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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](mailto:psa@ansi.org)

\* Standard for consumer products

## Comment Deadline: March 13, 2016

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

#### Addenda

BSR/ASHRAE/IES Addendum bd to Standard 90.1-201x, 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. The requirement is 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 chilled-water plants.

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

Send comments (with copy to [psa@ansi.org](mailto: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 bs to Standard 90.1-201x, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

This reinstates the current minimum EER levels for water-source variable refrigerant flow (VRF) products above 65,000 Btu/h.

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

Send comments (with copy to [psa@ansi.org](mailto: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 bz to Standard 90.1-201x, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

This addendum replaces the current Table 6.8.1-11 in its entirety and replaces it with a new table to account for new rating conditions established in AHRI 1360.

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

Send comments (with copy to [psa@ansi.org](mailto: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 cy to Standard 90.1-201x, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

This proposal establishes a product class and minimum efficiency for indoor pool dehumidifiers.

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

Send comments (with copy to [psa@ansi.org](mailto: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 dd to Standard 90.1-201x, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

This proposal reduces the threshold where variable flow and variable speed drives (VSD) are required for pumping systems.

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

Send comments (with copy to [psa@ansi.org](mailto: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 de to Standard 90.1-201x, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

In April 2015, ISO published ISO 25745-2, Energy performance of lifts, escalators and moving walks - Part 2: Energy calculation and classification for lifts (elevators). This addendum references that standard and requires the designer of each new elevator to specify an efficiency level.

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

Send comments (with copy to [psa@ansi.org](mailto: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 dg to Standard 90.1-201x, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

This revision to Standard 90.1 provides guidance on the air leakage requirements of two new types of entrance doors, aligns the text of 90.1 with the testing protocol required for sectional and metal coiling doors, and provides default U-factors for unlabeled metal non-swinging doors.

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

Send comments (with copy to [psa@ansi.org](mailto: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 dh to Standard 90.1-201x, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

This addenda makes it clear that exempted display lighting in 9.2.2.3 cannot be provided an allowance in the interior lighting power calculation.

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

Send comments (with copy to [psa@ansi.org](mailto: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 di to Standard 90.1-201x, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

The motor efficiencies for Standard 90.1-2004 were reproduced for Appendix G and use the totally enclosed, four-pole, 1800-RPM motors. The language was updated to reference this table. Since this was the last reference to efficiency requirements from other sections, the sentence referring to the other sections was removed.

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

Send comments (with copy to [psa@ansi.org](mailto: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 dj to Standard 90.1-201x, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

This addendum adds baseline HVAC systems for educational facilities.

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

Send comments (with copy to [psa@ansi.org](mailto: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 dk to Standard 90.1-201x, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

This Addendum proposes an increase in the minimum efficiency requirement for axial fan closed circuit cooling towers as listed in Table 6.8.1-7, Performance Requirements for Heat Rejection Equipment.

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

Send comments (with copy to [psa@ansi.org](mailto: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 dm to Standard 90.1-201x, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

This proposal clarifies which pumps in a heating- or chilled-water system are required to be variable flow.

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

Send comments (with copy to [psa@ansi.org](mailto: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 dn to Standard 90.1-201x, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

This proposal modifies the exceptions to Section 6.5.6 Energy Recovery. These exceptions were added in the early years of energy recovery when almost all energy recovery was done for heating.

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

Send comments (with copy to [psa@ansi.org](mailto: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 dp to Standard 90.1-201x, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

This proposal clarifies the automatic lighting controls requirements for small office spaces.

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

Send comments (with copy to [psa@ansi.org](mailto: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 dq to Standard 90.1-201x, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

With new LED technology becoming commonplace, the retail display allowance used for highlighting merchandise and retail displays can be reduced. The proposed new values are based on several sets of analysis that look at the various options for replacing traditional fluorescent and incandescent sources with appropriate LED and LED mix options, and a conservative 25% reduction is proposed for the retail lighting allowance.

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

Send comments (with copy to [psa@ansi.org](mailto: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 dr to Standard 90.1-201x, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

With new LED technology becoming commonplace, the additional decorative allowance used for decorative elements in lighting design can be reduced. A conservative 25% reduction is proposed for the decorative lighting allowance

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

Send comments (with copy to [psa@ansi.org](mailto: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 ds to Standard 90.1-201x, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

The addendum re-instates a requirement that sensors in high ceiling applications must have a readily accessible calibration point to avoid excessively tall ladders or lifts to perform periodic calibrations

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

Send comments (with copy to [psa@ansi.org](mailto: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 dv to Standard 90.1-201x, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

This addendum updates the language related to the reference to Standard 140. The reference update to Standard 140-2014 was already made in Addendum CO.

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

Send comments (with copy to [psa@ansi.org](mailto: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 90.1-201x, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

This addendum establishes baseline elevator energy use for motors, fans, and lights for Appendix G.

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

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

## NSF (NSF International)

### Revision

BSR/NSF 14-201x (i77r1), Plastics piping system components and related materials (revision of ANSI/NSF 14-2015)

The physical, performance, and health effects requirements in this Standard apply to thermoplastic and thermoset plastic piping system components including, but not limited to, pipes, fittings, valves, joining materials, gaskets, and appurtenances. The established physical, performance, and health effects requirements also apply to materials (resin or blended compounds) and ingredients used to manufacture plastic piping system components. This Standard provides definitions and requirements for materials, ingredients, products, quality assurance, marking, and recordkeeping.

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

Send comments (with copy to [psa@ansi.org](mailto:psa@ansi.org)) to: Lauren Panoff, (734) 769-5197, [lpnoff@nsf.org](mailto:lpnoff@nsf.org)

## NSF (NSF International)

### Revision

BSR/NSF 60-201x (i72r1), Drinking Water Treatment Chemicals (revision of ANSI/NSF 60-2015)

This Standard establishes minimum health effects requirements for the chemicals, the chemical contaminants, and the impurities that are directly added to drinking water from drinking-water treatment chemicals. This Standard does not establish performance or taste and odor requirements for drinking-water treatment chemicals.

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

Send comments (with copy to [psa@ansi.org](mailto:psa@ansi.org)) to: Monica Leslie, (734) 827-5643, [mleslie@nsf.org](mailto:mleslie@nsf.org)

## UL (Underwriters Laboratories, Inc.)

### Revision

BSR/UL 1703-201x, Standard for Flat-Plate Photovoltaic Modules and Panels (revision of ANSI/UL 1703-2014a)

(1) Addition of allowable PV cable connectors to module documentation.

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

Send comments (with copy to [psa@ansi.org](mailto:psa@ansi.org)) to: Susan Malohn, (847) 664-1725, [Susan.P.Malohn@ul.com](mailto:Susan.P.Malohn@ul.com)

## Comment Deadline: March 28, 2016

## AAMI (Association for the Advancement of Medical Instrumentation)

### Reaffirmation

BSR/AAMI ST72-2011 (R201x), Bacterial endotoxin -Test methods, routine monitoring and alternatives to batch testing (reaffirmation of ANSI/AAMI ST72-2011)

Specifies general criteria to be applied in the determination of bacterial endotoxins (pyrogens) on sterilized or sterilizable healthcare products, components or raw materials. Endotoxin methodologies covered include both qualitative (limit) methods and quantitative (end-point) methods. Excludes determination of pyrogens other than bacterial endotoxins.

Single copy price: \$99.00 (AAMI members)/\$165.00 (list)

Order from: <http://my.aami.org/store/detail.aspx?id=ST72>

Send comments (with copy to [psa@ansi.org](mailto:psa@ansi.org)) to: Jennifer Moyer, (703) 253-8274, [jmoyer@aami.org](mailto:jmoyer@aami.org)

## ASA (ASC S12) (Acoustical Society of America)

### New National Adoption

BSR/ASA S12.5-201x/ISO 6926-201x, Acoustics - Requirements for the Performance and Calibration of Reference Sound Sources Used for the Determination of Sound Power Levels (identical national adoption of ISO 6926:2016 and revision of ANSI/ASA S12.5-2006/ISO 6926:1999 (R2011))

Specifies the acoustical performance requirements for reference sound sources (RSS): temporal steadiness of the sound power output, spectral characteristics, and directivity. Specifies procedures for providing level calibration data and uncertainty on a sound source intended for use as a RSS in terms of its sound power level under reference meteorological conditions in octave and in one-third octave bands, and with frequency weighting A. Specifies methods to calibrate RSS.

Single copy price: \$149.00

Obtain an electronic copy from: [asastds@acousticalsociety.org](mailto:asastds@acousticalsociety.org)

Order from: Susan Blaeser, (631) 390-0215, [asastds@acousticalsociety.org](mailto:asastds@acousticalsociety.org)

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

**ASA (ASC S12) (Acoustical Society of America)*****New Standard***

BSR/ASA S12.9-201x/Part 7, Quantities and Procedures for Description and Measurement of Environmental Sound, Part 7: Measurement of Low Frequency Noise and Infrasonic Outdoors in the Presence of Wind and Indoors in Occupied Spaces (new standard)

This standard provides requirements and methods for measuring low-frequency noise levels and infrasonic plus low-frequency noise levels outdoors in the presence of wind and indoors in occupied spaces. The most common application anticipated is the measurement of outdoor emission levels either near or far from sound emission sources or emission levels near a source.

Single copy price: \$150.00

Obtain an electronic copy from: [asastds@acousticalsociety.org](mailto:asastds@acousticalsociety.org)

Order from: Susan Blaeser, (631) 390-0215, [asastds@acousticalsociety.org](mailto:asastds@acousticalsociety.org)

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

**ASA (ASC S12) (Acoustical Society of America)*****Revision***

BSR/ASA S12.6-201x, Methods for Measuring the Real-Ear Attenuation of Hearing Protectors (revision of ANSI/ASA S12.6-2008)

Specifies laboratory-based procedures for measuring, analyzing, and reporting the passive noise-reducing capabilities of hearing protectors. Procedures consist of psychophysical tests on humans to determine the real-ear attenuation measured at hearing threshold. Provides two fitting procedures: trained-subject fit intended to describe capabilities of devices fitted by thoroughly trained users, and inexperienced subject fit to approximate protection that can be attained by groups of informed users.

Single copy price: \$130.00

Obtain an electronic copy from: [asastds@acousticalsociety.org](mailto:asastds@acousticalsociety.org)

Order from: Susan Blaeser, (631) 390-0215, [asastds@acousticalsociety.org](mailto:asastds@acousticalsociety.org)

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

**ASABE (American Society of Agricultural and Biological Engineers)*****New Standard***

BSR/ASABE S629 MONYEAR-201x, Framework to Evaluate the Sustainability of Agricultural Production Systems (new standard)

The scope of the ballot is limited to blue text indicating revision from the previously approved draft based on comment resolution. The Standard is intended to define frameworks for sustainability certification of all types of farming operations (which include ranching). It does not constitute a certification framework per se but rather serves as a criterion for development of certification.

Single copy price: \$58.00

Obtain an electronic copy from: [walsh@asabe.org](mailto:walsh@asabe.org)

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

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

**ASC X9 (Accredited Standards Committee X9, Incorporated)*****New Standard***

BSR X9.100-188-201x, Return Reasons (new standard)

Extract the current list of Return Reasons Codes from Annex B in ANSI X9.100-187 and Region 7F Return Reason Information from Annex A in ANSI X9.100-140 into standalone standard.

Single copy price: \$60.00

Obtain an electronic copy from: [janet.busch@x9.org](mailto:janet.busch@x9.org)

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

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

**ASCE (American Society of Civil Engineers)*****New Standard***

BSR/ASCE TBDXX-201x, Schedule Delay Analysis Standard (new standard)

The scope of this standard will cover a set of "best practice" concepts or guidelines that apply to any schedule delay analysis, whether conducted during construction or after project completion. This standard guideline is needed to help minimize the transactional cost of dispute by eliminating the disagreement over method with a set of guidelines or principles that apply in all situations. Clarity on best practices will help the parties know how delay analysis should be treated and that knowledge will help expedite dispute resolution related to schedule and delay analysis.

Single copy price: Free

Obtain an electronic copy from: [jneckel@asce.org](mailto:jneckel@asce.org)

Order from: James Neckel, 703-295-6176, [jneckel@asce.org](mailto:jneckel@asce.org)

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

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

BSR/ASHRAE/IES Addendum bg to Standard 90.1-201x, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

This proposal adds the Simplified Building Method in Section 9.3 for office buildings, schools, and retail buildings. This method provides a simplified method of compliance for entire buildings while saving energy through reduced LPDs and additional controls. The LPDs were originally derived from the Advanced Energy Design Guide. This addendum includes the changes from addendum y with the intent of discontinuing addendum y.

Single copy price: \$35.00

Obtain an electronic copy from: [standards.section@ashrae.org](mailto:standards.section@ashrae.org)

Order from: [standards.section@ashrae.org](mailto:standards.section@ashrae.org)

Send comments (with copy to [psa@ansi.org](mailto: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 dl to Standard 90.1-201x, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

The addendum proposal makes changes to section 6.4.1.2 of the ASHRAE 90.1-2013 Standard based on work done by the AHRI 550/590 Engineering committee. In the new AHRI 550/590 (IP)-2015 and AHRI 551/591 (SI)-2015, changes have been made to the IP rating conditions that require an update to the Kadj correction factor in section 6.4.1.2.

Single copy price: \$35.00

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Send comments (with copy to [psa@ansi.org](mailto: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 dt to Standard 90.1-201x, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013)

This proposal corrects the definition of Lighting Power Density (LPD) and adds two related terms, and in addition corrects the use of these terms in the language in Chapters 9 and 11.

Single copy price: \$35.00

Obtain an electronic copy from: [standards.section@ashrae.org](mailto:standards.section@ashrae.org)

Order from: [standards.section@ashrae.org](mailto:standards.section@ashrae.org)

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

**ATIS (Alliance for Telecommunications Industry Solutions)****Revision**

BSR/ATIS 0600030-201x, Line-Powering of Telecommunications Equipment on OSP Twisted Copper Pair Loops (revision of ANSI/ATIS 0600030-201x)

This standard also addresses performance of line-powering systems in fault conditions and provides manufacturers, installers, and users of line power systems with a consistent fault condition testing and recording method.

Single copy price: \$220.00

Obtain an electronic copy from: [kconn@atis.org](mailto:kconn@atis.org)

Order from: [kconn@atis.org](mailto:kconn@atis.org)

Send comments (with copy to [psa@ansi.org](mailto:psa@ansi.org)) to: [kconn@atis.org](mailto:kconn@atis.org)

**ATIS (Alliance for Telecommunications Industry Solutions)****Revision**

BSR/ATIS 0600338-201x, Electrical Coordination of Primary and Secondary Surge Protection for Use in Telecommunications Circuits (revision of ANSI/ATIS 0600338-2010)

Many types of communications devices contain secondary surge protection devices either integral to their designs or placed near the protected equipment. External primary surge protection devices, typically placed where the outside plant enters a structure, are normally used to prevent excessive currents and voltages from entering the structure or equipment, where they could cause injury or damage. This standard addresses the proper electrical coordination of primary and secondary surge protection devices.

Single copy price: \$220.00

Obtain an electronic copy from: [kconn@atis.org](mailto:kconn@atis.org)

Order from: [kconn@atis.org](mailto:kconn@atis.org)

Send comments (with copy to [psa@ansi.org](mailto:psa@ansi.org)) to: [kconn@atis.org](mailto:kconn@atis.org)

**AWS (American Welding Society)****Revision**

BSR/AWS C2.20/C2.20M-201X, Specification for Thermal Spraying Zinc Anodes on Steel Reinforced Concrete (revision of ANSI/AWS C2.20/C2.20M-2002)

This AWS standard is a specification for thermal spraying zinc anodes on steel reinforced concrete. This standard is formatted as an industrial process instruction. The scope includes: job description, safety, pass/fail job reference standards, feedstock materials, equipment, a step-by-step process instruction for surface preparation, thermal spraying, and quality control. There are two annexes: job control record and portable adhesion testing.

Single copy price: \$30.00

Obtain an electronic copy from: [jrosario@aws.org](mailto:jrosario@aws.org)

Order from: Jennifer Rosario, (800) 443-9353, [jrosario@aws.org](mailto:jrosario@aws.org)

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

**NASBLA (National Association of State Boating Law Administrators)****New Standard**

BSR/NASBLA 101-201X, Basic Boating Knowledge - Human-Propelled Boats (new standard)

This is the minimum standard that applies to all human-propelled boating courses in the U.S. states and territories and District of Columbia.

Single copy price: Free

Obtain an electronic copy from: [pam@nasbla.org](mailto:pam@nasbla.org)

Order from: Pamela Dillon, (859) 225-9487, [pam@nasbla.org](mailto:pam@nasbla.org)

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

**NSF (NSF International)****Revision**

BSR/NSF 6-201x (i11r3), Dispensing Freezers (revision of ANSI/NSF 6-2014)

This Standard contains requirements for the following equipment: dispensing freezers that process and freeze previously pasteurized product (e.g., soft ice cream, ice milk, yogurt, malts, custards) and dispense it directly into the consumer's container; dispensing freezers that dispense premanufactured frozen product (e.g., ice cream) directly into the consumer's container; and batch dispensing freezers. The materials, design, and construction requirements of this Standard may also apply to items that are manufactured as a component of a dispensing freezer.

Single copy price: Free

Obtain an electronic copy from: [http://standards.nsf.org/apps/group\\_public/download.php/30527/6i11r3%20JC%20memo%20%20ballot.pdf](http://standards.nsf.org/apps/group_public/download.php/30527/6i11r3%20JC%20memo%20%20ballot.pdf)

Order from: Allan Rose, (734) 827-3817, [arose@nsf.org](mailto:arose@nsf.org)

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

**NSF (NSF International)****Revision**

BSR/NSF 60-201x (i73r1), Drinking Water Treatment Chemicals (revision of ANSI/NSF 60-2015)

This Standard establishes minimum health effects requirements for the chemicals, the chemical contaminants, and the impurities that are directly added to drinking water from drinking water treatment chemicals. This Standard does not establish performance or taste and odor requirements for drinking water treatment chemicals.

Single copy price: Free

Obtain an electronic copy from: [http://standards.nsf.org/apps/group\\_public/download.php/30577/60i73r1%20JC%20memo%20%20ballot.pdf](http://standards.nsf.org/apps/group_public/download.php/30577/60i73r1%20JC%20memo%20%20ballot.pdf)

Order from: Monica Leslie, (734) 827-5643, [mleslie@nsf.org](mailto:mleslie@nsf.org)

Send comments (with copy to [psa@ansi.org](mailto:psa@ansi.org)) to: Monica Leslie, (734) 827-5643, [mleslie@nsf.org](mailto:mleslie@nsf.org)

**UL (Underwriters Laboratories, Inc.)****Revision**

BSR/UL 268-201X, Standard for Safety for Smoke Detectors for Fire Alarm Systems (revision of ANSI/UL 268-2016)

Proposes new cooking nuisance and polyurethane flaming and smoldering tests for the seventh edition of UL 268, which covers smoke detectors and accessories, including mechanical guards to be employed in ordinary indoor locations in accordance with the National Fire Alarm and Signaling Code, NFPA 72, the National Building Code of Canada, and the National Fire Code of Canada.

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](mailto:psa@ansi.org)) to: Paul Lloret, (408) 754-6618, [Paul.E.Lloret@ul.com](mailto:Paul.E.Lloret@ul.com)

**UL (Underwriters Laboratories, Inc.)****Revision**

BSR/UL 541-201x, Refrigerated Vending Machines (revision of ANSI/UL 541-2013)

(1) Proposed addition and revision of requirements to provide an alternate method of evaluating protective electronic circuits and controls; (2) Proposed addition and revisions of requirements to clarify requirements and to allow for an alternate compliance method for testing vending machines having a flammable refrigerant; (3) Proposed revisions to and addition of requirements to address vending machines with remote operation or monitoring functionality.

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](mailto:psa@ansi.org)) to: Beth Northcott, (847) 664-3198, [Elizabeth.Northcott@ul.com](mailto:Elizabeth.Northcott@ul.com)

**Comment Deadline: April 12, 2016****ASME (American Society of Mechanical Engineers)****Revision**

BSR/API 579-1/ASME FFS-1-201x, Fitness-for-Service (revision of ANSI/API 579-1/ASME FFS-1-2007)

Fitness-For-Service (FFS) assessments are quantitative engineering evaluations that are performed to demonstrate the structural integrity of an in-service component that may contain a flaw or damage, or that may be operating under a specific condition that might cause a failure. This Standard provides guidance for conducting FFS assessments using methodologies specifically prepared for pressurized equipment. The guidelines provided in this Standard can be used to make run-repair-replace decisions to help determine if components in pressurized equipment containing flaws that have been identified by inspection can continue to operate safely for some period of time. These FFS assessments are currently recognized and referenced by the API Codes and Standards (510, 570, & 653), and by NB-23 as suitable means for evaluating the structural integrity of pressure vessels, piping systems and storage tanks where inspection has revealed degradation and flaws in the equipment.

Single copy price: Free

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

Order from: Mayra Santiago, ASME; [ansibox@asme.org](mailto:ansibox@asme.org)

Send comments (with copy to [psa@ansi.org](mailto:psa@ansi.org)) to: Umberto D'Urso, (212) 591-8535, [dursou@asme.org](mailto:dursou@asme.org)

**NASBLA (National Association of State Boating Law Administrators)****New Standard**

BSR/NASBLA 103.1-201X, Supplement - Basic Boating Knowledge - Water-Jet Propelled Boats (new standard)

This supplement applies to basic boating knowledge education and proficiency assessment in the United States, U.S. Territories, and the District of Columbia.

Single copy price: Free

Obtain an electronic copy from: [pam@nasbla.org](mailto:pam@nasbla.org)

Order from: Pamela Dillon, (859) 225-9487, [pam@nasbla.org](mailto:pam@nasbla.org)

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

**UL (Underwriters Laboratories, Inc.)**

***Revision***

BSR/UL 1709-201X, Standard for Safety for Rapid Rise Fire Tests of Protection Materials for Structural Steel (revision of ANSI/UL 1709-2007 (R2011))

UL proposes a new edition of UL 1709.

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](mailto:psa@ansi.org)) to: Nicolette Allen, (919) 549-0973, [Nicolette.Allen@ul.com](mailto: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.

## **AAMI (Association for the Advancement of Medical Instrumentation)**

**Office:** 4301 N Fairfax Drive  
Suite 301  
Arlington, VA 22203-1633

**Contact:** *Jennifer Moyer*

**Phone:** (703) 253-8274

**Fax:** (703) 276-0793

**E-mail:** [jmoyer@aami.org](mailto:jmoyer@aami.org)

BSR/AAMI ST72-2011 (R201x), Bacterial endotoxin -Test methods, routine monitoring and alternatives to batch testing (reaffirmation of ANSI/AAMI ST72-2011)

## **ASA (ASC S12) (Acoustical Society of America)**

**Office:** 1305 Walt Whitman Rd  
Suite 300  
Melville, NY 11747

**Contact:** *Susan Blaeser*

**Phone:** (631) 390-0215

**Fax:** (631) 923-2875

**E-mail:** [asastds@acousticalsociety.org](mailto:asastds@acousticalsociety.org)

BSR/ASA S12.5-201x/ISO 6926-201x, Acoustics - Requirements for the Performance and Calibration of Reference Sound Sources Used for the Determination of Sound Power Levels (identical national adoption of ISO 6926:2016 and revision of ANSI/ASA S12.5-2006/ISO 6926:1999 (R2011))

Obtain an electronic copy from: [asastds@acousticalsociety.org](mailto:asastds@acousticalsociety.org)

BSR/ASA S12.6-201x, Methods for Measuring the Real-Ear Attenuation of Hearing Protectors (revision of ANSI/ASA S12.6-2008)

Obtain an electronic copy from: [asastds@acousticalsociety.org](mailto:asastds@acousticalsociety.org)

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

**Office:** 1791 Tullie Circle NE  
Atlanta, Georgia 30329

**Contact:** *Tanisha Lisle*

**Phone:** (678) 539-1111

**Fax:** (678) 539-1111

**E-mail:** [tmlisle@ashrae.org](mailto:tmlisle@ashrae.org)

BSR/ASHRAE Standard 20-1997 (R201x), Methods of Testing for Rating Remote Mechanical-Draft Air-Cooled Refrigerant Condensers (reaffirmation of ANSI/ASHRAE Standard 20-1997 (R2006))

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

BSR/ASHRAE Standard 24-201X, Methods of Testing for Rating Liquid Coolers (revision of ANSI/ASHRAE Standard 24-2013)

BSR/ASHRAE Standard 84-201X, Method of Testing Air-to-Air Heat/Energy Exchangers (revision of ANSI/ASHRAE Standard 84-2013)

BSR/ASHRAE Standard 113-201X, Method of Testing for Room Air Diffusion (revision of ANSI/ASHRAE Standard 113-2013)

BSR/ASHRAE Standard 118.2-201X, Method of Testing for Rating Residential Water Heaters (revision of ANSI/ASHRAE Standard 118.2-2006 (R2015))

BSR/ASHRAE Standard 200-201X, Methods of Testing Chilled Beams (revision of ANSI/ASHRAE Standard 200-2015)

## **NASBLA (National Association of State Boating Law Administrators)**

**Office:** 1648 McGrathiana Parkway  
Suite 360  
Lexington, KY 40511

**Contact:** *Pamela Dillon*

**Phone:** (859) 225-9487

**E-mail:** [pam@nasbla.org](mailto:pam@nasbla.org)

BSR/NASBLA 101-201X, Basic Boating Knowledge - Human-Propelled Boats (new standard)

Obtain an electronic copy from: [pam@nasbla.org](mailto:pam@nasbla.org)

## **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](mailto:jennifer@wmma.org).

## **Call for Members (ANS Consensus Bodies)**

### **Academy Standards Board (ASB) of the American Academy of Forensic Sciences (AAFS)**

#### **Call for Members for Consensus Bodies on DNA and Wildlife Forensics**

**Application Deadline: March 15, 2016**

The Academy Standards Board (ASB) of the American Academy of Forensic Sciences (AAFS) is an ANSI-accredited Standards Development Organization. It is announcing the formation of two new Consensus Bodies: DNA and Wildlife Forensics. Each will have 7 to 25 members based on applications received, members will be selected by the Board of Directors of the ASB. The ASB has eight interest categories, applicants are encouraged to apply in their self-selected interest category. A person may apply to one or both Consensus Bodies, and need not indicate the same interest category for each Consensus Body application. An on-line application form is available at <http://asb.aafs.org/documents-forms/>, the website also contains links to several relevant documents describing the ASB. Applicants are requested to submit forms to be considered for serving on the DNA and/or Wildlife Forensics Consensus Bodies by March 15. Questions: Teresa Ambrosius, [TAmbrosius@aafs.org](mailto:TAmbrosius@aafs.org), 703-980-2555.

# 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.

## **ACCA (Air Conditioning Contractors of America)**

### **Revision**

- \* ANSI/ACCA 2 Manual J-2016-2016, Residential Load Calculations (revision of ANSI/ACCA 2 Manual J-2011): 2/5/2016

## **AIIM (Association for Information and Image Management)**

### **New National Adoption**

- ANSI/AIIM/ISO 14289-1-2016, Document management applications - Electronic document file format enhancement for accessibility - Part 1: Use of ISO 32000-2 (PDF/UA-1) (identical national adoption of ISO 14289-1:2014): 2/8/2016

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

### **Addenda**

- ANSI/ASHRAE 34u-2016, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2013): 1/28/2016
- ANSI/ASHRAE 34v-2016, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2013): 1/28/2016
- ANSI/ASHRAE 34x-2016, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2013): 1/28/2016
- ANSI/ASHRAE Addendum 62.1g-2016, Ventilation for Acceptable Indoor Air Quality (addenda to ANSI/ASHRAE Standard 62.1-2013): 1/28/2016
- ANSI/ASHRAE Addendum 62.2o-2016, Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings (addenda to ANSI/ASHRAE Standard 62.2-2013): 1/28/2016
- ANSI/ASHRAE Addendum 62.2p-2016, Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings (addenda to ANSI/ASHRAE Standard 62.2-2013): 1/28/2016
- ANSI/ASHRAE Addendum 62.2r-2016, Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings (addenda to ANSI/ASHRAE Standard 62.2-2013): 1/28/2016
- ANSI/ASHRAE Addendum 62.2w-2016, Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings (addenda to ANSI/ASHRAE Standard 62.2-2013): 1/28/2016
- ANSI/ASHRAE/IES 90.1aj-2016, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013): 1/28/2016
- ANSI/ASHRAE/IES 90.1af-2016, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013): 1/28/2016
- ANSI/ASHRAE/IES 90.1am-2016, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013): 1/28/2016
- ANSI/ASHRAE/IES 90.1an-2016, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013): 1/28/2016
- ANSI/ASHRAE/IES 90.1ap-2016, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013): 1/28/2016

- ANSI/ASHRAE/IES 90.1ar-2016, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013): 1/28/2016
- ANSI/ASHRAE/IES 90.1as-2016, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013): 1/28/2016
- ANSI/ASHRAE/IES 90.1at-2016, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013): 1/28/2016
- ANSI/ASHRAE/IES 90.1au-2016, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013): 1/28/2016
- ANSI/ASHRAE/IES 90.1av-2016, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013): 1/28/2016
- ANSI/ASHRAE/IES 90.1az-2016, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013): 1/28/2016
- ANSI/ASHRAE/IES 90.1bb-2016, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013): 1/28/2016
- ANSI/ASHRAE/IES 90.1bc-2016, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013): 1/28/2016
- ANSI/ASHRAE/IES 90.1bl-2016, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013): 1/28/2016
- ANSI/ASHRAE/IES 90.1bp-2016, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013): 1/28/2016
- ANSI/ASHRAE/IES 90.1bq-2016, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013): 1/28/2016
- ANSI/ASHRAE/IES 90.1br-2016, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013): 1/28/2016
- ANSI/ASHRAE/IES 90.1bt-2016, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013): 1/28/2016
- ANSI/ASHRAE/IES 90.1bv-2016, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013): 1/28/2016
- ANSI/ASHRAE/IES 90.1cc-2016, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013): 1/28/2016
- ANSI/ASHRAE/IES 90.1ci-2016, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013): 1/28/2016
- ANSI/ASHRAE/IES 90.1ck-2016, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013): 1/28/2016
- ANSI/ASHRAE/IES 90.1f-2016, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013): 1/28/2016
- ANSI/ASHRAE/IES 90.1v-2016, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2013): 1/28/2016

ANSI/ASHRAE/USGBC/IES Addendum 189.1a-2016, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2014): 1/28/2016

ANSI/ASHRAE/USGBC/IES Addendum 189.1d-2016, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2014): 1/28/2016

ANSI/ASHRAE/USGBC/IES Addendum 189.1e-2016, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2014): 1/28/2016

ANSI/ASHRAE/USGBC/IES Addendum 189.1g-2016, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2014): 1/28/2016

### **Reaffirmation**

ANSI/ASHRAE Standard 164.2-2012 (R2016), Method of Test for Self-Contained Residential Humidifiers (reaffirmation of ANSI/ASHRAE Standard 164.2-2012): 12/31/2015

## **ASME (American Society of Mechanical Engineers)**

### **Revision**

ANSI/ASME B30.3-2016, Tower Cranes (revision of ANSI/ASME B30.3-2012): 2/3/2016

## **ASTM (ASTM International)**

### **New National Adoption**

ANSI/ASTM/ISO 55000-2016, Asset management - Overview, Principles and Terminology (identical national adoption of): 2/2/2016

ANSI/ASTM/ISO 55001-2016, Asset management - Management systems - Requirements (identical national adoption of): 2/2/2016

ANSI/ASTM/ISO 55002-2016, Asset management - Management systems - Guidelines for the application of ISO 55001 (identical national adoption of ISO 55002:2014(E)): 2/2/2016

### **Revision**

ANSI/ASTM C559-2016, Test Method for Bulk Density by Physical Measurements of Manufactured Carbon and Graphite Articles (revision of ANSI/ASTM C559-2000 (R2010)): 1/26/2016

ANSI/ASTM C561-2016, Test Method for Ash in a Graphite Sample (revision of ANSI/ASTM C561-2000 (R2010)): 1/26/2016

ANSI/ASTM C565-2016, Test Methods for Tension Testing of Carbon and Graphite Mechanical Materials (revision of ANSI/ASTM C565-2010): 2/2/2016

ANSI/ASTM C662-2016, Specification for Impervious Graphite Pipe and Threading (revision of ANSI/ASTM C662-2005 (R2010)): 1/26/2016

ANSI/ASTM C808-2000 (R2016), Guide for Reporting Friction and Wear Test Results of Manufactured Carbon and Graphite Bearing and Seal Materials (revision of ANSI/ASTM C808-2000 (R2010)): 1/26/2016

ANSI/ASTM C816-2016, Test Method for Sulfur in Graphite by Combustion-Iodometric Titration Method (revision of ANSI/ASTM C816-2005 (R2010)): 2/2/2016

ANSI/ASTM C1179-2016, Test Method for Oxidation Mass Loss of Manufactured Carbon and Graphite Materials in Air (revision of ANSI/ASTM C1179-2000 (R2010)): 2/2/2016

ANSI/ASTM D3241-2016, Test Method for Thermal Oxidation Stability of Aviation Turbine Fuels (revision of ANSI/ASTM D3241-2015): 2/1/2016

ANSI/ASTM D6299-2016, Practice for Applying Statistical Quality Assurance and Control Charting Techniques to Evaluate Analytical Measurement System Performance (revision of ANSI/ASTM D6299-2013): 1/26/2016

ANSI/ASTM D6708-2016, Practice for Statistical Assessment and Improvement of Expected Agreement Between Two Test Methods that Purport to Measure the Same Property of a Material (revision of ANSI/ASTM D6708-2015): 1/26/2016

ANSI/ASTM D7223-2016, Specification for Aviation Certification Turbine Fuel (revision of ANSI/ASTM D7223-2011 (R2015)): 1/26/2016

ANSI/ASTM D7846-2016, Practice for Reporting Uniaxial Strength Data and Estimating Weibull Distribution Parameters for Advanced Graphites (revision of ANSI/ASTM D7846-2012): 1/26/2016

ANSI/ASTM E136-2016, Test Method for Behavior of Materials in a Vertical Tube Furnace at 750C (revision of ANSI/ASTM E136-2012): 1/26/2016

ANSI/ASTM E1354-2016, Test Method for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter (revision of ANSI/ASTM E1354-2015a): 2/1/2016

ANSI/ASTM E1623-2016, Test Method for Determination of Fire and Thermal Parameters of Materials, Products, and Systems Using an Intermediate Scale Calorimeter (ICAL) (revision of ANSI/ASTM E1623-2014): 1/26/2016

ANSI/ASTM E2257-2016, Test Method for Room Fire Test of Wall and Ceiling Materials and Assemblies (revision of ANSI/ASTM E2257-2013a): 2/1/2016

ANSI/ASTM E2652-2016, Test Method for Behavior of Materials in a Tube Furnace with a Cone-shaped Airflow Stabilizer, at 750C (revision of ANSI/ASTM E2652-2012): 1/26/2016

ANSI/ASTM E2965-2016, Test Method for Determination of Low Levels Heat Release Rate for Materials and Products Using an Oxygen Consumption Calorimeter (revision of ANSI/ASTM E2965-2015): 1/26/2016

## **ATIS (Alliance for Telecommunications Industry Solutions)**

### **Withdrawal**

ANSI/ATIS 0500015-2010, Flexible LDF-AMF (Location Determination Function - Access Measurement Function) Protocol (FLAP) Specification (withdrawal of ANSI/ATIS 0500015-2010): 2/5/2016

## **CSA (CSA Group)**

### **Revision**

\* ANSI Z83.11-2016, Standard for Gas Food Service Equipment (same as CSA 1.8) (revision of ANSI Z83.11-2006 (R2011), ANSI Z83.11a-2007, and ANSI Z83.11b-2009): 2/2/2016

\* ANSI Z83.21/CSA C22.2 No.263/UL 921-2016, Standard for Commercial Dishwashers (same as UL 921) (revision of ANSI Z83.21/CSA C22.2 No. 168/UL 921-2005 (R2010)): 2/4/2016

## **NEMA (ASC C12) (National Electrical Manufacturers Association)**

### **Revision**

ANSI C12.1-2016, Code for Electricity Metering (revision of ANSI C12.1-2007): 2/1/2016

## **NSF (NSF International)**

### **Revision**

ANSI/NSF 5-2016 (i5r3), Water heaters, hot water supply boilers, and heat recovery equipment (revision of ANSI/NSF 5-2012): 1/26/2016

- \* ANSI/NSF 46-2015 (i28r1), Evaluation of Components and Devices Used in Wastewater Treatment Systems (revision of ANSI/NSF 46-2014): 10/7/2015
- \* ANSI/NSF 173-2016 (i49r1), Dietary Supplements (revision of ANSI/NSF 173-2013): 2/1/2016
- \* ANSI/NSF 173-2016 (i51r2), Dietary Supplements (revision of ANSI/NSF 173-2012): 2/5/2016
- \* ANSI/NSF 173-2016 (i54r1), Dietary Supplements (revision of ANSI/NSF 173-2013): 2/1/2016

## **RESNET (Residential Energy Services Network, Inc.)**

### ***New Standard***

- \* ANSI/RESNET/ICC 380-2016, Standard for Testing Airtightness of Building Enclosures, Airtightness of Heating and Cooling Air Distribution Systems, and Airflow of Mechanical Ventilation Systems (new standard): 2/4/2016

## **TIA (Telecommunications Industry Association)**

### ***New Standard***

ANSI/TIA 455-25-D-2016, FOTP-25 Impact Testing of Optical Fiber Cables (new standard): 2/3/2016

### ***Revision***

ANSI/TIA 455-104-B-2016, FOTP 104 - Fiber Optic Cable Cyclic Flexing Test (revision and redesignation of ANSI/TIA 455-104-A-1993 (R2013)): 2/3/2016

## **UL (Underwriters Laboratories, Inc.)**

### ***New National Adoption***

- ANSI/UL 60079-18-2016, Standard for Safety for Explosive Atmospheres - Part 18: Equipment Protection by Encapsulation "m" (Proposal dated 10-09-15) (national adoption of IEC 60079-18 with modifications and revision of ANSI/UL 60079-18-2012a): 12/14/2015
- \* ANSI/UL 60335-2-79-2016, Standard for Safety for Household and Similar Electrical Appliances, Part 2: Particular Requirements for High Pressure Cleaners (Proposal dated 9-4-15) (national adoption with modifications of IEC 60335-2-79): 1/14/2016

### ***New Standard***

- ANSI/UL 83A-2016, Standard for Safety for Fluoropolymer Insulated Wire (Proposal dated 11-20-15) (new standard): 2/1/2016
- ANSI/UL 464A-2016, Standard for Safety for Audible Signal Appliances for General Signaling Use (new standard): 2/3/2016
- ANSI/UL 1004-9-2016, Standard for Safety for Form Wound and Medium Voltage Rotating Electrical Machines (new standard): 1/27/2016
- ANSI/UL 1480A-2016, Standard for Safety for Speakers for Commercial and Professional Use (new standard): 2/3/2016

### ***Reaffirmation***

- ANSI/UL 793-2011 (R2016), Standard for Safety for Automatically Operated Roof Vents for Smoke and Heat (reaffirmation of ANSI/UL 793-2011): 1/27/2016
- ANSI/UL 2017-2016, Standard for Safety for General-Purpose Signaling Devices and Systems (reaffirmation of ANSI/UL 2017-2011): 1/27/2016

### ***Revision***

- ANSI/UL 347-2016, Standard for Safety for Medium-Voltage AC Contactors, Controllers, and Control Centers (revision of ANSI/UL 347-2009a): 1/29/2016
- ANSI/UL 347-2016a, Standard for Safety for Medium-Voltage AC Contactors, Controllers, and Control Centers (revision of ANSI/UL 347-2009a): 1/29/2016

ANSI/UL 448-2016, Standard for Safety for Centrifugal Stationary Pumps for Fire-Protection Service (revision of ANSI/UL 448-2013): 2/3/2016

ANSI/UL 464-2016, Standard for Safety for Audible Signaling Devices for Fire Alarm and Signaling Systems, Including Accessories (revision of ANSI/UL 464-2012): 1/28/2016

ANSI/UL 746A-2016, Standard for Safety for Polymeric Materials - Short Term Property Evaluations (revision of ANSI/UL 746A-2015): 1/27/2016

\* ANSI/UL 858-2016, Standard for Safety for Household Electric Ranges (revision of ANSI/UL 858-2015): 2/8/2016

\* ANSI/UL 858-2016a, Standard for Safety for Household Electric Ranges (revision of ANSI/UL 858-2015): 2/8/2016

ANSI/UL 1480-2016, Standard for Safety for Speakers for Fire Alarm and Signaling Systems, Including Accessories (Proposal dated 5-10-13) (revision of ANSI/UL 1480-2012): 1/28/2016

ANSI/UL 1480-2016a, Standard for Safety for Speakers for Fire Alarm and Signaling Systems, Including Accessories (revision of ANSI/UL 1480-2012): 1/28/2016

ANSI/UL 1480-2016b, Standard for Safety for Speakers for Fire Alarm and Signaling Systems, Including Accessories (revision of ANSI/UL 1480-2012): 1/28/2016

ANSI/UL 1638-2016, Standard for Safety for Visible Signaling Devices for Fire Alarm and Signaling Systems, Including Accessories (revision of ANSI/UL 1638-2008 (R2013)): 1/28/2016

ANSI/UL 1638-2016a, Standard for Safety for Visible Signaling Devices for Fire Alarm and Signaling Systems, Including Accessories (revision of ANSI/UL 1638-2008 (R2013)): 1/28/2016

ANSI/UL 2225-2016, Standard for Safety for Cables and Cable-Fittings for Use in Hazardous (Classified) Locations (Proposal dated 10-02-15) (revision of ANSI/UL 2225-2013a): 1/29/2016

ANSI/UL 2225-2016a, Standard for Safety for Cables and Cable-Fittings for Use in Hazardous (Classified) Locations (Proposal dated 12-18-15) (revision of ANSI/UL 2225-2013): 1/29/2016

# 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](http://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.

## **AAMI (Association for the Advancement of Medical Instrumentation)**

**Office:** 4301 N Fairfax Drive  
Suite 301  
Arlington, VA 22203-1633

**Contact:** *Hae Choe*

**Fax:** (703) 276-0793

**E-mail:** [HChoe@aami.org](mailto:HChoe@aami.org); [customerservice@aami.org](mailto:customerservice@aami.org)

BSR/AAMI/IEC 60601-2-2-201x, Medical electrical equipment - Part 2 -2: Particular requirements for the basic safety and essential performance of high frequency surgical equipment and high frequency surgical accessories (identical national adoption of IEC 60601-2-2 and revision of ANSI/AAMI/IEC 60601-2-2-2009 (R2014))

This international standard applies to the basic safety and essential performance of HF surgical equipment and HF surgical accessories. HF surgical equipment having a rated output power not exceeding 50 W (for example micro-coagulation, or for use in dentistry or ophthalmology) is exempt from certain of the requirements of this particular standard.

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

**Office:** 1791 Tullie Circle NE  
Atlanta, Georgia 30329

**Contact:** *Tanisha Lisle*

**Fax:** (678) 539-1111

**E-mail:** [tmlisle@ashrae.org](mailto:tmlisle@ashrae.org)

BSR/ASHRAE Standard 24-201X, Methods of Testing for Rating Liquid Coolers (revision of ANSI/ASHRAE Standard 24-2013)

Stakeholders: Manufacturers and users of liquid-cooled direct expansion evaporators, which will include packaged chiller manufacturers for all market segments and system builders.

Project Need: Revise standard to conform to mandatory language, and uncertainty analysis, and enthalpy-based heat transfer calculations

this standard: (a) classifies liquid coolers as to type, (b) lists and defines the terms suggested for rating liquid coolers, and (c) establishes methods of test that shall be used as basis for obtaining ratings of liquid coolers.

BSR/ASHRAE Standard 84-201X, Method of Testing Air-to-Air Heat/Energy Exchangers (revision of ANSI/ASHRAE Standard 84-2013)

Stakeholders: Manufacturers of ERV equipment, testing organizations, certification bodies.

Project Need: Standard 84-2013 is in active use as the method of test for the AHRI 1060 certification program. The current version is not written in mandatory language. A published erratum needs to be incorporated in the Standard. The method of test for alternating-mass exchangers has been drafted and will be reviewed for inclusion in the Standard.

The purpose of this standard is to: (a) establish a uniform method of test for obtaining performance data for air-to-air heat/energy exchangers; ; (b) specify the test conditions, data required, uncertainty analysis to be performed, calculations to be used, and reporting procedures for testing the performance of an air-to-air heat/energy exchanger; and (c) specify the types of test equipment for performing such tests.

BSR/ASHRAE Standard 113-201X, Method of Testing for Room Air Diffusion (revision of ANSI/ASHRAE Standard 113-2013)

Stakeholders: General interest, Government agencies

Project Need: The standard must be written in mandatory code language, the appendixes need to be reformatted to informative and the recent ASHRAE Research project 1546 data needs to be incorporated.

The purpose of this standard is to define a repeatable method of testing the steady state air diffusion performance of an air distribution system in occupied zones of building spaces. This method is based on air velocity and air temperature distributions at specified heating or cooling loads and operating conditions.

BSR/ASHRAE Standard 118.2-201X, Method of Testing for Rating Residential Water Heaters (revision of ANSI/ASHRAE Standard 118.2-2006 (R2015))

Stakeholders: Users, Utilities, Government Agencies, General Interest and Manufacturers

Project Need: SPC 118.2 will revise this standard by recommendation of the Department of Energy.

The purpose of this standard is to provide test procedures for rating the efficiency and hot water delivery capabilities of directly heated residential water heaters and residential-duty commercial water heaters.

BSR/ASHRAE Standard 200-201X, Methods of Testing Chilled Beams  
(revision of ANSI/ASHRAE Standard 200-2015)

Stakeholders: Chilled beam manufacturers; AHRI chilled beam certification program; chilled beam researchers / project

Project Need: Water pressure drop testing method was omitted from prior version by mistake. The induction testing method needs updated to reflect current research that was unavailable at the time of original publishing the standard.

This standard specifies test instrumentation, facilities, installation methods and procedures for determining the performance of Chilled Beams.

#### **ASTM (ASTM International)**

**Office:** 100 Barr Harbor Drive  
West Conshohocken, PA 19428-2959

**Contact:** Corice Leonard

**Fax:** (610) 834-3683

**E-mail:** accreditation@astm.org

BSR/ASTM WK53089-201x, New Specification for Standard  
Specification for Special Inspection of Sprayed Fire-Resistive  
Materials (new standard)

Stakeholders: Laboratory/Inspection Bodies Industry

Project Need: The purpose of this specification is to establish requirements for the Special Inspection of Sprayed Fire-Resistive Materials (SFRM) in conformance with the general requirements of the International Building Code (IBC), including methods for field verification and inspection and laboratory testing, as reflected in the project documents.

<http://www.astm.org/DATABASE.CART/WORKITEMS/WK53089.htm>

#### **ATIS (Alliance for Telecommunications Industry Solutions)**

**Office:** 1200 G Street NW  
Suite 500  
Washington, DC 20005

**Contact:** Alexandra Blasgen

**E-mail:** ablasgen@atis.org

BSR/ATIS 0600028-201x, DC Power Wire and Cable for  
Telecommunications Power Systems - for XHHW and  
DLO/Halogenated RHW-RHH Cable Types (revision of ANSI ATIS  
0600028-2011)

Stakeholders: Communications Industry

Project Need: This document describes standard dimensions and testing for XHHW and DLO type wires to be used for telecommunications power and grounding as an alternative to RHW-RHH cable described in ATIS-0600017.

This document describes standard dimensions and testing for XHHW and DLO type wires to be used for telecommunications power and grounding as an alternative to RHW-RHH cable described in ATIS-0600017.

#### **AWS (American Welding Society)**

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

**Contact:** Rakesh Gupta

**Fax:** (305) 443-5951

**E-mail:** gupta@aws.org

- \* BSR/AWS A5.5/A5.5M-201X, Specification for Low-Alloy Steel Electrodes for Shielded Metal Arc Welding (revision of ANSI/AWS A5.5/A5.5M-2014)

Stakeholders: Welders, welding supervisors, welding educators, welding engineers, filler metal suppliers, filler metal manufacturers and all those who are involved in low-alloy steel welding.

Project Need: Adding new filler metal

This specification prescribes the requirements for classification of low-alloy steel covered electrodes used for shielded metal arc welding. The requirements include chemical composition and mechanical properties of weld metal, weld metal soundness, usability tests of electrodes, and moisture tests of the low-hydrogen electrode covering. Requirements for standard sizes and lengths, marking, manufacturing, and packaging are also included. Optional supplemental requirements include tests for absorbed moisture in the electrode covering and for diffusible hydrogen in the weld metal.

- \* BSR/AWS A5.26/A5.26M-201X, Specification for Carbon and Low-Alloy Steel Electrodes for Electrode Gas Welding (revision of ANSI/AWS A5.26/A5.26M-1997 (R2008))

Stakeholders: welders, welding supervisors, welding educators, welding engineers, filler metal suppliers, filler metal manufacturers and others who are involved in electrode gas welding.

Project Need: Updating specification for the latest practices of the industry

Classification requirements are specified for solid and tubular composite (flux cored and metal cored) electrodes for electrode gas welding. The requirements include chemical composition of the electrode for solid electrodes and of weld metal for tubular composite (cored) electrodes, in addition to the mechanical properties and soundness of weld metal taken from a groove weld made with these electrodes using the prescribed welding procedure.

#### **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; v david@awwa.org

BSR/AWWA E2XX-201x, Solids Handling Pumps for Wastewater  
Applications (new standard)

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

Project Need: The purpose of this standard is to provide a consensus document establishing basic materials of construction and performance expectations for solids handling pumps for wastewater applications.

This standard describes the minimum requirements for solids handling pumps for installation in wastewater collection systems, wastewater treatment plants, and wastewater transmission systems.



**IAPMO (Z) (International Association of Plumbing & Mechanical Officials)**

**Office:** 5001 E. Philadelphia Street  
Ontario, CA 91761-2816

**Contact:** Charles Gross

**Fax:** (909) 472-4178

**E-mail:** charles.gross@iapmo.org

- \* BSR/IAPMO Z1001-201x, Prefabricated Gravity Grease Interceptors  
(revision of ANSI/IAPMO Z1001-2014)

Stakeholders: Manufacturers, users, consumers, regulatory authorities

Project Need: Revise the current edition to be more practical to industry's needs.

This Standard covers prefabricated gravity grease interceptors made of concrete, fiber-reinforced polyester (FRP), thermoplastic, or steel and specifies requirements for design, materials, performance, testing, and markings.

**UL (Underwriters Laboratories, Inc.)**

**Office:** 333 Pfingsten Road  
Northbrook, IL 60062

**Contact:** Ritu Madan

**E-mail:** ritu.madan@ul.com

- BSR/UL 1489-201x, Standard for Safety for Fire Resistant Pipe  
Protection Systems Carrying Combustible Liquids (new standard)

Stakeholders: Same as UL 1479 manufacturers with addition perhaps of stakeholders in Fire Resistant Tanks for Flammable and Combustible Liquids, Protected Aboveground Tanks for Flammable and Combustible Liquids

Project Need: Development of a new Standard

The Standard covers the investigation of products such as, but not limited to, sleeve, wrap or spray-on type fire protection systems of various materials and construction intended to protect rigid piping networks containing combustible liquids from a fire exposure, such as diesel fuel or heating oil, that are routed in buildings between the supply tank and utilizing equipment.

# 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](http://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](http://www.ansi.org/publicreview).

Alternatively, you may contact the Procedures & Standards Administration department (PSA) at [psa@ansi.org](mailto: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](mailto:standact@ansi.org).

## AAMI

Association for the Advancement of  
Medical Instrumentation  
4301 N Fairfax Drive  
Suite 301  
Arlington, VA 22203-1633  
Phone: (703) 253-8274  
Fax: (703) 276-0793  
Web: [www.aami.org](http://www.aami.org)

## ACCA

Air Conditioning Contractors of  
America  
2800 Shirlington Road  
Suite 300  
Arlington, VA 22206  
Phone: (703) 824-8870  
Web: [www.acca.org](http://www.acca.org)

## AIIM

Association for Information and Image  
Management  
1100 Wayne Avenue  
Suite 1100  
Silver Spring, MD 20910  
Phone: (301) 755-2682  
Fax: (240) 494-2682  
Web: [www.aiim.org](http://www.aiim.org)

## ASA (ASC S12)

Acoustical Society of America  
1305 Walt Whitman Rd  
Suite 300  
Melville, NY 11747  
Phone: (631) 390-0215  
Fax: (631) 923-2875  
Web: [www.acousticalsociety.org](http://www.acousticalsociety.org)

## ASABE

American Society of Agricultural and  
Biological Engineers  
2950 Niles Road  
St Joseph, MI 49085  
Phone: (269) 932-7027  
Fax: (269) 429-3852  
Web: [www.asabe.org](http://www.asabe.org)

## ASC X9

Accredited Standards Committee X9,  
Incorporated  
1212 West Street  
Suite 200  
Annapolis, MD 21401  
Phone: (410) 267-7707  
Fax: (410) 267-0961  
Web: [www.x9.org](http://www.x9.org)

## ASCE

American Society of Civil Engineers  
1801 Alexander Bell Dr  
Reston, VA 20191  
Phone: 703-295-6176  
Web: [www.asce.org](http://www.asce.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](http://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](http://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](http://www.astm.org)

## ATIS

Alliance for Telecommunications  
Industry Solutions  
1200 G Street NW  
Suite 500  
Washington, DC 20005  
Phone: (202) 434-8840  
Web: [www.atis.org](http://www.atis.org)

## AWS

American Welding Society  
8669 NW 36th Street  
Suite #130  
Miami, FL 33166-6672  
Phone: (800) 443-9353  
Fax: (305) 443-5951  
Web: [www.aws.org](http://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](http://www.awwa.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](http://www.csa-america.org)

## IAPMO (Z)

International Association of Plumbing  
& Mechanical Officials  
5001 E. Philadelphia Street  
Ontario, CA 91761-2816  
Phone: (909) 472-4136  
Fax: (909) 472-4178  
Web: [www.iapmort.org](http://www.iapmort.org)

## NASBLA

National Association of State Boating  
Law Administrators  
1648 McGrathiana Parkway  
Suite 360  
Lexington, KY 40511  
Phone: (859) 225-9487  
Web: [www.nasbla.org](http://www.nasbla.org)

## NEMA (ASC C12)

National Electrical Manufacturers  
Association  
1300 North 17th Street  
Suite 900  
Rosslyn, VA 22209  
Phone: (703) 841-3227  
Fax: (703) 841-3327  
Web: [www.nema.org](http://www.nema.org)

## NSF

NSF International  
789 N. Dixboro Road  
Ann Arbor, MI 48105-9723  
Phone: (734) 769-5197  
Web: [www.nsf.org](http://www.nsf.org)

## RESNET

Residential Energy Services Network,  
Inc.  
4867 Patina Court  
Oceanside, CA 92057  
Phone: (760) 408-5860  
Fax: (760) 806-9449  
Web: [www.resnet.us.com](http://www.resnet.us.com)

## TIA

Telecommunications Industry  
Association  
1320 North Courthouse Road  
Suite 200  
Arlington, VA 22201  
Phone: (703) 907-7497  
Fax: (703) 907-7727  
Web: [www.tiaonline.org](http://www.tiaonline.org)

## UL

Underwriters Laboratories, Inc.  
333 Pfingsten Road  
Northbrook, IL 60062-2096  
Phone: (847) 664-1725  
Fax: (847) 407-1725  
Web: [www.ul.com](http://www.ul.com)



# 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

### **BUILDING CONSTRUCTION MACHINERY AND EQUIPMENT (TC 195)**

ISO/DIS 19720-1, Building construction machinery and equipment - Plants for the preparation of concrete and mortar - Part 1: Terminology and commercial specifications - 5/7/2016, \$82.00

### **CONCRETE, REINFORCED CONCRETE AND PRE-STRESSED CONCRETE (TC 71)**

ISO/DIS 19595, Natural aggregates for concrete - 5/4/2016  
ISO/DIS 13315-4, Environmental management for concrete and concrete structures - Part 4: Environmental design of concrete structures - 5/14/2016

### **CORROSION OF METALS AND ALLOYS (TC 156)**

ISO/DIS 18897, Corrosion of metals and alloys - Standard test method for particle-free erosion corrosion of metallic materials by jet-in-slit - 5/7/2016

### **DENTISTRY (TC 106)**

ISO/DIS 9873, Dentistry - Intra-oral mirrors - 3/5/2016, \$53.00  
ISO/DIS 22112, Dentistry - Artificial teeth for dental prostheses - 5/7/2016

### **EARTH-MOVING MACHINERY (TC 127)**

ISO/DIS 16001, Earth-moving machinery - Object detection systems and visibility aids - Performance requirements and tests - 5/14/2016

ISO/DIS 13766-1, Earth-moving- and Building construction machinery - Electromagnetic compatibility of machines with internal electrical power supply - Part 1: General EMC requirements under typical EMC environmental conditions - 3/5/2016, \$107.00

ISO/DIS 13766-2, Earth-moving machinery - Electromagnetic compatibility - Part 2: EMC requirements under the aspect of functional safety - 3/5/2016, \$53.00

### **FERROUS METAL PIPES AND METALLIC FITTINGS (TC 5)**

ISO/DIS 8179-1, Ductile iron pipes, fittings, accessories and valves - Part 1: Metallic zinc based coatings - 5/7/2016, \$53.00  
ISO/DIS 8179-2, Ductile iron pipes, fittings, accessories and valves external zinc based coatings. - Part 2: Zinc rich paint coating - 5/7/2016, \$40.00

### **FERTILIZERS AND SOIL CONDITIONERS (TC 134)**

ISO/DIS 19670, Fertilizers and soil conditioners - Solid urea aldehyde slow release fertilizer - General requirements - 3/5/2016

### **FIRE SAFETY (TC 92)**

ISO/DIS 19021, Test method for determination of gas concentrations in ISO 5659-2 using Fourier transform infrared spectroscopy - 3/6/2016, \$82.00

### **FLUID POWER SYSTEMS (TC 131)**

ISO/DIS 6605, Hydraulic fluid power - Hose assemblies - Method of test - 11/15/2002, \$53.00

### **IMPLANTS FOR SURGERY (TC 150)**

ISO 7206-2/DAmD1, Implants for surgery - Partial and total hip joint prostheses - Part 2: Articulating surfaces made of metallic, ceramic and plastics materials - Amendment 1 - 3/4/2016, \$33.00  
ISO 7207-2/DAmD1, Implants for surgery - Components for partial and total knee joint prostheses - Part 2: Articulating surfaces made of metal, ceramic and plastics materials - Amendment 1 - 3/4/2016, \$29.00

### **INDUSTRIAL AUTOMATION SYSTEMS AND INTEGRATION (TC 184)**

ISO/DIS 20140-5, Automation systems and integration - Evaluating energy efficiency and other factors of manufacturing systems that influence the environment - Part 5: Environmental influence evaluation data - 3/4/2016

**NON-DESTRUCTIVE TESTING (TC 135)**

ISO/DIS 15708-1, Non-destructive testing - Radiation methods - Computed tomography - Part 1: Principle, equipment and samples - 5/7/2016, \$71.00

ISO/DIS 15708-2, Non-destructive testing - Radiation methods - Computed Tomography - Part 2: Operation and interpretation - 5/7/2016, \$82.00

ISO/DIS 15708-3, Non-destructive testing - Radiation methods - Computed tomography - Part 3: Terminology - 5/7/2016, \$58.00

ISO/DIS 15708-4, Non-destructive testing - Radiation methods - Computed tomography - Part 4: Qualification - 5/7/2016, \$53.00

**PLASTICS (TC 61)**

ISO/DIS 294-1, Plastics - Injection moulding of test specimens of thermoplastic materials - Part 1: General principles, and moulding of multipurpose and bar test specimens - 3/5/2016, \$93.00

**REFRIGERATION (TC 86)**

ISO/DIS 14903, Refrigerating systems and heat pumps - Qualification of tightness of components and joints - 5/14/2016

**ROAD VEHICLES (TC 22)**

ISO/DIS 12619-6, Road vehicles - Compressed gaseous hydrogen (CGH<sub>2</sub>) and hydrogen/natural gas blend fuel system components - Part 6: Automatic valve - 5/7/2016

**RUBBER AND RUBBER PRODUCTS (TC 45)**

ISO/DIS 4662, Rubber, vulcanized or thermoplastic - Determination of rebound resilience - 3/6/2016, \$102.00

ISO/DIS 19983, Rubber - Determination of precision of test methods - 5/7/2016

ISO/DIS 20437, Natural rubber latex cleanroom gloves - Specification - 5/7/2016, \$40.00

**SECURITY (TC 292)**

ISO/DIS 22319, Security and resilience - Guidelines for planning the involvement of spontaneous volunteers - 5/7/2016

**SHIPS AND MARINE TECHNOLOGY (TC 8)**

ISO/DIS 20519, Ships and marine technology - Specification for bunkering of gas fuelled ships - 3/5/2016, \$107.00

IEC/IEEE DIS 80005-1, Utility connections in port - Part 1: High Voltage Shore Connection (HVSC) Systems - General requirements - 4/24/2016

**SOLID MINERAL FUELS (TC 27)**

ISO/DIS 1213-2, Solid mineral fuels - Vocabulary - Part 2: Terms relating to sampling, testing and analysis - 5/14/2016

**SUSTAINABLE DEVELOPMENT IN COMMUNITIES (TC 268)**

ISO/DIS 37102, Sustainable development and resilience of communities - Vocabulary - 5/2/2016, \$62.00

**TRACTORS AND MACHINERY FOR AGRICULTURE AND FORESTRY (TC 23)**

ISO 11681-2/DAmD1, Machinery for forestry - Portable chain-saw safety requirements and testing - Part 2: Chain-saws for tree service - Amendment 1 - 5/14/2016

ISO/DIS 6531, Machinery for forestry - Portable chainsaws - Vocabulary - 3/4/2016, \$62.00

ISO/DIS 8437-1, Snow throwers - Safety requirements and test procedures - Part 1: Terminology and common tests - 5/7/2016

ISO/DIS 8437-2, Snow throwers - Safety requirements and test procedures - Part 2: Pedestrian controlled snow throwers - 5/7/2016

ISO/DIS 8437-3, Snow throwers - Safety requirements and test procedures - Part 3: Ride-on snow throwers - 5/14/2016

ISO/DIS 8437-4, Snow throwers - Safety requirements and test procedures - Part 4: Information on national and regional provisions - 5/7/2016

**TRANSFUSION, INFUSION AND INJECTION EQUIPMENT FOR MEDICAL USE (TC 76)**

ISO/DIS 8536-6, Infusion equipment for medical use - Part 6: Freeze drying closures for infusion bottles - 5/7/2016, \$67.00

**TRANSPORT INFORMATION AND CONTROL SYSTEMS (TC 204)**

ISO/DIS 13111-1, Intelligent transport systems (ITS) - The use of personal ITS station to support ITS service provision for travelers - Part 1: General information and use cases definitions - 3/4/2016, \$102.00

**ISO/IEC JTC 1, Information Technology**

ISO/IEC DIS 27004, Information technology - Security techniques - Information security management - Monitoring, measurement, analysis and evaluation - 3/6/2016, \$125.00

ISO/IEC DIS 30182, Smart city concept model - Guidance for establishing a model for data interoperability - 5/8/2016

ISO/IEC DIS 30754, Information technology - Software trustworthiness - Governance and management - Specification - 5/7/2016

ISO/IEC DIS 24709-1, Information technology - Conformance testing for BioAPI - Part 1: Methods and procedures - 5/14/2016

**IEC Standards**

3C/2157/FDIS, IEC 60417-6300, Suitable for uninsulated hazardous live conductors, 03/18/2016

9/2140/CD, IEC 62995 Ed.1: Railway applications - Rolling stock - Rules for installation of cabling, 04/29/2016

13/1673/DTS, IEC/TS 62056-8-20, Electricity Metering Data Exchange - The DLMS/COSEM Suite - Part 8-20: Mesh communication profile for neighbourhood networks, 04/29/2016

15/771/CD, IEC 60893-3-6/A2/Ed2: Insulating materials - Industrial rigid laminated sheets based on thermosetting resins for electrical purposes - Part 3-6: Specifications for individual materials - Requirements for rigid laminated sheets based on silicone resins, 04/29/2016

34A/1890/NP, PNW 34A-1890: Semi-integrated led lamps for general lighting services with supply voltages not exceeding 50 V A.C. R.M. S. or 120 V ripple free D.C. - Performance requirements, 04/29/2016

34B/1847/CD, IEC 60061 f75 Ed.3: Lamp caps and holders together with gauges for the control of interchangeability and safety - Part 1: Lamp caps;-Part 2: Holders;-Part 3: Gauges (Proposal for the amendment of GX16t-5 Caps, Holders and Gauges - sheet number 183), 04/29/2016

- 47/2282/FDIS, IEC 62779-3 Ed.1: Semiconductor devices - Semiconductor interface for human body communication - Part 3: Functional type and its operational conditions, 03/18/2016
- 49/1183A/CD, IEC 63041-1 Ed.1: Sensor devices using piezoelectric bulk or surface acoustic waves - Part 1: Generic specifications, 04/22/2016
- 59K/273/FDIS, IEC 60350-1 Ed.2: Household electric cooking appliances - Part 1: Ranges, ovens, steam ovens and grills - Methods for measuring performance, 03/18/2016
- 61J/625/FDIS, IEC 60335-2-72/Ed4: Household and similar electrical appliances - Safety - Part 2-72: Particular requirements for floor treatment machines with or without traction drive, for commercial use, 03/18/2016
- 64/2088/CDV, IEC 60364-7-704: Low-voltage electrical installations - Part 7-704, Requirements for special installations or locations - Construction and demolition site installations, 05/06/2016
- 64/2101/CD, IEC 60364-8-1: Low-Voltage electrical installations - Part 8-1: Energy efficiency, 05/27/2016
- 65C/838/CDV, IEC 61784-3 Ed 3.0 Amd 1: Industrial communication networks - Profiles - Part 3: Functional safety fieldbuses - General rules and profile definitions, 05/06/2016
- 66/583A/CDV, IEC 61010-2-030 Ed.2: Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-030: Particular requirements for equipment having testing or measuring circuits, 04/15/2016
- 77/513/FDIS, IEC 61000-1-2: Electromagnetic compatibility (EMC) - Part 1-2: General - Methodology for the achievement of functional safety of electrical and electronic systems including equipment with regard to electromagnetic phenomena, 03/18/2016
- 77B/751/CDV, IEC 61000-4-39 - Electromagnetic Compatibility (EMC) - Part 4-39: Testing and measurement techniques - Radiated fields in close proximity - Immunity test, 05/06/2016
- 78/1145/DTR, IEC TR 61328: Live working - Guidelines for the installation of transmission & distribution line conductors and earthwires - stringing equipment and accessory items, 04/01/2016
- 80/795/FDIS, IEC 601162-450 A1 Ed.1: Amendment 1 to IEC 61162 -450 Ed.1: Maritime navigation and radiocommunication equipment and systems - Digital interfaces - Part 450: Multiple talkers and multiple listeners - Ethernet interconnection, 03/18/2016
- 82/1053/CDV, IEC 60904-1-1 Ed.1: Photovoltaic devices - Part 1-1: Measurement of current-voltage characteristics of multi-junction photovoltaic devices, 05/06/2016
- 82/1054/CDV, IEC 60904-8-1 Ed.1: Photovoltaic devices - Part 8-1: Measurement of spectral responsivity of multi-junction photovoltaic (PV) devices, 05/06/2016
- 86A/1702A/CD, IEC 60793-1-1/Ed4: Optical fibres - Part 1-1: Measurement methods and test procedures - General and guidance, 02/26/2016
- 86A/1714/CD, IEC 60793-1-60/Ed1: Optical fibres - Part 1-60: Measurement methods and test procedures - Beat length, 04/01/2016
- 86A/1715/CD, IEC 60793-1-61/Ed1: Optical fibres - Part 1-61: Measurement methods and test procedures - Polarization crosstalk, 04/01/2016
- 86A/1716/CD, IEC 60793-2-70/Ed1: Optical fibres - Part 2-70: Product specifications - Sectional specifications for polarization-maintaining fibres, 04/01/2016
- 86B/3975/FDIS, IEC 61300-2-37/Ed3: Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-37: Tests - Cable bending for fibre optic closures, 03/18/2016
- 86C/1370/FDIS, IEC 62343-3-1/Ed2: Dynamic modules - Part 3-1: Performance specification templates - Dynamic channel equalizers, 03/18/2016
- 89/1310/CD, CEI 60695-11-2/Ed3: Essais relatifs aux risques du feu - Partie 11-2: Flamme d'essai - Flamme à prémélange de 1 kW nominal - Appareillage, disposition d'essai de vérification et indications, 04/01/2016
- 100/2643/CD, IEC TS 63033-1: Car Multimedia Systems and Equipment - Drive Monitor System - Part 1: General (TC 100), 04/29/2016
- 100/2645/CD, IEC 62608-2 Ed.1.0: Multimedia home network configuration - Basic reference model - Part 2: Operational model (TA 8), 04/29/2016
- 110/736/NP, Future IEC 62595-2-3: Display lighting unit - Part 2-3: Electro-optical measuring methods of LED frontlight unit, 04/29/2016
- 113/308/CD, IEC 62607-4-5: Nanomanufacturing - Key control characteristics - Part 4-5 Cathode nanomaterials for nano-enabled electrical energy storage - Electrochemical characterisation, 3-electrode cell method, 04/29/2016
- 119/94/NP, Future IEC 62899-202-5: Printed electronics - Part 202-5: Materials - Conductive ink - Mechanical bending test of a printed conductive layer on substrate, 04/29/2016
- 121/14/NP, PNW 121-14: Environmental aspects for Low-Voltage Switchgear and Controlgear and their assemblies., 04/29/2016



# 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](http://www.ansi.org). All paper copies are available from Standards resellers (<http://webstore.ansi.org/faq.aspx#resellers>).

## ISO Standards

### ACOUSTICS (TC 43)

[ISO 16283-3:2016](#), Acoustics - Field measurement of sound insulation in buildings and of building elements - Part 3: Façade sound insulation, \$200.00

### CONTROL AND SAFETY DEVICES FOR NON INDUSTRIAL GAS-FIRED APPLIANCES AND SYSTEMS (TC 161)

[ISO 23551-8:2016](#), Safety and control devices for gas burners and gas-burning appliances - Particular requirements - Part 8: Multifunctional controls, \$88.00

### CRANES (TC 96)

[ISO 8566-2:2016](#), Cranes - Cabins and control stations - Part 2: Mobile cranes, \$51.00

[ISO 9926-3:2016](#), Cranes - Training of operators - Part 3: Tower cranes, \$51.00

### MACHINE TOOLS (TC 39)

[ISO 230-10:2016](#), Test code for machine tools - Part 10: Determination of the measuring performance of probing systems of numerically controlled machine tools, \$200.00

### MECHANICAL VIBRATION AND SHOCK (TC 108)

[ISO 16063-21/Amd1:2016](#), Methods for the calibration of vibration and shock transducers - Part 21: Vibration calibration by comparison to a reference transducer - Amendment 1, \$22.00

### METALLIC AND OTHER INORGANIC COATINGS (TC 107)

[ISO 18555:2016](#), Metallic and other inorganic coatings - Determination of thermal conductivity of thermal barrier coatings, \$123.00

### NUCLEAR ENERGY (TC 85)

[ISO 11665-9:2016](#), Measurement of radioactivity in the environment - Air: Radon-222 - Part 9: Test methods for exhalation rate of building materials, \$200.00

### PLASTICS (TC 61)

[ISO 18188:2016](#), Specification of polypropylene drinking straws, \$88.00

### SMALL TOOLS (TC 29)

[ISO 22917:2016](#), Precision superabrasives - Limit deviations and run-out tolerances for grinding wheels with diamond or cubic boron nitride, \$123.00

### STEEL (TC 17)

[ISO 4938:2016](#), Steel and iron - Determination of nickel content - Gravimetric or titrimetric method, \$123.00

[ISO 4946:2016](#), Steel and cast iron - Determination of copper - 2,2-Biquinoline spectrophotometric method, \$88.00

### STERILIZATION OF HEALTH CARE PRODUCTS (TC 198)

[ISO 15883-7:2016](#), Washer-disinfectors - Part 7: Requirements and tests for washer-disinfectors employing chemical disinfection for non-invasive, non-critical thermolabile medical devices and healthcare equipment, \$173.00

### TERMINOLOGY (PRINCIPLES AND COORDINATION) (TC 37)

[ISO 24617-6:2016](#), Language resource management - Semantic annotation framework - Part 6: Principles of semantic annotation (SemAF Principles), \$173.00

### WELDING AND ALLIED PROCESSES (TC 44)

[ISO 9454-1:2016](#), Soft soldering fluxes - Classification and requirements - Part 1: Classification, labelling and packaging, \$88.00

## ISO Technical Reports

### PLASTICS (TC 61)

[ISO/TR 18486:2016](#), Plastics - Parameters comparing the spectral irradiance of a laboratory light source for weathering applications to a reference solar spectral irradiance, \$88.00

## ISO Technical Specifications

### INFORMATION AND DOCUMENTATION (TC 46)

[ISO/TS 18344:2016](#), Effectiveness of paper deacidification processes, \$123.00

### ROBOTS AND ROBOTIC DEVICES (TC 299)

[ISO/TS 15066:2016](#), Robots and robotic devices - Collaborative robots, \$173.00

### SMALL TOOLS (TC 29)

[ISO/TS 13399-204:2016](#), Cutting tool data representation and exchange - Part 204: Creation and exchange of 3D models - Inserts for reaming, \$123.00

[ISO/TS 13399-303:2016](#), Cutting tool data representation and exchange - Part 303: Creation and exchange of 3D models - Solid end mills, \$173.00

[ISO/TS 13399-304:2016](#), Cutting tool data representation and exchange - Part 304: Creation and exchange of 3D models - Solid milling cutters with arbor hole, \$173.00

[ISO/TS 13399-308:2016](#), Cutting tool data representation and exchange - Part 308: Creation and exchange of 3D models - Milling cutters with arbor hole for indexable inserts, \$200.00

## ISO/IEC JTC 1, Information Technology

[ISO/IEC 19762:2016](#), Information technology - Automatic identification and data capture (AIDC) techniques - Harmonized vocabulary, \$265.00

# IEC Standards

## ALARM SYSTEMS (TC 79)

[IEC 60839-5-2 Ed. 2.0 b:2016](#), Alarm and electronic security systems - Part 5-2: Alarm transmission systems - Requirements for supervised premises transceiver (SPT), \$230.00

[IEC 60839-5-3 Ed. 1.0 b:2016](#), Alarm and electronic security systems - Part 5-3: Alarm transmission systems - Requirements for receiving centre transceiver (RCT), \$206.00

## ELECTRIC TRACTION EQUIPMENT (TC 9)

[IEC 62505-1 Ed. 2.0 b:2016](#), Railway applications - Fixed installations - Particular requirements for AC switchgear - Part 1: Circuit-breakers with nominal voltage above 1 kV, \$206.00

[IEC 62505-2 Ed. 2.0 b:2016](#), Railway applications - Fixed installations - Particular requirements for AC switchgear - Part 2: Disconnectors, earthing switches and switches with nominal voltage above 1 kV, \$85.00

## MEASURING EQUIPMENT FOR ELECTROMAGNETIC QUANTITIES (TC 85)

[IEC 60051-1 Ed. 6.0 b:2016](#), Direct acting indicating analogue electrical measuring instruments and their accessories - Part 1: Definitions and general requirements common to all parts, \$303.00

## SURFACE MOUNTING TECHNOLOGY (TC 91)

[IEC 62326-20 Ed. 1.0 b:2016](#), Printed boards - Part 20: Printed circuit boards for high-brightness LEDs, \$278.00

## TERMINOLOGY (TC 1)

[IEC 60050-614 Ed. 1.0 b:2016](#), International electrotechnical vocabulary - Part 614: Generation, transmission and distribution of electricity - Operation, \$303.00

## WIND TURBINE GENERATOR SYSTEMS (TC 88)

[IEC 61400-1 Ed. 3.1 b cor.1:2016](#), Corrigendum 1 - Wind turbines - Part 1: Design requirements, \$0.00



# 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](mailto:ncsci@nist.gov) or [notifyus@nist.gov](mailto:notifyus@nist.gov).

# Information Concerning

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## 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 rely 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](mailto:jgarner@itic.org). Visit [www.INCITS.org](http://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](http://www.scte.org) or by e-mail from [standards@scte.org](mailto:standards@scte.org).

## ANSI Accredited Standards Developers

### Approval of Reaccreditation

#### ATCC

ANSI's Executive Standards Council has approved the reaccreditation of ATCC, an ANSI Member and Accredited Standards Developer, under its recently revised operating procedures for documenting consensus on ATCC-sponsored American National Standards, effective February 8, 2016. For additional information, please contact: Ms. Christine Alston-Roberts, Standards & Certification Specialist, ATCC, 10801 University Boulevard, Manassas, VA 20110-2209; phone: 703.365.2700, ext. 2802; e-mail: [calston-roberts@atcc.org](mailto:calston-roberts@atcc.org).

#### Green Building Initiative (GBI)

ANSI's Executive Standards Council has approved the reaccreditation of the Green Building Initiative (GBI), an ANSI Member and Accredited Standards Developer, under its recently revised operating procedures for documenting consensus on GBI-sponsored American National Standards, effective February 4, 2016. For additional information, please contact: Ms. Maria Woodbury, Secretariat, Green Building Initiative, 5410 Macadam Avenue, Suite 150, Portland, OR 97239; phone: 207.807.8666; e-mail: [maria@theqbi.org](mailto:maria@theqbi.org).

## Project Management Institute (PMI)

ANSI's Executive Standards Council has approved the reaccréditation of the Project Management Institute (PMI), an ANSI Member and Accredited Standards Developer, under its recently revised operating procedures for documenting consensus on PMI-sponsored American National Standards, effective February 4, 2016. For additional information, please contact: Ms. Lorna Scheel, Standards Compliance Specialist, Project Management Institute, 14 Campus Boulevard, Newtown Square, PA 19073-3299; phone: 313.404.3507; e-mail: [Lorna.Scheel@pmi.org](mailto:Lorna.Scheel@pmi.org).

## International Organization for Standardization (ISO)

### Call for International (ISO) Secretariat

#### ISO/TC 211 – Geographic information/Geomatics

ANSI has been informed by the ISO Technical Management Board (ISO/TMB) that Standards Norway (SN), the ISO delegated secretariat, wishes to relinquish the role of the secretariat. ISO/TC 211 operates under the following scope:

**Standardization in the field of digital geographic information.**

Note: This work aims to establish a structured set of standards for information concerning objects or phenomena that are directly or indirectly associated with a location relative to the Earth.

These standards may specify, for geographic information, methods, tools and services for data management (including definition and description), acquiring, processing, analyzing, accessing, presenting and transferring such data in digital / electronic form between different users, systems and locations.

The work shall link to appropriate standards for information technology and data where possible, and provide a framework for the development of sector-specific applications using geographic data.

Information concerning the United States acquiring the role of international secretariat may be obtained by contacting ANSI at [isot@ansi.org](mailto:isot@ansi.org).

### Call for U.S. TAG Administrator

#### ISO/IEC JTC 1/SC 23 – Digitally Recorded Media for Information Interchange and Storage

ANSI has been informed that the InterNational Committee for Information Technology Standards (INCITS), the ANSI accredited U.S. TAG Administrator for ISO/IEC JTC 1/SC 23, wishes to relinquish their role as U.S. TAG Administrator.

ISO/IEC JTC 1/SC 23 operates under the following scope:

Standardization in the field of removable digital storage media utilizing optical, holographic and magnetic recording technologies, and flash memory technologies for digital information interchange, including;

- algorithms for the lossless compression of data
- volume and file structure
- methods for determining the life expectancy of digital storage media
- methods for error monitoring of digital storage media

Organizations interested in serving as the U.S. TAG Administrator should contact [ISOT@ansi.org](mailto:ISOT@ansi.org).

## ISO/IEC JTC 1/SC 34 – Document description and processing languages

ANSI has been informed that the InterNational Committee for Information Technology Standards (INCITS), the ANSI accredited U.S. TAG Administrator for ISO/IEC JTC 1/SC 34, wishes to relinquish their role as U.S. TAG Administrator.

ISO/IEC JTC 1/SC 34 operates under the following scope:

Standardization in the field of document description and processing languages,

within the scope of ISO/IEC JTC 1: Standardization in the field of information technology.

Organizations interested in serving as the U.S. TAG Administrator should contact [ISOT@ansi.org](mailto:ISOT@ansi.org).

### New Work Item Proposal

#### Natural Bitumen (Mineral) – Specifications and Test Methods

#### Comment Deadline: March 25, 2016

ISIRI, the ISO member body for the Islamic Republic of Iran, has submitted to ISO a new work item proposal for development of an ISO standard on Natural Bitumen (Mineral) – Specifications and Test Methods, with the following scope statement:

The purpose of this standard is to determine the specifications and test methods of natural bitumen extracted from mines, used for different purposes in industries.

Anyone wishing to review the new work item proposal can request a copy of the proposal by contacting ANSI's ISO Team via e-mail: [isot@ansi.org](mailto:isot@ansi.org) with submission of comments to Steve Cornish ([scornish@ansi.org](mailto:scornish@ansi.org)) by close of business on Friday, March 25, 2016.

#### Urban Pedestrian Bridge (Footbridge) Assemblies – Location

#### Comment Deadline: March 25, 2016

ISIRI, the ISO member body for the Islamic Republic of Iran, has submitted to ISO a new work item proposal for development of an ISO standard on Urban Pedestrian Bridge (Footbridge) Assemblies – Location, with the following scope statement:

This standard specifies location requirements of Urban pedestrian bridge (footbridge) assemblies in cities. Pedestrian bridges outside of cities are not covered by this standard. This International Standard is also intended to facilitate the understanding of installers of urban pedestrian bridges and municipalities.

Anyone wishing to review the new work item proposal can request a copy of the proposal by contacting ANSI's ISO Team via email: [isot@ansi.org](mailto:isot@ansi.org) with submission of comments to Steve Cornish ([scornish@ansi.org](mailto:scornish@ansi.org)) by close of business on Friday, March 25, 2016.

# International Electrotechnical Commission (IEC)

## ASABE Advises Intent to Relinquish USNC TAG Administratorship for USNC TAG for IEC/SC 61H

The American Society of Agricultural and Biological Engineers (ASABE) has announced to the USNC Office its intent to relinquish its assignment as TAG Administrator for the USNC Technical Advisory Group for IEC/SC 61H – Safety of Electrically-Operated Farm Appliances.

### Scope of IEC SC 61H:

To prepare international safety standards for electrical appliances primarily intended for agricultural use on farms such as for electric fencing, harvesting, processing, protecting packaging, breeding or cultivating of agricultural products.

If any entities are interested in being considered for assignment as TAG Administrator for the USNC TAG for IEC/SC 61H, they are invited to contact me at the E-Mail provided below. The USNC Technical Management Committee (TMC) will consider any expressions of interest received and will allocate the assignment as appropriate. If no entities express interest in this assignment, the TMC will consider registering the USNC as a Non-Member of this SC.



**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 –ISC (February 2016)  
(Draft shows Proposed Changes to Previous Addendum)**

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](http://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](http://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](http://www.ashrae.org).

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

Second Public Review Draft – Independent Substantive Changes

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## 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..*

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### **Addendum bd to 90.1-2013**

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*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 in new electric motor driven for:

- a. water cooled chilled water plants larger than 1,500 tons (5,276.5 kW) peak load for climate zones 5-8 , 3C and 4C and larger than 1,000 tons (3,517 kW) for all other zones to monitor the electrical energy use and efficiency of the chilled water plant and,
- b. air cooled chilled water plants larger than 860 tons (3,024 kW) peak load for climate zones 5-8 , 3C and 4C and larger than 570 tons (2,005 kW) 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 be capable of maintaining~~ all data collected for a minimum of 36 months.

*Add the following informative reference to Appendix E under ASHRAE:*

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



**BSR/ASHRAE/IES Addendum bs  
to ANSI/ASHRAE/IES Standard 90.1-2013**

**Public Review Draft**

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

**Independent Substantive Change ()  
(Draft shows Proposed Changes to Current Standard)**

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## FOREWORD

*This independent substantive change (ISC) to addendum bs reinstates the current minimum EER levels for water-source variable refrigerant flow (VRF) products above 65,000 Btu/h. This change was in response to the Department of Energy’s comment expressing concerns that a change in minimum EER values will make it difficult for DOE to migrate to an IEER-based federal standard for VRFs in a timely manner.*

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

## Addendum bs to 90.1-2013

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

*Revise Table 6.8.1-10 as follows:*

**TABLE 6.8.1-10 Electrically Operated Variable-Refrigerant-Flow Air-to-Air and Applied Heat Pumps—  
Minimum Efficiency Requirements**

Equipment Type	Size Category	Heating Section Type	Subcategory or Rating Condition	Minimum Efficiency	Test Procedure
VRF water source (cooling mode)	<65,000 Btu/h	All	VRF multisplit systems 86°F entering water	12.0 EER <del>(before 1/1/2018)</del>	AHRI 1230
				<del>12.3 EER (as of 1/1/2018)</del>	
				16.0 IEER (as of 1/1/2018)	
	<65,000 Btu/h	All	VRF multisplit systems with heat recovery 86°F entering water	11.8 EER <del>(before 1/1/2018)</del>	
				<del>12.1 EER (as of 1/1/2018)</del>	
				15.8 IEER (as of 1/1/2018)	



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≥65,000 Btu/h and <135,000 Btu/h	All	VRF multisplit system 86°F entering water	12.0 EER ( <del>before 1/1/2018</del> ) <del>12.3 EER (as of 1/1/2018)</del> 16.0 IEER (as of 1/1/2018)
≥65,000 Btu/h and <135,000 Btu/h	All	VRF multisplit system with heat recovery 86°F entering water	11.8 EER ( <del>before 1/1/2018</del> ) <del>12.1 EER (as of 1/1/2018)</del> 15.8 IEER (as of 1/1/2018)
≥135,000 Btu/h and <240,000 Btu/h	All	VRF multisplit system 86°F entering water	10.0 EER ( <del>before 1/1/2018</del> ) <del>10.4 EER (as of 1/1/2018)</del> 14.0 IEER (as of 1/1/2018)
≥135,000 Btu/h and <240,000 Btu/h	All	VRF multisplit system with heat recovery 86°F entering water	9.8 EER ( <del>before 1/1/2018</del> ) <del>10.2 EER (as of 1/1/2018)</del> 13.8 IEER (as of 1/1/2018)
≥240,000 Btu/h	All	VRF multisplit system 86°F entering water	10.0 EER 12.0 IEER (as of 1/1/2018)
≥240,000 Btu/h	All	VRF multisplit system with heat recovery 86°F entering water	9.8 EER 11.8 IEER (as of 1/1/2018)

SI Units**TABLE 6.8.1-10 Electrically Operated Variable-Refrigerant-Flow Air-to-Air and Applied Heat Pumps—Minimum Efficiency Requirements**

Equipment Type	Size Category	Heating Section Type	Subcategory or Rating Condition	Minimum Efficiency	Test Procedure
VRF water source (cooling mode)	<19 kW	All	VRF multisplit systems 30°C entering water	3.52 COP <sub>C</sub> ( <del>before 1/1/2018</del> ) <del>3.60 COP<sub>C</sub> (as of 1/1/2018)</del> 4.69 ICOP (as of 1/1/2018)	AHRI 1230
	<19 kW	All	VRF multisplit systems with heat recovery 30°C entering water	3.46 COP <sub>C</sub> ( <del>before 1/1/2018</del> ) <del>3.54 COP<sub>C</sub> (as of 1/1/2018)</del> 4.63 ICOP (as of 1/1/2018)	
	≥19 kW and <40 kW	All	VRF multisplit system 30°C entering water	3.52 COP <sub>C</sub> ( <del>before 1/1/2018</del> ) <del>3.60 COP<sub>C</sub> (as of 1/1/2018)</del>	

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			4.69 ICOP (as of 1/1/2018)
≥19 kW and <40 kW	All	VRF multisplit system with heat recovery 30°C entering water	3.46 COP <sub>c</sub> ( <del>before 1/1/2018</del> ) <del>3.54 COP<sub>c</sub> (as of 1/1/2018)</del> 4.63 ICOP (as of 1/1/2018)
≥40 kW	All	VRF multisplit system 30°C entering water	2.93 COP <sub>c</sub> 3.52 ICOP (as of 1/1/2018)
≥40 kW	All	VRF multisplit system with heat recovery 30°C entering water	2.87 COP <sub>c</sub> 3.46 ICOP (as of 1/1/2018)



**BSR/ASHRAE/IES Addendum bz  
to ANSI/ASHRAE/IES Standard 90.1-2013**

**Public Review Draft**

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

**Second Public Review –ISC (February 2016)  
(Draft shows Proposed Changes to Previous Addendum)**

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## FOREWORD

*In 2012, ASHRAE amended Standard 127 to include new rating conditions for computer room air conditioners. Later in 2013, AHRI developed Standard 1360 which incorporates ASHRAE 127-2012 as a method of test. AHRI 1360 includes the same new rating conditions that are listed in ASHRAE 127-2012. AHRI member companies have started to test their equipment based on the AHRI standard and an industry certification program was put in place to independently verify the performance rating of these products.*

*This addendum replaces the current Table 6.8.1-11 in its entirety and replaces it with a new table to account for the new rating conditions. These new rating conditions add 3 application classes. Minimum net sensible COP values were developed for the new classes, while net sensible COP values for class 1 (i.e. 75F dry-bulb/52F dew-point) were kept the same or equivalent to those currently listed in ASHRAE 90.1-2013*

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### Addendum bz to 90.1-2013

Revise the Standard as follows:

*Delete existing Table 6.8.1-11 “Air Conditioners and Condensing Units Serving Computer Rooms” in its entirety and replace with new Table as shown below*

**TABLE 6.8.1-11 Air Conditioners and Condensing Units Serving Computer Rooms**

		<u>Minimum Net Sensible COP</u>				
		<u>Return Air Dry-Bulb Temperature/Dew-Point Temperature</u>				
		<u>Class 1</u>	<u>Class 2</u>	<u>Class 3</u>		
<u>Equipment Type</u>	<u>Net Sensible Cooling Capacity</u>	<u>Standard Model</u>	<u>75F/52F</u>	<u>85F/52F</u>	<u>95F/52F</u>	<u>Test Procedure</u>
Air Cooled	<65,000 Btu/h	<u>Down-Flow Unit</u>		<u>2.30</u>		AHRI 1360 (I-P)
		<u>Up-Flow Unit - Ducted</u>		<u>2.10</u>		

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		<u>Up-Flow Unit – Non-Ducted</u>	<u>2.09</u>			
		<u>Horizontal-Flow Unit</u>			<u>2.45</u>	
	<u>&gt;=65,000</u> <u>and &lt;240,000</u> <u>Btu/h</u>	<u>Down-Flow Unit</u>		<u>2.20</u>		
		<u>Up-Flow Unit - Ducted</u>		<u>2.05</u>		
		<u>Up-Flow Unit – Non-Ducted</u>	<u>1.99</u>			
		<u>Horizontal-Flow Unit</u>				<u>2.35</u>
	<u>&gt;=240,000</u> <u>Btu/h</u>	<u>Down-Flow Unit</u>		<u>2.00</u>		
		<u>Up-Flow Unit - Ducted</u>		<u>1.85</u>		
		<u>Up-Flow Unit – Non-Ducted</u>	<u>1.79</u>			
		<u>Horizontal-Flow Unit</u>				<u>2.15</u>
<u>Water</u> <u>Cooled</u>	<u>&lt;65,000</u> <u>Btu/h</u>	<u>Down-Flow Unit</u>		<u>2.50</u>		
		<u>Up-Flow Unit - Ducted</u>		<u>2.30</u>		
		<u>Up-Flow Unit – Non-Ducted</u>	<u>2.25</u>			
		<u>Horizontal-Flow Unit</u>				<u>2.70</u>
	<u>&gt;=65,000</u> <u>and &lt;240,000</u> <u>Btu/h</u>	<u>Down-Flow Unit</u>		<u>2.40</u>		
		<u>Up-Flow Unit - Ducted</u>		<u>2.20</u>		
		<u>Up-Flow Unit – Non-Ducted</u>	<u>2.15</u>			
		<u>Horizontal-Flow Unit</u>				<u>2.60</u>
	<u>&gt;=240,000</u> <u>Btu/h</u>	<u>Down-Flow Unit</u>		<u>2.25</u>		
		<u>Up-Flow Unit - Ducted</u>		<u>2.10</u>		
		<u>Up-Flow Unit – Non-Ducted</u>	<u>2.05</u>			
		<u>Horizontal-Flow Unit</u>				<u>2.45</u>
<u>Water</u> <u>Cooled with</u> <u>Fluid</u> <u>Economizer</u>	<u>&lt;65,000</u> <u>Btu/h</u>	<u>Down-Flow Unit</u>		<u>2.45</u>		
		<u>Up-Flow Unit - Ducted</u>		<u>2.25</u>		
		<u>Up-Flow Unit – Non-Ducted</u>	<u>2.20</u>			
		<u>Horizontal-Flow Unit</u>				<u>2.60</u>
	<u>&gt;=65,000</u> <u>and &lt;240,000</u> <u>Btu/h</u>	<u>Down-Flow Unit</u>		<u>2.35</u>		
		<u>Up-Flow Unit - Ducted</u>		<u>2.15</u>		
		<u>Up-Flow Unit – Non-Ducted</u>	<u>2.10</u>			
		<u>Horizontal-Flow Unit</u>				<u>2.55</u>
	<u>&gt;=240,000</u> <u>Btu/h</u>	<u>Down-Flow Unit</u>		<u>2.20</u>		
		<u>Up-Flow Unit - Ducted</u>		<u>2.05</u>		
		<u>Up-Flow Unit – Non-Ducted</u>	<u>2.00</u>			
		<u>Horizontal-Flow Unit</u>				<u>2.40</u>
<u>Glycol</u> <u>Cooled</u>	<u>&lt;65,000</u> <u>Btu/h</u>	<u>Down-Flow Unit</u>		<u>2.30</u>		
		<u>Up-Flow Unit - Ducted</u>		<u>2.10</u>		
		<u>Up-Flow Unit – Non-Ducted</u>	<u>2.00</u>			
		<u>Horizontal-Flow Unit</u>				<u>2.40</u>
	<u>&gt;=65,000</u> <u>and &lt;240,000</u> <u>Btu/h</u>	<u>Down-Flow Unit</u>		<u>2.05</u>		
		<u>Up-Flow Unit - Ducted</u>		<u>1.85</u>		
		<u>Up-Flow Unit – Non-Ducted</u>	<u>1.85</u>			
		<u>Horizontal-Flow Unit</u>				<u>2.15</u>
			<u>Down-Flow Unit</u>		<u>1.95</u>	

AHRI 1360  
(I-P)AHRI 1360  
(I-P)AHRI 1360  
(I-P)

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	<u><math>\geq 240,000</math></u> <u>Btu/h</u>	<u>Up-Flow Unit - Ducted</u>		<u>1.80</u>			
		<u>Up-Flow Unit – Non-Ducted</u>	<u>1.75</u>				
		<u>Horizontal-Flow Unit</u>			<u>2.10</u>		
<u>Glycol Cooled with Fluid Economizer</u>	<u><math>&lt; 65,000</math></u> <u>Btu/h</u>	<u>Down-Flow Unit</u>		<u>2.25</u>		<u>AHRI 1360 (I-P)</u>	
		<u>Up-Flow Unit - Ducted</u>		<u>2.10</u>			
		<u>Up-Flow Unit – Non-Ducted</u>	<u>2.00</u>				
		<u>Horizontal-Flow Unit</u>			<u>2.35</u>		
	<u><math>\geq 65,000</math></u> <u>and <math>&lt; 240,000</math></u> <u>Btu/h</u>	<u>Down-Flow Unit</u>		<u>1.95</u>			
		<u>Up-Flow Unit - Ducted</u>		<u>1.80</u>			
		<u>Up-Flow Unit – Non-Ducted</u>	<u>1.75</u>				
		<u>Horizontal-Flow Unit</u>			<u>2.10</u>		
	<u><math>\geq 240,000</math></u> <u>Btu/h</u>	<u>Down-Flow Unit</u>		<u>1.90</u>			
		<u>Up-Flow Unit - Ducted</u>		<u>1.80</u>			
		<u>Up-Flow Unit – Non-Ducted</u>	<u>1.70</u>				
		<u>Horizontal-Flow Unit</u>			<u>2.10</u>		

*Add new reference in Section 12 as follows:*ANSI/AHRI Standard 1360-2016 (I-P)Performance Rating of Computer and Data Processing Room Air Conditioners

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SI Units

**TABLE 6.8.1-11 Air Conditioners and Condensing Units Serving Computer Rooms**

			<b>Minimum Net Sensible COP</b>				
			<b>Return Air Dry-Bulb Temperature/Dew-Point Temperature</b>				
			<b>Class 1</b>	<b>Class 2</b>	<b>Class 3</b>		
<b>Equipment Type</b>	<b>Net Sensible Cooling Capacity</b>	<b>Standard Model</b>	<b>24C/11C</b>	<b>29.5C/11C</b>	<b>35C/11C</b>	<b>Test Procedure</b>	
<b>Air Cooled</b>	<b>&lt;19 kW</b>	<u>Down-Flow Unit</u>		<u>2.30</u>		<b>AHRI 1361 (SI)</b>	
		<u>Up-Flow Unit - Ducted</u>		<u>2.10</u>			
		<u>Up-Flow Unit – Non-Ducted</u>	<u>2.09</u>				
		<u>Horizontal-Flow Unit</u>			<u>2.45</u>		
	<b>≥19 kW and &lt; 70 kW</b>	<u>Down-Flow Unit</u>			<u>2.20</u>		
		<u>Up-Flow Unit - Ducted</u>			<u>2.05</u>		
		<u>Up-Flow Unit – Non-Ducted</u>	<u>1.99</u>				
		<u>Horizontal-Flow Unit</u>					<u>2.35</u>
	<b>≥70 kW</b>	<u>Down-Flow Unit</u>			<u>2.00</u>		
		<u>Up-Flow Unit - Ducted</u>			<u>1.85</u>		
		<u>Up-Flow Unit – Non-Ducted</u>	<u>1.79</u>				
		<u>Horizontal-Flow Unit</u>					<u>2.15</u>
<b>Water Cooled</b>	<b>&lt;19 kW</b>	<u>Down-Flow Unit</u>		<u>2.50</u>		<b>AHRI 1361 (SI)</b>	
		<u>Up-Flow Unit - Ducted</u>		<u>2.30</u>			
		<u>Up-Flow Unit – Non-Ducted</u>	<u>2.25</u>				
		<u>Horizontal-Flow Unit</u>			<u>2.70</u>		
	<b>≥19 kW and &lt;70 kW</b>	<u>Down-Flow Unit</u>			<u>2.40</u>		
		<u>Up-Flow Unit - Ducted</u>			<u>2.20</u>		
		<u>Up-Flow Unit – Non-Ducted</u>	<u>2.15</u>				
		<u>Horizontal-Flow Unit</u>					<u>2.60</u>
	<b>≥70 kW</b>	<u>Down-Flow Unit</u>			<u>2.25</u>		
		<u>Up-Flow Unit - Ducted</u>			<u>2.10</u>		
		<u>Up-Flow Unit – Non-Ducted</u>	<u>2.05</u>				
		<u>Horizontal-Flow Unit</u>					<u>2.45</u>
<b>Water Cooled with Fluid Economizer</b>	<b>&lt;19 kW</b>	<u>Down-Flow Unit</u>		<u>2.45</u>		<b>AHRI 1361 (SI)</b>	
		<u>Up-Flow Unit - Ducted</u>		<u>2.25</u>			
		<u>Up-Flow Unit – Non-Ducted</u>	<u>2.20</u>				
		<u>Horizontal-Flow Unit</u>			<u>2.60</u>		
	<u>Down-Flow Unit</u>			<u>2.35</u>			

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

## Second Public Review Draft – Independent Substantive Changes

	<u><math>\geq 19</math> kW and <math>&lt; 70</math> kW</u>	<u>Up-Flow Unit - Ducted</u>		<u>2.15</u>	
		<u>Up-Flow Unit – Non-Ducted</u>	<u>2.10</u>		
		<u>Horizontal-Flow Unit</u>			<u>2.55</u>
	<u><math>\geq 70</math> kW</u>	<u>Down-Flow Unit</u>		<u>2.20</u>	
		<u>Up-Flow Unit - Ducted</u>		<u>2.05</u>	
		<u>Up-Flow Unit – Non-Ducted</u>	<u>2.00</u>		
		<u>Horizontal-Flow Unit</u>			<u>2.40</u>
<u>Glycol Cooled</u>	<u><math>&lt; 19</math> kW</u>	<u>Down-Flow Unit</u>		<u>2.30</u>	
		<u>Up-Flow Unit - Ducted</u>		<u>2.10</u>	
		<u>Up-Flow Unit – Non-Ducted</u>	<u>2.00</u>		
		<u>Horizontal-Flow Unit</u>			<u>2.40</u>
	<u><math>\geq 19</math> kW and <math>&lt; 70</math> kW</u>	<u>Down-Flow Unit</u>		<u>2.05</u>	
		<u>Up-Flow Unit - Ducted</u>		<u>1.85</u>	
		<u>Up-Flow Unit – Non-Ducted</u>	<u>1.85</u>		
		<u>Horizontal-Flow Unit</u>			<u>2.15</u>
	<u><math>\geq 70</math> kW</u>	<u>Down-Flow Unit</u>		<u>1.95</u>	
		<u>Up-Flow Unit - Ducted</u>		<u>1.80</u>	
		<u>Up-Flow Unit – Non-Ducted</u>	<u>1.75</u>		
		<u>Horizontal-Flow Unit</u>			<u>2.10</u>
<u>Glycol Cooled with Fluid Economizer</u>	<u><math>&lt; 19</math> kW</u>	<u>Down-Flow Unit</u>		<u>2.25</u>	
		<u>Up-Flow Unit - Ducted</u>		<u>2.10</u>	
		<u>Up-Flow Unit – Non-Ducted</u>	<u>2.00</u>		
		<u>Horizontal-Flow Unit</u>			<u>2.35</u>
	<u><math>\geq 19</math> kW and <math>&lt; 70</math> kW</u>	<u>Down-Flow Unit</u>		<u>1.95</u>	
		<u>Up-Flow Unit - Ducted</u>		<u>1.80</u>	
		<u>Up-Flow Unit – Non-Ducted</u>	<u>1.75</u>		
		<u>Horizontal-Flow Unit</u>			<u>2.10</u>
	<u><math>\geq 70</math> kW</u>	<u>Down-Flow Unit</u>		<u>1.90</u>	
		<u>Up-Flow Unit - Ducted</u>		<u>1.80</u>	
		<u>Up-Flow Unit – Non-Ducted</u>	<u>1.70</u>		
		<u>Horizontal-Flow Unit</u>			<u>2.10</u>
					<u>AHRI 1361 (SI)</u>
					<u>AHRI 1361 (SI)</u>

Add new reference in Section 12 as follows:

ANSI/AHRI Standard 1361-2016 (SI)

Performance Rating of Computer and Data Processing Room Air Conditioners





**BSR/ASHRAE/IES Addendum cy  
to ANSI/ASHRAE/IES Standard 90.1-2013**

**Public Review Draft**

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**Proposed Addendum cy to Standard  
90.1-2013, *Energy Standard for  
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Residential Buildings***

**First Public Review (December 2015)  
(Draft shows Proposed Changes to Current Standard)**

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## FOREWORD

*Indoor Pool Dehumidifiers (IPD) were introduced over 40 years ago and are now used in many buildings covered by ASHRAE 90.1. However, the current ASHRAE 90.1 standard has no minimum energy efficiency requirements for this equipment. Through AHRI, manufacturers of IPD developed Standard 910 (I-P) to establish common rating conditions for these products. In addition, AHRI is currently developing a certification program and will soon publish certified ratings on its directory of certified products.*

*This proposal establishes for the first time a product class for IPD. The intent is to recognize the technology in Standard 90.1 by requiring minimum energy efficiency standards. Moisture Removal Efficiency (MRE) is proposed for a full range of product classes at standard rating conditions listed in AHRI Standard 910 (I-P). These levels will be subject to further review and evaluation once a third-party certification is established and more data is available.*

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## Addendum **XX** to 90.1-2013

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*Revise the Standard as follows (IP and SI units)*

*Add definitions as follows:*

**Indoor Pool Dehumidifier.** A type of air-cooled or water-cooled electrically operated, vapor compression refrigeration system; factory assembled as a single package or split system, which includes an indoor cooling/dehumidifying coil, an air reheat coil, compressor(s) and an air moving device. It may also include a Refrigerant Heat Recovery Unit, an auxiliary refrigerant condenser, economizer, and an air-to-air heat recovery device. It shall provide the function of dehumidifying, air circulation, air reheating and may include the function of air-cooling, air-cleaning, pool water heating and air-to-air heat recovery.

**Moisture Removal Efficiency (MRE).** A ratio of the moisture removal capacity in lb of moisture/h to the power input values in kW at any given set of standard rating conditions expressed in lb of moisture/kWh.

*(b) Add new "n." to 6.4.1.1:*

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**6.4.1.1 Minimum Equipment Efficiencies—Listed Equipment—Standard Rating and Operating Conditions.** Equipment shown in Tables 6.8.1-1 through 6.8.1-14 shall have a minimum performance at the specified rating conditions when tested in accordance with the specified test procedure. Where multiple rating conditions or performance requirements are provided, the equipment shall satisfy all stated requirements unless otherwise exempted by footnotes in the table. Equipment covered under the Federal Energy Policy Act of 1992 (EPACT) shall have no minimum efficiency requirements for operation at minimum capacity or other than standard rating conditions. Equipment used to provide water heating functions as part of a combination system shall satisfy all stated requirements for the appropriate space heating or cooling category.

Tables are as follows:

- a. Table 6.8.1-1—Electrically Operated Unitary Air Conditioners and Condensing Units—Minimum Efficiency Requirements
- b. Table 6.8.1-2—Electrically Operated Unitary and Applied Heat Pumps—Minimum Efficiency Requirements
- c. Table 6.8.1-3—Water-Chilling Packages—Efficiency Requirements (see Section 6.4.1.2 for water-cooled centrifugal water-chilling packages that are designed to operate at nonstandard conditions.)
- d. Table 6.8.1-4—Electrically Operated Packaged Terminal Air Conditioners, Packaged Terminal Heat Pumps, Single-Package Vertical Air Conditioners, Single-Package Vertical Heat Pumps, Room Air Conditioners, and Room Air Conditioner Heat Pumps—Minimum Efficiency Requirements
- e. Table 6.8.1-5—Warm-Air Furnaces, Warm-Air Furnaces/Air-Conditioning Units, Warm-Air Duct Furnaces, and Unit Heaters
- f. Table 6.8.1-6—Gas- and Oil-Fired Boilers—Minimum Efficiency Requirements
- g. Table 6.8.1-7—Performance Requirements for Heat Rejection Equipment
- h. Table 6.8.1-8—Heat Transfer Equipment
- i. Table 6.8.1-9—Electrically Operated Variable-Refrigerant-Flow Air Conditioners
- j. —Minimum Efficiency Requirements Table 6.8.1-10—Electrically Operated Variable-Refrigerant-Flow Air-to-Air and Applied Heat Pumps—Minimum Efficiency Requirements
- k. Table 6.8.1-11—Air Conditioners and Condensing Units Serving Computer Rooms
- l. Table 6.8.1-12—Commercial Refrigerators and Freezers
- m. Table 6.8.1-13—Commercial Refrigeration
- n. Table 6.8.1-14—Indoor Pool Dehumidifiers

Add new Table 6.8.1-14:

**TABLE 6.8.1-14 Vapor Compression Based Indoor Pool Dehumidifiers – Minimum Efficiency Requirements (IP Units)**

<u>Equipment Type</u>	<u>Subcategory or Rating Condition</u>	<u>Minimum Efficiency</u>	<u>Test Procedure</u>
Single Package Indoor <sup>a</sup> (With or Without Economizer)	<u>Rating Conditions: A, B, or C</u>	<u>3.5 MRE</u>	<u>AHRI 910 (I-P)</u>
Single Package Indoor Water-Cooled (With or Without	<u>Rating Conditions: A, B, or C</u>	<u>3.5 MRE</u>	

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Economizer)		
Single Package		
Indoor		
Air-Cooled (With or Without Economizer)	<u>Rating Conditions: A, B, or C</u>	<u>3.5 MRE</u>
Split System		
Indoor		
Air-Cooled (With or Without Economizer)	<u>Rating Conditions: A, B, or C</u>	<u>3.5 MRE</u>

a. Units without air-cooled condenser.

**TABLE 6.8.1-14 Vapor Compression Based Indoor Pool Dehumidifiers – Minimum Efficiency Requirements (SI Units)**

<u>Equipment Type</u>	<u>Subcategory or Rating Condition</u>	<u>Minimum Efficiency</u>	<u>Test Procedure</u>
Single Package Indoor <sup>a</sup> (With or Without Economizer)	<u>Rating Conditions: A, B, or C</u>	<u>1.6 MRE</u>	
Single Package Indoor Water-Cooled (With or Without Economizer)	<u>Rating Conditions: A, B, or C</u>	<u>1.6 MRE</u>	
Single Package Indoor Air-Cooled (With or Without Economizer)	<u>Rating Conditions: A, B, or C</u>	<u>1.6 MRE</u>	<u>AHRI 911 (SI)</u>
Split System Indoor Air-Cooled (With or Without Economizer)	<u>Rating Conditions: A, B, or C</u>	<u>1.6 MRE</u>	

a. Units without air-cooled condenser.

*Add normative reference under Air Conditioning, Heating and Refrigeration Institute (AHRI)*

AHRI Standard 910 (I-P)-2014

Performance Rating of Indoor Pool Dehumidifiers

AHRI Standard 911 (SI)-2014

Performance Rating of Indoor Pool Dehumidifiers



**BSR/ASHRAE/IES Addendum DD  
to ANSI/ASHRAE/IES Standard 90.1-2013**

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## FOREWORD

*This proposal reduces the threshold where variable flow and variable speed drives (VSD) are required for pumping systems. The chilled water VSD threshold is reduced from 7.5 hp in most climate zones and heating water VSD is added with pump hp thresholds by climate zone. Variable flow systems use less pumping energy than constant flow systems. Variable pumping systems also produce larger system temperature differences that can enhance chiller efficiency. Variable flow systems can reduce flow either by throttling flow and then having the pump “ride the curve” to reduce flow and energy at higher pressure or using a VSD. Using a variable speed drive provides similar flow control at a lower energy cost, as pressure differential is reduced.*

**Energy Savings:** *Operation of variable flow systems is less expensive than constant flow systems and variable speed drives increase the savings compared to throttling control. An analysis of energy impact shows that annual savings from expanding the use of motor speed control in the proposal ranges from \$580 to \$364 for 15 to 2 horsepower pumps in typical chilled water hydronic systems. For heating systems, some heating effect from the pump must be made up by the boiler and annual savings ranges from \$576 to \$365 for 15 to 2 horsepower pumps. In some climate zones heating water pumps have higher thresholds with proportionately higher costs and savings.*

**Cost Impact:** *The cost of variable frequency drives continues to drop. Incremental cost for VSD and associated controls ranges from \$6,224 to \$3,920 for 15 to 2 horsepower pumps.*

**Cost-effectiveness:** *A cost-effectiveness analysis using ASHRAE SSPC 90.1 scalar methodology showed that the payback was less than the scalar threshold at varying horsepower based on hours of operation and system type (chilled water vs. heating water). Pump horsepower thresholds were selected for each climate zone based on expected system hours of operation.*

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## Addendum dd to 90.1-2013

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*Revise the Standard as follows (IP and SI Units)*

*Revise Sections 6.5.4.2 as follows:*

*(Note, base language is shown as revised by addendum **ak** to 90.1-2013, as published in the 2015 Supplement)*



**BSR/ASHRAE/IES Addendum DE  
to ANSI/ASHRAE/IES Standard 90.1-2013**

**Public Review Draft**  
**Proposed Addendum DE to Standard  
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## FOREWORD

*The 90.1 Elevator Working group has been working with industry members and NEII to develop wording that addresses elevator movement efficiency. In April 2015 ISO published ISO 25745-2 Energy performance of lifts, escalators and moving walks — Part 2: Energy calculation and classification for lifts (elevators). This addendum references that standard and requires the designer of each new elevator to specify an efficiency level.*

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### Addendum de to 90.1-2013

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*Revise the Standard as follows (IP and SI Units)*

**10.4.3.4 Design documents.** Design documents shall list the following for new elevators:

1. Usage Category as defined in ISO 25745-2 between 1 and 6, and
2. Energy Efficiency Class A thru G per ISO 25745-2 Table 7.

## 12. NORMATIVE REFERENCES

### International Organization for Standardization

SS-EN ISO 25745-2:2014	Energy Performance of lifts, escalators and moving walks – Part 2: Energy calculation and classification for lifts (elevators)
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**BSR/ASHRAE/IES Addendum DG  
to ANSI/ASHRAE/IES Standard 90.1-2013**

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## FOREWORD

*This revision to Standard 90.1 provides guidance on the air leakage requirements of two new types of entrance doors, aligns the text of 90.1 with the testing protocol required for Sectional and metal coiling doors, and provides default U-factors for unlabeled metal non-swinging doors*

***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 dg to 90.1-2013

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*Revise the Standard as follows (IP and SI Units)*

*Revise the Standard as follows (IP and SI Units)*

**5.4.3.2 Fenestration and Doors.** Air leakage for fenestration and doors shall be determined in accordance with AAMA/WDMA/CSA 101/I.S.2/A440, NFRC 400, or ASTM E283 as specified below. Air leakage shall be determined by a laboratory accredited by a nationally recognized accreditation organization, such as the National Fenestration Rating Council, and shall be labeled and certified by the manufacturer. Air leakage shall not exceed:

a. 1.0 cfm/ft<sup>2</sup> (18.3 m<sup>3</sup>/h x m<sup>2</sup>) for glazed swinging entrance doors, glazed power-operated sliding entrance doors, glazed power-operated folding entrance doors, and revolving doors, tested at a pressure of at least 1.57 pounds per square foot (psf) (75 Pa) in accordance with AAMA/WDMA/CSA 101/I.S.2/A440, NFRC 400, or ASTM E283.

*(Remainder of Section 5.4.3.2 unchanged)*

*Revise Section 5.8.2.3 exception 4:*

4. For sectional garage doors and metal coiling doors, ANSI/DASMA 105 shall be an acceptable alternative for determining *U*-factors.

*Revise Section A7:*

BSR/ASHRAE/IES Addendum dg to ANSI/ASHRAE Standard 90.1-2013, *Energy Standard for Buildings Except Low-Rise Residential Buildings*  
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## A7. OPAQUE DOORS

All *opaque doors* with *U-factors* determined, certified and labeled in accordance with NFRC 100 or ANSI/DASMA 105 shall be assigned those *U-factors*.

**A7.1 Unlabeled Opaque Doors.** Unlabeled opaque doors shall be assigned the following U-factors:

- a. Uninsulated single-layer metal swinging doors or non-swinging doors, including single-layer uninsulated access hatches and uninsulated smoke vents: U-1.45 (U-8.2)
- b. Insulated double-layer metal coiling doors: U-1.00 (U-5.68)
- bc. Uninsulated double-layer metal swinging doors or non-swinging doors, including double-layer uninsulated access hatches and uninsulated smoke vents: U-0.70 (U-4.0)
- ed. Insulated metal swinging doors, including fire-rated doors, insulated access hatches, ~~and~~ insulated smoke vents, and other insulated metal non-swinging doors: U-0.50 (U-2.8)
- de. Wood doors, minimum nominal thickness of 1.75 in. (44 mm), including panel doors with minimum panel thickness of 1.125 in. (28 mm), solid core flush doors, and hollow core flush doors: U-0.50 (U-2.8)
- ef. Any other wood door: U-0.60 (U-3.4)



**BSR/ASHRAE/IES Addendum DH  
to ANSI/ASHRAE/IES Standard 90.1-2013**

**Public Review Draft**

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

*Section 9.2.2.3 (interior lighting power calculation) Exempts display lighting for art exhibits in galleries, museums and monuments where this lighting is critical to the function of the space and variable depending on the building, space, and application type. Section 9.6.2 provides a wattage allowance for display lighting and is intended for less intensive applications such as an office building lobby. However, technically, display lighting could be both exempted and garner an allowance. This addenda makes it clear that exempted display lighting in 9.2.2.3 cannot be provided an allowance.*

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## Addendum dh to 90.1-2013

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*Revise the Standard as follows (IP and SI Units)*

**9.6.2 Additional Interior Lighting Power.** When using the Space-by-Space Method, an increase in the interior lighting power allowance is allowed for specific lighting functions. Additional power shall be allowed only if the specified lighting is installed and automatically controlled, separately from the general lighting, to be turned off during nonbusiness hours. This additional power shall be used only for the specified luminaires and shall not be used for any other purpose unless otherwise indicated.

- a. For spaces in which lighting is specified to be installed in addition to the general lighting for the purpose of decorative appearance or for highlighting art or exhibits not exempted in 9.2.2.3 exception 1, provided that the additional lighting power shall not exceed 1.0 W/ft<sup>2</sup> of such spaces



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to ANSI/ASHRAE/IES Standard 90.1-2013**

**Public Review Draft**

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

**Second Public Review (February 2016)  
(Draft shows Proposed Changes to Current Standard)**

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## FOREWORD

*The motor efficiencies for Standard 90.1-2004 were reproduced for Appendix G and use the totally enclosed, four pole, 1800 RPM motors. The language was updated to reference this table. Since this was the last reference to efficiency requirements from other sections the sentence referring to the other sections was removed.*

**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 di to 90.1-2013

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

Proposed Building Performance	Baseline Building Performance
<b>12. Receptacle and Other Loads</b>	
<p>Receptacle and process loads, such as those for office and other equipment, shall be estimated based on the building type or space type category and shall be assumed to be identical in the proposed and <i>baseline building designs</i>, except as specifically authorized by the <i>rating authority</i> only when quantifying performance that exceeds the requirements of Standard 90.1 but not when the <i>performance rating method</i> is used as an alternative path for minimum standard compliance per Section 4.2.1.1. These loads shall always be included in simulations of the building. These loads shall be included when calculating the <i>baseline building performance</i> and <i>proposed building performance</i> as required by Section G1.2.1.</p> <ol style="list-style-type: none"><li>Where power and other systems covered by Sections 8 and 10 have been designed and submitted with design documents, those systems shall be determined in accordance with Chapters 8 and 10.</li><li>Where power and other systems covered by Chapters 8 and 10 have not been submitted with design documents, those systems shall comply with but not exceed the requirements of those sections.</li></ol>	<p><u>Motors shall have the efficiency ratings found in Table G3.9.</u> Other systems, <del>such as motors</del> covered by Section 10, and miscellaneous loads shall be modeled as identical to those in the proposed design including schedules of operation and control of the equipment. <del>Where there are specific efficiency requirements listed in Sections 5 through 10, these systems or components shall be modeled as having the lowest efficiency allowed by those requirements. Where no efficiency requirements exist,</del> such as Energy used for cooking equipment, receptacle loads, computers, medical or laboratory equipment, and manufacturing and industrial process equipment not specifically identified in the standard power and energy rating or capacity of the equipment shall be identical between the baseline building and the proposed design with the following exception:</p> <p>Exception: When quantifying performance that exceeds the requirements of Standard 90.1 (but not when using the Performance Rating Method as an alternative path for minimum standard compliance per Section 4.2.1.1), variations of the power requirements, schedules, or control sequences of the equipment modeled in the baseline building from those in the proposed design shall be allowed by the rating authority based upon documentation that the equipment installed in the proposed design represents a significant verifiable departure from documented current conventional practice. The burden of this documentation is to demonstrate that accepted conventional practice would result in baseline building equipment different from that installed in the proposed design. Occupancy and occupancy schedules shall not be changed.</p>

**G3.1.2.9 System Fan Power.**

fan motor efficiency = the *efficiency* from Table 40.8-2 G3.9 for the next motor size greater than the bhp using a totally enclosed fan cooled motor at 1800 rpm.

**Table G3.9 Performance Rating Method Motor Efficiency Requirements**

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





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to ANSI/ASHRAE/IES Standard 90.1-2013**

**Public Review Draft**

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

**First Public Review (February 2016)  
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## FOREWORD

*This addendum adds baseline HVAC systems for educational facilities.*

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### **Addendum dj to 90.1-2013**

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*Revise the Standard as follows (IP and SI Units)*

*Revise the Appendix G table G3.1.1-3 as follows*

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TABLE G3.1.1-3 Baseline HVAC System Types

Building Type	Climate Zones 3b, 3c, and 4-8	Climate Zones 1-3a
Residential	System 1—PTAC	System 2—PThP
Public assembly <120,000 ft <sup>2</sup>	System 3—PSZ-AC	System 4—PSZ-HP
Public assembly 120,000 ft <sup>2</sup>	System 12—SZ-CV-HW	System 13—SZ-CV-ER
Nonresidential and 3 floors or fewer and <25,000 ft <sup>2</sup> 4—PSZ-HP		System 3—PSZ-AC System
Nonresidential and 4 or 5 Floors and <25,000 ft <sup>2</sup> or 5 floors or fewer and 25,000 ft <sup>2</sup> to 150,000 ft <sup>2</sup>	System 5—Packaged VAV with reheat	System 6—Packaged VAV with PFP boxes
Nonresidential and more than 5 floors or >150,000 ft <sup>2</sup> 8—VAV with PFP boxes		System 7—VAV with reheat System
Heated-only storage	System 9—Heating and ventilation	System 10—Heating and ventilation
Retail and 2 floors or fewer	System 3—PSZ-AC	System 4—PSZ-HP
Educational Facility < 100,000 ft <sup>2</sup> (9300 m <sup>2</sup> )	System 3—PSZ-AC	System 4—PSZ-HP
Educational Facility ≥ 100,000 ft <sup>2</sup> (9300 m <sup>2</sup> )	System 7—VAV with Reheat	System 8—VAV with PFP Boxes

Notes:

1. Residential building types include dormitory, hotel, motel, and multifamily. Residential space types include guest rooms, living quarters, private living space, and sleeping quarters. Other building and space types are considered nonresidential.
2. Where attributes make a building eligible for more than one baseline system type, use the predominant condition to determine the system type for the entire building except as noted in Exception (1) to Section G3.1.1.
3. For laboratory spaces in a building having a total laboratory exhaust rate greater than 5000 cfm, use a single system of type 5 or 7 serving only those spaces.
4. For hospitals, depending on building type, use System 5 or 7 in all climate zones.
5. Public assembly building types include houses of worship, auditoriums, movie theaters, performance theaters, concert halls, arenas, enclosed stadiums, ice rinks, gymnasiums, convention centers, exhibition centers, and natatoriums.
6. Educational facility types include child care and K-12 educational buildings whose pre-dominant space types are classroom, cafeteria, gymnasium and auditorium spaces. Institutional and higher education buildings are not considered Educational Facilities for the purpose of selecting baseline HVAC system types. In educational facilities ≥ 100,000 ft<sup>2</sup> (9300 m<sup>2</sup>), any cafeteria, kitchen, gymnasiums, auditorium, locker rooms, natatorium and ice rink spaces will use Baseline System 12 or 13, depending on climate zone.



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to ANSI/ASHRAE/IES Standard 90.1-2013**

**Public Review Draft**

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

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## FOREWORD

*Minimum efficiencies for closed circuit cooling towers were first included in Standard 90.1 in the 2010 Edition. The market for closed circuit cooling towers has now adapted to these new requirements and the technology has advanced to the point where an increase in the minimum efficiency for axial (propeller) fan closed circuit cooling towers can be justified.*

*As background, closed circuit cooling towers, also sometimes referred to as “fluid coolers”, combine the function of an open circuit cooling tower and a heat exchanger into a single unit. These devices keep the process fluid clean and contaminant free in a closed loop. This creates two separate fluid circuits: (1) an external circuit, in which spray water circulates over a coil using an integral pump and mixes with the outside air, and (2) an internal circuit, in which the process fluid to be cooled circulates inside the coil. During operation, heat is transferred from the warm fluid in the coil to the spray water, and then to the atmosphere as a portion of the water evaporates. In addition to chiller applications and industrial process cooling, closed circuit cooling towers are often used in heat pump loops, where closed loop heat rejection is preferred.*

*This Addendum proposes an increase in the minimum efficiency requirement for axial fan closed circuit cooling towers as listed in Table 6.8.1-7, Performance Requirements for Heat Rejection Equipment. The current value of 14.7 gpm/hp has been increased 15% to 16.1 gpm/hp, based on the rating condition of 102°F entering temperature to the unit, 90°F leaving temperature from the unit, with a 75°F entering air wet bulb temperature. Note that the denominator for this metric is the sum of the fan motor horsepower and the integral spray pump motor horsepower.*

*Lastly, this proposal has the consensus support of the ASHRAE TC 8.6 Subcommittee on Standards and Codes. ASHRAE TC 8.6 is concerned with cooling towers, evaporative liquid coolers and condensers, spray ponds, and other types of contact type liquid to air exchangers and their applications, including water treatment.*

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*[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 dk to 90.1-2013

Modify the standard as follows (IP Units)

**TABLE 6.8.1-7 Performance Requirements for Heat Rejection Equipment**

Equipment Type	Total System Heat Rejection Capacity at Rated Conditions	Subcategory or Rating Condition <sup>h</sup>	Performance Required <sup>a,b,c,d,f,g</sup>	Test Procedure <sup>e</sup>
Propeller or axial fan open-circuit cooling towers	All	95°F entering water 85°F leaving water 75°F entering wb	≥40.2 gpm/hp	CTI ATC-105 and CTI STD-201 RS
Centrifugal fan open-circuit cooling towers	All	95°F entering water 85°F leaving water 75°F entering wb	≥20.0 gpm/hp	CTI ATC-105 and CTI STD-201 RS
Propeller or axial fan closed-circuit cooling towers	All	102°F entering water 90°F leaving water 75°F entering wb	≥ <del>14.0</del> <u>16.1</u> gpm/hp	CTI ATC-105S and CTI STD-201 RS
Centrifugal closed-circuit cooling towers	All	102°F entering water 90°F leaving water 75°F entering wb	≥7.0 gpm/hp	CTI ATC-105S and CTI STD-201 RS
Propeller or axial fan evaporative condensers	All	R-507A test fluid 165°F entering gas temperature 105°F condensing temperature 75°F entering wb	≥157,000 Btu/h·hp	CTI ATC-106
Propeller or axial fan evaporative condensers	All	Ammonia test fluid 140°F entering gas temperature 96.3°F condensing temperature 75°F entering wb	≥134,000 Btu/h·hp	CTI ATC-106
Centrifugal fan evaporative condensers	All	R-507A test fluid 165°F entering gas temperature 105°F condensing temperature 75°F entering wb	≥135,000 Btu/h·hp	CTI ATC-106
Centrifugal fan evaporative condensers	All	Ammonia test fluid 140°F entering gas temperature 96.3°F condensing temperature 75°F entering wb	≥110,000 Btu/h·hp	CTI ATC-106
Air cooled condensers	All	125°F condensing temperature 190°F entering gas temperature 15°F subcooling 95°F entering db	≥176,000 Btu/h·hp	AHRI 460

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- a. For purposes of this table, open-circuit cooling tower performance is defined as the water flow rating of the tower at the thermal rating condition listed in Table 6.8.1-7 divided by the fan motor nameplate power.
- b. For purposes of this table, closed-circuit cooling tower performance is defined as the process water flow rating of the tower at the thermal rating condition listed in Table 6.8.1-7 divided by the sum of the fan motor nameplate power and the integral spray pump motor nameplate power.
- c. For purposes of this table, air-cooled condenser performance is defined as the heat rejected from the refrigerant divided by the fan motor nameplate power.
- d. Section 12 contains a complete specification of the referenced test procedure, including the referenced year version of the test procedure.
- e. The efficiencies and test procedures for both open- and closed-circuit cooling towers are not applicable to hybrid cooling towers that contain a combination of separate wet and dry heat exchange sections.
- The certification requirements do not apply to field-erected cooling towers.
- f. All cooling towers shall comply with the minimum efficiency listed in the table for that specific type of tower with the capacity effect of any project-specific accessories and/or options included in the capacity of the cooling tower.
- g. For purposes of this table, evaporative condenser performance is defined as the heat rejected at the specified rating condition in the table, divided by the sum of the fan motor nameplate power and the integral spray pump nameplate power.
- h. Requirements for evaporative condensers are listed with ammonia (R-717) and R-507A as test fluids in the table. Evaporative condensers intended for use with halocarbon refrigerants other than R-507A must meet the minimum efficiency requirements listed above with R-507A as the test fluid.

**Note:** The unmarked remainder of this table is not affected by this Addendum.

Modify the standard as follows (SI Units)

**TABLE 6.8.1-7 Performance Requirements for Heat Rejection Equipment**

Equipment Type	Total System Heat Rejection Capacity at Rated Conditions	Subcategory or Rating Condition <sup>h</sup>	Performance Required <sup>a,b,c,d,fg</sup>	Test Procedure <sup>e</sup>
Propeller or axial fan open-circuit cooling towers	All	35.0°C entering water 29.4°C leaving water 23.9°C entering wb	≥3.40 L/s·kW	CTI ATC-105 and CTI STD-201 RS
Centrifugal fan open-circuit cooling towers	All	35.0°C entering water 29.4°C leaving water 23.9°C entering wb	≥1.70 L/s·kW	CTI ATC-105 and CTI STD-201 RS
Propeller or axial fan closed-circuit cooling towers	All	38.9°C entering water 32.2°C leaving water 23.9°C entering wb	≥ <del>1.18</del> 1.36 L/s·kW	CTI ATC-105S and CTI STD-201 RS
Centrifugal closed-circuit cooling towers	All	38.9°C entering water 32.2°C leaving water 23.9°C entering wb	≥0.59 L/s·kW	CTI ATC-105S and CTI STD-201 RS
Propeller or axial fan evaporative condensers	All	R-507A test fluid 73.9°C entering gas temperature 40.6°C condensing temperature 23.9°C entering wb	≥61.6 COP	CTI ATC-106
Propeller or axial fan evaporative condensers	All	Ammonia test fluid 60°C entering gas temperature 35.7°C condensing temperature 23.9°C entering wb	≥52.6 COP	CTI ATC-106
Centrifugal fan evaporative condensers	All	R-507A test fluid 73.9°C entering gas temperature 40.6°C condensing temperature 23.9°C entering wb	≥53.0 COP	CTI ATC-106
Centrifugal fan evaporative condensers	All	Ammonia test fluid 60°C entering gas temperature	≥43.2 COP	CTI ATC-106

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		35.7°C condensing temperature 23.9°C entering wb		
Air cooled condensers	All	53°C condensing temperature 88°C entering gas temperature 8°C subcooling 35°C entering db	≥69 COP	AHRI 460

- a. For purposes of this table, open-circuit cooling tower performance is defined as the water flow rating of the tower at the thermal rating condition listed in Table 6.8.1-7 divided by the fan motor nameplate power.
- b. For purposes of this table, closed-circuit cooling tower performance is defined as the process water flow rating of the tower at the thermal rating condition listed in Table 6.8.1-7 divided by the sum of the fan motor nameplate power and the integral spray pump motor nameplate power.
- c. For purposes of this table, air-cooled condenser performance is defined as the heat rejected from the refrigerant divided by the fan motor nameplate power.
- d. Section 12 contains a complete specification of the referenced test procedure, including the referenced year version of the test procedure.
- e. The efficiencies and test procedures for both open- and closed-circuit cooling towers are not applicable to hybrid cooling towers that contain a combination of separate wet and dry heat exchange sections.
- The certification requirements do not apply to field-erected cooling towers.
- f. All cooling towers shall comply with the minimum efficiency listed in the table for that specific type of tower with the capacity effect of any project-specific accessories and/or options included in the capacity of the cooling tower.
- g. For purposes of this table, evaporative condenser performance is defined as the heat rejected at the specified rating condition in the table, divided by the sum of the fan motor nameplate power and the integral spray pump nameplate power.
- h. Requirements for evaporative condensers are listed with ammonia (R-717) and R-507A as test fluids in the table. Evaporative condensers intended for use with halocarbon refrigerants other than R-507A must meet the minimum efficiency requirements listed above with R-507A as the test fluid.





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BSR/ASHRAE/IES Addendum dm to ANSI/ASHRAE Standard 90.1-2013, *Energy Standard for Buildings Except Low-Rise Residential Buildings*  
First Public Review Draft

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## **FOREWORD**

*This proposal clarifies which pumps in a heating- or chilled-water system are required to be variable flow. Some building officials may define “distribution systems” to include primary pumps and dedicated coil pumps that operate mostly in a constant flow mode. These exceptions are designed to clarify which pumps are in the variable flow system and which pumps are excluded.*

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### **Addendum dm to 90.1-2013**

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*Revise the Standard as follows (IP and SI Units)*

*Revise Sections 6.5.4.2 as follows:*

*(Note, base language is shown as revised by addendum **ak** to 90.1-2013, as published in the 2015 Supplement)*



**BSR/ASHRAE/IES Addendum DN  
to ANSI/ASHRAE/IES Standard 90.1-2013**

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## FOREWORD

*This amendment modifies the exceptions to Section 6.5.6 Energy Recovery. These exceptions were added in the early years of energy recovery when almost all energy recovery was done for heating.*

*Exception 5 for sites that use solar or site-recovered energy for at least 60% of outdoor air heating is modified so that the exception applies only to exhaust energy recovery in the heating mode.*

*Exception 9, which provides an exception for systems requiring dehumidification that use energy recovery in series with the coil is changed to apply only the heating energy recovery and applies only to systems where additional dehumidification is required during the heating mode*

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## Addendum dn to 90.1-2013

---

*Revise the Standard as follows (IP and SI Units)*

### 6.5.6 Energy Recovery

**6.5.6.1 Exhaust Air Energy Recovery.** Each fan system shall have an energy recovery system when the system's supply airflow rate exceeds the value listed in Tables 6.5.6.1-1 and 6.5.6.1-2, based on the climate zone and percentage of outdoor airflow rate at design conditions. Table 6.5.6.1-1 shall be used for all ventilation systems that operate less than 8000 hours per year, and Table 6.5.6.1-2 shall be used for all ventilation systems that operate 8000 or more hours per year. Energy recovery systems required by this section shall have at least 50% energy recovery effectiveness. Fifty percent energy recovery effectiveness shall mean a change in the enthalpy of the outdoor air supply equal to 50% of the difference between the outdoor air and return air enthalpies at design conditions. Provision shall be made to bypass or control the energy recovery system to permit air economizer operation as required by Section 6.5.1.1.

#### Exceptions:

1. Laboratory systems meeting Section 6.5.7.2
2. Systems serving spaces that are not cooled and that are heated to less than 60°F
3. Systems exhausting toxic, flammable, paint, or corrosive fumes or dust
4. Commercial kitchen hoods used for collecting and removing grease vapors and smoke
5. Heating energy recovery ~~w~~Where more than 60% of the outdoor air heating energy is provided from site-recovered or site solar energy
6. Heating energy recovery in Climate Zones 1 and 2.

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7. Cooling energy recovery in Climate Zones 3c, 4c, 5b, 5c, 6b, 7, and 8
8. Where the largest source of air exhausted at a single location at the building exterior is less than 75% of the design outdoor airflow rate.
9. Heating energy recovery for sSystems requiring dehumidification during heating mode that employ energy recovery in series with the cooling coil.



**BSR/ASHRAE/IES Addendum DP  
to ANSI/ASHRAE/IES Standard 90.1-2013**

**Public Review Draft**  
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## FOREWORD

*New LED office lighting solutions incorporate high-efficiency luminaires with embedded sensing and control capabilities, and sophisticated algorithms. The sequences of behavior of these systems are specifically designed and optimized for open plan offices and can deliver substantial energy savings by providing interior lighting controls that turn lights off when they're not being used and prevent the wasting of energy within the cycle of occupancy and vacancy.*

*Industry estimates of savings of these systems compared to traditional controls used in open offices is approximately 20%. However, our current control requirements that are aimed at saving energy with more traditional controls can inhibit application of this type of fully automatic system.*

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## Addendum dp to 90.1-2013

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*Revise the Standard as follows (IP and SI Units)*

### **9.4.1.1 Interior Lighting Controls.**

.....

c. *Restricted to partial automatic ON:* No more than 50% of the lighting power for the general lighting shall be allowed to be automatically turned on, and none of the remaining lighting shall be automatically turned on.

#### **Exception to 9.4.1.1(c):**

Lighting in open plan office spaces shall be allowed to turn on automatically to more than 50% provided the control zone is no larger than 600 ft<sup>2</sup> (56 m<sup>2</sup>).



**BSR/ASHRAE/IES Addendum DQ  
to ANSI/ASHRAE/IES Standard 90.1-2013**

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## FOREWORD

*With new LED technology becoming commonplace, the retail display allowance used for highlighting merchandise and retail displays can also be reduced. The proposed new values are based on several sets of analysis that look at the various options for replacing traditional fluorescent and incandescent sources with appropriate LED and LED mix options. Even with the mixed option of mostly LED with some halogen sources still applied, the potential savings is on average 50% for typical retail display options. For this proposal, a conservative 25% reduction is proposed for the decorative lighting allowance. The allowance still remains as a use-it-or-lose it allowance and cannot be used elsewhere. .*

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### Addendum dq to 90.1-2013

---

*Revise the Standard as follows (IP and SI Units)*

#### 9.6.2 Additional Interior Lighting Power.

.....

An increase in the interior lighting power allowance is permitted in the following cases:

.....

b. For lighting equipment installed in sales areas and specifically designed and directed to highlight merchandise, calculate the additional lighting power as follows:

Additional Interior Lighting Power Allowance = 1000 W + (Retail Area 1 × ~~0.6~~ 0.45 W/ft<sup>2</sup> (4.8 W/m<sup>2</sup>))  
+ (Retail Area 2 × ~~0.6~~ 0.45 W/ft<sup>2</sup> (4.8 W/m<sup>2</sup>))  
+ (Retail Area 3 × ~~1.4~~ 1.05 W/ft<sup>2</sup> (11 W/m<sup>2</sup>))  
+ (Retail Area 4 × ~~2.5~~ 1.88 W/ft<sup>2</sup> (20 W/m<sup>2</sup>)),



**BSR/ASHRAE/IES Addendum DR  
to ANSI/ASHRAE/IES Standard 90.1-2013**

**Public Review Draft**  
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## FOREWORD

*With new LED technology becoming commonplace, the additional decorative allowance used for decorative elements in lighting design can also be reduced. A standard typical efficacy change from standard sources typically used for decorative purposes (mix of FL and INC/Halogen) to LED is approximately 50% but does vary. A conservative 25% reduction is proposed for the decorative lighting allowance. The allowance still remains as a use-it-or-lose it allowance and cannot be used elsewhere. The decorative lighting definition is also modified to more clearly represent actual decorative lighting needs and applications.*

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## Addendum dr to 90.1-2013

---

*Revise the Standard as follows (IP and SI Units)*

### 3.2 Definitions

.....

**lighting, decorative:** lighting that is ~~purely~~ ornamental ~~and or~~ installed for aesthetic effect. Decorative lighting shall not include general lighting.

.....

**9.6.2 Additional Interior Lighting Power.** When using the Space-by-Space Method, an increase in the interior lighting power allowance is allowed for specific lighting functions. Additional power shall be allowed only if the specified lighting is installed and automatically controlled, separately from the general lighting, to be turned off during nonbusiness hours. This additional power shall be used only for the specified luminaires and shall not be used for any other purpose unless otherwise indicated.

An increase in the interior lighting power allowance is permitted in the following cases:

- a. For spaces in which lighting is specified to be installed in addition to the general lighting for the purpose of decorative appearance or for highlighting art or exhibits, provided that the additional lighting power shall not exceed ~~±0~~ 0.75 W/ft<sup>2</sup> (8.1 W/m<sup>2</sup>) of such spaces



**BSR/ASHRAE/IES Addendum DS  
to ANSI/ASHRAE/IES Standard 90.1-2013**

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## FOREWORD

*Addendum AT added useful language to make calibration of daylight sensors more effective and therefore able to save more energy. However, a requirement for the calibration location to be readily accessible for typical applications was inadvertently removed. The addendum re-instates a requirement that sensors in high ceiling applications must have a readily accessible calibration point to avoid excessively tall ladders or lifts to perform periodic calibrations.*

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### Addendum ds to 90.1-2013

---

*Revise the Standard as follows (IP and SI Units)*

#### 9.4.1.1 Interior Lighting Controls.

.....

*e. Automatic daylight responsive controls for sidelighting:*

.....

The control system shall have the following characteristics:

1. The calibration adjustment control shall be located no higher than 11 feet (3.4 m) above the finished floor.
2. The photocontrol shall reduce electric lighting in response to available daylight using continuous dimming or with at least one control point between 50% and 70% of design lighting power, a second control point between 20% and 40% of design lighting power or the lowest dimming level the technology allows, and a third control point that turns off all the controlled lighting.
3. The calibration shall not require the physical presence of a person at the sensor while the calibration is processing.



**BSR/ASHRAE/IES Addendum DV  
to ANSI/ASHRAE/IES Standard 90.1-2013**

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## **FOREWORD**

*This addendum updates the language related to the reference to Standard 140. The reference update to Standard 140-2014 was already made in Addendum CO.*

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### **Addendum dv to 90.1-2013**

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*Revise the Standard as follows (IP and SI Units)*

#### **Section C3.1.4**

The simulation program shall be tested according to ASHRAE Standard 140, except Sections 7 and 8, and the results shall be ~~published~~furnished by the software provider.

#### **Section 11.4.1.4**

The simulation program shall be tested according to ASHRAE Standard 140, except Sections 7 and 8, and the results shall be furnished by the software provider.



**BSR/ASHRAE/IES Addendum DW  
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BSR/ASHRAE/IES Addendum dw to ANSI/ASHRAE Standard 90.1-2013, *Energy Standard for Buildings Except Low-Rise Residential Buildings*  
First Public Review Draft

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

## FOREWORD

*This addendum addresses one update. The update establishes baseline elevator energy use for motors, fans, and lights for Appendix G. The calculations and many of the assumptions are based on the PNNL technical support documentation.*

*For buildings less than or equal to four stories the baseline elevator is based on a hydraulic elevator with a speed of 150 fpm. For buildings greater than four stories the baseline elevator is based on a traction elevator with a speed of 350 fpm.*

***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

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*Revise the Standard as follows (IP and SI Units)*

*Note: Table G3.X.X.X will be renumbered to fit the current numbering scheme for tables reference in Table G3.1*

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

No.	Proposed Building Performance	Baseline Building Performance
<b>16. Elevators</b>	<p><u>Where the proposed building includes elevators, the elevator motor, ventilation fan, and light load shall be included in the model. The cab ventilation fan and lights shall be modeled with the same schedule as the elevator motor.</u></p>	<p><u>Where the proposed building includes elevators, the baseline shall be modeled to include the elevator cab motor, ventilation fans and lighting power.</u></p> <p><u>The elevator peak motor power shall be calculated as follows:</u></p> <p><u>IP Units:</u>  <math display="block">bhp = (\text{weight of car} + \text{rated load} - \text{counterweight}) \times \text{speed of car} / (33,000 \times \eta_{\text{mechanical}})</math></p> <p><math display="block">P_m = bhp \times 746 / \eta_{\text{motor}}</math></p> <p><u>SI Units:</u>  <math display="block">(kW = (\text{weight of car} + \text{rated load} - \text{counterweight}) \times \text{speed of car} \times 0.00981 / \eta_{\text{mechanical}})</math></p>

BSR/ASHRAE/IES Addendum dw to ANSI/ASHRAE Standard 90.1-2013, *Energy Standard for Buildings Except Low-Rise Residential Buildings*  
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**Table G3.1 Modeling Requirements for Calculating Proposed and Baseline Building Performance**

No.	Proposed Building Performance	Baseline Building Performance
		$P_m = kW / \eta_{motor}$ <p>where</p> <p>weight of car = the proposed design elevator car weight (lbs.) (kg)</p> <p>rated load = the proposed design elevator load to operate at (lbs.) (kg)</p> <p>counterweight of car = the elevator car counterweight (lbs.) (kg) from Table G3.X.X</p> <p>speed of car = the speed of the proposed elevator (feet per minute) (meters per second)</p> <p><math>\eta_{mechanical}</math> = the mechanical efficiency of the elevator from Table G3.X.X</p> <p><math>\eta_{motor}</math> = the motor efficiency from Table G.X.X.X for the next motor size greater than than the bhp (kW) using a totally enclosed motor at 1800 rpm</p> <p><math>P_m</math> = peak elevator motor power (watts) (kW)</p> <p>The elevator motor use shall be modeled with the same schedule as the proposed.</p> <p>When included in the proposed design, the baseline elevator cab ventilation fan shall be 0.33 W/cfm (0.69 W/L-s) and the lighting power density shall be 3.14 W/ft<sup>2</sup> (33.79 W/m<sup>2</sup>), both operate continuously.</p>

**TABLE G3.X.X Baseline Elevator Motor Power**

<u>Number of Stories (including basement)</u>	<u>Motor Type</u>	<u>Counterweight</u>	<u>Mechanical Efficiency</u>
<u>≤ 4</u>	<u>Hydraulic</u>	<u>None</u>	<u>58%</u>
<u>&gt; 4</u>	<u>Traction</u>	<u>Proposed design counterweight, if not specified use weight of the car plus 40% of the rated load</u>	<u>64%</u>

## Appendix E. INFORMATIVE REFERENCES

### International Organization for Standardization

BSR/ASHRAE/IES Addendum dw to ANSI/ASHRAE Standard 90.1-2013, *Energy Standard for Buildings Except Low-Rise Residential Buildings*  
First Public Review Draft

SS-EN ISO 25745-2:2014

Energy Performance of lifts, escalators and moving walks – Part  
2: Energy calculation and classification for lifts (elevators)

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#### 8.4 Thread compounds, sealants, gasket lubricants, solvent cement, and adhesives

The manufacturer shall label each container with the designations and identifications required in the applicable standards as referenced in 2 of this Standard. The container shall bear an appropriate batch number identifying the day, month, and year of manufacture, as well as the formulation designation. In instances where the manufacturer has more than one plant location or produces for other suppliers or distributors, an identifying symbol shall be used.

Thread sealants shall meet the requirements of IAPMO PS-36.

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[Note – the changes are seen below using strikeout for removal of old text and gray highlights to show the suggested text. ONLY the highlighted text is within the scope of this ballot.]

## NSF/ANSI Standard for Drinking Water Treatment Chemicals– Health Effects

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### 4 Coagulation and flocculation chemicals

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The following table is a generic listing of the types of products covered in this section. This table is not intended to be a complete list of all products used for coagulation and flocculation applications. Inclusion of a product does not indicate either a use endorsement of the product or an automatic acceptance under the provisions of this Standard. Annex D, Table D1, includes a cross-reference index of the various chemicals (and the more common synonyms) contained in this table.

**Table 4.1 – Coagulation and flocculation products – product identification and evaluation**

Chemical type (Description)	Synonyms	Formula (CAS number)	Approximate molecular weight	Preparation method	Typical use level (mg/L) <sup>1</sup>	Minimum Test Batteries of Chemistry-specific analyses <sup>2</sup>
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poly (epichlorohydrin/dimethylamine) (polyamines) (polyelectrolytes)	EPI/DMA, polyamine	(25988-97-0) or (42751-79-1)	30 thousand - 3 million	—	<del>2</del> 10.0 <sup>10</sup>	epichlorohydrin, 1,3-Dichloro-2-propanol, 1,2-dichloro-3-propanol, glycidol, dimethylamine, ethylenediamine (if used as a branching agent)

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**Table 4.1 – Coagulation and flocculation products – product identification and evaluation**

Chemical type (Description)	Synonyms	Formula (CAS number)	Approximate molecular weight	Preparation method	Typical use level (mg/L) <sup>1</sup>	Minimum Test Batteries of Chemistry-specific analyses <sup>2</sup>
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<sup>1</sup> The typical use level is an application level which has been used historically in water treatment. The typical use level is not the maximum use level for the product unless specifically stated.

<sup>2</sup> Analysis for all chemistry-specific analytes in these minimum test batteries shall be performed each time the product is evaluated. Analysis shall also include formulation-dependent analytes as identified during formulation review. Testing for specific repackages, blends, or dilutions of previously certified products may be waived.

<sup>3</sup> If nitrogen-containing initiators are used in these chemical types, evaluation shall include analysis for the initiator and any initiator by-products.

<sup>4</sup> The typical use level for this product is based on an acrylamide polymer application of 1 mg/L and an acrylamide monomer level of 0.05% in the polymer, or equivalent (40 CFR 141.111) for a carryover of not more than 0.5 ppb of acrylamide monomer into the finished water.

<sup>5</sup> Metals = antimony, arsenic, barium, beryllium, cadmium, chromium, copper, lead, mercury, selenium, thallium

<sup>6</sup> A GC/MS analysis shall also be performed on this chemical type when recycled materials are used in the manufacturing process.

<sup>7</sup> The first value is the typical use level as indicated by the chemical formula. The second value is the typical use level as aluminum oxide for the aluminum salts (aluminum chloride, aluminum sulfate, polyaluminum chloride, and sodium aluminate).

<sup>8</sup> The first value is the typical use level as indicated by the chemical formula. The second value is the typical use level as Fe for the iron salts (ferric chloride, ferric sulfate, ferrous chloride, and ferrous sulfate).

<sup>9</sup> The typical use level for this product is based on a polyDADMAC polymer application of 25 mg/L and a carryover of not more than 50 ppb of DADMAC into the finished water.

<sup>10</sup> The typical use level for this product is based on a EPI/DMA polymer application of 210 mg/L and an epichlorohydrin monomer level of 0.01% in the polymer, or equivalent (40 CFR 141.111) for a carryover of not more than 21 ppb of epichlorohydrin monomer into the finished water.

<sup>11</sup> The typical use level of this product is expressed as mg/L of active polymer in the product as sold.

<sup>12</sup> Sodium silicate may be used in conjunction with an acid-forming substance to produce activated silica. The net concentrations of sodium silicate and acid-forming substance are not to exceed the maximum use levels for these chemicals individually.

**Reason: Revised per 2015 DWA-TC JC meeting to better reflect actual TUL in the field.**

**BSR/UL 1703, Standard for Safety for Flat-Plate Photovoltaic Modules and Panels**

47.1 A module or panel shall have a plain, legible, permanent marking that includes:

- a) The manufacturer's name, trademark, or other descriptive marking by which the organization responsible for the product can be identified;
- b) The model number or the equivalent;
- c) The electrical ratings - see 46.1; and
- d) The date or other dating period of manufacture not exceeding any three consecutive months; and
- e) If the module is equipped with PV wiring connectors that comply with the Standard for Connectors for Use in Photovoltaic Systems, UL 6703, the specific allowable mating connector manufacturer and model number(s).

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

*Exception No. 2: The date of manufacture may be abbreviated; or may be in a nationally accepted conventional code or in a code affirmed by the manufacturer, provided that the code:*

- a) *Does not repeat in less than 10 years; and*
- b) *Does not require reference to the production records of the manufacturer to determine when the product was manufactured.*

*Exception No. 3: With regards to part (e), the statement "See module literature for appropriate mating connectors" or equivalent may be used.*

48.1.1 The electrical installation instructions shall include a detailed description of the wiring method to be used in accordance with the National Electrical Code, ANSI/NFPA 70. This description shall include:

- a) The grounding method to be used, and where a specific grounding device is supplied or suggested, the following statements:
  - 1) "Where common grounding hardware (nuts, bolts, star washers, split-ring lock washers, flat washers and the like) is used to attach a listed grounding/bonding device, the attachment must be made in conformance with the grounding device manufacturer's instructions."
  - 2) PV module manufacturers recommending such a method must either 1) thoroughly detail the attachment means in the module installation

instructions or 2) refer the installer to readily available manufacturer's instructions for the grounding/bonding device.

3) "Common hardware items such as nuts, bolts, star washers, lock washers and the like have not been evaluated for electrical conductivity or for use as grounding devices and should be used only for maintaining mechanical connections and holding electrical grounding devices in the proper position for electrical conductivity. Such devices, where supplied with the module and evaluated through the requirements in UL 1703, may be used for grounding connections in accordance with the instructions provided with the module."

b) For modules with a wiring compartment intended for use with field-installed wiring:

- 1) The size, type, and temperature rating of the conductors to be used,
- 2) The maximum rating of any overcurrent protection, if required,
- 3) The minimum and maximum cable diameters when the wiring method is cable, and
- 4) Any limitations on wiring methods that apply to the wiring compartment or box.

c) Modules equipped with PV wiring connectors that comply with the Standard for Connectors for Use in Photovoltaic Systems, UL 6703, shall have the specific allowable mating connector manufacturer and model number(s) listed, as well as contact information and/or website of the PV connector manufacturer. If a specific module product is available with multiple PV wiring connectors from various manufacturers, then the following shall be included:

- 1) Means to identify each distinct PV connector manufacturer's product - such as a picture or illustration, unique physical features, markings, company logos, etc, and
- 2) Allowable mating connector manufacturer and model number(s) listed for each distinct cable connector manufacturer's product(s), as well as contact information and/or website of the PV connector manufacturer.