual alarm, activated when the sash is raised (1.0 in (25 mm)) above or positioned (1.0 in (25 mm)) below the manufacturer's specified opening height.

5.25.2 Internal cabinet supply/exhaust fan interlock alarm

When a cabinet contains both an internal downflow and exhaust fan, they shall be interlocked so that the downflow fan shuts off whenever the exhaust fan fails. An audible and visual alarm shall signal the failure. If the downflow fan fails, the exhaust fan shall continue to operate, and an audible and visual alarm shall signal the failure.

5.25.3 Type B exhaust alarm

Type B cabinets shall be exhausted by a remote fan. Once the cabinet is set or certified in its acceptable airflow range, audible and visual alarms shall be required to indicate a 20% loss of exhaust volume within 15 s. The internal cabinet fan(s) shall be interlocked to shut off at the same time the alarms are activated. Type B cabinets shall not initiate cabinet blower startup until sensors determine appropriate exhaust flow.

5.25.4 Type A1 or A2 exhaust alarm

Type A1 or A2 cabinets may be connected to an exhaust system via a canopy connection and exhausted by a remote fan. Once the cabinet and canopy is set or certified in its acceptable airflow range, audible and visual alarms shall be required to indicate within 15 s a loss of capture of room air using a visible medium to verify at the canopy air intake(s). The cabinet fan(s) must remain in operation when the alarm is activated.

Rationale: Sections 5.19.4 and 5.25.1 are identical and redundant. The language most appropriately fits under the **alarms** *subsection and not the* **doors and covers** *subsection.*

NSF International Standard for Dietary Supplements —

Dietary supplements

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1.3 Formulation submission

The manufacturer shall submit, at a minimum, the following information for each product:

– complete formulation information, which includes the following:

– the composition of the formulation (in percent or parts by weight for each ingredient in the formulation including excipients);

NOTE – Ranges shall be considered acceptable.

– the reaction process, if applicable;

– the ~~raw material~~ component ID number (if applicable), chemical/material name, trade name and supplier(s) for each chemical present in the formulation;

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3.21 ~~raw material~~ component**:** An ingredient intended for use in the manufacture of a dietary ingredient or dietary supplement, including those that may not appear in such finished product.

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5.1.1 ~~Raw materials~~ Dietary Ingredients

The identity of the ~~raw material~~ dietary ingredient shall be verified in accordance with 6.1 or 8 using the test method(s) appropriate for establishing identity based on the manufacturer's claims.

5.1.2 Finished product

Manufacturers are responsible for ensuring that finished products shall contain each of the dietary ingredients and marker constituents declared on the label. The finished product identity claims shall be reviewed to determine if select claims shall be verified in accordance with 6.1 or 8.

5.2 Quantity

5.2.1 ~~Raw materials~~ Dietary ingredients

Certificate of Analysis claims for ~~raw materials~~ dietary ingredients shall be reviewed to determine a set of

verification tests to confirm quantity of dietary ingredients and marker constituents in accordance with 6.2 or 8.

~~Raw materials~~ Dietary ingredients tested shall meet minimum quantities (minus the measure of uncertainty of the analytical method) of ingredients and marker constituents as stated as a specification in the certificate of analysis.

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5.3.2 Pesticides

A broad pesticide screen shall be performed to confirm the absence of banned pesticides in botanical products.

NOTE - A pesticide is considered banned if it appears in Annex III of the Rotterdam Convention.[1]

~~Raw materials~~ Dietary ingredients and finished products containing *Panax ginseng* or *Panax quinquefolius* shall meet applicable national requirements for the market in which they are to be sold.

NOTE - Products which are to be sold and/or distributed in the United States shall not contain pesticides listed in 7.2.2 (limit of detection is 10 parts per billion [ppb]). The limits are not based upon a safety or risk assessment of the individual pesticides; rather, limits are related to U.S. trade and governmental preferences regarding ginseng suppliers. Product that does not meet the requirements for pesticides listed in 7.2.2 shall be labeled in a manner that would preclude its sale and/or distribution in the United States.

5.3.3 Microbiological contaminants

~~Raw materials~~ Dietary ingredients shall not contain aflatoxins at levels greater than 20 ppb and shall not contain microorganisms in quantities greater than permitted in Tables 2A and 2B.

Finished products shall not contain aflatoxins at levels greater than 20 ppb and shall not contain microorganisms in quantities greater than permitted in Tables 3A and 3B.
Finished products in a liquid form with an alcohol content less than or equal to 50% shall not contain *Pseudomonas aeruginosa*.

Finished products with an alcohol content greater than or equal to 50% are exempt from microbial testing.

5.3.4 Aristolochic acid

~~Raw materials~~ Dietary ingredients and finished products shall not contain botanicals in the Aristolochiaceae family (e.g., species in the following genera: *Aristolochia*; *Asarum*; *Asiphonia*; *Hexastylis*; *Thottea*; etc.) unless such materials or products are confirmed to be free of aristolochic acid at a limit of detection of 0.5 ppm.

~~Raw materials~~ Dietary ingredients and finished products containing any botanicals listed in Annex A shall be confirmed to be free of aristolochic acid at the above-stated limit of detection according to 7.4.

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5.3.6.2 Contaminants in Glycerin

[1] Secretariat of the Rotterdam Convention – UNEP, 11-13, Chemin des Anémones - 1219 Châtelaine, Switzerland <www.pic.int/>.

For ingredients and products containing glycerin, manufacturers shall have good manufacturing controls in place to verify that any specific lot of glycerin used in the manufacture or preparation of products is tested for diethylene glycol (DEG).

Diethylene glycol in glycerin ~~raw materials~~ components shall not exceed 0.1% as stated in the USP Glycerin monograph.**Error! Bookmark not defined.**

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6 Test methods used by testing laboratories for identification and quantification of ingredients – ~~raw materials~~ dietary ingredients and finished products

6.1 Identification test methods

6.1.1 Botanicals

6.1.1.1 Macroscopic and organoleptic/sensory evaluation

The identity of ~~raw~~ 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.

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7 Test methods used by testing laboratories for detection of contaminants – ~~raw materials~~ dietary ingredients and finished products

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8.4 Requirement for Testing of Diethylene Glycol (DEG) in Glycerin Ingredients

Written procedures shall be established and followed for testing for diethylene glycol in the glycerin ~~raw materials~~ components. Testing shall be performed utilizing identity tests, including the gas chromatographic limit test for DEG, which appear in the USP Glycerin monograph or other method that is scientifically valid and demonstrated as fit for purpose.

Manufacturers shall meet this testing requirement by providing testing documentation which can be reviewed and clearly shows the association of the test results with the lot of finished product material being certified.

Manufacturers shall meet this test requirement by either providing their own data, providing data from their qualified supplier(s) or acquiring third party test data.

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Table 2A – Acceptable limits for microbiological contaminants in ~~raw materials~~ dietary ingredients

Ingredient	Aerobic	Yeast/Mold	Enterobacteriaceae
Vitamin and/or mineral ingredient	1×10^3 CFU/g	1×10^2 CFU/g	1×10^2 CFU/g
Botanical ingredient – non-extract	1×10^7 CFU/g	1×10^5 CFU/g	1×10^4 CFU/g

Botanical ingredient – extract / other dietary supplement ingredient	1 x 10^4 CFU/g	1 x 10^3 CFU/g	1 x 10^2 CFU/g

Table 2B – Acceptable limits for pathogenic microbiological contaminants in ~~raw materials~~ dietary ingredients

Ingredient	*Salmonella* spp.	*E. coli*(1)	*S. aureus*
Vitamin and/or mineral ingredient	ND(2)	ND(2)	ND(2)
Botanical ingredient – non-extract(1)	ND(2)	1 x 10^2 CFU/g	ND(2)
Botanical ingredient – extract / Other dietary supplement ingredient	ND(2)	ND(2)	ND(2)
(1) Upon the presence of *E. coli*, 7.3.6.2 is to be followed to determine whether the colonies are enterovirulent. There is a zero tolerance for the presence of enterovirulent *E. coli.*			
(2) ND = Not Detected. Not Detected requires that no colonies shall be present in 10 g of sample when tested under the conditions of the USP method cited in 7.3. The detection level for this testing is 10 CFU/g for the period of time tested.			

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B.1 Metals

Acceptance limit for arsenic in finished products was obtained from the Joint FAO/WHO Expert Committee on Food Additives, World Health Organization,[18] International Programme on Chemical Safety, Safety Evaluation of Certain Food Additives and Contaminants.

The acceptance limits for chromium ~~in raw materials and~~ in finished products were obtained from the Environmental Protection Agency[10] (1998), Integrated Risk Information System (IRIS): Hexavalent Chromium.

The acceptance limits for mercury ~~in raw materials and~~ in finished products were obtained from the Environmental Protection Agency[10] (1989), Integrated Risk Information System (IRIS): Mercury (inorganic).

~~The acceptance limit for arsenic in raw materials was obtained from the British Herbal Pharmacopoeia.[8]~~

~~The acceptance limits for cadmium and lead in raw materials were obtained from the World Health Organization Monographs on Selected Medical Plants, Volume 1 (1999).~~

The acceptance limit for cadmium in finished products was obtained from the Office of Environmental Health Hazard Assessment (OEHHA), Proposition 65 Maximum Allowable Daily Level (MADL) for Reproductive Toxicity for Cadmium (Oral Route), May 2001.[2]

The acceptance limit for lead in finished products was obtained from the American Herbal Products Association, Heavy Metals: Analysis and Limits in Herbal Dietary Supplements, December 2009.

[2] Office of Environmental Health Hazard Assessment, 1001 I Street, PO Box 2815, Sacramento, CA 95812 <www.oehha.ca.gov>.

BSR/UL 60335-2-3, Standard for Household and Similar Electrical Appliances, Part 2: Particular Requirements for Electric Irons

1. Electric Iron Cord Flexing

PROPOSAL

3.109DV D2 Addition of the following definition to the part 2:

CORD STORAGE DEVICE: A covered spool for storage of insulated flexible power supply cord but does not enclose or support uninsulated live parts.

25.14DV.1 Compliance is checked by the cord flexing test in Clauses 25.14DV.2 - 25.14DV.6. Appliances with automatic or manual cord reels shall comply with these requirements in addition to those of Clause 22.16.

25.14DV.2 To determine whether the cord including any guard provided with the cord are acceptable, the tests in 25.14DV.3 - 25.14DV.5 are to be conducted. During the test, the cord shall not develop an open circuit, and there shall be no exposure of an uninsulated conductor strand. Travel irons and irons with cord reels or cord storage device shall be flexed for 50,000 cycles, and all other irons shall be flexed for 100,000 cycles. The power STAND of a CORDLESS IRON is not required to be tested.

25.14DV.3 To conduct the flexing test referred to in 25.14DV.2, six assemblies of the cord and cord guard are to be assembled to electric irons, simulated mounting surfaces, or test-fixtures, so that the assemblies do not interfere with the test procedure. Each assembly is to be mounted so that rotation is centered at the point where the guard enters the unit. See Figure 104DV. For the start of the test, the axis of the cord guard is to be positioned vertically with the cord end down. The cord is to be passed through a horizontal bushing having a smoothly rounded 25,4 mm (1-in) diameter opening, located 610 mm (2 ft) below the cord guard entry to the electric iron. The free end of the cord is to be attached to a 110-g (1/4-lb) unsupported weight. One or more complete electric irons of the maximum rating intended for use with the cord and with the THERMOSTAT bypassed are to be used as the electrical load, or the leads for each assembly that are normally connected to the heating elements are to be connected to a load that draws the same current. The supply end of the cord is to be connected to a 120-V circuit protected by a 20-A time-delay fuse. One or more series current relays are to be provided to shut down the machine if a conductor opens. The six assemblies are to be flexed ~~for 50 000 cycles~~ through an angle of 180 degrees, as illustrated in Figure 104DV, by a machine at a rate of 20 cycles per minute, unless faster cycling is agreeable to those concerned.

2. Allowable Cord Types for Stands of Cordless Irons

25.7 Addition:

Braided cords may be used.

Polyvinyl chloride sheathed cords are only allowed as the supply cords for **STANDS** of **CORDLESS IRONS** and for the separate water reservoir or boiler of **STEAM IRONS**. This does not apply to supply cords having a cross-linked PVC sheath (code designation 60245 IEC 87 or code designation 60245 IEC 88).

NOTE 101 Polyvinyl chloride cords are not allowed for CORDLESS IRONS that may also be directly connected to the supply mains during ironing.

25.7DV.1 D2 Modification ~~of~~ to delete the second paragraph and note 101 of 25.7 of the part 2 ~~by replacement with the following:~~.

~~Polyvinyl chloride sheathed cord shall not be used.~~

25.7DV.2 D2 Replacement of 25.7 of the UL part 1:

A supply cord shall be Type HPD, HPN, HS, HSJ, HSJO, HSO, or an equivalent heater cord. For STANDS of CORDLESS IRONS and for the separate water reservoir or boiler of STEAM IRONS, where the supply cord is not likely to touch surfaces exceeding 121ºC during Heating, Clause 11, the cord may be Type SJ, SJO, SJT, or an equivalent cord type for commercial type; and Type SJ, SJO, SJT, SPT-2, SVT or an equivalent cord type for household type.

BSR/UL 746A, Standard for Safety for Polymeric Materials – Short Term Property Evaluations

1. Enhancement of Conformance Criteria in Polymer Variations Program in Section 9.9

PROPOSAL

9.9.2 Table 9.1 indicates the properties that are to be considered leading indicators when evaluating polymer variations. If the results of side-by-side testing based on the test program shown in Table 9.2 demonstrates comparable results (for polymer variations evaluated for use with either the same or a new designation) or better results (for polymer variations only for use under a new designation), then all ratings from the original formulation may be extended to the variation. However, if all tests do not indicate comparable results, then no ratings shall be extended to the variation unless determined through direct testing.

Exception: In cases where testing of a polymer variation shows better results, the material may retain the same designation and be assigned better ratings if both of the following conditions are met:

a) Full side by side testing of all critical properties is conducted in accordance with Program Code C of Table 9.2, and

b) None of the other tested properties are adversely affected.

Results are considered comparable ~~results~~ if:

~~1. The individual test results are within 10% of the test results obtained for the original material.~~

2. The UL 94 flammability ratings ~~are the same,~~ and the PLC ratings (for applicable tests) are the same or the test results of the Polymer variations are within 10%

3. The UL 746B RTI values based on LTTA testing, if applicable, comply with Section 19 of UL 746B for related materials.

Exception: Regarding Item 1, for mechanical properties like Tensile strength/Flexural Strength and Impact strength, the test results of the Polymer variations are within 15%.

BSR/UL 746E, Standard for Safety for Polymeric Materials – Industrial Laminates, Filament Wound Tubing, Vulcanized Fibre, and Materials Used In Printed-Wiring Boards

2. Addition of ANSI Grade Definition of Type CEM-3 with Filler to Table 7.4

PROPOSAL

Table 7.4

Industrial laminate constituents

UL/ANSI type	Resin	Reinforcement material
X	Phenolic	Paper
XP	Phenolic	Paper
XPC	Phenolic	Paper
XX	Phenolic	Paper
XXP	Phenolic	Paper
XXX	Phenolic	Paper
XXXP	Phenolic	Paper
XXXPC	Phenolic	Paper
C	Phenolic	Cotton fabric
CE	Phenolic	Cotton fabric
L	Phenolic	Cotton fabric
LE	Phenolic	Cotton fabric
G-3	Phenolic	Continuous filament woven glass fabric
G-5	Melamine	Continuous filament woven glass fabric
G-7	Silicone	Continuous filament woven glass fabric
G-9	Melamine	Continuous filament woven glass fabric
G-10	Epoxy	Continuous filament woven glass fabric
G-11	Epoxy	Continuous filament woven glass fabric
FR-1	Phenolic	Paper
FR-2	Phenolic	Paper
FR-3	Epoxy	Paper

FR-4.0[a]	Brominated Epoxy	Continuous filament woven glass fabric
FR-4.1[a, b]	Non-Halogenated Epoxy	Continuous filament woven glass fabric
FR-5	Epoxy	Continuous filament woven glass fabric
CEM-1	Epoxy	Continuous filament woven glass fabric surfaces, cellulose paper core
CEM-3[c]	Epoxy	Continuous filament woven glass fabric surfaces, nonwoven glass core
GPO-2	Polyester	Random laid material of glass fibers
GPO-3	Polyester	Random laid material of glass fibers
FR-6	Polyester	Random laid material of glass fibers
GPY	Polyimide	Continuous filament woven glass fabric

[a] Total inorganic filler content equal to 45 percent maximum by weight .

[b] Total halogen content equal to 900 ppm maximum Bromine or Chlorine and 1500 ppm combined Bromine and Chlorine tested in accordance with 8.12.

[c] Total inorganic filler content equal to ~~80~~ 90 percent maximum by weight excluding the reinforcement.

BSR/UL 1004-1, Standard for Rotating Electrical Machines - General Requirements

1. Addition of requirements for a generator grounding method

PROPOSAL

10.6.1 A generator shall provide in a location inaccessible from outside the assembly in its end use application:

a) A flat, unpainted, corrosion protected, surface integral with or irreversibly connected to the generator barrel that is properly sized for the generator's fault current capability; and

b) Tapped with a hole or holes for machine thread fasteners or other approved method for securing any grounding conductor(s) for equipment provided with the generator and grounding conductor terminals properly sized for the generator's fault current capability.

Exception: The generator foot or mounting location shall not be prohibited as a secondary location when all criteria in (a) are satisfied elsewhere on the generator.

2. Revision to narrow the scope of UL 1004-1 to motors rated 1,000 V or less

PROPOSAL

1.1 This Standard applies to form wound rotating electrical machines rated less than 460 volts and all other rotating electrical machines and linear motors, both AC and DC, rated ~~7,200~~ 1,000 volts or less.

Table 18.2

Minimum acceptable spacings at field wiring terminals for voltages over 750 V

Voltage range, Volts	Minimum spacings			
	Through air		Over surface	
	mm	(inches)	mm	(inches)
751 - 1000	9.5	(3/8)	12.7	(1/2)
~~1001 - 2000~~	~~19.0~~	~~(3/4)~~	~~34.9~~	~~(1-3/8)~~
~~2001 - 3000~~	~~25.4~~	~~(1)~~	~~50.8~~	~~(2)~~
~~3001 - 5000[a]~~	~~63.5~~	~~(2-1/2)~~	~~76.2~~	~~(3)~~
~~3001 - 5000[b]~~	~~82.6~~	~~(3-1/4)~~	~~101.6~~	~~(4)~~
~~5001 - 7200[a]~~	~~76.2~~	~~(3)~~	~~88.9~~	~~(3-1/2)~~
~~5001 - 7200[b]~~	~~101.6~~	~~(4)~~	~~127~~	~~(5)~~
~~[a]Between uninsulated live parts and grounded non-current-carrying metal parts.~~				
~~[b] Between uninsulated live parts of opposite polarity.~~				

Table 18.4

Minimum acceptable spacings at other than field-wiring terminals

Voltage range, volts	Parts involved	Over surface		Through air	
		mm	(inches)	mm	(inches)
0 - 125	Commutator or collector rings	1.6	(1/16)	1.6	(1/16)
	Elsewhere in the motor	1.6	(1/16)	1.6	(1/16)
126 - 250	Commutator or collector rings	1.6	(1/16)	1.6	(1/16)
	Elsewhere in the motor	2.4	(3/32)	2.4	(3/32)
251 - 750	Commutator or collector rings and live parts of the brush rigging	6.4	(1/4)	6.4[b]	(1/4)
	Elsewhere in the motor	6.4[a]	(1/4)	6.4[a]	(1/4)
751 - 1000	Elsewhere in the motor	12.7	(1/2)	9.5	(3/8)
~~1001 - 2000~~	~~Elsewhere in the motor~~	~~34.9~~	~~(1-3/8)~~	~~19.0~~	~~(3/4)~~
~~2001 - 3000~~	~~Elsewhere in the motor~~	~~50.8~~	~~(2)~~	~~25.4~~	~~(1)~~
~~3001 - 5000~~	~~Between uninsulated live parts and grounded non-current-carrying metal parts.~~	~~76.2~~	~~(3)~~	~~63.5~~	~~(2-1/2)~~
	~~Between uninsulated live parts of opposite polarity.~~	~~101.6~~	~~(4)~~	~~82.6~~	~~(3-1/4)~~
~~5001 - 7200~~	~~Between uninsulated live parts and grounded non-current-carrying metal parts.~~	~~88.9~~	~~(3-1/2)~~	~~76.2~~	~~(3)~~
	~~Between uninsulated live parts of opposite polarity.~~	~~127~~	~~(5)~~	~~101.6~~	~~(4)~~

[a] Film-coated wire is considered to be an uninsulated live part. However, a spacing of not less than 2.4 mm (3/32 inch), over surface and through air between film-coated wire, rigidly supported and held in place on a coil, and a dead metal part is acceptable.

[b] Through-air spacings involving a collector ring may be not less than 3.2 mm (1/8 inch).

~~23.7 Insulation systems for Class E and higher machines operating at levels where the voltage is 1000 V or more and/or where transient overvoltages are not limited and/or partial discharge is likely to contribute to the degradation of the insulation system, shall comply with the requirements specified in IEEE 1776, Recommended Practice for Thermal Evaluation of Unsealed or Sealed Insulation Systems for AC Electric Machinery Employing Form-Wound Pre-Insulated Stator Coils for Machines Rated 15000 V and Below.~~

~~23.8 Insulation systems for Class E and higher machines employing form wound windings, regardless of operating voltage, shall comply with the requirements specified in IEEE 1776, Recommended Practice for Thermal Evaluation of Unsealed or Sealed Insulation Systems for AC Electric Machinery Employing Form-Wound Pre-Insulated Stator Coils for Machines Rated 15000 V and Below.~~

~~*Exception: Machines employing form wound windings and operating at 1000 V or less need not comply with IEEE 1776 when a slot liner is used as the major ground insulation and where the overall insulation system complies with the Standard for Systems of Insulating Materials - General, UL 1446.*~~

3. Revision to temperature calculation method for high ambients

PROPOSAL

32.7 The temperatures specified in Table 32.1 are based upon an ambient of 40°C (104°F). ~~The temperature test may be conducted at any ambient temperature within the range of 20 - 40°C (68 - 104°F) for products rated 40°C (104°F). Products rated higher than 40°C (104°F) are to be tested at the rated ambient ±10°C.~~

32.8 ~~If the temperature test is conducted at an ambient other than 40°C (104°F), an observed temperature is to be corrected as described in 32.9. Neither a corrected temperature nor an observed temperature shall exceed the limits specified in Table 32.1.~~ The observed test temperature shall be corrected to rated ambient. When the stabilized test ambient is lower than the rated ambient, the observed test temperature is to be increased by the difference between stabilized test ambient and rated ambient. When the test ambient is higher than the rated ambient, the observed test temperature is to be reduced by the difference.

~~32.9 An observed temperature is to be corrected by addition [if the ambient temperature is lower than 40°C (104°F)] or subtraction (if the ambient temperature is higher than 40°C) of the difference between 40°C and the ambient temperature. If a corrected temperature exceeds the limit specified in Table 32.1, at the request of the manufacturer, the test may be repeated at a temperature closer to the rated operating ambient.~~

32.10 Coil and winding temperatures are to be measured either by thermocouples or by the change of resistance method, which compares the heated coil resistance to the resistance at a known (ambient) temperature. This method uses the following equation to determine the heated coil temperature:

$$\sout{T_2 = [(R_2 / R_1)(K + T_1)] - K}$$
$$T = [(R_2 / R_1)(K + T_1)] - K + (T_1 - T_2)$$

Where:

R_2 = *the coil resistance at the conclusion of the test*

R_1 = *the coil resistance under ambient conditions at the beginning of the test*

K = is a constant equal to 234.5 for copper, 225.0 for electrical conductor grade (EC) aluminum. The value of K for other conductor materials is to be determined.

T = the coil temperature at the conclusion of the test

T_1 = *the room ambient ~~(and coil temperature)~~ at the beginning of the test*

T_2 = *the ~~coil temperature~~ room ambient at the conclusion of the test.*

BSR/UL 2580, *Standard for Batteries for Use In Electric Vehicles*

2. Clarification of the Overcharge Test and revision of the Isolation Test and External Fire Exposure Test.

5 Reference Publications

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

ISO Standards

ISO No. 7010
Graphical Symbols - Safety Colours and Safety Signs - Registered Safety Signs

ISO 6469-1
Electrically Propelled Road Vehicles - Safety Specifications - Part 1: On-Board Rechargeable Energy Storage System (RESS)

~~ISO 12405-3~~
~~*Electrically Propelled Road Vehicles - Test Specification for Lithium-Ion Traction Battery Packs and Systems - Part 3: Safety Performance Requirements*~~

ISO 26262-2
Road Vehicles - Functional Safety Part 2: Management of Functional Safety

42 External Fire Exposure Test

42.1 The purpose of this test is to determine an electrical energy storage assembly's ability to prevent an explosion as a result of exposure to a simulated fuel or vehicle fire external to the electrical energy storage assembly.

Exception No. 1: If the cells employed in the assembly comply with the Standard for Lithium Batteries, UL 1642 or the Standard for Household and Commercial Batteries, UL 2054 projectile test, the assembly is exempted from this test.

Exception No. 2: Testing may be conducted at the module level that is representative of the energy storage assembly.

~~*Exception No. 3: The test method outlined in the Exposure to Fire clause of the Standard for Electrically Propelled Road Vehicles - Test Specification for Lithium-Ion Traction Battery Packs and Systems - Part 3: Safety Performance Requirements, ISO 12405-3 may be performed instead. (This method has choice of either exposing the DUT to a 70 s direct flame exposure followed by a 60 s indirect flame exposure or exposing the DUT to 120 s of direct flame exposure.)*~~

42.4 Within 5 min of ignition, at least one thermocouple shall indicate a minimum temperature of 590°C (1094°F). The test is concluded when this minimum temperature indication of 590°C (1094°F) has been maintained for ~~10~~ 20 min.

3. Revision of samples numbers for cell testing in 16.2 and 16.3.

16 Cells (Battery and Electrochemical Capacitor)

16.2 Lithium ion cells shall comply with the requirements for secondary lithium cells in the Standard for Lithium Batteries, UL 1642 per Table 5 with modifications as outlined in Exception No. 1 - 64 ~~below~~.

Exception No. 1: The overall dimensions of the projectile test aluminum test screen may be increased from those outlined in the Standard for Lithium Batteries, UL 1642 to accommodate large cells intended for EV applications but the flat panels of the test screen shall not exceed a distance of 305 mm (12 in) from the cell in any direction.

Exception No. 2: The overall external resistance for the short circuit test shall be less than or equal to 20 mΩ.

Exception No. 3: The crush test shall be a bar crush test rather than a flat plate crush using a bar with a 15-cm (5.9-in) diameter. The force is to be to be applied until one of the following occurs first:

a) A voltage (OCV) drop of one-third of the original cell voltage occurs; or

b) A deformation of 15% or more (in the direction of the crush) of initial cell dimension occurs; or

c) A force of 1000 times the weight of cell is reached.

Exception No. 4: For cells whose weight is greater than 500 g (1.1 lbs), the maximum temperature of the heating test shall be held for 30 min rather than 10 min.

Exception No. 5: The requirements outlined in Annex B may be used instead of the Standard for Lithium Batteries, UL 1642 for lithium ion cells and Exception No. 1 - 3 above.

Exception No. 6: The sample numbers for cell testing are to be reduced from 5 samples per test to 2 samples per test.

16.3 Nickel based cells shall comply with the cell requirements in the Standard for Household and Commercial Batteries, UL 2054 per Table 6 with modifications as outlined in Exception No. 1 - 6 below.

Exception No. 1: The overall dimensions of the projectile test aluminum test screen may be increased from those outlined in the Standard for Household and Commercial Batteries, UL 2054 to accommodate large cells intended for EV applications but the flat panels of the test screen shall not exceed a distance of 305 mm (12 in) from the cell in any direction.

Exception No. 2: The overall external resistance for the short circuit test shall be less than or equal to 20 mΩ.

Exception No. 3: The crush test shall be a bar crush test rather than a flat plate crush using a bar with a 15-cm (5.9-in) diameter. The force is to be to be applied until one of the following occurs first:

a) A voltage (OCV) drop of one-third of the original cell voltage occurs; or

b) A deformation of 15% or more (in the direction of the crush) of initial cell dimension occurs; or

c) A force of 1000 times the weight of cell is reached.

Exception No. 4: For cells whose weight is greater than 500 g (1.1 lbs), the maximum temperature of the heating test shall be held for 30 min rather than 10 min.

Exception No. 5 ~~4~~: The sample numbers for cell testing are to be reduced from 5 samples per test to 2 samples per test.

Exception No. 6 ~~5~~: Nickel based cells that are sealed and formed as part of a monobloc battery, need only comply with the test requirements of this standard as part of the assembled battery/module.

Table 5 - Cell Tests from UL 1642
(See 16.2)

UL 1642 test	UL 1642 reference
Short-Circuit Test	Section 10
Abnormal Charging Test	Paragraphs 11.7 - 11.10
Crush Test	Section 13
Impact Test	Section 14
Shock Test	Section 15
Vibration Test	Section 16
Heating Test	Section 17
Temperature Cycling Test	Section 18
Low Pressure (Altitude Simulation) Test	Section 19
Projectile Test	Section 20

Table 6 - Cell Tests from UL 2054
(See 16.3)

UL 2054 test	UL 2054 reference
Short-Circuit Test	Paragraphs 9.1 - 9.6
Abnormal Charging Test	Paragraphs 10.7 - 10.9
Crush Test	Section 14
Impact Test	Section 15
Shock Test	Section 16
Vibration Test	Section 17
Projectile Test	Section 22
Heating Test	Section 23
Temperature Cycling Test	Section 24