

PUBLISHED WEEKLY BY THE AMERICAN NATIONAL STANDARDS INSTITUTE 25 West 43rd Street, NY, NY 10036

VOL. 45, #36

September 5, 2014

Call for Comment on Standards Proposals2Call for Members (ANS Consensus Bodies)25Final Actions28Project Initiation Notification System (PINS)30ANS Maintained Under Continuous Maintenance34ANSI-Accredited Standards Developers Contact Information35International Standards37	Contents	
Call for Members (ANS Consensus Bodies)25Final Actions28Project Initiation Notification System (PINS)30ANS Maintained Under Continuous Maintenance34ANSI-Accredited Standards Developers Contact Information35International Standards37	American National Standards	
Final Actions       28         Project Initiation Notification System (PINS)       30         ANS Maintained Under Continuous Maintenance       34         ANSI-Accredited Standards Developers Contact Information       35         International Standards       37	Call for Comment on Standards Proposals	2
Project Initiation Notification System (PINS)30ANS Maintained Under Continuous Maintenance34ANSI-Accredited Standards Developers Contact Information35International Standards35ISO and IEC Draft Standards37	Call for Members (ANS Consensus Bodies)	25
ANS Maintained Under Continuous Maintenance34ANSI-Accredited Standards Developers Contact Information35International Standards35ISO and IEC Draft Standards37	Final Actions	28
ANSI-Accredited Standards Developers Contact Information       35         International Standards       37         ISO and IEC Draft Standards       37	Project Initiation Notification System (PINS)	30
International Standards ISO and IEC Draft Standards	ANS Maintained Under Continuous Maintenance	34
ISO and IEC Draft Standards	ANSI-Accredited Standards Developers Contact Information	35
	International Standards	
ISO Newly Published Standards	ISO and IEC Draft Standards	37
	ISO Newly Published Standards	40
	Proposed Foreign Government Regulations	41 42

# **American National Standards**

Call for comment on proposals listed

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

Ordering Instructions for "Call-for-Comment" Listings

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

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

\* Standard for consumer products

© 2014 by American National Standards Institute, Inc. ANSI members may reproduce for internal distribution. Journals may excerpt items in their fields

## Comment Deadline: October 5, 2014

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

#### Addenda

BSR/ASHRAE Addendum 55c-201x, Thermal Environmental Conditions for Human Occupancy (addenda to ANSI/ASHRAE Standard 55-2013)

This addendum simplifies Normative Appendix A (Methods for Determining Operative Temperature) to be a single calculation procedure for calculating operative temperature. Case 1 is removed because it is overly permissive and Case 3 is removed because it is redundant with Case 2.

#### Click here to view these changes in full

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

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

#### Addenda

BSR/ASHRAE Addendum 62.1b-201x, Ventilation for Acceptable Indoor Air Quality (addenda to ANSI/ASHRAE Standard 62.1-2013)

For existing buildings, it may be difficult to apply the ventilation rate procedure (VRP), particularly for buildings with multiple-zone recirculating ventilation systems. This is because determination of some of the values needed to calculate ventilation rates may be difficult or impossible because required information is not available. This proposed addendum provides an alternate path of compliance with Standard 62.1 that is needed by the marketplace for those situations where information required to determine system performance is unavailable or for smaller facilities with straightforward multiple zone applications.

#### Click here to view these changes in full

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

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

#### Addenda

BSR/ASHRAE Addendum 62.1c-201x, Ventilation for Acceptable Indoor Air Quality (addenda to ANSI/ASHRAE Standard 62.1-2013)

This proposed addendum revises the current definition of ETS to include emissions from electronic smoking devices and from smoking of cannabis. The existing requirements for separation of ETS-free spaces from ETS spaces remain unchanged. It also clarifies the intent of the standard that provision of acceptable indoor air quality is incompatible with the presence of ETS, including cannabis smoke and e-cigarette emissions. The ventilation rates determined in accordance with the provisions of the standard apply only to spaces where these emissions are not present and which are adequately separated from spaces where they are present.

#### Click here to view these changes in full

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

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

#### Addenda

BSR/ASHRAE Addendum 62.1d-201x, Ventilation for Acceptable Indoor Air Quality (addenda to ANSI/ASHRAE Standard 62.1-2013)

This proposed addendum adds an exception to Section 5.8 (Particulate Matter Removal). In sensible-only cooling (i.e., sensible-only chilled beams), the equipment's purpose is to provide only sensible cooling. In this case, the coil surface would never be wet and the filtration requirements intended for wetted surfaces should not apply. Latent cooling for these systems would be provided by other portions of the system, such as cooling coils in the primary air stream, which would then have independent upstream air filtration.

#### Click here to view these changes in full

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

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

#### Addenda

BSR/ASHRAE Addendum 62.1e-201x, Ventilation for Acceptable Indoor Air Quality (addenda to ANSI/ASHRAE Standard 62.1-2013)

This proposed addendum modifies Section 8, Operation and Maintenance, incorporating calibration requirements for airflow monitoring sensors and systems and harmonizes Table 8.4.1 (Minimum Maintenance Activity and Frequency) with ASHRAE/ACCA Standard 180-2012, Standard Practice for Inspection and Maintenance of Commercial-Building HVAC Systems.

#### Click here to view these changes in full

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

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

#### Addenda

BSR/ASHRAE Addendum 62.1p-201x, Ventilation for Acceptable Indoor Air Quality (addenda to ANSI/ASHRAE Standard 62.1-2013)

At present, all occupancy types are required to provide no less than the area component of the minimum ventilation rate during periods when the space is "expected to be occupied." A previous interpretation clarified that this prohibited the use of occupancy sensors to reduce the ventilation rate to zero during these times. This proposed addendum would allow the ventilation to be reduced to zero through the use of occupancy sensors (not through contaminant or CO2 measurements) for spaces of selected occupancy types. These occupancy types are identified by a new Note H to Table 6.2.2.1 (Minimum Ventilation Rates in Breathing Zone).

#### Click here to view these changes in full

#### Addenda

BSR/ASHRAE Addendum 62.1q-201x, Ventilation for Acceptable Indoor Air Quality (addenda to ANSI/ASHRAE Standard 62.1-2013)

This proposed addendum modifies Section 5.2 (Exhaust Duct Location) to clarify requirements by including air classes instead of descriptive language, and modifies the requirements by allowing positively pressurized exhaust ducts inside the space of origin.

#### Click here to view these changes in full

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

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

#### Addenda

BSR/ASHRAE Addendum j to ANSI/ASHRAE Standard 34-2013, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2013)

This addendum adds the zeotropic refrigerant blend R-451A, to Table 4-2 and Table D-2. The recommended flammability classification 2L is based on an LFL of 7.0 vol. %, a heat of combustion of 9,790 kJ/kg (4,209 BTU/lb), and a burning velocity less than 4 cm/s. The recommended toxicity classification A is based on an adopted OEL of 520 ppm v/v. The recommended ATEL is 100,000 ppm v/v.

#### Click here to view these changes in full

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

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

#### Addenda

BSR/ASHRAE Addendum k to ANSI/ASHRAE Standard 34-2013, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2013)

This addendum adds the zeotropic refrigerant blend R-451B, to Table 4-2 and Table D-2. The recommended flammability classification 2L is based on an LFL of 7.0 vol. %, a heat of combustion of 9,790 kJ/kg (4,209 BTU/lb), and a burning velocity less than 4 cm/s. The recommended toxicity classification A is based on an adopted OEL of 530 ppm v/v. The recommended ATEL is 100,000 ppm v/v.

#### Click here to view these changes in full

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

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

#### Addenda

BSR/ASHRAE Addendum I to ANSI/ASHRAE Standard 34-2013, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2013)

This addendum adds the zeotropic refrigerant blend R-513A, to Table 4-2 and Table D-2. The recommended flammability classification is 1. The recommended toxicity classification A is based on an adopted OEL of 650 ppm v/v. The recommended ATEL is 72,000 ppm v/v.

#### Click here to view these changes in full

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

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

#### Addenda

BSR/ASHRAE Addendum m to ANSI/ASHRAE Standard 34-2013, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2013)

This addendum adds the zeotropic refrigerant blend R-452A, to Table 4-2 and Table D-2. The recommended flammability classification is 1. The recommended toxicity classification A is based on an adopted OEL of 780 ppm v/v. The recommended ATEL is 100,000 ppm v/v.

#### Click here to view these changes in full

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

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

#### Addenda

BSR/ASHRAE Addendum n to ANSI/ASHRAE Standard 34-2013, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2013)

This addendum modifies Section 6.1.3, Flammability Classification, on required validation tests for burning velocity measurement.

#### Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Online Comment Database at https://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 e 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 relaxes the existing threshold for lighting control alterations but captures a lot of energy efficiency by requiring more of the control requirements. The cost of lighting controls has decreased and can probably be expected to decrease further, so the cost of adding these lighting controls in an alteration no longer represents a large barrier.

#### Click here to view these changes in full

#### Addenda

BSR/ASHRAE/IES Addendum f 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 clarifies the exception to the automatic daylight responsive controls requirements for daylight areas under skylights.

Click here to view these changes in full

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

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

#### Addenda

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

The change proposed in this addendum removes the exception to the Variable Air Volume system ventilation optimization when Energy Recovery Ventilation is installed

#### Click here to view these changes in full

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

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

#### Addenda

BSR/ASHRAE/IES Addendum k 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 requires envelope assemblies to comply with Appendix A when complying with the Energy Cost Budget Method in Appendix G.

Click here to view these changes in full

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

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

### Addenda

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

Addendum adds requirements for building envelope verification, inspection, and compliance.

### Click here to view these changes in full

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

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

#### Addenda

BSR/ASHRAE/IES Addendum m 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 text in Section 10.4.1 on electric motors to provide information about the required efficiency of small electric motors shown in Tables 10.8-4 and 10.8-5. In addition, small electric motors were not included in the scope of the 2007 law, but now have performance requirements and are being added to the standard.

#### Click here to view these changes in full

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

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

#### Addenda

BSR/ASHRAE/IES Addendum n 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 updates the IEER values for air-cooled VRF air conditioners and heat pumps above 65,000 Btu/h. Depending on the cooling capacity and product classes, the new IEERs are between 15 and 20% better than the values they are replacing. The new IEERs will become effective on January 1, 2017.

#### Click here to view these changes in full

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

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

#### Addenda

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

This proposed change clarifies the wording regarding duct seal class to avoid any possible misinterpretation that compliance with the text that is struck out could substitute for the seal class requirement.

#### Click here to view these changes in full

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

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

#### Addenda

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

CTI Standard 201 in Table 6.8.1-7 has been updated. This certification standard has been divided into Standard 201 RS and Standard 201 OM. This change indicates that the 201 RS standard is required for compliance.

#### Click here to view these changes in full

#### Addenda

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

This proposed change limits the systems that can take advantage of the fan power pressure allowance for fully ducted return and/or exhaust air systems.

Click here to view these changes in full

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

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

#### Addenda

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

Section G3.1.1 Baseline HVAC System Type and Description is revised to confirm the hierarchy for selecting baseline HVAC systems, clarify what floors to count, and specify what building type to use when no one use is predominant. Table G3.1.1-3 Baseline HVAC System Types is revised so heading names are consistent with Section G3.1.1.

Click here to view these changes in full

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

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

#### Addenda

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

Exception 2 to 6.5.2.1 addresses single-duct VAV reheat systems with DDC. It unintentionally places undue requirements on other VAV systems with DDC that have an alternate means of heating such as fan-powered boxes, dual duct, and baseboard, and even non-VAV systems such as DOAS with radiant or chilled beams. This is resolved by making Exception 1 also apply to systems with DDC but with lower reheat minimums compared to systems without DDC (e.g., pneumatic control).

#### Click here to view these changes in full

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

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

#### Addenda

BSR/ASHRAE/IES Addendum u 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 new requirements for transfer air in exhaust systems.

#### Click here to view these changes in full

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

## **NSF (NSF International)**

#### Revision

BSR/NSF 46-201x (i25r1), Evaluation of Components Used in Wastewater Treatment Systems (revision of ANSI/NSF 46-2013)

This Standard is intended for use with components and devices not covered by other NSF wastewater standards. Components and devices covered by this Standard are intended for use with graywater or blackwater or both. Management methods for the end-products of these components and devices are not addressed in this Standard. This Standard shall in no way restrict new system designs, provided that such designs meet the minimum specifications described in this standard.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Mindy Costello, (734) 827 -6819, mcostello@nsf.org

## **NSF (NSF International)**

#### Revision

BSR/NSF 49-201x (i61r2), Biosafety Cabinetry: Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-2012 and ANSI/NSF 49-201x (i61r1))

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

#### Click here to view these changes in full

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

## **NSF (NSF International)**

#### Revision

BSR/NSF 51-201x (i11r1), Food Equipment Materials (revision of ANSI/NSF 51-2012)

This Standard establishes minimum public health and sanitation requirements for materials used in the construction of commercial food equipment. The requirements of this Standard are intended to ensure that the composition and surface finish of food equipment materials are such that a material will not adulterate food nor render food equipment difficult to clean and sanitize.

#### Click here to view these changes in full

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

### **NSF (NSF International)**

#### Revision

BSR/NSF 140-201x (i25r2), Sustainability Assessment for Carpet (revision of ANSI/NSF 140-2013)

This sustainability standard is intended to enable organizations throughout the carpet supply chain to apply performance requirements to achieve sustainable attributes and demonstrate compliance with levels of achievement through quantifiable metrics. While this Standard can be used on any carpet product, it is intended to be used for evaluation of commercial carpet products by providing a product evaluation methodology that is additive to emerging commercial green building standards. This Standard does not apply to the packaging of sustainable carpets or to the adhesive or padding products used in the installation of carpet products.

#### Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Mindy Costello, (734) 827 -6819, mcostello@nsf.org

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

#### Revision

BSR/UL 1561-201x, Standard for Safety for Dry-Type General Purpose and Power Transformers (revision of ANSI/UL 1561-2012)

Addition of requirements for Class 240 insulation systems.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Patricia Sena, (919) 549 -1636, patricia.a.sena@ul.com

### UL (Underwriters Laboratories, Inc.)

#### Revision

BSR/UL 8750-201X, Standard for Safety for Light Emitting Diode (LED) Equipment for Use in Lighting Products (revision of ANSI/UL 8750-2014)

The following changes in requirements to the Standard for Light Emitting Diode (LED) Equipment for Use in Lighting Products, UL 8750, are being proposed: (1) Correlate bridging capacitor use in paragraph 7.9.2 with UL 60950-1 requirements.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Heather Sakellariou, (847) 664-2346, Heather.Sakellariou@ul.com

## Comment Deadline: October 20, 2014

### ADA (American Dental Association)

#### New National Adoption

BSR/ADA Standard 136-201x, Products for External Tooth Bleaching (identical national adoption of ISO 28399:2011)

This standard specifies requirements and test methods for external tooth bleaching products. These products are intended for use in the oral cavity, either by professional application (in-office tooth bleaching products) or consumer application (professional or non-professional home use of tooth bleaching products), or both. It also specifies requirements for their packaging, labeling, and instructions for use.

Single copy price: \$108.00

Obtain an electronic copy from: standards@ada.org

Order from: Kathy Medic, (312) 440-2533, medick@ada.org

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

### ADA (American Dental Association)

#### New National Adoption

BSR/ADA Specification No. 119-201x, Manual Toothbrushes (national adoption of ISO 20126:2012 and ISO 22254:2005 with modifications and revision of ANSI/ADA Specification No. 119-2008)

This standard describes requirements and test methods for the physical properties of manual toothbrushes in order to promote the safety of these products for their intended use. Also specified is a test method for determining the resistance of the tufted portion of manual toothbrushes to deflection. This test method is applicable to toothbrushes having a conventional, flat trim design and may not be applicable to toothbrushes with other designs.

Single copy price: \$99.00

Obtain an electronic copy from: standards@ada.org

Order from: Kathy Medic, (312) 440-2533, medick@ada.org

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

### ADA (American Dental Association)

#### New National Adoption

BSR/ADA Specification No. 128-201x, Hydrocolloid Impression Materials (identical national adoption of ISO 21563:2013 and revision of ANSI/ADA Specification No. 82-1998 (R2009))

This standard specifies the requirements and tests for helping determine whether the elastic aqueous agar and alginate hydrocolloid dental impression materials, as prepared for retail marketing, are of the quality needed for their intended purposes. It also specifies requirements for labeling and instructions for use.

Single copy price: \$189.00

Obtain an electronic copy from: standards@ada.org

Order from: Kathy Medic, (312) 440-2533, medick@ada.org

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

## ADA (American Dental Association)

#### New National Adoption

BSR/ADA Specification No. 27-201x, Polymer-Based Restorative Materials (national adoption of ISO 4049:2009 with modifications and revision of ANSI/ADA Specification No. 27-2005)

This standard specifies requirements for dental polymer-based restorative materials supplied in a form suitable for mechanical mixing, hand-mixing, or intra-oral and extra-oral external energy activation, and intended for use primarily for the direct or indirect restoration of cavities in the teeth and for luting. The polymer-based luting materials covered by this standard are intended for use in the cementation or fixation of restorations and appliances such as inlays, onlays, veneers, crowns, and bridges.

Single copy price: \$156.00

Obtain an electronic copy from: standards@ada.org

Order from: Kathy Medic, (312) 440-2533, medick@ada.org

### AGA (ASC Z380) (American Gas Association)

#### Addenda

BSR GPTC Z380.1-2012 TR08-32-200x, Guide for Gas Transmission and Distribution Piping Systems (addenda to ANSI/GPTC Z380.1-2012)

Revise guidance under 192.620 regarding increasing MAOP. The standard provides guidance to operators of natural gas and LP pipeline systems regulated under U.S. CFR 49, Parts 191 and 192.

Single copy price: Free

Obtain an electronic copy from: www.aga.org/gptc

Order from: Paul Cabot, (202) 824-7312, pcabot@aga.org Send comments (with copy to psa@ansi.org) to: Same

## AGA (ASC Z380) (American Gas Association) Addenda

BSR GPTC Z380.1-2012 TR10-09-200x, Guide for Gas Transmission and Distribution Piping Systems (addenda to ANSI/GPTC Z380.1-2012)

Revise guidance under 192.631 regarding control room procedures. The standard provides guidance to operators of natural gas and LP pipeline systems regulated under U.S. CFR 49, Parts 191 and 192.

Single copy price: Free

Obtain an electronic copy from: www.aga.org/gptc

Order from: Paul Cabot, (202) 824-7312, pcabot@aga.org Send comments (with copy to psa@ansi.org) to: Same

## AGA (ASC Z380) (American Gas Association)

#### Addenda

BSR GPTC Z380.1-2012 TR10-25-200x, Guide for Gas Transmission and Distribution Piping Systems (addenda to ANSI/GPTC Z380.1-2012)

Revise guidance under Appendix G-192-15A regarding horizontal drilling design criteria. The standard provides guidance to operators of natural gas and LP pipeline systems regulated under U.S. CFR 49, Parts 191 and 192. Single copy price: Free

Obtain an electronic copy from: www.aga.org/gptc

Order from: Paul Cabot, (202) 824-7312, pcabot@aga.org

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

## AGA (ASC Z380) (American Gas Association)

#### Addenda

BSR GPTC Z380.1-2012 TR11-32-200x, Guide for Gas Transmission and Distribution Piping Systems (addenda to ANSI/GPTC Z380.1-2012)

Revise guidance under 192.459 and 192.613 regarding exposed pipelines and integrity management. The standard provides guidance to operators of natural gas and LP pipeline systems regulated under U.S. CFR 49, Parts 191 and 192.

Single copy price: Free

Obtain an electronic copy from: www.aga.org/gptc

Order from: Paul Cabot, (202) 824-7312, pcabot@aga.org

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

## AGA (ASC Z380) (American Gas Association) Addenda

BSR GPTC Z380.1-2012 TR11-37-200x, Guide for Gas Transmission and Distribution Piping Systems (addenda to ANSI/GPTC Z380.1-2012)

Revise guidance under 192.629 regarding gas odorization. The standard provides guidance to operators of natural gas and LP pipeline systems regulated under U.S. CFR 49, Parts 191 and 192.

Single copy price: Free

Obtain an electronic copy from: www.aga.org/gptc

Order from: Paul Cabot, (202) 824-7312, pcabot@aga.org

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

## AGA (ASC Z380) (American Gas Association)

Addenda

BSR GPTC Z380.1-2012 TR12-45-200x, Guide for Gas Transmission and Distribution Piping Systems (addenda to ANSI/GPTC Z380.1-2012)

Revise guidance under 192.361 regarding service lines under buildings. The standard provides guidance to operators of natural gas and LP pipeline systems regulated under U.S. CFR 49, Parts 191 and 192.

Single copy price: Free

Obtain an electronic copy from: www.aga.org/gptc

Order from: Paul Cabot, (202) 824-7312, pcabot@aga.org Send comments (with copy to psa@ansi.org) to: Same

## AGA (ASC Z380) (American Gas Association)

#### Addenda

BSR GPTC Z380.1-2012 TR12-47-200x, Guide for Gas Transmission and Distribution Piping Systems (addenda to ANSI/GPTC Z380.1-2012)

Revise guidance under 192.709 regarding leak surveys. The standard provides guidance to operators of natural gas and LP pipeline systems regulated under U.S. CFR 49, Parts 191 and 192.

Single copy price: Free

Obtain an electronic copy from: www.aga.org/gptc

Order from: Paul Cabot, (202) 824-7312, pcabot@aga.org

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

## AGA (ASC Z380) (American Gas Association)

### Addenda

BSR GPTC Z380.1-2012 TR13-01-200x, Guide for Gas Transmission and Distribution Piping Systems (addenda to ANSI/GPTC Z380.1-2012)

Revise guidance under 192.319, 192.321, 192.361, 192.614, and Appendix G-192-13 regarding marking new facilities. The standard provides guidance to operators of natural gas and LP pipeline systems regulated under U.S. CFR 49, Parts 191 and 192.

Single copy price: Free

Obtain an electronic copy from: www.aga.org/gptc

Order from: Paul Cabot, (202) 824-7312, pcabot@aga.org

### AGA (ASC Z380) (American Gas Association)

#### Addenda

BSR GPTC Z380.1-2012 TR13-20-200x, Guide for Gas Transmission and Distribution Piping Systems (addenda to ANSI/GPTC Z380.1-2012)

Revise guidance under 192.605 regarding defining goals for performance regulations. The standard provides guidance to operators of natural gas and LP pipeline systems regulated under U.S. CFR 49, Parts 191 and 192. Single copy price: Free

Obtain an electronic copy from: www.aga.org/gptc

Order from: Paul Cabot, (202) 824-7312, pcabot@aga.org Send comments (with copy to psa@ansi.org) to: Same

### AGA (ASC Z380) (American Gas Association) Addenda

BSR GPTC Z380.1-2012 TR13-24-200x, Guide for Gas Transmission and Distribution Piping Systems (addenda to ANSI/GPTC Z380.1-2012)

Revise guidance under 192.321 and Appendix G-192-1 regarding plastic pipe backfill material. The standard provides guidance to operators of natural gas and LP pipeline systems regulated under U.S. CFR 49, Parts 191 and 192.

Single copy price: Free

Obtain an electronic copy from: www.aga.org/gptc

Order from: Paul Cabot, (202) 824-7312, pcabot@aga.org

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

## AGA (ASC Z380) (American Gas Association)

#### Addenda

BSR GPTC Z380.1-2012 TR13-36-200x, Guide for Gas Transmission and Distribution Piping Systems (addenda to ANSI/GPTC Z380.1-2012)

Revise guidance under 192.517 regarding pressure testing records. The standard provides guidance to operators of natural gas and LP pipeline systems regulated under U.S. CFR 49, Parts 191 and 192.

Single copy price: Free

Obtain an electronic copy from: www.aga.org/gptc

Order from: Paul Cabot, (202) 824-7312, pcabot@aga.org

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

## AGA (ASC Z380) (American Gas Association)

#### Addenda

BSR GPTC Z380.1-2012 TR14-19-200x, Guide for Gas Transmission and Distribution Piping Systems (addenda to ANSI/GPTC Z380.1-2012)

Revise guidance under 192.619 and Appendix G-192-9A regarding pressure testing guidelines. The standard provides guidance to operators of natural gas and LP pipeline systems regulated under U.S. CFR 49, Parts 191 and 192.

Single copy price: Free

Obtain an electronic copy from: www.aga.org/gptc

Order from: Paul Cabot, (202) 824-7312, pcabot@aga.org

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

## AMCA (Air Movement and Control Association) *Withdrawal*

ANSI/AMCA 520-2009, Laboratory Methods of Testing Actuators (withdrawal of ANSI/AMCA 520-2009)

This standard establishes an industry standard for minimum rating and testing of actuators used on fire/smoke dampers.

Single copy price: \$5.00

Order from: Amanda Muledy, (847) 704-6295, amuledy@amca.org Send comments (with copy to psa@ansi.org) to: Same

## ASA (ASC S3) (Acoustical Society of America)

## New Standard

BSR/ASA S3/SC1.100-201x / BSR/ASA S12.100-201x, Methods to Define and Measure the Residual Sound in Protected Natural and Quiet Residential Areas (new standard)

This standard was developed as a joint project between ANSI-Accredited Standards Committee S3/SC 1, Animal Bioacoustics, and ANSI-Accredited Standards Committee S12, Noise. It comprises a part of a group of definitions, standards, and specifications for use in the field of environmental acoustics as it affects both humans and animals.

Single copy price: \$120.00

Obtain an electronic copy from: asastds@acousticalsociety.org

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

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

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

#### Addenda

BSR/ASHRAE Addendum 55b-201x, Thermal Environmental Conditions for Human Occupancy (addenda to ANSI/ASHRAE Standard 55-2012)

This addenda clarifies the three comfort calculation approaches in Section 5.3.3 by providing a new applicability table (Table 5.3.1) and re-organizing Section 5.3.3 to cover an "Elevated Air Speed Comfort Zone Method". In addition, the standard now explicitly states that when "average air speed" (Va) is greater than 0.2 m/s (40 fpm), Section 5.3.3 shall be used to calculate the upper and lower bounds of the comfort zone. This requirement was not clearly stated previously. Other changes include removal of the upper limit to air speed when occupants have control and change of the draft limit to 0.2 m/s (40 fpm) to align with the still air comfort zone in Table 5.3.3.

Single copy price: \$35.00

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

Send request to: standards.section@ashrae.org

#### Addenda

BSR/ASHRAE/IES Addendum bm 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 takes the requirements from 90.1-2004 and makes them the baseline for modeling when using Appendix G. In addition, it allows Appendix G to be used as a compliance path in 90.1. Changes to the previous version allow for more specificity for building types in climate zones.

Single copy price: \$35.00

Send request to: standards.section@ashrae.org

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

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

#### New Standard

BSR/ASHRAE/ASHE Standard 189.3P-201x, Standard for the Design, Construction and Operation of Sustainable High-Performance Health Care Facilities (new standard)

This proposed standard addresses the sustainability of healthcare facilities as a document paralleling, yet distinct from, ASHRAE/USGBC/IES Standard 189.1-2011, Standard for the Design of High-Performance Green Buildings. Healthcare facilities have a keen interest and, in many cases, the desire to develop in a sustainable manner. These facilities are often the largest and most energy intensive buildings in a community, and their leadership recognizes that saving energy and operating costs are an opportunity to reflect smart decision-making, care, and stewardship of the environment and fiscal practicality.

Single copy price: \$35.00

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

Send request to: standards.section@ashrae.org

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

## ASME (American Society of Mechanical Engineers)

#### Revision

BSR/ASME OM-201x, Operation and Maintenance of Nuclear Power Plants (revision of ANSI/ASME OM-2012)

This Standard provides requirements for testing and examination of pumps, valves, pressure relief devices and dynamic restraints (snubbers) in light-water nuclear power plants.

Single copy price: Free

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

Order from: Mayra Santiago, (212) 591-8521, ansibox@asme.org

Send comments (with copy to psa@ansi.org) to: Lauren Powers, (212) 591 -7008, powersl@asme.org

## **ASTM (ASTM International)**

#### New Standard

BSR/ASTM WK45668-201x, Test Method for Chloride Content Determination (new standard)

http://www.astm.org/ANSI\_SA

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org

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

### ASTM (ASTM International)

#### New Standard

BSR/ASTM WK46161-201x, Specification for Standard Specification for Unleaded Aviaton Gasoline Test fuel (new standard)

http://www.astm.org/ANSI\_SA

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org

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

## **ASTM (ASTM International)**

#### Reaffirmation

BSR/ASTM D4865-2009 (R201x), Guide for Generation and Dissipation of Static Electricity in Petroleum Fuel Systems (reaffirmation of ANSI/ASTM D4865-2009)

http://www.astm.org/ANSI\_SA

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org

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

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

#### Reaffirmation

BSR/ASTM D5001-2014 (R201x), Test Method for Measurement of Lubricity of Aviation Turbine Fuels by the Ball-on-Cylinder Lubricity Evaluator (BOCLE) (reaffirmation of ANSI/ASTM D5001-2014)

http://www.astm.org/ANSI\_SA

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org

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

## **ASTM (ASTM International)**

#### Reaffirmation

BSR/ASTM D6424-2004a (R201x), Practice for Octane Rating Naturally Aspirated Spark Ignition Aircraft Engines (reaffirmation of ANSI/ASTM D6424-2004a (R2010))

http://www.astm.org/ANSI\_SA

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org Send comments (with copy to psa@ansi.org) to: Same

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

#### Reaffirmation

BSR/ASTM D6812-2004b (R201x), Practice for Ground-Based Octane Rating Procedures for Turbocharged/Supercharged Spark Ignition Aircraft Engines (reaffirmation of ANSI/ASTM D6812-2004b (R2010))

http://www.astm.org/ANSI\_SA

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org

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

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

#### Reaffirmation

BSR/ASTM F2608-2007 (R201x), Test Method for Determining the Change in Room Air Particulate Counts as a Result of the Vacuum Cleaning Process (reaffirmation of ANSI/ASTM F2608-2007)

http://www.astm.org/ANSI\_SA

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org

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

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

#### Revision

BSR/ASTM D1322-201x, Test Method for Smoke Point of Kerosine and Aviation Turbine Fuel (revision of ANSI/ASTM D1322-2012)

http://www.astm.org/ANSI\_SA

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org Send comments (with copy to psa@ansi.org) to: Same

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

#### Revision

BSR/ASTM D1655-201x, Specification for Aviation Turbine Fuels (revision of ANSI/ASTM D1655-2014)

http://www.astm.org/ANSI\_SA

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org Send comments (with copy to psa@ansi.org) to: Same

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

#### Revision

BSR/ASTM D3241-201x, Test Method for Thermal Oxidation Stability of Aviation Turbine Fuels (revision of ANSI/ASTM D3241-2014) http://www.astm.org/ANSI\_SA Single copy price: Free Obtain an electronic copy from: cleonard@astm.org Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org Send comments (with copy to psa@ansi.org) to: Same

### ASTM (ASTM International)

#### Revision

BSR/ASTM D4726-201x, Specification for Rigid Poly(Vinyl Chloride) (PVC) Exterior-Profile Extrusions Used for Assembled Windows and Doors (revision of ANSI/ASTM D4726-2009)

http://www.astm.org/ANSI\_SA

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org

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

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

#### Revision

BSR/ASTM D5364-201x, Guide for Design, Fabrication, and Erection of Fiberglass Reinforced (FRP) Plastic Chimney Liners with Coal-Fired Units (revision of ANSI/ASTM D5364-2008)

http://www.astm.org/ANSI\_SA

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org

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

## **ASTM (ASTM International)**

#### Revision

BSR/ASTM D7547-201x, Specification for Hydrocarbon Unleaded Aviation Gasoline (revision of ANSI/ASTM D7547-2014)

http://www.astm.org/ANSI\_SA

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org

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

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

#### Revision

BSR/ASTM D7566-201x, Specification for Aviation Turbine Fuel Containing Synthesized Hydrocarbons (revision of ANSI/ASTM D7566-2014) http://www.astm.org/ANSI\_SA

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org Send comments (with copy to psa@ansi.org) to: Same

## **ASTM (ASTM International)**

#### Revision

BSR/ASTM D7719-201x, Specification for High-Octane Unleaded Fuel (revision of ANSI/ASTM D7719-2014) http://www.astm.org/ANSI\_SA Single copy price: Free Obtain an electronic copy from: cleonard@astm.org Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org Send comments (with copy to psa@ansi.org) to: Same

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

#### Revision

BSR/ASTM D7826-201x, Guide for Evaluation of New Aviation Gasolines and New Aviation Gasoline Additives (revision of ANSI/ASTM D7826-2013) http://www.astm.org/ANSI\_SA

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org Send comments (with copy to psa@ansi.org) to: Same

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

#### Revision

BSR/ASTM E8-201x, Test Methods for Tension Testing of Metallic Materials (revision of ANSI/ASTM E8-2013a)

http://www.astm.org/ANSI\_SA

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org

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

### ASTM (ASTM International)

#### Revision

BSR/ASTM E18-201x, Test Methods for Rockwell Hardness of Metallic Materials (revision of ANSI/ASTM E18-2014)

http://www.astm.org/ANSI\_SA

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org Send comments (with copy to psa@ansi.org) to: Same

## **ASTM (ASTM International)**

#### Revision

BSR/ASTM E23-201x, Test Methods for Notched Bar Impact Testing of Metallic Materials (revision of ANSI/ASTM E23-2012c)

http://www.astm.org/ANSI\_SA

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org Send comments (with copy to psa@ansi.org) to: Same

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

#### Revision

BSR/ASTM E2282-201x, Guide for Defining the Test Result of a Test Method (revision of ANSI/ASTM E2282-2013)

http://www.astm.org/ANSI\_SA

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org Send comments (with copy to psa@ansi.org) to: Same

### ASTM (ASTM International)

#### Revision

BSR/ASTM E2587-201x, Practice for Use of Control Charts in Statistical Process Control (revision of ANSI/ASTM E2587-2012)

http://www.astm.org/ANSI\_SA

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org

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

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

#### Revision

BSR/ASTM E2655-201x, Guide for Reporting Uncertainty of Test Results and Use of the Term Measurement Uncertainty in ASTM Test Methods (revision of ANSI/ASTM E2655-2008)

http://www.astm.org/ANSI\_SA

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org

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

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

#### Revision

BSR/ASTM E2709-201x, Practice for Demonstrating Capability to Comply with an Acceptance Procedure (revision of ANSI/ASTM E2709-2012)

http://www.astm.org/ANSI\_SA Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org Send comments (with copy to psa@ansi.org) to: Same

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

#### Revision

BSR/ASTM E2935-201x, Practice for Conducting Equivalence Testing in Laboratory Applications (revision of ANSI/ASTM E2935-2013)

http://www.astm.org/ANSI\_SA

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org

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

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

#### Revision

BSR/ASTM F963-201x, Consumer Safety Specification for Toy Safety (revision of ANSI/ASTM F963-2011) http://www.astm.org/ANSI\_SA Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org Send comments (with copy to psa@ansi.org) to: Same

#### New Standard

BSR ATIS 0600015.08-201x, Small Networking Devices Efficiency Standard (new standard)

This document specifies the definition of router and Ethernet switch products based on their position in a network, as well as a methodology to calculate the Telecommunication Energy Efficiency Ratio (TEER). The standard will also provide requirements for how equipment vendors shall respond to a TEER request based on a specific application description by making use of relevant data from internal and independent test reports.

Single copy price: \$60.00

Obtain an electronic copy from: kconn@atis.org

Order from: Kerrianne Conn, (202) 434-8841, kconn@atis.org

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

## ATIS (Alliance for Telecommunications Industry Solutions)

#### Reaffirmation

BSR ATIS 1000006-2005 (R201x), Signalling Systems No. 7 (SS7) -Emergency Telecommunications Service (ETS) (reaffirmation of ANSI ATIS 1000006-2005 (R2010))

This document builds upon the High Probability of Completion (HPC) Network Capability as described in T1.631-1993 (R1999). The ETS service is expanded to address bearer networks and the ITU-T Recommendation E.106, International Emergency Preference Scheme for Disaster Relief Operations (IEPS).

Single copy price: \$205.00

Obtain an electronic copy from: kconn@atis.org

Order from: Kerrianne Conn, (202) 434-8841, kconn@atis.org

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

## ATIS (Alliance for Telecommunications Industry Solutions)

#### Reaffirmation

BSR ATIS 1000034-2010 (R201x), Next Generation Network (NGN): Security Mechanisms and Procedures (reaffirmation of ANSI ATIS 1000034 -2010)

This standard describes some security mechanisms that can be used to fulfill the requirements described in ATIS 1000029.2008 and specifies the suite of options for each selected mechanism. Specifically, this standard describes identification, authentication and authorization mechanisms; then discusses transport security for signaling and OAMP, and media security. It then describes audit-trail-related mechanisms and finally describes the provisioning.

Single copy price: \$220.00

Obtain an electronic copy from: kconn@atis.org

Order from: Kerrianne Conn, (202) 434-8841, kconn@atis.org

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

## ATIS (Alliance for Telecommunications Industry Solutions)

#### Reaffirmation

BSR ATIS 1000110-1999 (R201x), Signaling System No.7, General Information (reaffirmation of ANSI ATIS 1000110-1999 (R2010))

This standard is based on the 1988 Blue Book specification of Signaling System No. 1 (SS#7) for international use issued by the CCITT Study Group XI (Vol. VI Fascicles VI.7 and VI.8) and is intended to be generally compatible with that standard. It has been appropriately modified for use within and between U.S. networks to meet the anticipated needs and applications of those entities.

Single copy price: \$275.00

Obtain an electronic copy from: kconn@atis.org

Order from: Kerrianne Conn, (202) 434-8841, kconn@atis.org

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

## ATIS (Alliance for Telecommunications Industry Solutions)

#### Reaffirmation

BSR ATIS 1000111-2005 (R201x), Signalling System Number 7 (SS7) -Message Transfer Part (MTP) (reaffirmation of ANSI ATIS 1000111-2005 (R2010))

The overall objective of the SS7 Message Transfer Part (MTP) is to provide an internationally standardized general purpose common channel signaling system that provides a reliable means of transfer of information in correct sequence and without loss or duplication.

Single copy price: \$590.00

Obtain an electronic copy from: kconn@atis.org

Order from: Kerrianne Conn, (202) 434-8841, kconn@atis.org

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

## ATIS (Alliance for Telecommunications Industry Solutions)

#### Reaffirmation

BSR ATIS 1000112-2005 (R201x), Signaling System Number 7 (SS7) -Signaling Connection Control Part (SCCP) (reaffirmation of ANSI ATIS 1000112-2005 (R2010))

This recommendation contains a general description for the services provided from the Message Transfer Part (MTP) of Signaling System Number 7 (SS7), the functions within the Signaling Connection Control Part (SCCP), and the resultant services provided for the users of the SCCP.

Single copy price: \$590.00

Obtain an electronic copy from: kconn@atis.org

Order from: Kerrianne Conn, (202) 434-8841, kconn@atis.org

#### Reaffirmation

BSR ATIS 1000116-2000 (R201x), Signalling System Number 7 (SS7) - Operations, Maintenance, and Administration Part (OMAP) (reaffirmation of ANSI ATIS 1000116-2000 (R2010))

This standard is based on the 1988 Blue Book Recommendations Q.791 and Q.795 of SS7 for international use issued by the CCITT Study Group XI (Vol. VI, Fascicles VI.7 and VI.8) and is intended to be compatible with that standard. It has been modified for use within and between U.S. Networks to meet the anticipated needs and applications of those entities. In general, the modifications fall into two categories: (1) The specification of options designated by the CCITT for national use and (2) Extensions to the 1988 protocol to provide for new applications of the SS#7 protocol. This is in accordance with the current and projected ITU-T activity.

Single copy price: \$470.00

Obtain an electronic copy from: kconn@atis.org

Order from: Kerrianne Conn, (202) 434-8841, kconn@atis.org

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

## ATIS (Alliance for Telecommunications Industry Solutions)

#### Reaffirmation

BSR ATIS 1000118-1992 (R201x), SS7 - Intermediate Signaling Network Identification (ISNI) (reaffirmation of ANSI ATIS 1000118-1992 (R2010))

The Intermediate Signaling Network Identification (ISNI) capability allows an application process in the origination network to specify intermediate signaling network(s) for non-circuit-associated signaling messages, or to notify an application process in the destination network about such intermediate signaling network(s), or to do both. ISNI 5 be invoked by a variety of services.

Single copy price: \$145.00

Obtain an electronic copy from: kconn@atis.org

Order from: Kerrianne Conn, (202) 434-8841, kconn@atis.org

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

# ATIS (Alliance for Telecommunications Industry Solutions)

#### Reaffirmation

BSR ATIS 1000619-1992 (R201x), Integrated Services Digital Network (ISDN) - Multi-Level Precedence and Preemption (MLPP) (reaffirmation of ANSI ATIS 1000619-1992 (R2010))

This standard is one of a series that defines and describes service capabilities within the context of an integrated services digital network (ISDN). This service capability 5 be made available on a demand or subscription arrangement. The interaction of this service capability with other service capabilities defined in other American National Standards is also included. The purpose of this standard is to allow maximum compatibility among network- and user-owned telecommunications equipments in order to increase the attractiveness and usefulness of ISDN-based capabilities.

Single copy price: \$330.00

Obtain an electronic copy from: kconn@atis.org

Order from: Kerrianne Conn, (202) 434-8841, kconn@atis.org

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

### ATIS (Alliance for Telecommunications Industry Solutions)

#### Reaffirmation

BSR ATIS 1000628-2000 (R201x), Emergency Calling Service (reaffirmation of ANSI ATIS 1000628-2000 (R2010))

This standard specifies the capabilities required to provide the network routing and transfer features associated with emergency service calls. Routing, Bridging, and Transfer of Emergency Service Calls (RBTESC) allows emergency service calls to be completed through the network to an appropriate emergency service attendant, and to provide the emergency service attendant with the ability to bridge to any other attendant in the emergency serving area with full feature functionality.

Single copy price: \$175.00

Obtain an electronic copy from: kconn@atis.org

Order from: Kerrianne Conn, (202) 434-8841, kconn@atis.org

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

## ATIS (Alliance for Telecommunications Industry Solutions)

#### Reaffirmation

BSR ATIS 1000628.a-2001 (R201x), ECS-Connection and Ring Back Addendum (reaffirmation of ANSI ATIS 1000628.a-2001 (R2010))

This addendum to ATIS 1000628.2000 (R2005) specifies the use of the Connection Hold network capability by the Emergency Calling Service (ECS) to support ECS call hold and ring back. This addendum also specifies the TCAP messages exchanged between a switching node routing ECS calls and a Selective Routing Database (SRDB) that contains information determining the PSAP that should receive the emergency calls originating from a given caller or calling location.

Single copy price: \$145.00

Obtain an electronic copy from: kconn@atis.org

Order from: Kerrianne Conn, (202) 434-8841, kconn@atis.org

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

## ATIS (Alliance for Telecommunications Industry Solutions)

#### Reaffirmation

BSR ATIS 1000631-2005 (R201x), Signaling Systems No. 7 (SS7) - High Probability of Completion (HPC) Network Capability (reaffirmation of ANSI ATIS 1000631-2005 (R2010))

The Office of the Manager, National Communications Systems (OMNCS), tasked by directives from the White House to ensure that a survivable and enduring National Security and Emergency Preparedness (NS/EP) telecommunications capability is available during national emergencies has endorsed the development and adoption of a standard to support increased call completion capabilities for critical users. The High Probability of Completion (HPC) network capability would be applied during the call setup of NS/EP calls by providing for an identifier for those calls on the SS7 network protocol

Single copy price: \$60.00

Obtain an electronic copy from: kconn@atis.org

Order from: Kerrianne Conn, (202) 434-8841, kconn@atis.org

#### Reaffirmation

BSR ATIS 1000635-1999 (R201x), Broadband ISDN-ATM Adaptation Layer Type 5 Common Part Functions and Specifications (reaffirmation of ANSI ATIS 1000635-1999 (R2010))

This standard references the complete text of ITU-T (formerly CCITT) AAL Type 5, Recommendation text for section 6 of I.363, 1993. This standard describes a protocol of the Common Part of the ATM Adaptation Layer type 5 to support Variable Bit Rate (VBR) services.

Single copy price: \$60.00

Obtain an electronic copy from: kconn@atis.org

Order from: Kerrianne Conn, (202) 434-8841, kconn@atis.org

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

## ATIS (Alliance for Telecommunications Industry Solutions)

#### Reaffirmation

BSR ATIS 1000636-1999 (R2010), B-ISDN Signaling ATM Adaptation Layer (SAAL) -Overview Description (reaffirmation of ANSI ATIS 1000636-1999 (R2010))

This standard briefly describes the various components which make up the AAL functions necessary to support signaling (SAAL). It is intended to serve as a guide to all other standards required by a user who intends to construct an AAL for the purpose of signaling

Single copy price: \$60.00

Obtain an electronic copy from: kconn@atis.org

Order from: Kerrianne Conn, (202) 434-8841, kconn@atis.org

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

## ATIS (Alliance for Telecommunications Industry Solutions)

### Reaffirmation

BSR ATIS 1000637-1999 (R201x), B-ISDN ATM Adaptation Layer-Service Specific Connection Oriented Protocol (SSCOP) (reaffirmation of ANSI ATIS 1000637-1999 (R2010))

The intent of this standard is to provide a new protocol specification that can be used in the B-ISDN ATM Adaptation Layer (AAL). This protocol, called the Service Specific Connection Oriented Protocol (SSCOP), provides assured data delivery between AAL connection endpoints.

Single copy price: \$60.00

Obtain an electronic copy from: kconn@atis.org

Order from: Kerrianne Conn, (202) 434-8841, kconn@atis.org

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

### ATIS (Alliance for Telecommunications Industry Solutions)

#### Reaffirmation

BSR ATIS 1000638-1999 (R201x), B-ISDN ATM Adaptation Layer-Service Specific Coordination Function for Support of Signaling at the User-to-Network Interface (SSCF at the UNI) (reaffirmation of ANSI ATIS 1000638 -1999 (R2010))

The intent of this standard is to provide a function which is part of the ATM Adaptation Layer for the support of signaling (SAAL) at the UNI of the B-ISDN. This function is used to map the service of the Service Specific Connection Oriented Protocol (SSCOP) of the AAL to the needs of layer 3 protocols for access signaling across the UNI (e.g., Q.2931). This function is called Service Specific Coordination Function (SSCF) for signaling at the UNI.

Single copy price: \$60.00

Obtain an electronic copy from: kconn@atis.org

Order from: Kerrianne Conn, (202) 434-8841, kconn@atis.org

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

# ATIS (Alliance for Telecommunications Industry Solutions)

#### Reaffirmation

BSR ATIS 1000644-1995 (R201x), Broadband ISDN - Meta-Signalling Protocol (reaffirmation of ANSI ATIS 1000644-1995 (R2010))

his standard defines the B-ISDN meta-signalling protocol (Version 1) that is used to establish and maintain user-network signalling connections that are applicable for multipoint configurations at the Sb or Tb reference points. Single copy price: \$30.00

Obtain an electronic copy from: kconn@atis.org

Order from: Kerrianne Conn, (202) 434-8841, kconn@atis.org

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

## ATIS (Alliance for Telecommunications Industry Solutions)

#### Reaffirmation

BSR ATIS 1000646-2003 (R201x), Network and Customer Installation Interfaces - Broadband ISDN: Common Criteria (reaffirmation of ANSI ATIS 1000646-2003 (R2010))

This standard is a revision of the common criteria for broadband ISDN in T1.646-1995 and replaces the relevant clauses of the standard in their entirety. This standard provides NI compatibility information and is not meant to be an equipment specification. Information and requirements specific to particular transmission technologies has been removed to standard associated with those technologies.

Single copy price: \$110.00

Obtain an electronic copy from: kconn@atis.org

Order from: Kerrianne Conn, (202) 434-8841, kconn@atis.org

#### Reaffirmation

BSR ATIS 1000647-1995 (R201x), Integrated Services Digital Network ISDN-Conference Calling Supplementary Service (reaffirmation of ANSI ATIS 1000647-1995 (R2010))

This standard is one of a series, which defines and describes supplementary services within the context of an Integrated Services Digital Network (ISDN). The interaction of this services with other ISDN services is also included.

Single copy price: \$220.00

Obtain an electronic copy from: kconn@atis.org

Order from: Kerrianne Conn, (202) 434-8841, kconn@atis.org

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

# ATIS (Alliance for Telecommunications Industry Solutions)

### Reaffirmation

BSR ATIS 1000647.a-1998 (R201x), Integrated Services Digital Network (ISDN) - Conference Calling Supplementary Service-Operations Across Multiple Interfaces (reaffirmation of ANSI ATIS 1000647.a-1998 (R2010))

Supplement provides enhancements to Conference Calling to expand and improve the applicability of the ISDN Conference Calling service.

Single copy price: \$30.00

Obtain an electronic copy from: kconn@atis.org

Order from: Kerrianne Conn, (202) 434-8841, kconn@atis.org

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

## ATIS (Alliance for Telecommunications Industry Solutions)

#### Reaffirmation

BSR ATIS 1000650-1995 (R201x), ISDN - Usage of the Cause Information Element in Digital Subscriber Signaling System Number 1 (DSS1) (reaffirmation of ANSI ATIS 1000650-1995 (R2010))

This standard defines the usage, format, and encoding of the cause information element within the context of the Digital Subscriber Signaling System Number 1 (DSS1) of an Integrated Services Digital Network (ISDN). It also defines the meaning of specific causes, and the usage of the location and diagnostic fields.

Single copy price: \$145.00

Obtain an electronic copy from: kconn@atis.org

Order from: Kerrianne Conn, (202) 434-8841, kconn@atis.org

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

### ATIS (Alliance for Telecommunications Industry Solutions)

#### Reaffirmation

BSR ATIS 1000653-1996 (R201x), Integrated Services Digital Network (ISDN) - Call Park Supplementary Service (reaffirmation of ANSI ATIS 1000653-1996 (R2010))

This standard specifies the service capabilities of the Call Park service within the context of an Integrated Services Digital Network (ISDN). Call Park is a Circuit-Switched service that allows a user to interrupt a voice or voice-band data communication on an existing call, and then re-establish communications from the same or different terminal equipment within the same Call Park subscriber group.

Single copy price: \$175.00

Obtain an electronic copy from: kconn@atis.org

Order from: Kerrianne Conn, (202) 434-8841, kconn@atis.org

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

### ATIS (Alliance for Telecommunications Industry Solutions)

#### Reaffirmation

BSR ATIS 1000653.a-1998 (R201x), Integrated Services Digital Network (ISDN) - Call Park Supplementary Service - Generic Procedures for the Control of ISDN Supplementary Services, Clarification for Number Identification (reaffirmation of ANSI ATIS 1000653.a-1998 (R2010))

This supplement to American National Standard for Telecommunications -Integrated Services Digital Network (ISDN) - Call Park Supplementary Service, ATIS 1000653, revised the standard to improve and clarify the standard based on related advances in other standards bodies.

Single copy price: \$30.00

Obtain an electronic copy from: kconn@atis.org

Order from: Kerrianne Conn, (202) 434-8841, kconn@atis.org

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

## ATIS (Alliance for Telecommunications Industry Solutions)

#### Reaffirmation

BSR ATIS 1000661-2000 (R201x), Signaling System Number 7 (SS7) -Release to Pivot (RTP) (reaffirmation of ANSI ATIS 1000661-2000 (R2010))

The Release To Pivot (RTP) network capability permits an SS7 Signalling Point that has received a call from another Node, and has determined the call should be connected to a Destination Node other than itself, to have the connection established from a Node earlier in the call path. RTP functionality is shared between the Release Node and the Pivot Node. The RTP capability 5 be invoked by an end-user service or other network capability on a per-call basis.

Single copy price: \$110.00

Obtain an electronic copy from: kconn@atis.org

Order from: Kerrianne Conn, (202) 434-8841, kconn@atis.org Send comments (with copy to psa@ansi.org) to: Same

#### Reaffirmation

BSR ATIS 1000668-1999 (R201x), Signaling System Number 7 (SS7) -Facility Request to Pivot (FRP) (reaffirmation of ANSI ATIS 1000668-1999 (R2010))

The Facility Request to Pivot (FRP) network capability permits an ISUPcapable SS7 Signalling Point that has received a call from another ISUPcapable node, and has determined that the call should be connected to a Destination node other than itself, to have the connection established from a node earlier in the call path. FRP functionality is shared between the Request and Pivot nodes.

Single copy price: \$145.00

Obtain an electronic copy from: kconn@atis.org

Order from: Kerrianne Conn, (202) 434-8841, kconn@atis.org

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

# ATIS (Alliance for Telecommunications Industry Solutions)

#### Reaffirmation

BSR ATIS 1000669-1999 (R201x), Signalling System Number 7 (SS7) -Intermediate Network Selection (INS) (reaffirmation of ANSI ATIS 1000669 -1999 (R2010))

This standard allows an application process in the origination network to specify a single intermediate signalling network for non-circuit-associated signalling messages. This network capability also includes functionality that 5 be used to route non-circuit-associated messages in a number portability environment.

Single copy price: \$145.00

Obtain an electronic copy from: kconn@atis.org

Order from: Kerrianne Conn, (202) 434-8841, kconn@atis.org

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

## ATIS (Alliance for Telecommunications Industry Solutions)

#### Reaffirmation

BSR ATIS 1000671-2000 (R201x), Signaling System Number 7 (SS7) -Carrier Service Provider Identification (CSPI) (reaffirmation of ANSI ATIS 1000671-2000 (R2010))

Carrier Service Provider Identification (CSPI) information is intended to identify to intermediate switches all presubscribed carriers associated with a calling party. Identifiable carrier service providers include the preferred intraLATA toll carrier, the preferred interLATA carrier, and the international carrier. Other carrier types 5 be included as the need arises.

Single copy price: \$110.00

Obtain an electronic copy from: kconn@atis.org

Order from: Kerrianne Conn, (202) 434-8841, kconn@atis.org

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

### ATIS (Alliance for Telecommunications Industry Solutions)

#### Reaffirmation

BSR ATIS 1000672-2000 (R201x), Bearer Independent Call Control (BICC) (reaffirmation of ANSI ATIS 1000672-2000 (R2010))

This standard describes the adaptation o the narrowband ISDN User Part (ISUP) for the support of narrowband ISDN services independent of the bearer technology and signalling message transport technology used. Single copy price: \$330.00

Obtain an electronic copy from: kconn@atis.org

Order from: Kerrianne Conn, (202) 434-8841, kconn@atis.org Send comments (with copy to psa@ansi.org) to: Same

### AWWA (American Water Works Association)

#### Revision

BSR/AWWA B306-201x, Aqua Ammonia (Liquid Ammonium Hydroxide) (revision of ANSI/AWWA B306-2007)

This standard describes aqua ammonia (liquid ammonium hydroxide) for use in the treatment of potable water, wastewater, or reclaimed water.

Single copy price: \$20.00

Obtain an electronic copy from: vdavid@awwa.org

Order from: Paul Olson, (303) 347-6178, polson@awwa.org; vdavid@awwa.org

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

### AWWA (American Water Works Association)

#### Revision

BSR/AWWA C216-201x, Heat-Shrinkable Cross-Linked Polyolefin Coatings for Steel Water Pipe and Fittings (revision of ANSI/AWWA C216-2007)

This standard describes the material, application, and field-procedure requirements for protective exterior coatings consisting of heat-shrinkable, cross-linked polyolefin coatings. ANSI/AWWA C216 also describes the application of protective exterior coatings to special sections, connections, and fittings to be used in underground and underwater steel pipelines.

Single copy price: \$20.00

Obtain an electronic copy from: vdavid@awwa.org

Order from: Paul Olson, (303) 347-6178, polson@awwa.org; vdavid@awwa.org

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

### AWWA (American Water Works Association)

#### Supplement

BSR/AWWA C560a-201x, Cast Iron Slide Gates (supplement to ANSI/AWWA C560-2014)

This addendum describes the clarification of the requirements for the manufacture, design, installation and delivery of a cast iron slide gate. Single copy price: \$20.00

Obtain an electronic copy from: vdavid@awwa.org

Order from: Paul Olson, (303) 347-6178, polson@awwa.org; vdavid@awwa. org

### B11 (B11 Standards, Inc.)

#### New Standard

BSR B11.26-201x, Functional Safety for Equipment (Electrical/Fluid Power Control Systems) - Application of ISO 13849 - General Principles for Design (new standard)

This American National Standard provides guidance in understanding and implementing safety-related control functions (functional safety) as they relate to electrical, electronic, pneumatic, hydraulic components and systems.

Informative Notes: (a) This document does not cover ISO 13829-2 -Validation; (b) The terminology used in this standard may not be used consistently throughout the industry, but this standard does represent concepts that are important when using and designing safety-related control systems; (c) This document is not intended to address programmable electronic systems/programmable electronic devices (PES/PED). (See ANSI B11.TR4.)

Single copy price: \$175.00

Obtain an electronic copy from: dfelinski@b11standards.org

Order from: David Felinski, (832) 446-6999, dfelinski@b11standards.org

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

## BHMA (Builders Hardware Manufacturers Association)

### New Standard

BSR/BHMA A156.39-201x, Residential Locksets and Latches (new standard)

This Standard establishes performance requirements for bored residential locksets and latches, and includes durability, security, and finish tests. Residential locksets and latches are generally used for single-family homes and multifamily dwellings.

Single copy price: 36.00 (Nonmembers)/\$18.00 (BHMA Members)

Order from: Emily Brochstein, (212) 297-2126, ebrochstein@kellencompany. com

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

## BHMA (Builders Hardware Manufacturers Association)

## New Standard

BSR/BHMA A156.40-201x, Residential Deadbolts (new standard)

ANSI/BHMA A156.40 establishes requirements for residential deadbolts and deadlatches, and includes durability, security, and finish tests. Residential deadbolt and deadlatches are generally used for single-family homes and multifamily dwellings.

Single copy price: 36.00 (Nonmembers)/\$18.00 (BHMA Members)

Order from: Emily Brochstein, (212) 297-2126, ebrochstein@kellencompany. com

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

# BHMA (Builders Hardware Manufacturers Association) *Revision*

BSR/BHMA A156.32-201x, Integrated Door Opening Assemblies (revision of ANSI/BHMA A156.32-2008)

This Standard establishes requirements for Integrated Door Opening Assemblies with steel, wood, and fiberglass reinforced doors that are supplied to the customer with integral hardware. At a minimum, they shall include a door, frame, hanging device, and latching mechanism.

Single copy price: 36.00 (Nonmembers)/\$18.00 (BHMA Members)

Order from: Emily Brochstein, (212) 297-2126, ebrochstein@kellencompany. com

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

## **CEA (Consumer Electronics Association)**

### Revision

BSR/CEA 2010-B-201x, Standard Method of Measurement for Subwoofers (revision and redesignation of ANSI/CEA 2010-A-2012)

This standard defines a method for measuring the audio performance of powered and passive subwoofers. The revision will include adding the maximum continuous SPL output capability measurement, as well as providing a reporting of the combined SPL (continuous & peak) tempered with a defined crest factor signal.

Single copy price: \$82.00

Obtain an electronic copy from: standards@ce.org

Order from: standards@ce.org

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

## DMSC, Inc. (Dimensional Metrology Standards Consortium, Inc.)

### New Standard

BSR/DMSC QIF Part 3-201x, Quality Information Framework - Complete and Accurate Model Based Definition (CAMBD) information model and XML schema files v2.0 (new standard)

A complete and accurate 3D product definition with semantic product manufacturing information (PMI) providing a cost-effective exchange is needed to satisfy many CAD-to-model-based metrology use cases.

Single copy price: Free

Obtain an electronic copy from: bsquier@dmis.org

Send comments (with copy to psa@ansi.org) to: Bailey Squier <br/> <br/> chailey Squier @dmis.org>

# DMSC, Inc. (Dimensional Metrology Standards Consortium, Inc.)

### New Standard

BSR/DMSC QIF Part 5-201x, Quality Information Framework - QIF-Resources information model and XML schema files v2.0 (new standard)

The standard is an information model that can be used to describe resources, both hardware and software, used in manufacturing quality measurement. The resource descriptions can be used to prescribe required resources, or to describe resources used, for inspection of products. The standard also contains XML schema files that implement the information model and that describe the format for exchange files.

Single copy price: Free

Obtain an electronic copy from: bsquier@dmis.org

Send comments (with copy to psa@ansi.org) to: Bailey Squier <br/> <br/> <br/> squier@dmis.org>

## DMSC, Inc. (Dimensional Metrology Standards Consortium, Inc.)

#### New Standard

BSR/DMSC QIF Part 6-201x, Quality Information Framework - QIF-Rules information model and XML schema files v2.0 (new standard)

The standard describes an information model used to specify required measurement practices to be used in manufacturing dimensional metrology. The standard also contains XML schema files that implement the information model and that describe the format for rules exchange data packages.

Single copy price: Free

Obtain an electronic copy from: bsquier@dmis.org

Send comments (with copy to psa@ansi.org) to: Bailey Squier <br/>
<br/>
squier@dmis.org>

## DMSC, Inc. (Dimensional Metrology Standards Consortium, Inc.)

### New Standard

BSR/DMSC QIF Part 8-201x, Quality Information Framework - QIF-Statistics information model and XML schema files v2.0 (new standard)

XML format for quality measurement statistical data of dimensional and nondimensional entities, including numerical and non-numerical quantities. QIF-Statistics includes references to raw measurement results, traceability, plans and model information. It includes summary statistical values (capability, standard deviation, maximum, minimum, etc.), description of the control and sampling plan, corrective action plan against multiple quality study types (e. g., capability, production, gage R&R).

Single copy price: Free

Obtain an electronic copy from: bsquier@dmis.org

Send comments (with copy to psa@ansi.org) to: Bailey Squier <br/>
<br/>
squier@dmis.org>

## DMSC, Inc. (Dimensional Metrology Standards Consortium, Inc.)

#### Revision

BSR/DMSC QIF Part 1-2014 and BSR/DMSC QIF Part 2-2014, Quality Information Framework - QIF Library Information model and XML schema files V2.0 (revision of ANSI/DMSC QIF Part 1, v1.0 and DMSC-QIF 1.0, Part 2, v1.0-2013)

QIF is a suite of interface specifications defining quality measurement information to, from, and within Computer-Aided Quality (CAQ) systems. The QIF Library contains data elements common to the major QIF application areas of Model Based Design, Plans, Resources, Rules, Results, and Statistics. It includes geometric dimension and tolerance information, including measurement nominals, tolerances, geometric features, geometric dimensions, and quality control frames.

Single copy price: Free

Obtain an electronic copy from: bsquier@dmis.org

Send comments (with copy to psa@ansi.org) to: Bailey Squier <br/>
<br/>
squier@dmis.org>

## DMSC, Inc. (Dimensional Metrology Standards Consortium, Inc.)

#### Revision

BSR/DMSC QIF Part 4-2014, Quality Information Framework - QIF-Plans information model and XML schema files v2.0 (revision and redesignation of ANSI/DMSC QIF V 1.0-2013)

The scope is all information required to generate part measurement programs on any quality measurement device. Plans include: dimensional part information, e.g., geometric features, measurement features, dimensions, and tolerances, part characteristics, nominals and tolerances, CAD entity relationships, measurement rules, and work instructions.

Single copy price: Free

Obtain an electronic copy from: bsquier@dmis.org

Send comments (with copy to psa@ansi.org) to: Bailey Squier <br/>
<br/>
squier@dmis.org>

## DMSC, Inc. (Dimensional Metrology Standards Consortium, Inc.)

#### Revision

BSR/DMSC QIF Part 7-201x, Quality Information Framework - QIF-Results information model and XML schema files v2.0 (revision and redesignation of ANSI/DMSC QIF V 1.0-2013)

Format for quality measurements of dimensional and non-dimensional entities, including numerical and non-numerical quantities. Measurement results include raw measurement values and derived results. Results also include description of the algorithmic means for calculating derived results. Nominal target values are included to allow reanalysis. Traceability information including shift, equipment operator's name, the ID and feature of the item measure, date and time of the measurement, etc.

Single copy price: Free

Obtain an electronic copy from: bsquier@dmis.org

Send comments (with copy to psa@ansi.org) to: Bailey Squier <br/>
<br/>
squier@dmis.org>

## HL7 (Health Level Seven)

#### New Standard

BSR/HL7 SAIF CANON, R2-201x, HL7 Service-Aware Interoperability Framework: Canonical Definition Specification, Release 2 (new standard)

The Service Aware Interoperability Framework (SAIF) provides consistency between all artifacts, enables a standardized approach to Enterprise Architecture development and implementation, and provides a way to measure the consistency. SAIF is the framework that is required to rationalize interoperability of standards. SAIF is an architecture for achieving interoperability, but it is not a whole-solution design for Enterprise architecture management. This document describes a canonical form of Service Aware Interoperability Framework (SAIF) which can be adapted to an organization's implementation requirements through the production of a SAIF implementation Guide.

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

Obtain an electronic copy from: Karenvan@HL7.org

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

### HL7 (Health Level Seven)

#### Revision

BSR/HL7 Arden V2.10-201x, Health Level Seven Arden Syntax for Medical Logic Systems, Version 2.10 (revision and redesignation of ANSI/HL7 Arden V2.9-2013)

This is the next version of the Arden Syntax, offering incremental improvements over version 2.9. The key substantive changes from version 2.9 will be the update of the XML representation of the Syntax so that it fully reflects all changes through the latest version and its migration from the current non-mandatory appendix to the normative part of the document, thus facilitating representation of MLMs in the original Arden and its XML equivalent.

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

Obtain an electronic copy from: Karenvan@HL7.org

Order from: Karen Van Hentenryck, (734) 677-7777, Karenvan@HL7.org Send comments (with copy to psa@ansi.org) to: Same

## INMM (ASC N14) (Institute of Nuclear Materials Management)

#### Reaffirmation

BSR N14.33-2000 (R201x), Characterizing Damaged Spent Nuclear Fuel for the Purpose of Storage and Transport (reaffirmation of ANSI N14.33-2005)

This standard defines terms related to dry storage and transport of damaged light water reactor (LWR) spent nuclear fuel. It establishes procedures for identifying, categorizing, and managing damaged fuel. The standard provides: (1) Methods for identifying and classifying damaged and undamaged spent nuclear fuel assemblies; (2) Preparation and handling requirements for damaged spent nuclear fuel assemblies for dry storage and transport; (3) Requirements for record keeping and quality assurance; and (4) Specifies the requirements for canning damaged fuel assemblies.

Single copy price: Free

Obtain an electronic copy from: N14Secretary@gmail.com

Order from: Ronald Natali, (435) 258-3730, N14Secretary@gmail.com

Send comments (with copy to psa@ansi.org) to: N14Secretary@gmail.com

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

### New National Adoption

INCITS/ISO/IEC 9797-1:2011, Information technology - Security techniques -Message Authentication Codes (MACs) - Part 1: Mechanisms using a block cipher (identical national adoption of ISO/IEC 9797-1:2011 and revision of INCITS/ISO/IEC 9797-1:1999 [R2009])

ISO/IEC 9797-1:2011 specifies six MAC algorithms that use a secret key and an n-bit block cipher to calculate an m-bit MAC. ISO/IEC 9797-1:2011 can be applied to the security services of any security architecture, process, or application.

Single copy price: \$180.00

Obtain an electronic copy from: www.incits.org

Order from: www.incits.org

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

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

#### New National Adoption

INCITS/ISO/IEC 12862:2011, Information technology - 120 mm (8,54 Gbytes per side) and 80 mm (2,66 Gbytes per side) DVD recordable disk for dual layer (DVD-R for DL) (identical national adoption of ISO/IEC 12862:2011 and revision of INCITS/ISO/IEC 12862:2009 [2009])

ISO/IEC 12862:2011 specifies the mechanical, physical and optical characteristics of a 120 mm and an 80 mm dual layer DVD recordable disk to enable the interchange of such disks. It specifies the quality of the pre-recorded, unrecorded and recorded signals, the format of the data, the format of the information zone, the format of the unrecorded zone, and the recording method, thereby allowing for information interchange by means of such disks. This disk is identified as a DVD recordable disk for dual layer (DVD-R for DL).

Single copy price: \$314.00

Obtain an electronic copy from: www.incits.org

Order from: www.incits.org

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

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

### Reaffirmation

INCITS/ISO/IEC 2382-5:1999 [R2014], Information technology - Vocabulary - Part 5: Representation of data (reaffirmation of INCITS/ISO/IEC 2382 -5:1999 [2009])

This part of ISO/IEC 2382 is intended to facilitate international communication in information technology. It presents, in two languages, terms and definitions of selected concepts relevant to the field of information technology and identifies relationships among the entries. In order to facilitate their translation into other languages, the definitions are drafted so as to avoid, as far as possible, any peculiarity attached to a language. This part of ISO/IEC 2382 defines concepts related to the representation of data, including types of representation, literals, numeration systems, and notation.

Single copy price: \$60.00

Obtain an electronic copy from: http://webstore.ansi.org

Order from: http://webstore.ansi.org

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

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

#### Reaffirmation

INCITS/ISO/IEC 7811-7-2004 [R2014], Identification cards - Recording technique - Part 7: Magnetic stripe - High coercivity, high density (reaffirmation of INCITS/ISO/IEC 7811-7:2004 [R2009])

ISO/IEC 7811-7(2004) is one of a series of International Standards describing the characteristics of identification cards. It is the purpose of ISO/IEC 7811-7 to provide criteria to which cards shall perform and to specify the requirements for such cards used for international interchange. It takes into consideration both human and machine aspects and states minimum requirements.

Single copy price: \$60.00

Obtain an electronic copy from: http://webstore.ansi.org

Order from: http://webstore.ansi.org

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

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

#### Reaffirmation

INCITS/ISO/IEC 11889-1:2009 [R2014], Information technology - Trusted Platform Module - Part 1: Overview (reaffirmation of INCITS/ISO/IEC 11889 -1:2009 [2009])

ISO/IEC 11889 defines the Trusted Platform Module (TPM), a device that enables trust in computing platforms in general. ISO/IEC 11889-1:2009 is an overview of the TPM. It describes the TPM and how it fits into the trusted platform. ISO/IEC 11889-1:2009 describes trusted platform concepts such as the trust boundary, transitive trust, integrity measurement, and integrity reporting.

Single copy price: \$50.00

Obtain an electronic copy from: www.incits.org

Order from: www.incits.org

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

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

#### Reaffirmation

INCITS/ISO/IEC 11889-2:2009 [R2014], Information technology - Trusted Platform Module - Part 2: Design Principles (reaffirmation of INCITS/ISO/IEC 11889-2:2009 [2009])

ISO/IEC 11889 defines the Trusted Platform Module (TPM), a device that enables trust in computing platforms in general. ISO/IEC 11889-2:2009 defines the principles of TPM operation. These include base operating modes, cryptographic algorithms and key sizes for the algorithms, basic interoperability requirements, basic protocols, and the use of the protocols, and use of TPM resources.

Single copy price: \$147.50

Obtain an electronic copy from: www.incits.org

Order from: www.incits.org

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

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

#### Reaffirmation

INCITS/ISO/IEC 11889-3:2009 [R2014], Information technology - Trusted Platform Module - Part 3: Structures (reaffirmation of INCITS/ISO/IEC 11889 -3:2009 [2009])

ISO/IEC 11889 defines the Trusted Platform Module (TPM), a device that enables trust in computing platforms in general. ISO/IEC 11889-3:2009 defines the structures and constants that enable the interoperability between TPM implementations.

Single copy price: \$157.00

Obtain an electronic copy from: www.incits.org

Order from: www.incits.org

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

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

### Reaffirmation

INCITS/ISO/IEC 11889-4:2009 [R2014], Information technology - Trusted Platform Module - Part 4: Commands (reaffirmation of INCITS/ISO/IEC 11889-4:2009 [2009])

ISO/IEC 11889 defines the Trusted Platform Module (TPM), a device that enables trust in computing platforms in general. ISO/IEC 11889-4:2009 defines the commands, actions of the commands, and the parameters to the commands that provide the TPM functionality.

Single copy price: \$157.00

Obtain an electronic copy from: www.incits.org

Order from: www.incits.org

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

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

#### Reaffirmation

INCITS/ISO/IEC 24761:2009 [R2014], Information technology - Security techniques - Authentication context for biometrics (reaffirmation of INCITS/ISO/IEC 24761:2009 [2009])

ISO/IEC 24761:2009 specifies the structure and the data elements of Authentication Context for Biometrics (ACBio), which is used for checking the validity of the result of a biometric verification process executed at a remote site. ISO/IEC 24761:2009 allows any ACBio instance to accompany any data item that is involved in any biometric process related to verification and enrollment. The specification of ACBio is applicable not only to single modal biometric verification but also to multimodal fusion. ISO/IEC 24761:2009 specifies the cryptographic syntax of an ACBio instance.

Single copy price: \$99.50

Obtain an electronic copy from: www.incits.org

Order from: www.incits.org

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

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

#### Reaffirmation

INCITS/ISO/IEC 27011:2008 [R2014], Information technology - Security techniques - Information security management guidelines for telecommunications organizations based on ISO/IEC 27002 (reaffirmation of INCITS/ISO/IEC 27011:2008)

The scope of this Recommendation | International Standard is to define guidelines supporting the implementation of information security management in telecommunications organizations. The adoption of this Recommendation | International Standard will allow telecommunications organizations to meet baseline information security management requirements of confidentiality, integrity, availability, and any other relevant security property.

Single copy price: \$95.00

Obtain an electronic copy from: www.incits.org

Order from: www.incits.org

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

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

#### Revision

INCITS 410-201x. Information Technology - Identification Cards - Limited Use (LU), Proximity Integrated Circuit Card (PICC) (revision of INCITS 410:2006)

This standard provides a physical specification with similar electronic characteristics to Proximity Integrated Circuit Cards (PICCs), such as those specified within ISO/IEC 14443 Part-2 and -3. The Physical card thickness (finished card body) formats, are defined within this specification and may also have references to both ISO/IEC 7810-1:2012-1, ANSI-440 (Card Life Cycle) and ISO/IEC 15457 for thin flexible cards and other thickness dimensions as called out in this standard. Construction attributes, pertaining to the materials, functionality and environmental requirements, and the targeted use of these cards are also specified.

Single copy price: \$60.00

Obtain an electronic copy from: www.incits.org

Order from: www.incits.org

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

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

#### Withdrawal

INCITS/ISO/IEC TR 14516:2002 [2009], Information technology - Security techniques - Guidelines on the use and management of Trusted Third Party services (withdrawal of INCITS/ISO/IEC TR 14516:2002 [2009])

This Recommendation | Technical Report provides guidance for the use and management of TTPs, a clear definition of the basic duties and services provided, their description and their purpose, and the roles and liabilities of TTPs and entities using their services. It is intended primarily for system managers, developers, TTP operators and enterprise users to select those TTP services needed for particular requirements, their subsequent management, use and operational deployment, and the establishment of a Security Policy within a TTP. It is not intended to be used as a basis for a formal assessment of a TTP or a comparison of TTPs.

Single copy price: \$87.00

Obtain an electronic copy from: www.incits.org

Order from: www.incits.org

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

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

#### Withdrawal

INCITS/ISO/IEC TR 15446:2009 [2009], Information Technology - Security Techniques - Guide for the Production of Protection Profiles and Security Targets (withdrawal of INCITS/ISO/IEC TR 15446:2009 [2009])

ISO/IEC TR15446:2009 provides guidance relating to the construction of Protection Profiles (PPs) and Security Targets (STs) that are intended to be compliant with the third edition of ISO/IEC 15408. It is also applicable to PPs and STs compliant with Common Criteria Version 3.1, a technically identical standard published by the Common Criteria Management Board, a consortium of governmental organizations involved in IT security evaluation and certification.

Single copy price: \$126.00

Obtain an electronic copy from: www.incits.org

Order from: www.incits.org

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

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

#### Withdrawal

INCITS/ISO/IEC TR 19791:2006 [2009]. Information technology - Security techniques - Security assessment of operational systems (withdrawal of INCITS/ISO/IEC TR 19791:2006 [2009])

ISO/IEC TR 19791:2010 provides guidance and criteria for the security evaluation of operational systems. It provides an extension to the scope of ISO/IEC 15408 by taking into account a number of critical aspects of operational systems not addressed in ISO/IEC 15408 evaluation. The principal extensions that are required address evaluation of the operational environment surrounding the target of evaluation, and the decomposition of complex operational systems into security domains that can be separately evaluated.

Single copy price: \$157.00

Obtain an electronic copy from: www.incits.org

Order from: www.incits.org

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

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

### Withdrawal

INCITS/ISO/IEC TR-15443-1:2005 [2009], Information technology - Security techniques - Framework for IT security assurance - Part 1: Overview and Framework (withdrawal of INCITS/ISO/IEC TR-15443-1:2005 [2009])

ISO/IEC TR 15443-1:2012 defines terms and establishes an extensive and organised set of concepts and their relationships for understanding IT security assurance, thereby establishing a basis for shared understanding of the concepts and principles central to ISO/IEC TR 15443 across its user communities. It provides information fundamental to users of ISO/IEC TR 15443-2.

Single copy price: \$106.00

Obtain an electronic copy from: www.incits.org

Order from: www.incits.org

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

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

### Withdrawal

INCITS/ISO/IEC TR-15443-2:2005 [2009], Information technology - Security techniques - Framework for IT security assurance - Part 2: Assurance Methods (withdrawal of INCITS/ISO/IEC TR-15443-2:2005 [2009])

ISO/IEC TR 15443-2:2012 builds on the concepts presented in ISO/IEC TR 15443-1. It provides a discussion of the attributes of security assurance conformity assessment methods that contribute towards making assurance claims and providing assurance evidence to fulfill meeting the assurance requirements for a deliverable.

Single copy price: \$70.00

Obtain an electronic copy from: www.incits.org

Order from: www.incits.org

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

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

#### Withdrawal

INCITS/ISO/IEC TR-15443-3:2007 [2009], Information technology - Security techniques - Framework for IT security assurance - Part 3: Analysis of assurance methods (withdrawal of INCITS/ISO/IEC TR-15443-3:2007 [2009])

ISO/IEC TR 15443-3:2007 provides general guidance to an assurance authority in the choice of the appropriate type of international communications techology (ICT) assurance methods and to lay the framework for the analysis of specific assurance methods for specific environments.

Single copy price: \$180.00

Obtain an electronic copy from: www.incits.org

Order from: www.incits.org

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

## NCPDP (National Council for Prescription Drug Programs)

#### New Standard

BSR/NCPDP Benefit Integration Standard v10-201x, NCPDP Benefit Integration Implementation Guide Standard v10 (new standard)

The Benefit Integration Standard Implementation Guide supports the communication of accumulator data in a standard format via transactions that are used to facilitate the delivery and receipt of this information. These transactions provide administrative efficiencies and allow for an industry standard to be used to share accumulator data (such as deductible and out of pocket) between Benefit Partners to administer integrated benefits for a member.

Single copy price: \$200.00 (non-member)

Obtain an electronic copy from: kkrempin@ncpdp.org

Order from: Kittye Krempin, (512) 291-1356, kkrempin@ncpdp.org

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

## NCPDP (National Council for Prescription Drug Programs)

#### Revision

BSR/NCPDP FB v43-201x, NCPDP Formulary and Benefit Standard v43 -201x (revision and redesignation of ANSI/NCPDP FB v4.2-201x)

Formulary and Benefit Standard provides a standard means for pharmacy benefit payers (including health plans and Pharmacy Benefit Managers) to communicate formulary and benefit information to prescribers via technology vendor systems.

Single copy price: \$200.00 (non-member)

Obtain an electronic copy from: kkrempin@ncpdp.org

Order from: Kittye Krempin, (512) 291-1356, kkrempin@ncpdp.org

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

## NCPDP (National Council for Prescription Drug Programs)

#### Revision

BSR/NCPDP SC WG110062201xxx#, NCPDP SCRIPT Standard 201xxx# (revision and redesignation of ANSI/NCPDP SC WG110060201xxx#)

The standard provides general guidelines for developers of pharmacy or physician management systems who wish to provide prescription transmission functionality to their clients. The standard addresses the electronic transmission of new prescriptions, prescription refill requests, prescription fill status notifications, and cancellation notifications.

Single copy price: \$200.00 (non-member)

Obtain an electronic copy from: kkrempin@ncpdp.org

Order from: Kittye Krempin, (512) 291-1356, kkrempin@ncpdp.org Send comments (with copy to psa@ansi.org) to: Same

NCPDP (National Council for Prescription Drug Programs)

### Revision

BSR/NCPDP Specialized Standard WG110062201xxx#, NCPDP Specialized Standard 201xxx# (revision and redesignation of ANSI/NCPDP Specialized Standard WG110060201xxx#)

The NCPDP Specialized Standard will house transactions that are not eprescribing but are part of the NCPDP XML environment. The standard provides general guidelines for developers of systems who wish to provide business functionality of these transactions to their clients. The guide describes a set of transactions and the implementation of these transactions.

Single copy price: \$200.00 (non-member)

Obtain an electronic copy from: kkrempin@ncpdp.org

Order from: Kittye Krempin, (512) 291-1356, kkrempin@ncpdp.org

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

## **NECA (National Electrical Contractors Association)**

#### Revision

BSR/NECA 409-201X, Standard for Installing and Maintaining Dry-Type Transformers (revision of ANSI/NECA 409-2009)

This standard describes the installation and maintenance procedures for single- and three-phase general purpose dry-type distribution and power transformers and associated accessories rated 600 Volts AC or less, and 0.25 kVA or more. This publication applies to indoor and outdoor, ventilated and non-ventilated, two-winding transformers used for supplying power, heating, and lighting loads for commercial, institutional, and industrial use in nonhazardous locations both indoors and outdoors.

Single copy price: \$40.00

Obtain an electronic copy from: neis@necanet.org

Order from: Diana Brioso, (301) 215-4549, diana.brioso@necanet.org; neis@necanet.org

## NEMA (ASC C136) (National Electrical Manufacturers Association)

#### Revision

BSR C136.14-201x, Roadway and Area Lighting Equipment - Elliptically Shaped, Enclosed Side-Mounted Luminaires for Horizontal-Burning High-Intensity Discharge Lamps (revision of ANSI C136.14-2004 (R2009))

This standard covers dimensional, maintenance and light distribution features that permit the interchange of enclosed side-mounted luminaires for horizontal-burning high-intensity discharge lamps used in roadway and area lighting equipment. Luminaires of similar size, shape, and weight meeting the requirements of this standard may be used interchangeably within a system with assurance that they will fit the bracket arm, pole strength requirements will not change, light distribution will be similar and similar maintenance procedures can be used.

Single copy price: \$37.00

Obtain an electronic copy from: megan.hayes@nema.org

Order from: Megan Hayes, (703) 841-3285, megan.hayes@nema.org Send comments (with copy to psa@ansi.org) to: Same

# TAPPI (Technical Association of the Pulp and Paper Industry)

#### New Standard

BSR/TAPPI T 845 om-2014, Wet Pin Adhesion of Corrugated Board by Selective Separation (new standard)

This method measures the force required to separate the linerboard facings from the medium in corrugated board after the board has been immersed in water for a period of time. It may be used to evaluate the water-resistance properties or levels in water-resistant adhesive.

Single copy price: Free

Obtain an electronic copy from: standards@tappi.org

Order from: Charles Bohanan, (770) 209-7276, standards@tappi.org

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

## UL (Underwriters Laboratories, Inc.)

#### Reaffirmation

BSR/UL 22-2010 (R201X), Standard for Safety for Amusement and Gaming Machines (Proposal dated 9/5/14) (reaffirmation of ANSI/UL 22-2010)

These requirements cover electrical, electronic, and electromechanical commercial amusement and gaming machines and accessories that are intended to be used in accordance with the National Electrical Code, NFPA 70. Amusement and gaming machines as covered by this standard are intended for indoor use only, except that they will be investigated for outdoor use or use in a protected location if so designated by the manufacturer. These requirements do not cover coin-operated sound-recording and - reproducing machines or carnival rides.

Single copy price: Contact comm2000 for pricing and delivery options

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

Order from: comm2000

Send comments (with copy to psa@ansi.org) to: Linda Phinney, (408) 754 -6684, Linda.L.Phinney@ul.com

## UL (Underwriters Laboratories, Inc.)

### Reaffirmation

BSR/UL 1175-2010 (R201x), Standard for Buoyant Cushions (reaffirmation of ANSI/UL 1175-2010)

UL proposes a reaffirmation for ANSI approval for UL 1175. (NOTE: This standard was prematurely listed in the Call-for-Comment section of last week's issue of Standards Action. The correct closing date for orders and comments is October 20, 2014.)

Single copy price: Contact comm2000 for pricing and delivery options

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

Order from: comm2000

Send comments (with copy to psa@ansi.org) to: Betty Holthouser, (919) 549 -1896, betty.c.holthouser@ul.com

## UL (Underwriters Laboratories, Inc.)

#### Revision

BSR/UL 471-201x, Standard for Safety for Commercial Refrigerators and Freezers (revision of ANSI/UL 471-2013)

The following is being proposed: (1) Revisions to incorporate operating control requirements, protective control parameters, and safety critical functions; (2) Revisions for motors and motor overload protection; (3) Miscellaneous revisions including updated standard references, thermal equilibrium requirements, and removal of R-22 references; (4) Revisions to supplement SB - Refrigerators and freezers employing a flammable refrigerant in the refrigerating system; and (5) Motor capacitors and capacitors intended for connection directly across the line.

Single copy price: Contact comm2000 for pricing and delivery options

Obtain an electronic copy from: http://www.comm-2000.com Order from: comm2000

Send comments (with copy to psa@ansi.org) to: Jeff Prusko, (847) 664 -3416, jeffrey.prusko@ul.com

## UL (Underwriters Laboratories, Inc.)

#### Revision

BSR/UL 1034-201X, Standard for Safety for Burglary-Resistant Electric Locking Mechanisms (Proposal dated 9/5/14) (revision of ANSI/UL 1034 -2011)

Revised Electrical Transient Tests, Section 44.

Single copy price: Contact comm2000 for pricing and delivery options Obtain an electronic copy from: http://www.comm-2000.com

Order from: comm2000

Send comments (with copy to psa@ansi.org) to: Linda Phinney, (408) 754 -6684, Linda.L.Phinney@ul.com

## UL (Underwriters Laboratories, Inc.)

#### Revision

BSR/UL 2024-201x, Standard for Safety for Cable Routing Assemblies and Communications Raceways (revision of ANSI/UL 2024-2014)

The intent of this proposal is to update the requirements of UL 2024 to correlate with the requirements of NFPA 90A-2015.

Single copy price: Contact comm2000 for pricing and delivery options

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

Order from: comm2000

Send comments (with copy to psa@ansi.org) to: Derrick Martin, (408) 754 -6656, Derrick.L.Martin@ul.com

## **Comment Deadline: November 4, 2014**

## ANS (American Nuclear Society)

### Revision

BSR/ANS 8.10-201x, Criteria for Nuclear Criticality Safety Controls in Operations with Shielding and Confinement (revision of ANSI/ANS 8.10 -1983 (R2005))

This standard provides criteria that may be used for operations outside of nuclear reactors with 235U, 233U, 239Pu, and other fissile and fissionable materials in which shielding and confinement are provided for protection of personnel and the public, except for the assembly of these materials under controlled conditions (e.g., critical experiments).

Single copy price: \$20.00

Obtain an electronic copy from: scook@ans.org

Order from: Sue Cook, (708) 579-8210, orders@ans.org; scook@ans.org

Send comments (with copy to psa@ansi.org) to: Patricia Schroeder, (708) 579-8269, pschroeder@ans.org; kmurdoch@ans.org

## **Projects Withdrawn from Consideration**

An accredited standards developer may abandon the processing of a proposed new or revised American National Standard or portion thereof if it has followed its accredited procedures. The following projects have been withdrawn accordingly:

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

INCITS/ISO/IEC 2383-5:1999 [R2014], Information technology - Vocabulary - Part 5: Representation of data (reaffirmation of INCITS/ISO/IEC 2382 -5:1999 [2009])

## Notice of Withdrawn ANS by an ANSI-Accredited Standards Developer

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

## **ASTM (ASTM International)**

ANSI/ASTM D5000-2005, Practice for Evaluating Activity of Clay Elements Using a Side-Stream Sensor

## **ASTM (ASTM International)**

ANSI/ASTM F1772-1999 (R2005), Specification for Climbing Harnesses

## **ASTM (ASTM International)**

ANSI/ASTM F1774-1999 (R2005), Specification for Climbing and Mountaineering Carabiners

## **ASTM (ASTM International)**

ANSI/ASTM F1955-1998 (R2005), Test Method for Flammability of Sleeping Bags

## **ASTM (ASTM International)**

E1431-2004 - ISO/ASTM 51431, Practice for Dosimetry in Electron and Bremsstrahlung Irradiation Facilities for Food Processing

# **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.

#### ASA (ASC S3) (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

BSR/ASA S3/SC1.100-201x / BSR/ASA S12.100-201x, Methods to Define and Measure the Residual Sound in Protected Natural and Quiet Residential Areas (new standard)

Obtain an electronic copy from: asastds@acousticalsociety.org

#### BHMA (Builders Hardware Manufacturers Association)

Office:	355 Lexington Avenue
	15th Floor
	New York, NY 10017

Contact: Emily Brochstein

Phone: (212) 297-2126

Fax: (212) 370-9047

E-mail: ebrochstein@kellencompany.com

BSR/BHMA A156.32-201x, Integrated Door Opening Assemblies (revision of ANSI/BHMA A156.32-2008)

BSR/BHMA A156.39-201x, Residential Locksets and Latches (new standard)

BSR/BHMA A156.40-201x, Residential Deadbolts (new standard)

#### DMSC, Inc. (Dimensional Metrology Standards Consortium, Inc.)

Office:	1350 SW Alsbury Blvd
	#514
	Burleson, TX 76028-9219
Contact:	Bailey Squier
-	(017) 461 1000

Phone: (817) 461-1092 Fax: (682) 224-6201

- E-mail: bsquier@dmis.org
- BSR/DMSC QIF Part 1-2014 and BSR/DMSC QIF Part 2-2014, Quality Information Framework - QIF Library Information model and XML schema files V2.0 (revision of ANSI/DMSC QIF Part 1, v1.0 and DMSC-QIF 1.0, Part 2, v1.0-2013)

Obtain an electronic copy from: bsquier@dmis.org

BSR/DMSC QIF Part 3-201x, Quality Information Framework - Complete and Accurate Model Based Definition (CAMBD) information model and XML schema files v2.0 (new standard)

Obtain an electronic copy from: bsquier@dmis.org

BSR/DMSC QIF Part 4-2014, Quality Information Framework - QIF-Plans information model and XML schema files v2.0 (revision and redesignation of ANSI/DMSC QIF V 1.0-2013)

Obtain an electronic copy from: bsquier@dmis.org

BSR/DMSC QIF Part 5-201x, Quality Information Framework - QIF-Resources information model and XML schema files v2.0 (new standard)

Obtain an electronic copy from: bsquier@dmis.org

BSR/DMSC QIF Part 6-201x, Quality Information Framework - QIF-Rules information model and XML schema files v2.0 (new standard) Obtain an electronic copy from: bsquier@dmis.org

Obtain an electronic copy nom. Dsquier@umis.org

BSR/DMSC QIF Part 7-201x, Quality Information Framework - QIF-Results information model and XML schema files v2.0 (revision and redesignation of ANSI/DMSC QIF V 1.0-2013)

Obtain an electronic copy from: bsquier@dmis.org

BSR/DMSC QIF Part 8-201x, Quality Information Framework - QIF-Statistics information model and XML schema files v2.0 (new standard)

Obtain an electronic copy from: bsquier@dmis.org

#### IEEE (ASC N42) (Institute of Electrical and Electronics Engineers)

Office:	100 Bureau Drive M/S 8462 Gaithersburg, MD 20899-8462
Contact:	Michael Unterweger
Phone:	(301) 975-5536
Fax:	(301) 926-7416

E-mail: michael.unterweger@nist.gov

BSR N42.45-201x, Standard Evaluating the Image Quality of X-ray Computed Tomography (CT) Security-Screening Systems. (revision of ANSI N42.45-2010)

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

Office:	1101 K Street NW	
	Suite 610	
	Washington, DC 20005-3922	
Contact:	Deborah Spittle	
Phone:	(202) 626-5746	
Fax:	(202) 638-4922	
E-mail:	comments@itic.org	

INCITS 410-201x, Information Technology - Identification Cards -Limited Use (LU), Proximity Integrated Circuit Card (PICC) (revision of INCITS 410:2006)

Obtain an electronic copy from: www.incits.org

INCITS/ISO/IEC 2382-5:1999 [R2014], Information technology -Vocabulary - Part 5: Representation of data (reaffirmation of INCITS/ISO/IEC 2382-5:1999 [2009])

Obtain an electronic copy from: http://webstore.ansi.org

INCITS/ISO/IEC 7811-7-2004 [R2014], Identification cards - Recording technique - Part 7: Magnetic stripe - High coercivity, high density (reaffirmation of INCITS/ISO/IEC 7811-7:2004 [R2009])

Obtain an electronic copy from: http://webstore.ansi.org

INCITS/ISO/IEC 9797-1:2011, Information technology - Security techniques - Message Authentication Codes (MACs) - Part 1: Mechanisms using a block cipher (identical national adoption of ISO/IEC 9797-1:2011 and revision of INCITS/ISO/IEC 9797-1:1999 [R2009])

Obtain an electronic copy from: www.incits.org

INCITS/ISO/IEC 11889-1:2009 [R2014], Information technology -Trusted Platform Module - Part 1: Overview (reaffirmation of INCITS/ISO/IEC 11889-1:2009 [2009])

Obtain an electronic copy from: www.incits.org

- INCITS/ISO/IEC 11889-2:2009 [R2014], Information technology -Trusted Platform Module - Part 2: Design Principles (reaffirmation of INCITS/ISO/IEC 11889-2:2009 [2009])
- Obtain an electronic copy from: www.incits.org
- INCITS/ISO/IEC 11889-3:2009 [R2014], Information technology -Trusted Platform Module - Part 3: Structures (reaffirmation of INCITS/ISO/IEC 11889-3:2009 [2009])
- Obtain an electronic copy from: www.incits.org
- INCITS/ISO/IEC 11889-4:2009 [R2014], Information technology -Trusted Platform Module - Part 4: Commands (reaffirmation of INCITS/ISO/IEC 11889-4:2009 [2009])
- Obtain an electronic copy from: www.incits.org
- INCITS/ISO/IEC 12862:2011, Information technology 120 mm (8,54 Gbytes per side) and 80 mm (2,66 Gbytes per side) DVD recordable disk for dual layer (DVD-R for DL) (identical national adoption of ISO/IEC 12862:2011 and revision of INCITS/ISO/IEC 12862:2009 [2009])
- Obtain an electronic copy from: www.incits.org
- INCITS/ISO/IEC 17629:2014, Information technology Office equipment - Method for measuring first print out time for digital printing devices (identical national adoption of ISO/IEC 17629:2014)
- INCITS/ISO/IEC 24734:2014, Information technology Office equipment - Method for measuring digital printing productivity (identical national adoption of ISO/IEC 24734:2014 and revision of INCITS/ISO/IEC 24734:2009 [2009])
- INCITS/ISO/IEC 24761:2009 [R2014], Information technology Security techniques - Authentication context for biometrics (reaffirmation of INCITS/ISO/IEC 24761:2009 [2009])
- Obtain an electronic copy from: www.incits.org
- INCITS/ISO/IEC 27011:2008 [R2014], Information technology Security techniques Information security management guidelines for telecommunications organizations based on ISO/IEC 27002 (reaffirmation of INCITS/ISO/IEC 27011:2008)
- Obtain an electronic copy from: www.incits.org
- INCITS/ISO/IEC TR 14516:2002 [2009], Information technology -Security techniques - Guidelines on the use and management of Trusted Third Party services (withdrawal of INCITS/ISO/IEC TR 14516:2002 [2009])
- Obtain an electronic copy from: www.incits.org
- INCITS/ISO/IEC TR 15446:2009 [2009], Information technology -Security techniques - Guide for the production of Protection Profiles and Security Targets (withdrawal of INCITS/ISO/IEC TR 15446:2009 [2009])
- Obtain an electronic copy from: www.incits.org
- INCITS/ISO/IEC TR 19791:2006 [2009], Information technology -Security techniques - Security assessment of operational systems (withdrawal of INCITS/ISO/IEC TR 19791:2006 [2009])
- Obtain an electronic copy from: www.incits.org

INCITS/ISO/IEC TR-15443-1:2005 [2009], Information technology -Security techniques - Framework for IT security assurance - Part 1: Overview and Framework (withdrawal of INCITS/ISO/IEC TR-15443 -1:2005 [2009])

Obtain an electronic copy from: www.incits.org

- INCITS/ISO/IEC TR-15443-2:2005 [2009], Information technology -Security techniques - Framework for IT security assurance - Part 2: Assurance Methods (withdrawal of INCITS/ISO/IEC TR-15443-2:2005 [2009])
- Obtain an electronic copy from: www.incits.org
- INCITS/ISO/IEC TR-15443-3:2007 [2009], Information technology -Security techniques - Framework for IT security assurance - Part 3: Analysis of assurance methods (withdrawal of INCITS/ISO/IEC TR -15443-3:2007 [2009])
- Obtain an electronic copy from: www.incits.org

#### **NECA (National Electrical Contractors Association)**

Office:	3 Bethesda Metro Center Suite 1100 Bethesda. MD 20814
Contact:	Diana Brioso

- Phone: (301) 215-4549
- Fax: (301) 215-4500
- E-mail: diana.brioso@necanet.org; neis@necanet.org
- BSR/NECA 409-201X, Standard for Installing and Maintaining Dry-Type Transformers (revision of ANSI/NECA 409-2009)
- Obtain an electronic copy from: neis@necanet.org

#### NEMA (ASC C136) (National Electrical Manufacturers Association)

Office:	1300 North 17th Street
	Suite 1752
	Rosslyn, VA 22209

Contact: Megan Hayes Phone: (703) 841-3285

Filone.	(100) 041 0200
Fax:	(703) 841-3385

- E-mail: megan.hayes@nema.org
- BSR C136.14-201x, Roadway and Area Lighting Equipment Elliptically Shaped, Enclosed Side-Mounted Luminaires for Horizontal-Burning High-Intensity Discharge Lamps (revision of ANSI C136.14-2004 (R2009))

Obtain an electronic copy from: megan.hayes@nema.org

#### NEMA (ASC C78) (National Electrical Manufacturers Association)

Office:	1300 North 17th Street Suite 1752 Rosslyn, VA 22209
Contact:	Karen Willis
Phone:	(703) 841-3277
Fax:	(703) 841-3377

- E-mail: Karen.Willis@nema.org
- BSR C78.53-201x, Electric Lamps, Performance Specifications for Direct Replacement LED (Light Emitting Diode) Lamps (new standard)

#### **NSF (NSF International)**

Office:	789 N. Dixboro Road Ann Arbor, MI 48105
Contact:	Mindy Costello
Phone:	(734) 827-6819
Fax:	(734) 827-7875

E-mail: mcostello@nsf.org

BSR/NSF 46-201x (i25r1), Evaluation of Components Used in Wastewater Treatment Systems (revision of ANSI/NSF 46-2013)

Obtain an electronic copy from: mcostello@nsf.org

- BSR/NSF 455-1-201x, Good Manufacturing Practices for Cosmetics (new standard)
- BSR/NSF 455-2-201x, Good Manufacturing Practices for Dietary Supplements (new standard)
- BSR/NSF 455-3-201x, Good Manufacturing Practices for Medical Devices (new standard)
- BSR/NSF 455-4-201x, Good Manufacturing Practices for Over the Counter Drugs (new standard)

#### TAPPI (Technical Association of the Pulp and Paper Industry)

Office:	15 Technology Parkway South
	Peachtree Corners, GA 30092

- Contact: Charles Bohanan
- Phone: (770) 209-7276
- **Fax:** (770) 446-6947
- E-mail: standards@tappi.org
- BSR/TAPPI T 456 om-201x, Tensile breaking strength of watersaturated paper and paperboard ("wet tensile strength") (new standard)
- BSR/TAPPI T 546 om-201x, Machine-direction grammage variation measurement (gravimetric method) (revision of ANSI/TAPPI T 546 om -201x)

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

Office: 455 East Trimble Road San Jose, CA 95131-1230

Contact: Derrick Martin

Phone:(408) 754-6656Fax:(408) 754-6656

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

BSR/UL 2024-201x, Standard for Safety for Cable Routing Assemblies and Communications Raceways (revision of ANSI/UL 2024-2014)

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

# **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.

## ASA (ASC S1) (Acoustical Society of America)

### Revision

ANSI/ASA S1.26-2014, Methods for Calculation of the Absorption of Sound by the Atmosphere (revision of ANSI/ASA S1.26-1995 (R2009)): 8/28/2014

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

### Addenda

- ANSI/ASHRAE/USGBC/IES Addendum 189.1ay-2014, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2011): 8/26/2014
- ANSI/ASHRAE/USGBC/IES Addendum 189.1bx-2014, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2011): 8/26/2014

## ASQ (ASC Z1) (American Society for Quality)

### New National Adoption

- ANSI/ASQ/ISO 14044-2014, Environmental management Life cycle assessment - Requirements and guidelines (identical national adoption of ISO 14044:2006): 8/27/2014
- ANSI/ASQ/ISO 10001:2014, Quality management Customer satisfaction - Guidelines for codes of conduct for organizations (identical national adoption of ISO 10001:2007): 8/27/2014
- ANSI/ASQ/ISO 10003:2014, Quality management Customer satisfaction - Guidelines for dispute resolution external to organizations (identical national adoption of ISO 10003:2007): 8/27/2014
- ANSI/ASQ/ISO 10004:2014, Quality management Customer satisfaction - Guidelines for monitoring and measuring (identical national adoption of ISO 10004:2012): 8/27/2014
- ANSI/ASQ/ISO 10008:2014, Quality management Customer satisfaction - Guidelines for business-to-consumer electronic commerce transactions (identical national adoption of ISO 10008:2013): 8/27/2014
- ANSI/ASQ/ISO 10018:2014, Quality management Guidelines on people involvement and competence (identical national adoption of ISO/TR 10018:2012): 8/27/2014
- ANSI/ASQ/ISO 14031:2014, Environmental management -Environmental performance evaluation - Guidelines (identical national adoption of ISO 14031:2013): 8/27/2014
- ANSI/ASQ/ISO 14040:2014, Environmental management Life cycle assessment - Principles and framework (identical national adoption of ISO 14040:2006): 8/27/2014
- ANSI/ASQ/ISO 14051:2014, Environmental management Material flow cost accounting - General framework (identical national adoption of ISO 14051-2011): 8/27/2014
- ANSI/ASQ/ISO 14063:2014, Environmental management -Environmental communication - Guidelines and examples (identical national adoption of ISO 14063:2006): 8/27/2014

# ASSE (ASC Z359) (American Society of Safety Engineers)

### New Standard

- ANSI ASSE Z359.15-2014, Safety Requirements for Single Anchor Vertical Lifelines and Fall Arrestors for Personal Fall Arrest Systems (new standard): 8/25/2014
- ANSI/ASSE Z359.11-2014, Safety Requirements for Full Body Harness (new standard): 8/25/2014

## **ASTM (ASTM International)**

### Revision

ANSI/ASTM F1703-2013, Guide for Ice Hockey Playing Facilities (revision of ANSI/ASTM F1703-2004): 1/1/2013

## CSA (CSA Group)

### Reaffirmation

\* ANSI Z83.19-2009 (R2014), Standard for Gas-Fired High Intensity Infrared Heaters (same as CSA 2.35 with Addenda A) (reaffirmation of ANSI Z83.19-2009, ANSI Z83.19a-2010): 8/25/2014

## ECA (Electronic Components Association) *Reaffirmation*

- ANSI/EIA 364-55-A-2008 (R2014), Current Cycling Test Procedure for Electrical Contacts, Connectors, and Sockets (reaffirmation of ANSI/EIA 364-55-A-2008): 8/28/2014
- ANSI/EIA 364-60A-2008 (R2014), General Methods for Testing of Contact Finishes for Electrical Connectors and Sockets (reaffirmation of ANSI/EIA 364-60A-2008): 8/28/2014
- ANSI/EIA 364-71C-2008 (R2014), Solder Wicking (Wave Solder Technique) for Electrical Connectors and Sockets (reaffirmation of ANSI/EIA 364-71C-2008): 8/28/2014
- ANSI/EIA 364-92-1997 (R2014), Wire Bending Test Procedure for Insulation Displacement Contacts (IDC) for Electrical Connectors (reaffirmation of ANSI/EIA 364-92-1997 (R2008)): 8/28/2014

## EOS/ESD (ESD Association, Inc.)

### Revision

ANSI/ESDA/JEDEC JS-001-2014, ESDA/JEDEC Joint Standard for Electrostatic Discharge Sensitivity Testing - Human Body Model (HBM) - Component Level (revision of ANSI/ESDA/JEDEC JS-001 -2012): 8/28/2014

## HL7 (Health Level Seven) New Standard

ANSI/HL7 V3 CPM CMET, R1-2014, HL7 Version 3 Standard: Common Product Model, Release 1 (new standard): 8/27/2014

### Revision

ANSI/HL7 SPL, R5-2014, HL7 Version 3 Standard: Structured Product Labeling, Release 5 (revision and redesignation of ANSI/HL7 V3 SPL, R4-2009): 8/27/2014 ANSI/HL7 V2.8.1-2014, Health Level Seven Standard Version 2.8.1 -An Application Protocol for Electronic Data Exchange in Healthcare Environments (revision and redesignation of ANSI HL7 V2.8-2014): 8/27/2014

### HPS (ASC N13) (Health Physics Society)

#### New Standard

ANSI N13.44-2014, Standard for a Thyroid Phantom Used in Occupational Monitoring (new standard): 8/28/2014

### IEEE (ASC C63) (Institute of Electrical and **Electronics Engineers**)

#### Revision

ANSI C63.14-2014, Standard Dictionary of Electromagnetic Compatibility (EMC) including Electromagnetic Environmental Effects (E3) (revision of ANSI C63.14-2009): 8/28/2014

### NCPDP (National Council for Prescription Drug Programs)

#### Revision

ANSI/NCPDP SC Standard 2014072-2014, NCPDP SCRIPT Standard 2014072 (revision and redesignation of): 8/25/2014

### NEMA (ASC C136) (National Electrical Manufacturers Association)

#### Reaffirmation

ANSI C136.22-2004 (R2014), Roadway and Area Lighting Equipment -Internal Labeling of Luminaires (reaffirmation of ANSI C136.22-2004 (R2009)): 8/25/2014

### NEMA (ASC C78) (National Electrical Manufacturers Association)

#### Revision

\* ANSI C78.375A-2014, Electric Lamps: Fluorescent Lamps - Guide for Electrical Measures (revision of ANSI C78.375-21997 (R2011)): 8/28/2014

### **NSF (NSF International)**

#### Revision

- \* ANSI/NSF 4-2014 (i18r3), Commercial Cooking, Rethermalization, and Powered Hot Food Holding and Transportation Equipment (revision of ANSI/NSF 4-2009): 3/30/2014
- \* ANSI/NSF 14-2014 (i57r2), Plastics Piping System Components and Related Materials (revision of ANSI/NSF 14-2013): 8/22/2014
- \* ANSI/NSF 61-2014 (i113r1), Drinking Water System Components -Health Effects (revision of ANSI/NSF 61-2013): 8/24/2014

## **RVIA (Recreational Vehicle Industry Association)**

### Revision

ANSI/RIVA UPA-1-2014, Uniform Plan Approval for Recreational Vehicles (revision of ANSI/RVIA UPA-1-2009): 8/28/2014

## **SCTE (Society of Cable Telecommunications** Engineers)

#### Revision

- ANSI/SCTE 67-2014, Recommended Practice for SCTE 35 Digital Program Insertion Cueing Message for Cable (revision of ANSI/SCTE 67-2010): 8/25/2014
- ANSI/SCTE 98-2014, Test Method for Withstand Tightening Torgue -'F' Male (revision of ANSI/SCTE 98-2010): 8/25/2014

## TIA (Telecommunications Industry Association) New Standard

ANSI/TIA/EIA 136-140-C-2014, TDMA Third Generation Wireless Analog Control Channel (new standard): 8/28/2014

#### Revision

- ANSI/TIA 102.BAEB-B-2014, IP Data Bearer Service Specification (revision and redesignation of ANSI/TIA 102.BAEB-A-2005): 8/28/2014
- ANSI/TIA/EIA 136-000-I-2014, TDMA Third Generation Wireless List of Parts (revision and redesignation of ANSI/TIA/EIA 136-000-H-2011): 8/28/2014
- ANSI/TIA/EIA 136-123-I-2014, TDMA Third Generation Wireless Digital Control Channel Layer 3 (revision and redesignation of ANSI/TIA 136-123-H-2011): 8/27/2014
- ANSI/TIA/EIA 136-370-E-2014, TDMA Third Generation Wireless Enhanced General Packet-Data Service (EGPRS-136) (revision and redesignation of ANSI/TIA/EIA 136-370-D-2011): 8/27/2014
- ANSI/TIA/EIA 136-376-E-2014. TDMA Third Generation Wireless Enhanced General Packet-Data Service (EGPRS-136) Mobility Management (MM) (revision and redesignation of ANSI/TIA/EIA 136 -376-D-2011): 8/28/2014
- ANSI/TIA/EIA 136-377-E-2014, TDMA Third Generation Wireless EGPRS-136 Gs Interface Specifications (revision and redesignation of ANSI/TIA/EIA 136-377-D-2011): 8/28/2014
- ANSI/TIA/EIA 136-440-E-2014, TDMA Third Generation Wireless Adaptive Multi Rate (AMR) Codec (revision and redesignation of ANSI/TIA/EIA 136-440-D-2011): 8/28/2014

## **TPI (Truss Plate Institute)**

### Revision

ANSI/TPI 1-2014, National Design Standard for Metal Plate Connected Wood Truss Construction (revision of ANSI/TPI 1-2007): 8/27/2014

### UL (Underwriters Laboratories, Inc.)

#### Revision

- ANSI/UL 2200-2014, Standard for Safety for Stationary Engine Generator Assemblies (revision of ANSI/UL 2200-2013a): 8/26/2014
- ANSI/UL 2586-2014, Standard for Safety for Hose Nozzle Valves (revision of ANSI/UL 2586-2013): 8/22/2014
- ANSI/UL 2586-2014a. Standard for Safety for Hose Nozzle Valves (revision of ANSI/UL 2586-2013): 8/22/2014
- ANSI/UL 2586-2014b, Standard for Safety for Hose Nozzle Valves (revision of ANSI/UL 2586-2013): 8/22/2014

# **Project Initiation Notification System (PINS)**

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

Following is a list of proposed actions and new ANS that have been received recently from ASDs. Please also review the section in Standards Action entitled "American National Standards Maintained Under Continuous Maintenance" for additional or comparable information with regard to standards maintained under the continuous maintenance option. To view information about additional standards for which a PINS has been submitted and to search approved ANS, please visit www.NSSN.org, which is a database of standards information. Note that this database is not exhaustive.

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

#### **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 WK47077-201x, New Practice for Using Walkway Tribometry Data in Estimating Pedestrian Slip Resistance Thresholds (new standard)

Stakeholders: Traction industry.

Project Need: This practice provides a methodology for estimating acceptable minimum threshold values for pedestrian wet-slip resistance, based on walkway tribometry data.

http://www.astm.org/DATABASE.CART/WORKITEMS/WK47077.htm

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

Office:	1200 G Street, NW	
	Suite 500	
	Washington, DC 20005	
Contact:	Kerrianne Conn	
Fax:	(202) 347-7125	
E-mail:	kconn@atis.org	

BSR ATIS 0300074-201x, Guidelines and Requirements for Security Management Systems (revision of ANSI ATIS 0300074-2009)

Stakeholders: Communications industry.

Project Need: This standard aligns with the relevant ITU-T recommendation M.3410.

This standard aligns with the relevant ITU-T recommendation M.3410, Guidelines and Requirements for Security Management Systems to Support Telecommunications Management, to replace the previously published ATIS 0300074.2006.

BSR ATIS 0300202-201x, Internetwork Operations - Guidelines for Network Management of the Public Telecommunications Networks under Disaster Conditions (revision of ANSI ATIS 0300202-2009)

Stakeholders: Communications industry.

Project Need: These guidelines encompass the cooperative network management actions (that may be) required of interconnected network operators during emergency conditions associated with disasters that threaten life or property and case congestion in the public telecommunications networks.

These guidelines encompass the cooperative network management actions (that may be) required of interconnected network operators during emergency conditions associated with disasters that threaten life or property and case congestion in the public telecommunications networks.

#### BSR ATIS 0300210-201x, OAM&P - Principles of Functions,

Architectures, and Protocol for Telecommunications Management Network (TMN) Interfaces and enhanced Telecom Operations Map (eTOM) (revision of ANSI ATIS 0300210-2009)

Stakeholders: Communications industry

Project Need: It is the intention of this standard to use and align with the relevant ITU-T Recommendations.

It is the intention of this standard to use and align with the relevant ITU-T Recommendations.

#### AWS (American Welding Society)

Office:	8669 NW 36 Street
	#130
	Miami, FL 33166-6672
Contact	Prion McCroth

Contact:	Brian McGrath

Fax: (305) 443-5951 E-mail: bmcgrath@aws.org

BSR/AWS D10.7M/D10.7-201x (R201x), Guide for the Gas Shielded Arc Welding of Aluminum and Aluminum Alloy Pipe (reaffirmation of ANSI/AWS D10.7M/D10.7-2008)

Stakeholders: Owners, fabricators, and inspectors associated with the fabrication of aluminum piping.

Project Needed for the provision of guidance for arc welding of aluminum alloy pipe products.

This document presents information concerning those properties of aluminum which affect its weldability and which cause specific problems in the fabrication of aluminum pipe. Recommendations are made for solving these problems and suggested procedures are presented for welding aluminum pipe joints with the Gas Tungsten Arc and Gas Metal Arc Welding Processes.

#### HL7 (Health Level Seven)

Office: 3300 Washtenaw Avenue Suite 227 Ann Arbor, MI 48104

Contact: Karen Van Hentenryck

(734) 677-6622 Fax:

Karenvan@HL7.org E-mail:

BSR/HL7 V3 BRIDG, R2-201x, HL7 Version 3 Standard: Biomedical Research Integrated Domain, Release 2 (new standard)

Stakeholders: Pharmaceutical, FDA, NCI

Project Need: Since the BRIDG model has previously been balloted within HL7 but has had continued development in the meantime, there is a need to re-ballot the latest versions of the BRIDG for acceptance by the HL7 community and others.

The BRIDG model is an open shared view of the dynamic and static semantics of a common domain-of-interest, focused on the domain of clinical research and its associated regulatory artifacts. In the past, the scope of the BRIDG model was protocol-driven research, but it has widened for version 4.0 to include basic life sciences research.

BSR/HL7 V3 SPDIR, R2-201x, HL7 Version 3 Standard: Healthcare, Community Services and Provider Directory, Release 2 (revision and redesignation of ANSI/HL7 V3 SPDIR. R1-2010)

Stakeholders: Regulatory agency, standards development organizations (SDOs); HIS vendors; emergency services; local and state Departments of Health; healthcare institutions (hospitals, longterm care, home care, mental health).

Project Need: The service directory defined in the specification supports a number of activities including credentialing, scheduling, authentication, referral, and wait list management.

This project seeks to update the service directory specification (Service Functional Model - SFM) to be consistent with the Technical Specification that was created as a result of the Healthcare Services Specification Project. Lessons learned from existing implementations will be incorporated into the updated specification and will also harmonize with the relevant FHIR resources. (such as Organization, Location, Practitioner and Healthcare Service)

BSR/HL7 V3 XMLITSSTR1.1, R1-201x, HL7 Version 3 Standard: XML Implementation Technology Specification - V3 Structures 1.1, Release 1 (new standard)

Stakeholders: All those using HL7 V3.

Project Need: Provides for use of RIM-based extensions in XML ITS specification.

The objective of this document is to present an Implementable Technology Specification (ITS) for the encoding rules for HL7 Version 3 messages based on the Extensible Markup Language (XML). This release of the specification introduces an additional extension mechanism allowing extensions to be included in the HL7 namespace.

#### IEEE (ASC N42) (Institute of Electrical and Electronics Engineers)

Office:	100 Bureau Drive M/S 8462
	Gaithersburg, MD 20899-8462
Contact:	Michael Unterweger

Fax: (301) 926-7416

E-mail: michael.unterweger@nist.gov

BSR N42.45-201x, Standard Evaluating the Image Quality of X-ray Computed Tomography (CT) Security-Screening Systems. (revision of ANSI N42.45-2010)

Stakeholders: USDHS, TSA, and emergency responders (fire departments, police, customs and border patrol members)

Project Need: Due to expanded and expected increased use of the ANSI N42.45 test object within the aforementioned community, it was decided to revise this standard and to include revised test methods and test objects as well as editorial and engineering changes.

This standard provides test methods for the evaluation of image quality of computed tomography (CT) security-screening systems. The quality of data for automated analysis is the primary concern. This standard does not address the system's ability to use this image data to automatically detect explosives or other threat materials, which is typically verified by an appropriate regulatory body.

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

Office:	1101 K Street, NW Suite 610 Washington, DC 20005-3922
Contact:	Barbara Bennett
Fax:	(202) 638-4922
E-mail:	comments@itic.org

INCITS/ISO/IEC 17629:2014, Information technology - Office equipment - Method for measuring first print out time for digital

printing devices (identical national adoption of ISO/IEC 17629:2014) Stakeholders: ICT industry.

Project Need: Adoption of this International Standard will be beneficial to the ICT industry.

ISO/IEC 17629:2014 specifies a method for measuring first print out time of digital printing devices. It is applicable to digital printing devices and multifunctional devices. It is intended to be used for black and white (B&W) as well as color digital printing devices and multifunctional devices of any underlying marking technology. It includes instructions for test charts, test setup procedure, test procedure, and the reporting requirements for the digital printing measurements.

INCITS/ISO/IEC 24734:2014, Information technology - Office equipment - Method for measuring digital printing productivity (identical national adoption of ISO/IEC 24734:2014 and revision of INCITS/ISO/IEC 24734:2009 [2009])

#### Stakeholders: ICT industry.

Project Need: Adoption of this International Standard will be beneficial to the ICT industry.

ISO/IEC 24734:2014 specifies a method for measuring the productivity of digital printing devices with various office applications and print job characteristics. It is applicable to digital printing devices, including single-function and multi-function devices, regardless of print technology (e.g., inkjet, laser). Devices can be equipped with a range of paper feed and finishing options either directly connected to the computer system or via a network. It is intended to be used for black and white (B&W) as well as color digital printing devices.

#### NEMA (ASC C78) (National Electrical Manufacturers Association)

Office:	1300 North 17th Street Suite 1752 Rosslyn, VA 22209
Contact:	Karen Willis
Fax:	(703) 841-3377

E-mail: Karen.Willis@nema.org

 \* BSR C78.53-201x, Electric Lamps, Performance Specifications for Direct Replacement LED (Light Emitting Diode) Lamps (new standard)

Stakeholders: Manufacturers, designers, testing labs, and end users. Project Need: This project is needed because it outlines the electrical and mechanical characteristics of LED lamps that directly replace non-LED lamps.

This standard describes the electrical and mechanical characteristics of LED Lamps that are direct replacements for existing ANSI standardized non-LED lamps. Lamps covered in this standard contain LED-based light sources. Direct replacement is defined as LED lamps that shall not require modification of existing equipment.

#### **NSF (NSF International)**

Office: 789 N. Dixboro Road Ann Arbor, MI 48105-9723

Contact: Rachel Brooker

- E-mail: rbrooker@nsf.org
- BSR/NSF 455-1-201x, Good Manufacturing Practices for Cosmetics (new standard)

Stakeholders: Product and ingredient manufacturers, distributors, packagers, labelers, retailers, industry associations, regulators, consumer organizations, and testing laboratories.

Project Need: Establish a national standard for ensuring the safe production of cosmetics. This initiative would support standardization and coordination of retailer and manufacturer requirements, benefitting all parties through a reduction of audits by retailers and independent consultants, and provide added assurance for compliance to the consumer.

This Standard is intended to define a standardized approach for auditing to determine the level of compliance of cosmetic products to ISO 22716 Good Manufacturing Practices (GMPs) for cosmetics as well as incorporating additional retailer requirements. It refers to the requirements for GMPs applicable to all cosmetics. It will assist in the determination of adequate facilities and controls for cosmetic manufacture with sufficient quality to ensure suitability for intended use.

\* BSR/NSF 455-2-201x, Good Manufacturing Practices for Dietary Supplements (new standard)

Stakeholders: Product and ingredient manufacturers, distributors, packagers, labelers, retailers, industry associations, regulators, consumer organizations, and testing laboratories.

Project Need: Establish a national standard for ensuring the safe production of dietary supplements. This initiative would support standardization and coordination of retailer and manufacturer requirements, benefitting all parties through a reduction of audits by retailers and independent consultants, and provide added assurance for compliance to the consumer.

This Standard is intended to define a standardized approach for auditing to determine the level of compliance of dietary supplement products to 21 CFR 111 Current Good Manufacturing Practices (GMPs) in manufacturing, packaging, labeling, or holding operations for dietary supplements as well as incorporating additional retailer requirements. It refers to the requirements for GMPs applicable to all dietary supplements. It will assist in the determination of adequate facilities and controls for dietary supplement manufacture with sufficient quality to ensure suitability for intended use. \* BSR/NSF 455-3-201x, Good Manufacturing Practices for Medical Devices (new standard)

Stakeholders: Product and ingredient and/or component manufacturers, distributors, packagers, labelers, retailers, industry associations, regulators, consumer organizations, and testing laboratories.

Project Need: Establish a national standard for ensuring the safe production of medical devices. This initiative would support standardization and coordination of retailer and manufacturer requirements, benefitting all parties through a reduction of audits by retailers and independent consultants, and provide added assurance for compliance to the consumer.

This Standard is intended to define a standardized approach for auditing to determine the level of compliance of medical device products to 21 CFR 820 Good Manufacturing Practices (GMPs) for medical devices as well as incorporating additional retailer requirements. It refers to the requirements for GMPs applicable to all medical devices. It will assist in the determination of adequate facilities and controls for medical device manufacture with sufficient quality to ensure suitability for intended use.

\* BSR/NSF 455-4-201x, Good Manufacturing Practices for Over the Counter Drugs (new standard)

Stakeholders: Product and ingredient manufacturers, distributors, packagers, labelers, retailers, industry associations, regulators, consumer organizations, and testing laboratories.

Project Need: Establish a national standard for ensuring the safe production of over-the-counter (OTC) drugs. This initiative would support standardization and coordination of retailer and manufacturer requirements, benefitting all parties through a reduction of audits by retailers and independent consultants, and provide added assurance for compliance to the consumer.

This Standard is intended to define a standardized approach for auditing to determine the level of compliance of over-the-counter (OTC) drug products to 21 CFR 210 & 211 Good Manufacturing Practices (GMPs) in manufacturing, processing, packing, or holding of drugs for finished pharmaceuticals as well as incorporating additional retailer requirements. It refers to the requirements for GMPs applicable to all OTC drugs. It will assist in the determination of adequate facilities and controls for OTC drug manufacture with sufficient quality to ensure suitability for intended use.

#### TAPPI (Technical Association of the Pulp and Paper Industry)

Office:	15 Technology Parkway South Peachtree Corners, GA 30092
Contact:	Charles Bohanan
Fax: E-mail:	(770) 446-6947 standards@tappi.org

BSR/TAPPI T 456 om-201x, Tensile breaking strength of watersaturated paper and paperboard ("wet tensile strength") (new standard)

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

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

This method describes the procedure for the determination of the tensile strength of paper and paperboard after saturation with water. This procedure is applicable to papers and paperboard (excluding corrugated board) that will be subjected to stress while wet, either during processing or use. Such materials include but are not limited to tissue products, papers used in map-making, photography, blueprints, bags, and food wraps.

BSR/TAPPI T 546 om-201x, Machine-direction grammage variation measurement (gravimetric method) (revision of ANSI/TAPPI T 546 om-201x)

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

Project Need: To revise existing ANSI/TAPPI standard based on comments received on draft 1 ballot.

This procedure can be used to determine the short term machinedirection variation in mass per unit area. These variations can be caused by defects in the stock approach system, headbox, or consistency control. This test method is not intended to identify the source of the variations, but rather to quantify them. The method has particular application to acceptance testing of both the papermaking process and the product.

## 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 <u>www.ansi.org/asd</u>, select "Standards Activities," click on "Public Review and Comment" and "American National Standards Maintained Under Continuous Maintenance." This information is also available directly at <u>www.ansi.org/publicreview</u>.

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

## **ANSI-Accredited Standards Developers Contact Information**

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

#### ADA (Organization)

American Dental Association

211 E. Chicago Ave Chicago, IL 60611 Phone: (312) 440-2533 Fax: (312) 440-2529 Web: www.ada.org

#### AGA (ASC Z380)

American Gas Association 400 N. Capitol Street, N.W.

Washington, DC 20001 Phone: (202) 824-7312 Fax: (202) 824-9122 Web: www.aga.org

#### AMCA

AMCA International, Inc. 30 West University Drive Arlington Heights, IL 60004-1893 Phone: (847) 704-6295 Fax: (847) 253-0088 Web: www.amca.org

#### ANS

American Nuclear Society

555 North Kensington Avenue La Grange Park, IL 60526 Phone: (708) 579-8268 Fax: (708) 579-8248 Web: www.ans.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

#### ASHRAE

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

1791 Tullie Circle, NE Atlanta, GA 30329 Phone: (678) 539-1214 Fax: (678) 539-2214 Web: www.ashrae.org

Web: www.asme.org

#### ASME

American Society of Mechanical Engineers Two Park Avenue New York, NY 10016 Phone: (212) 591-8521 Fax: (212) 591-8501

### ASQ (ASC Z1)

American Society for Quality 600 N Plankinton Ave Milwaukee, WI 53203 Phone: (414) 272-8575 Web: www.asq.org

#### ASSE (Safety)

American Society of Safety Engineers

1800 East Oakton Street Des Plaines, IL 60018-2187 Phone: (847) 768-3411 Fax: (847) 296-9221 Web: www.asse.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

#### ATIS

Alliance for Telecommunications Industry Solutions

1200 G Street, NW Suite 500 Washington, DC 20005 Phone: (202) 434-8841 Fax: (202) 347-7125 Web: www.atis.org

#### AWS

American Welding Society 8669 NW 36 Street #130 Miami, FL 33166-6672 Phone: (800) 443-9353 Fax: (305) 443-5951 Web: www.aws.org

#### AWWA

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

#### B11

B11 Standards, Inc. PO Box 690905 Houston, TX 77269-0905 Phone: (832) 446-6999

#### BHMA

Builders Hardware Manufacturers Association

355 Lexington Avenue 15th Floor New York, NY 10017 Phone: (212) 297-2126 Fax: (212) 370-9047 Web: www.buildershardware.com

#### CEA

Consumer Electronics Association 1919 South Eads Street Arlington, VA 22202 Phone: (703) 907-7697 Fax: (703) 907-4197 Web: www.ce.org

#### CSA

CSA Group 8501 E. Pleasant Valley Road Cleveland, OH 44131 Phone: (216) 524-4990 Fax: (216) 520-8979 Web: www.csa-america.org

#### DMSC, Inc.

Dimensional Metrology Standards Consortium, Inc.

1350 SW Alsbury Blvd #514 Burleson, TX 76028-9219 Phone: (817) 461-1092 Fax: (682) 224-6201 Web: www.dmis.org

#### ECA

Electronic Components Association

2214 Rock Hill Road Suite 170 Herndon, VA 20170-4212 Phone: (571) 323-0294 Fax: (571) 323-0245 Web: www.ecianow.org

### EOS/ESD

ESD Association 7900 Turin Rd., Bldg. 3 Rome, NY 13440 Phone: (315) 339-6937 Fax: (315) 339-6793 Web: www.esda.org

#### HL7

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

#### HPS (ASC N13)

Health Physics Society 1313 Dolley Madison Blvd Suite 402 McLean, VA 22101 Phone: (703) 790-1745 Fax: (703) 790-2672 Web: www.hps.org

#### IEEE (ASC C63)

Institute of Electrical and Electronics Engineers

445 Hoes Lane, PO Box 1331 Piscataway, NJ 08855-1331 Phone: (732) 275-7362 Fax: (732) 562-1571 Web: www.ieee.org

#### IEEE (ASC N42)

Institute of Electrical and Electronics Engineers

100 Bureau Drive M/S 8462 Gaithersburg, MD 20899-8462 Phone: (301) 975-5536 Fax: (301) 926-7416 Web: www.ieee.org

#### INMM (ASC N14)

Institute of Nuclear Materials Management

75 North 200 East Oak Ridge National Laboratory Richmond, UT 84333 Phone: (435) 258-3730 Web: www.inmm.org

#### ITI (INCITS)

InterNational Committee for Information Technology Standards 1101 K Street, NW Suite 610 Washington, DC 20005-3922 Phone: (202) 626-5743 Fax: (202) 638-4922 Web: www.incits.org

#### NCPDP

National Council for Prescription Drug Programs 9240 East Raintree Drive Scottsdale, AZ 85260

Phone: (512) 291-1356 Fax: (480) 767-1042 Web: www.ncpdp.org

#### NECA

National Electrical Contractors Association

3 Bethesda Metro Center Suite 1100 Bethesda, MD 20814 Phone: (301) 215-4549 Fax: (301) 215-4500 Web: www.necanet.org

#### NEMA (ASC C78)

National Electrical Manufacturers Association 1300 North 17th Street Suite 1752 Rosslyn, VA 22209 Phone: (703) 841-3277 Fax: (703) 841-3377 Web: www.nema.org

#### NEMA (Canvass)

National Electrical Manufacturers Association 1300 North 17th Street Suite 1752 Rosslyn, VA 22209 Phone: (703) 841-3285 Fax: (703) 841-3385

#### NSF

NSF International

Web: www.nema.org

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

#### RVIA

Recreational Vehicle Industry Association 1896 Preston White Drive P.O. Box 2999 Reston, VA 20191-4363 Phone: (703) 620-6003 Fax: (703) 620-5071 Web: www.rvia.org

#### SCTE

Society of Cable Telecommunications Engineers

140 Philips Road Exton, PA 19341-1318 Phone: (480) 252-2330 Fax: (610) 363-5898 Web: www.scte.org

#### ΤΑΡΡΙ

Technical Association of the Pulp and Paper Industry

15 Technology Parkway South Peachtree Corners, GA 30092 Phone: (770) 209-7276 Fax: (770) 446-6947 Web: www.tappi.org

#### TIA

Telecommunications Industry Association 1320 North Courthouse Road Suite 200 Arlington, VA 22201 Phone: (703) 907-7706 Fax: (703) 907-7727 Web: www.tiaonline.org

## TPI

Truss Plate Institute 218 North Lee Street Suite 312 Alexandria, VA 22314 Phone: (703) 683-1010 Fax: (866) 445-3497 Web: www.tpinst.org

## UL

Underwriters Laboratories, Inc. 12 Laboratory Drive Research Triangle Park, NC 27709 Phone: (919) 549-1896 Fax: (919) 547-6180 Web: 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 Charles T. Zegers, General Secretary of the USNC (czegers@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**

### BANKING AND RELATED FINANCIAL SERVICES (TC 68)

- ISO/DIS 13491-1, Banking Secure cryptographic devices (retail) -Part 1: Concepts, requirements and evaluation methods -12/15/2014
- ISO/DIS 13491-2, Banking Secure cryptographic devices (retail) -Part 2: Security compliance checklists for devices used in financial transactions - 12/15/2014

#### FREIGHT CONTAINERS (TC 104)

- ISO/DIS 9897-1, Freight containers Container equipment data exchange (CEDEX) - Part 1: General communication codes for general purpose containers - 12/7/2014, \$107.00
- ISO/DIS 9897-2, Freight containers Container equipment data exchange (CEDEX) - Part 2: Refrigerated containers - 12/7/2014, \$155.00
- ISO/DIS 9897-6, Freight containers Container equipment data exchange (CEDEX) - Part 6: Message sets for data transfer between local computer and host computer - 12/7/2014, \$62.00

#### **HYDROMETRIC DETERMINATIONS (TC 113)**

ISO/DIS 24155, Hydrometry - Hydrometric data transmission systems - Specification of system requirements - 12/7/2014

#### MATERIALS, EQUIPMENT AND OFFSHORE STRUCTURES FOR PETROLEUM AND NATURAL GAS INDUSTRIES (TC 67)

ISO/DIS 17782, Petroleum, petrochemical and natural gas industries -Qualification of manufacturers of special materials - 12/6/2014, \$107.00

### NUCLEAR ENERGY (TC 85)

ISO/DIS 16639, Surveillance of the activity concentrations of airborne radioactive substances in the workplace of nuclear facilities - 11/28/2014, \$88.00

## PERSONAL SAFETY - PROTECTIVE CLOTHING AND EQUIPMENT (TC 94)

ISO/DIS 13506-1, Protective clothing against heat and flame - Part 1: Test method for complete garments - Measurement of transferred energy using an instrumented manikin - 10/5/2014, \$98.00

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

ISO/DIS 80369-6, Small bore connectors for liquids and gases in healthcare applications - Part 6: Connectors for neuraxial applications - 12/6/2014, \$119.00

#### **ROAD VEHICLES (TC 22)**

ISO/DIS 18300, Electrically propelled road vehicles - Specifications for lithium-ion cell and battery coupled with other types of battery and capacitor - 12/12/2014

#### **TEXTILES (TC 38)**

- ISO/DIS 17881-1, Textiles Determination of certain flame retardants -Part 1: Brominated flame retardants - 12/6/2014, \$46.00
- ISO/DIS 17881-2, Textiles Determination of certain flame retardants -Part 2: Phosphorus flame retardants - 12/6/2014, \$46.00

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

ISO/DIS 8362-5, Injection containers and accessories - Part 5: Freeze drying closures for injection vials - 12/7/2014, \$53.00

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

- ISO/DIS 14296, Intelligent transport systems Extension of map database specifications for applications of cooperative ITS -12/14/2014, \$98.00
- ISO/DIS 24102-2, Intelligent transport systems Communications access for land mobiles (CALM) - ITS station management - Part 2: Remote management - 12/15/2014

### ISO/IEC JTC 1, Information Technology

- ISO/IEC 19794-5:2011/PDAM 2, XML encoding and clarification of defects 12/14/2014, FREE
- ISO/IEC DIS 11179-1, Information technology Metadata registries (MDR) - Part 1: Framework - 12/7/2014, \$88.00

## **IEC Standards**

4/296/NP, Future ISO 20816-5/Ed1: Mechanical vibration - Evaluation of machine vibration by measurements on non-rotating parts - Part 5: Machine sets in hydraulic power generating and pump-storage plants, including shaft vibration measurements, 12/05/2014

10/946/NP, Standard for use and maintenance of natural ester insulating liquids in electrical equipment, 12/05/2014

22F/364A/CD, Amendment 1 - IEC/TR 62544 Ed.1: High-voltage direct current (HVDC) systems - Application of active filters, 10/24/2014

34A/1795/FDIS, IEC 62776 Ed.1: Double-capped LED lamps designed to retrofit linear fluorescent lamps - Safety specifications, 10/31/2014

38/476/CDV, IEC 61869-14: Instrument Transformers - Part 14: Specific Requirements for DC Current Transformers, 12/05/2014

38/477/CDV, IEC 61869-15: Instrument Transformers - Part 15: Specific Requirements for DC Voltage Transformers, 12/05/2014

40/2295/CDV, IEC 60384-1 Ed.5: Fixed capacitors for use in electronic equipment - Part 1: Generic specification, 12/05/2014

40/2296/CDV, IEC 60539-1 Ed. 3.0: Directly heated negative temperature coefficient thermistors - Part 1: Generic specification, 12/05/2014

45/779/NP, Industrial non-destructive testing equipment - Electron linear accelerator, 12/05/2014

46A/1230/FDIS, IEC 61196-1-200/Ed2: Coaxial Communication Cables - Part 1-100: Environmental test methods - General requirements, 10/31/2014

46A/1231/FDIS, IEC 61196-1-100/Ed.2: Coaxial Communication Cables - Part 1-100: Electrical test methods - General requirements, 10/31/2014

48D/573/CD, IEC 62610-5/Ed1: Mechanical structures for electrical and electronic equipment - Thermal management for cabinets in accordance with IEC 60297 and IEC 60917 series - Part 5: Guideline of cooling performance evaluation for indoor cabinets, 12/05/2014

59/618/DTS, IEC 62835 TS Ed.1: Electric toasters for household and similar use - Methods and measurements for improving accessibility, 12/05/2014

59F/269/FDIS, IEC 60312-2 Ed.2: Vacuum cleaners for household use - Part 2: Wet carpet cleaning appliances - Methods for measuring the performance, 10/31/2014

65B/947/FDIS, IEC 61207-6/Ed.2: Expression of Performance of Gas Analyzers - Part 6: Photometric analyzers, 10/31/2014

69/305/CD, IEC 61851, Electric Vehicles Conductive Power Supply System - Part 3-1, General Requirements for Light Electric Vehicles AC and DC conductive power supply systems, 10/31/2014

69/306/CD, IEC 61851, Electric Vehicles Conductive Power Supply System - Part 3-2: Requirements for Light Electric Vehicles (LEV) DC off-board conductive power supply systems, 10/31/2014

69/307/CD, ISO 15118-5/Ed.1: Road vehicles - Vehicle to grid communication interface - Part 5: Physical and data link layer conformance tests, 12/05/2014

69/308/NP, IEC 61851-2x Ed. 1.0: Electric vehicles conductive charging system - Part 2x: Bi-directional d.c. charging station, 12/05/2014

69/309/NP, Electric vehicle charge station - Monitoring system, 12/05/2014

100/2364/CDV, IEC 60728-11 Ed.4: Cable networks for television signals, sound signals and interactive services - Part 11: Safety, 12/05/2014

100/2385/NP, IEC 62608-2: Multimedia home network configuration -Basic reference model - Part 2: Operational model, 12/05/2014

107/245/DTS, IEC 62239-1 TS Ed.2: Process management for avionics - Management plan - Part 1: Preparation and maintenance of an electronic components management plan, 12/05/2014

108/564/CD, IEC 62911/Ed1: Audio, video and information technology equipment - Routine electrical safety testing in production, 10/31/2014

110/600/CD, IEC 62906-5-2 Ed.1: Laser display and devices - Part 5 -2: Optical measuring methods of speckle, 10/31/2014

110/601/CD, IEC 62595-2 Ed.2: LCD backlight unit - Part 2: Electrooptical measurement methods of LED backlight unit, 10/31/2014 8/1369/DC, Future revision of IEC 60038:2009 - Standard voltages for LVDC distribution, 10/24/2014

9/1953/CDV, IEC 61377 Ed.2: Railway applications - Rolling stock -Combined test method for traction systems, 11/28/2014

18/1424/FDIS, IEC 61892-5: Mobile and fixed offshore units -Electrical installations - Part 5: Mobile units, 10/24/2014

22F/362/CD, IEC/TR 62001-1 Ed.1.0: High-voltage direct current (HVDC) systems - Guidebook to the specification and design evaluation of A.C. filters - Part 1: Overview, 10/24/2014

22F/363/CD, IEC/TR 62001-4 Ed.1: High-voltage direct current (HVDC) systems - Guidebook to the specification and design evaluation of A.C. filters - Part 4: Equipment, 10/24/2014

22F/364/CD, Amendment 1 - IEC/TR 62544 Ed.1: High-voltage direct current (HVDC) systems - Application of active filters, 10/24/2014

22G/290/CD, Amendment 2 - IEC 61800-3 Ed.2: Adjustable speed electrical power drive systems - Part 3: EMC requirements and specific test methods, 10/24/2014

32C/499/NP, Future IEC 60127-8/Ed1: Miniature fuses - Part 8: Fuse resistors with particular overcurrent protection, 11/28/2014

32C/500/PAS, IEC/PAS 60127-8/Ed1: Miniature fuses - Part 8: Fuse resistors with particular overcurrent protection, 10/24/2014

34/212/DTR, IEC/TR 61547-1 Ed.1: Equipment for general lighting purposes - EMC immunity - Part 1: An objective voltage fluctuation immunity test method, 10/24/2014

36/352/DTS, IEC TS 61245: Artificial pollution tests on high-voltage insulators to be used on d.c systems, 11/28/2014

46/527/NP, Testing of Balanced Communication Cabling in Accordance with ISO/IEC 11801 Part 1-1: Installed Cabling -Additional requirements for measurement of transverse conversion loss with field test instrumentation., 11/28/2014

46A/1226/CD, IEC 60096-0-1/Ed3 Amd1: Radio frequency cables -Part 0-1: Guide to the design of detail specifications - Coaxial cables, Amendment 1, 11/28/2014

46A/1227/NP, Coaxial Communication Cables - Part 1-303: Electrical test methods - Test for plating thickness, 11/28/2014

48B/2401/PAS, IEC/PAS 61076-3-122/Ed1: Detail specification for rugged 8-way, shielded, free and fixed connectors, 10/24/2014

48B/2402/NP, IEC 61076-3-122/Ed1: Detail specification for rugged 8way, shielded, free and fixed connectors, 11/28/2014

65B/946/CD, IEC 62828-3 Ed.1: Reference conditions and procedures for testing industrial measurement transmitters - Part 3: Specific procedures for temperature transmitters, 11/28/2014

77A/866/CD, IEC 61000-3-2 (f1): Electromagnetic compatibility (EMC)
 Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase), 01/02/2015

77A/867/CD, IEC 61000-3-2 (f2): Electromagnetic compatibility (EMC)
 Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase), 01/02/2015

 77A/869/CD, IEC TR 61000-1-7: Electromagnetic compatibility (EMC)
 Part 1-7: General - Power factor in single phase systems under non-sinusoidal conditions, 11/28/2014

82/866/CDV, IEC 62891 Ed.1: Overall efficiency of grid connected photovoltaic inverters, 11/28/2014

100/2381/DTR, IEC/TR 62921: Quantification Methodology Greenhouse Gas Emissions for Computers and Monitors, 10/24/2014

101/451/CD, IEC 61340-5-1 Ed.2: Electrostatics - Part 5-1: Protection of electronic devices from electrostatic phenomena - General requirements, 11/28/2014

110/597/CD, IEC 62908-1-2 Ed.1: Touch and interactive displays - Part 1-2: Terminology and letter symbols, 10/24/2014

110/598/CD, IEC 62908-12-10 Ed.1: Touch and interactive displays -Part 12-10: Touch performance measuring methods, 10/24/2014

113/227/DTS, IEC TS 62844: Guidelines for quality and risk assessment for nano-enabled electrotechnical products, 11/28/2014

- 18/1418/CDV, ISO 16315: Small craft Electrical propulsion system, 10/17/2014
- 22E/152A/CD, IEC 61204-7 Ed. 2: Low-voltage switch mode power supplies Part 7: Safety requirements, 10/31/2014
- 31/1129/CDV, IEC 60079-13/Ed2: Explosive atmospheres Part 13: Equipment protection by pressurized room "p" and artificially ventilated room "v", 11/21/2014
- 32C/494/CDV, IEC 60691/Ed4: Thermal-links Requirements and application guide, 11/21/2014
- 44/719/CD, IEC 60204-34 TS Ed.1: Safety of machinery-Electrical equipment of machines Part 34: Requirements for machine tools, 11/21/2014
- 46F/272/CDV, IEC 61169-47 ed 2.0: Radio-Frequency Connectors -Part 47: Sectional specification for radio-frequency coaxial connectors with clamp coupling, typically for use in 75 Ohm cable networks (type F-Quick), 11/21/2014
- 46F/274/CDV, IEC 61169-52 ed 1.0: Radio-Frequency Connectors -Part 52: Sectional specification for series MMCX RF coaxial connectors, 11/21/2014
- 47A/941A/CD, IEC 62433-3 Ed.1: EMC IC modelling Part 3: Models of Integrated Circuits for EMI behavioural simulation - Radiated emissions modelling (ICEM-RE), 10/17/2014
- 62A/951/DTR, IEC TR 60601-4-3: Medical electrical equipment Part 4-3: Guidance and interpretation - Considerations of unclear or unaddressed safety aspects in the third edition of IEC 60601-1 and proposals for new requirements, 10/17/2014
- 65B/941/CD, IEC 62828-1 Ed.1: Reference conditions and procedures for industrial measurement transmitters - Part 1: General procedures for all types of transmitters, 11/21/2014
- 65B/942/CD, IEC 62828-2 Ed.1: Reference conditions and procedures for industrial measurement transmitters - Part 2: Specific procedures for pressure transmitters, 11/21/2014
- 65C/768/CDV, IEC 61784-5-x A1 Ed.2: Industrial communication networks - Profiles - Part 5-x: Installation of fieldbuses - Installation profiles for CPF x, 11/21/2014
- 77/465/CD, IEC 61000-6-1: Electromagnetic Compatibility (EMC) -Part 6-1: Generic standards - Immunity standard for residential, commercial and light-industrial environments, 11/21/2014
- 77/466/CD, IEC 61000-6-2 Ed. 3: Electromagnetic Compatibility (EMC)
   Part 6-2: Generic standards Immunity standard for industrial environments, 11/21/2014
- 89/1227/DTS, IEC 60696-11-11/TS/Ed2: Fire hazard testing Part 11 -11: Test flames - Determination of the ignition characteristic heat flux for ignition from a noncontacting flame source, 11/21/2014
- 89/1236/CD, IEC 60695-10-3/Ed2: Fire hazard testing Part 10-3: Abnormal heat - Mould stress relief distortion test, 10/17/2014
- 100/2374/CD, IEC 62702-1-1 Ed.1: Audio Archive System Part 1-1: DVD disk and data migration for long term audio data storage, 11/21/2014
- 101/448/FDIS, IEC 61340-4-8 Ed.2: Electrostatics Part 4-8: Standard test methods for specific applications Electrostatic discharge shielding Bags, 10/17/2014
- 101/450/CD, IEC 61340-2-3 Ed.2: Electrostatics Part 2-3: Methods of test for determining the resistance and resistivity of solid materials used to avoid electrostatic charge accumulation, 10/17/2014
- 107/243/NP, Process management for avionics Atmospheric radiation effects Part 6: Extreme space weather and potential impact on the avionics environment and electronics (proposed IEC TS 62396-6), 11/21/2014
- 107/244/PAS, IEC/PAS 62396-6 Ed.1: Process management for avionics - Atmospheric radiation effects - Part 6: Extreme space weather and potential impact on the avionics environment and electronics, 10/17/2014
- 110/581/CDV, IEC 62906-1-2 Ed.1: Laser display devices Part 1-2: Terminology and Letter symbols, 11/21/2014

- 110/593/NP, Electronic Paper Displays Part 3-3: Optical measuring methods with integrated lighting unit, 11/21/2014
- 116/191/CDV, IEC 62841-2-11/Ed1: Electric Motor-Operated Hand-Held Tools, Transportable Tools and Lawn and Garden Machinery -Safety - Part 2-11: Particular requirements for hand-held reciprocating saws (jig and sabre saws), 11/21/2014
- CABPUB/103A/CDV, ISO/IEC DIS 17021-1, Conformity assessment -Requirements for bodies providing audit and certification of management systems - Part 1: Requirements, 11/07/2014

# **Newly Published ISO Standards**



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

### ACOUSTICS (TC 43)

ISO 12913-1:2014, Acoustics - Soundscape - Part 1: Definition and conceptual framework, \$58.00

#### AGRICULTURAL FOOD PRODUCTS (TC 34)

- ISO 18301:2014, Animal and vegetable fats and oils Determination of conventional mass per volume (litre weight in air) Oscillating Utube method, \$77.00
- ISO 22004:2014, Food safety management systems Guidance on the application of ISO 22000, \$173.00

#### AIR QUALITY (TC 146)

ISO 22262-2:2014, Air quality - Bulk materials - Part 2: Quantitative determination of asbestos by gravimetric and microscopical methods, \$199.00

### AIRCRAFT AND SPACE VEHICLES (TC 20)

ISO 21100:2014, Air cargo unit load devices - Performance requirements and test parameters, \$189.00

## DIMENSIONAL AND GEOMETRICAL PRODUCT SPECIFICATIONS AND VERIFICATION (TC 213)

- ISO 2538-1:2014, Geometrical product specifications (GPS) Wedges Part 1: Series of angles and slopes, \$77.00
- ISO 2538-2:2014, Geometrical product specifications (GPS) Wedges Part 2: Dimensioning and tolerancing, \$99.00

#### **ESSENTIAL OILS (TC 54)**

ISO 16385:2014, Essential oil of molle (Schinus areira L.), Argentinean type, \$77.00

#### FLUID POWER SYSTEMS (TC 131)

ISO 10766:2014, Hydraulic fluid power - Cylinders - Housing dimensions for rectangular-section-cut bearing rings for pistons and rods, \$88.00

#### **HEALTH INFORMATICS (TC 215)**

ISO/HL7 21731:2014, Health informatics - HL7 version 3 - Reference information model - Release 4, \$199.00

### **OPTICS AND OPTICAL INSTRUMENTS (TC 172)**

- ISO 13212:2014, Ophthalmic optics Contact lens care products -Guidelines for determination of shelf-life, \$77.00
- ISO 15362:2014, Stereomicroscopes Information provided to the user, \$58.00

#### PLASTICS (TC 61)

- ISO 1887:2014, Textile glass Determination of combustible-matter content, \$66.00
- ISO 10122:2014, Reinforcement materials Tubular braided sleeves -Basis for a specification, \$77.00

#### **TEXTILES (TC 38)**

- ISO 105-B01:2014, Textiles Tests for colour fastness Part B01: Colour fastness to light: Daylight, \$108.00
- ISO 105-B02:2014, Textiles Tests for colour fastness Part B02: Colour fastness to artificial light: Xenon arc fading lamp test, \$180.00

#### TYRES, RIMS AND VALVES (TC 31)

ISO 5775-1:2014, Bicycle tyres and rims - Part 1: Tyre designations and dimensions, \$132.00

### ISO Technical Reports GEARS (TC 60)

ISO/TR 15144-1:2014, Calculation of micropitting load capacity of cylindrical spur and helical gears - Part 1: Introduction and basic principles, \$173.00

### **ISO Technical Specifications**

### CROSS-BORDER TRADE OF SECOND-HAND GOODS (TC 245)

ISO/TS 20245:2014, Cross-border trade of second-hand goods, \$77.00

### ISO/IEC JTC 1, Information Technology

- ISO/IEC 19794-2/Amd1/Cor2:2014, Information technology Biometric data interchange formats Part 2: Finger minutiae data Corrigendum, FREE
- ISO/IEC 10646:2014, Information technology Universal Coded Character Set (UCS), \$314.00
- ISO/IEC 7811-1:2014, Identification cards Recording technique Part 1: Embossing, \$139.00
- ISO/IEC 7811-6:2014, Identification cards Recording technique Part 6: Magnetic stripe High coercivity, \$139.00
- ISO/IEC 7811-7:2014, Identification cards Recording technique Part 7: Magnetic stripe High coercivity, high density, \$149.00
- ISO/IEC 14496-10:2014, Information technology Coding of audiovisual objects - Part 10: Advanced Video Coding, \$314.00

## **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: <a href="mailto:ncsci@nist.gov">ncsci@nist.gov</a> or notifyus@nist.gov.

## **American National Standards**

### **INCITS Executive Board**

# ANSI Accredited SDO and US TAG to ISO/IEC JTC 1, Information Technology

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

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

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

#### Producer – Hardware

This category primarily produces hardware products for the ITC marketplace.

#### Producer – Software

This category primarily produces software products for the ITC marketplace.

#### Distributor

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

#### • User

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

#### Consultants

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

## Standards Development Organizations and Consortia

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

#### Academic Institution

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

### Other

This category includes all organizations who do not meet the criteria defined in one of the other interest categories. Membership in the INCITS Executive Board is open to all directly and materially affected parties in accordance with INCITS membership rules. To find out more about participating on the INCITS Executive Board, please contact Jennifer Garner at 202-626-5737 or jgarner@itic.org. Visit www.INCITS.org for more information regarding INCITS activities.

### Calls for Members

### Society of Cable Telecommunications

### ANSI Accredited Standards Developer

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

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

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

Announcement of Intent to Process Provisional ANS (PS) in accordance with Annex B of the ANSI Essential Requirements (www.ansi.org/essentialrequirements)

ISO/DIS2 80369-3, Small-bore connectors for liquids and gases in healthcare applications --Part 3: Connectors for enteral applications, and ISO/DIS 80369-6, Small bore connectors for liquids and gases in healthcare applications --Part 6: Connectors for neuraxial applications

Association for the Advancement of Medical Instrumentation (AAMI) intends to ballot ISO/DIS2 80369-3, Small-bore connectors for liquids and gases in healthcare applications -- Part 3: Connectors for enteral applications and ISO/DIS 80369-6, Small bore connectors for liquids and gases in healthcare applications -- Part 6: Connectors for neuraxial applications as provisional American National Standards. The need is due to the impact on public safety, as well as to comply with pending California legislation prohibiting the use of an epidural, intravenous, or enteral feeding connector that fits into a connection port other than the type for which it was intended, which will go into effect January 1, 2016.

Once the final versions of ISO 80369-3 and ISO 80369-6 are approved by ISO, the provisional standards will be replaced by parallel adoptions of the ISO standards, which are already in process. AAMI agrees to comply with all of the requirements in Annex B of the ANSI Essential Requirements related to provisional American National Standards.

For more information, contact: Colleen Elliott, celliott@aami.org.

# International Organization for Standardization (ISO)

### Call for comments

### ISO/TMB - Standards under Systematic Review

### ISO/IEC Guide 98-4:2012

Every International Standard published by ISO shall be subject to systematic review in order to determine whether it should be confirmed, revised/amended, converted to another form of deliverable, or withdrawn at least once every five years.

ISO has launched Systematic Review ballots on the following standards that are the responsibility of the ISO/TMB:

ISO/IEC Guide 98-4:2012, Uncertainty of measurement --Part 4: Role of measurement uncertainty in conformity assessment

As there is no accredited U.S. TAG to provide the U.S. consensus positions on this document, we are seeking comments from any directly and materially affected parties.

Organizations or individuals interested in submitting comments or in requesting additional information should contact <u>ISOT@ansi.org</u>.

### ISO Proposal for a New Field of ISO Technical Activity

### **Electoral Administration**

### Comment Deadline: September 12, 2014

INTECO (Costa Rica) has submitted to ISO the attached proposal for a new field of ISO technical activity on the subject of Electoral Administration, with the following scope statement:

Standardization in the field of electoral administration and management, including, but not limited to, the registration of electors, the registration of political organizations and candidates, electoral logistics and planning, vote casting, vote counting and declaration of results, citizenship electoral education, oversight of campaign financing, electronic voting systems, electoral crimes and jurisprudence, electoral observation and methodologies, as well as any other aspects related to the organization of an electoral process.

Further explanation and rationale is provided in the document.

Anyone wishing to review this new proposal can request a copy by contacting ANSI's ISO Team via e-mail: isot@ansi.org with submission of comments to Steve Cornish (scornish@ansi.org) by close of business on Friday, September 12, 2014.

## **Meeting Notices**

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

The INCITS Executive Board will next meet September 9-11, 2014 in Santa Clara, California. Representatives of potential new members interested in attending this meeting should contact Jennifer Garner at 202-626-5737 or jgarner@itic.org to discuss membership and attendance requirements.

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 the more than 40 INCITS 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 always seeks to broaden its membership base and looks to recruit new participants in the following under-represented membership categories:

- Producer Hardware
- Producer Software
- Distributor
- User
- Consultants
- Standards Development Organizations and Consortia o "Minor"
- Academic Institution
- Other

The Society of the Plastics Industry, Inc. (SPI) Meeting Notices

October 7-9, 2014

### Independence, Ohio

### **Injection Molding Safety Committee**

The Injection Molding Safety Committee, sponsored by the Secretariat (SPI), will hold its next meeting October 7 through 9 at the Precision Manufacturers Association in Independence, OH. SPI is an ANSI-Accredited Standards developer, and the Injection Molding Safety Committee deals with the overall general safety requirements common to injection molding machines. The purpose of this meeting is to continue revising ANSI SPI B151.1-201X, Safety Requirements for the Manufacture, Care and Use of Injection Molding Machines. This meeting is open to anyone with an interest in injection molding machine safety, particularly as it relates to integration, care and use of these machines, and who wishes to participate in standards development.

If you have an interest in participating in this meeting or would like more information, please contact Katie Masterson at kmasterson@plasticsindustry.org or call 202-974-5296.

### Z15 Meeting Notice

#### November 20, 2014

The ANSI/ASSE Z15 Committee for Motor Vehicle Operations will be meeting at the ASSE Headquarters in Des Plaines, Illinois (Chicago) on November 20, 2014. There will be an RSVP site established and announced with registration information this fall. If you should have any questions about attendance please contact Tim Fisher with ASSE on behalf of the secretariat.

Timothy R. Fisher, CSP, CHMM, ARM, CPEA, CAE Director, Practices and Standards American Society of Safety Engineers (ASSE) 1800 East Oakton Street Des Plaines, IL 60018 Phone: (847) 768-3411 Fax: (847) 296-9221 E-mail: TFisher@ASSE.Org

# **Information Concerning**

## **American National Standards**

## **Notice of Redesignation of American National Standards**

The following standards are being redesignated to ANSI/AAMI/ISO standards and are now maintained by AAMI. Contact: Colleen Elliott, <u>celliott@aami.org</u>.

- ANSI/AAMI/ISO 4135-2009, Anesthetic and respiratory equipment Vocabulary (redesignation of ANSI/ASTM/ISO 4135-2009)
- ANSI/AAMI/ISO 5356-1-2009, Anesthetic and respiratory equipment Tracheal tubes and connectors (redesignation of ANSI/ASTM/ISO 5356-1-2009)
- ANSI/AAMI/ISO 5359-2003, Low-pressure hose assemblies for use with medical gases (redesignation of F2290-2003 ISO/ASTM 5359)
- ANSI/AAMI/ISO 5361-2014, Anesthetic and respiratory equipment Tracheal tubes and connectors (redesignation of ANSI/ISO 5361-2014)

ANSI/AAMI/ISO 5362-2014, Anesthetic reservoir bags (redesignation of ASTM/ISO 5362-2014)

- ANSI/AAMI/ISO 5364-2009, Anesthetic and respiratory equipment Oropharyngeal airways (redesignation of ANSI/ASTM/ISO 5364-2009)
- ANSI/AAMI/ISO 5366-1-2003 (R2014), Anesthetic and respiratory equipment Tracheostomy tubes Part 1: Tubes and connectors for use in adults (redesignation of ANSI/ISO 5366-1-2003 (R2014))
- ANSI/AAMI/ISO 5366-3-2009 (R2014), Anesthetic and respiratory equipment Tracheostomy tubes Part 3: Pediatric Tracheostomy tubes (redesignation of ANSI/ISO 5366-3-2009 (R2014))
- ANSI/AAMI/ISO 10079-1-2003 (R2014), Medical suction equipment Part 1: Electrically powered suction equipment Safety requirements (redesignation of ANSI/ISO 10079-1-2003 (R2014))
- ANSI/AAMI/ISO 10079-2-2002 (R2014), Medical suction equipment Part 2: Manually powered suction equipment (redesignation of ANSI/ISO 10079-2-2002 (R2014))
- ANSI/AAMI/ISO 10079-3-2002 (R2014), Medical suction equipment Part 3: Suction equipment powered from a vacuum or pressure source (redesignation of ANSI/ISO 10079-3-2002 (R2014))
- ANSI/AAMI/ISO 10651-4-2002 (R2014), Lung ventilators Part 4: Particular requirements for operatorpowered resuscitators (redesignation of ANSI/ISO 10651-4-2002 (R2014))
- ANSI/AAMI/ISO 10651-5-2006 (R2014), Lung ventilators for medical use Particular requirements for basic safety and essential performance – Part 5: Gas-powered emergency resuscitators (redesignation of ANSI/ISO 10651-5-2006 (R2014))
- ANSI/AAMI/ISO 11195-2009, Gas mixers for medical use Stand-alone gas mixers (redesignation of ANSI/ASTM/ISO 11195-2009)
- ANSI/AAMI/ISO 11712-2014, Anesthetic and respiratory equipment Supralaryngeal airways and connectors (redesignation of ANSI/ISO 11712-2014)
- ANSI/AAMI/ISO 14408-2009, Tracheal tubes designed for laser surgery Requirements for marking and accompanying information (redesignation of ANSI/ASTM/ISO 14408-2009)
- ANSI/AAMI/ISO 80601-2-13-2014, Medical electric equipment Part 2-13: Particular requirements for basic safety and essential performance of an anesthetic workstation (redesignation of ANSI/ISO 80601-2-13-2014)
- ANSI/AAMI/IEC 80601-2-35-2011, Medical electric equipment Part 2-35: Particular requirements for basic safety and essential performance of heating devices using blankets, pads or mattresses and intended for heating in medical use (redesignation of ANSI/ASTM/ISO/IEC 80601-2-35-2011)

# **Information Concerning**

## International Electrotechnical Commission (IEC)

## **USNC/IEC Non-Member of 13 IEC TCs/SCs**

The U.S. National Committee/IEC is currently registered as a **NON-MEMBER** of the following 13 IEC Technical Committees and Subcommittees. An effort is periodically launched to determine if any interest exists for establishing Technical Advisory Groups in these areas and registering as a Participating Member in any of the related Committees.

IEC/TC 7	Overhead Electrical Conductors
IEC/SC 8A	Grid Integration of Large-Capacity Renewable Energy Generation
IEC/TC 11	Overhead Lines
IEC/SC 22E	Power Electronic Systems and Equipment/Stabilized Power Supplies
IEC/SC 22F	Power Electronic Systems and Equipment/Power Electronics for Electrical Transmission and Distribution Systems
IEC/TC 28	Insulation Co-ordination
IEC/SC 36A	Insulators/Insulated Bushings
IEC/SC 59C	Performance of Household and Similar Electrical Appliances/Heating Appliances
IEC/SC 61B	Safety of Household and Similar Electrical Appliances/Safety of Household Microwave Ovens
IEC/TC 73	Short Circuit Currents
IEC/TC 97	Electrical Installations for Lighting and Beaconing of Aerodromes
IEC/TC 103	Transmitting Equipment for Radiocommunications
IEC/TC 122	UHV AC Transmission Systems

Anyone who has an interest in any of these IEC TCs/SCs and wishes additional information is invited to contact:

Tony Zertuche Deputy General Secretary, USNC/IEC ANSI Tel: 212 642 4892 E-Mail: <u>tzertuche@ansi.org</u>



BSR/ASHRAE Addendum c to ANSI/ASHRAE Standard 55-2013

## **Public Review Draft**

# Proposed Addendum c to Standard 55-2013, Thermal Environmental Conditions for Human Occupancy

First Public Review (July 2014) (Draft shows Proposed Changes to Current Standard)

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

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

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

© 2014 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

BSR/ASHRAE Addendum c to ANSI/ASHRAE Standard 55-2013, *Thermal Environmental Conditions for Human Occupancy* 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 simplifies Normative Appendix A (Methods for Determining Operative Temperature) to be a single calculation procedure for calculating operative temperature. Case 1 is removed because it is overly permissive and Case 3 is removed because it is redundant with Case 2.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by <u>underlining</u> (for additions) and <del>strikethrough</del> (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 c to 55-2013

Modify Normative Appendix A as follows:

(This is a normative appendix and is part of this standard.)

### NORMATIVE APPENDIX A METHODS FOR DETERMINING OPERATIVE TEMPERATURE

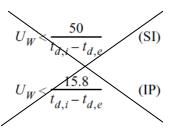
*Note: Average air speed* and *average air temperature* have precise definitions in this standard. See Section 3.0 for all defined terms.

Determine operative temperature ( $t_o$ ) in accordance with one of the following cases using the following method or Chapter 9 of ASHRAE Handbook—Fundamentals.<sup>3</sup>

**Case 1:** Average air temperature  $(t_{\sigma})$  is permitted to be used in place of operative temperature  $(t_{\sigma})$  when these three conditions are met:

a. There is no radiant and/or radiant panel heating or radiant panel cooling system.

b. The area weighted average U-factor of the outside window/ wall satisfies the following inequality:



BSR/ASHRAE Addendum c to ANSI/ASHRAE Standard 55-2013, *Thermal Environmental Conditions for Human Occupancy* First Public Review Draft

 $U_{w}$  = average U factor of window/wall, W/m<sup>2</sup>·K (Btu/h·ft<sup>2</sup>·°F)  $t_{d,i}$  = internal design temperature, °C (°F)  $t_{d,e}$  = external design temperature, °C (°F)

c. Window solar heat gain coefficients (SHGC) are less than 0.48.

**Case 2:** Calculation of the operative temperature  $(t_{o})$  is based on average air temperature  $(t_{a})$  and mean-radiant temperature.

Operative temperature  $(t_o)$  is permitted to be calculated per the following formula:

$$t_o = At_a + (1 - A)\overline{t_r}$$

where

 $t_o$  = operative temperature

 $t_a$  = average air temperature

 $\overline{t_r}$  = mean radiant temperature (For detailed calculation procedures see the "Thermal Comfort" chapter of most current edition of *ASHRAE Handbook*— *Fundamentals*<sup>3</sup>.)

A can be selected from the following values as a function of the relative <u>average</u> air speed,  $(V_a) \nu_{r}$ .

<u>V_a</u> . <i>¥</i> <sub>r</sub>	<0.2 m/s (<40 fpm)	0.2 to 0.6 m/s (40 to 120 fpm)	0.6 to 1.0 m/s (120 to 200 fpm)
A	0.5	0.6	0.7

**Case 3:** For representative occupants with metabolic rates between 1.0 and 1.3 met, not in direct sunlight, when the average air speed ( $V_{a}$ ) is <0.2 m/s (40 fpm) and where the difference between mean radiant temperature ( $\bar{t}_{a}$ ) and average air temperature ( $t_{a}$ ) is <4°C (7°F), the operative temperature ( $t_{o}$ ) is permitted to be calculated as the mean of the average air temperature and mean radiant temperature.



BSR/ASHRAE Addendum b to ANSI/ASHRAE Standard 62.1-2013

# **Public Review Draft**

# **Proposed Addendum b to**

# Standard 62.1-2013, Ventilation for

# **Acceptable Indoor Air Quality**

### First Public Review (August 2014) (Draft shows Proposed Changes to Current Standard)

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

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

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

© 2014 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

(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

Responding to increasing interest in sustainability in existing buildings, ASHRAE Standard 62.1 is cited frequently as a criterion for evaluating ventilation systems in existing buildings. Examples include LEED-EBOM, ENERGY STAR, and bEQ. Some building categories such as K-12 schools and office buildings are frequently renovated and often have multiple zone systems that provide HVAC to similar space types.

Section 6 (including the ventilation rate procedure) of the standard was developed as a design standard. As such, Section 6 and Normative Appendix A have the complexity to allow for many complex system designs and airflow pathways.

The scope of the standard (Section 2.4) states in part that "the provisions of this standard are not intended to be applied retroactively when the standard is used as a mandatory regulation or code."

For existing buildings, it may be difficult to apply the ventilation rate procedure (VRP), particularly for buildings with multiple-zone recirculating ventilation systems. This is because determination of some of the values needed to calculate ventilation rates may be difficult or impossible because required information is not available. An example is system ventilation efficiency (Ev), used in equation 6.2.5.4.

The proposed addendum provides an alternate path of compliance with Standard 62.1 that is needed by the marketplace for those situations where information required to determine system performance is unavailable or for smaller facilities with straightforward multiple zone applications.

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

## Addendum b to 62.1-2013

### Modify Section 6.2.5 as shown below.

**6.2.5 Multiple-Zone Recirculating Systems.** For ventilation systems wherein one or more air handlers supply a mixture of outdoor air and recirculated air to more than one ventilation zone, the outdoor air intake flow ( $V_{ot}$ ) shall be determined in accordance with Sections 6.2.5.1 through 6.2.5.4, or in accordance with the Simplified Ventilation Rate Calculation described in Normative Appendix J for occupancies that are listed in Table J-1.

Re-label existing Informative Appendix J as Informative Appendix K. Add new Normative Appendix J as follows:

(This is a normative appendix and is part of the standard.)

NORMATIVE APPENDIX J

### <u>Simplified Ventilation Rate Calculation for Multiple-Zone Recirculating Systems serving only specified</u> <u>occupancy categories</u>

**J.1 Outdoor Air Intake.** For multiple-zone recirculating systems serving only occupancy categories listed in Table J-1, the design system outdoor air intake flow  $(V_{ot})$  shall be determined in accordance with Equation J.1. For all other systems,  $V_{ot}$  shall be calculated using Section 6.2.5.4.

 $\underline{V_{ot}} = \sum_{\text{all zones}} (\underline{A_z \times R_s})$ (J.1)

where

<u> $A_z$ </u> = zone floor area, the net occupiable floor area of the ventilation zone, ft<sup>2</sup> (m<sup>2</sup>) <u> $R_s$ </u> = outdoor airflow rate required per unit area as determined from Table J.1

**J.2 Zone Primary Airflow.** For each zone, the minimum design system primary airflow shall be determined in accordance with equation J.2.

 $\underline{V_{p_z}} = \underline{A_z} \times \underline{R_{p_z}} \tag{J.2}$ 

where

 $\underline{R_{pz}}$  = minimum primary supply airflow rate required per unit area as determined from Table J-1. The minimum primary airflow rate is the minimum zone design airflow required for ventilation purposes.

<b>Occupancy Category</b>	Desig	n Occupancy	Minimum Airfl	0W	
	Outdoor Air	Rate Rs	<u>Minimum Pri</u> Air Ra		
Educational Facilities	$\frac{cfm/ft^2}{cfm}$	$L/s \cdot m^2$	$cfm/ft^2$	$\frac{L/s \cdot m^2}{m^2}$	
Classrooms (ages 5-8)	<u>0.65</u>	0.33	<u>1.12</u>	<u>0.56</u>	
Classrooms (age 9 plus)	<u>0.82</u>	<u>0.41</u>	<u>1.41</u>	<u>0.71</u>	
Computer lab	<u>0.65</u>	0.33	<u>1.12</u>	<u>0.56</u>	
Media center	<u>0.65</u>	<u>0.33</u>	<u>1.12</u>	<u>0.56</u>	
Music/theater/dance	<u>0.72</u>	<u>0.36</u>	<u>1.24</u>	<u>0.62</u>	
Multi-use assembly	<u>1.42</u>	<u>0.71</u>	<u>2.45</u>	<u>1.22</u>	
General			-	-	
Conference/meeting	<u>0.44</u>	0.22	<u>0.76</u>	<u>0.38</u>	
<u>Corridors</u>	<u>0.11</u>	<u>0.06</u>	<u>0.19</u>	<u>0.10</u>	
Office Buildings					
Breakrooms	<u>0.65</u>	<u>0.33</u>	<u>1.12</u>	<u>0.56</u>	
Main entry lobbies	<u>0.19</u>	<u>0.10</u>	<u>0.33</u>	<u>0.16</u>	
Occupiable storage rooms for dry materials	<u>0.12</u>	<u>0.06</u>	<u>0.21</u>	<u>0.10</u>	
Office space	<u>0.15</u>	0.08	0.26	<u>0.13</u>	
Reception areas	<u>0.37</u>	<u>0.19</u>	<u>0.64</u>	<u>0.32</u>	
Telephone/data entry	<u>0.63</u>	0.32	<u>1.09</u>	<u>0.54</u>	
Public Assembly Spaces					
<u>Libraries</u>	<u>0.30</u>	<u>0.15</u>	<u>0.52</u>	<u>0.26</u>	

### TABLE J-1 Minimum Ventilation and Supply Airflow Rates

**J.3 Minimum Airflows with Demand Control Ventilation.** For a multiple zone system that has a demand control ventilation system designed in accordance with Section 6.2.7.1, the following minimum airflows are required. When the zone is unoccupied during scheduled building occupancy, the zone outdoor air flow  $(V_{oz})$  shall be no less than that calculated by Equation J.3 and the zone primary airflow  $V_{pz}$  shall be no less than calculated by Equation J.4.

 $\underline{V_{oz}} = \underline{A_z} \times \underline{R_{smin}} \tag{J.3}$ 

where

 $\overline{R_{smin}}$  = outdoor airflow rate required per unit area as determined from Table J.2

 $\underline{V_{pz}} = \underline{A_z \times R_{pzmin}} \tag{J.4}$ 

where

 $\overline{R_{pzmin}}$  = primary supply airflow rate required per unit area as determined from Table J.2

### TABLE J-2 Minimum Ventilation and Supply Airflow Rates for Unoccupied Zones

Occupancy Category	Design DCV Zone Minimum Airflow						
	Outdoor Air		Primary Supply Air Rate <u>R</u> <sub>pzmin</sub>				
<b>Educational Facilities</b>	$cfm/ft^2$	$L/s \cdot m^2$	$cfm/ft^2$	$L/s \cdot m^2$			
Classrooms (ages 5-8)	<u>0.21</u>	<u>0.11</u>	0.36	<u>0.18</u>			
Classrooms (age 9 plus)	<u>0.21</u>	<u>0.11</u>	<u>0.36</u>	<u>0.18</u>			
Computer lab	0.21	<u>0.11</u>	0.36	<u>0.18</u>			
Media center	0.21	<u>0.11</u>	0.36	<u>0.18</u>			
Music/theater/dance	<u>0.11</u>	0.05	<u>0.18</u>	<u>0.09</u>			
Multi-use assembly	0.11	0.05	<u>0.18</u>	<u>0.09</u>			
General							
Conference/meeting	<u>0.11</u>	0.05	<u>0.18</u>	<u>0.09</u>			
Corridors	0.11	0.05	<u>0.18</u>	<u>0.09</u>			
Office Buildings							
Breakrooms	<u>0.21</u>	<u>0.11</u>	<u>0.36</u>	<u>0.18</u>			
Main entry lobbies	<u>0.11</u>	<u>0.05</u>	<u>0.18</u>	<u>0.09</u>			
Occupiable storage rooms for dry materials	<u>0.11</u>	<u>0.05</u>	<u>0.18</u>	<u>0.09</u>			
Office space	0.11	0.05	<u>0.18</u>	<u>0.09</u>			
Reception areas	<u>0.11</u>	0.05	<u>0.18</u>	<u>0.09</u>			
Telephone/data entry	<u>0.11</u>	0.05	<u>0.18</u>	<u>0.09</u>			
Public Assembly Spaces							
<u>Libraries</u>	<u>0.21</u>	<u>0.11</u>	<u>0.36</u>	<u>0.18</u>			



BSR/ASHRAE Addendum c to ANSI/ASHRAE Standard 62.1-2013

# **Public Review Draft**

# **Proposed Addendum c to**

# Standard 62.1-2013, Ventilation for

# **Acceptable Indoor Air Quality**

### First Public Review (August 2014) (Draft shows Proposed Changes to Current Standard)

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

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

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

© 2014 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

(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

Standard 62.1 contains requirements for ventilation of spaces which are free of environmental tobacco smoke (ETS-free). It also contains requirements for separation of an ETS-free area from any spaces containing environmental tobacco smoke.

Since the current language relating to ETS was added to the standard, electronic smoking devices (commonly called e-cigarettes) have come on the market and are increasingly popular. Also, some jurisdictions have legalized the smoking of cannabis.

This proposed addendum revises the current definition of ETS to include emissions from electronic smoking devices and from smoking of cannabis. The existing requirements for separation of ETS-free spaces from ETS spaces remain unchanged.

This proposed addendum clarifies the intent of the standard that provision of acceptable indoor air quality is incompatible with the presence of ETS, including cannabis smoke and e-cigarette emissions. The ventilation rates determined in accordance with the provisions of the standard apply only to spaces where these emissions are not present and which are adequately separated from spaces where they are present.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by <u>underlining</u> (for additions) and <del>strikethrough</del> (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 c to 62.1-2013

### Modify Section 3. Definitions as shown below:

*environmental tobacco smoke (ETS):* the "aged" and diluted combination of both side-stream smoke (smoke from the lit end of a cigarette or other tobacco product) and exhaled mainstream smoke (smoke that is exhaled by a smoker). ETS is commonly referred to as *secondhand smoke*. This definition includes smoke produced from the combustion of cannabis and controlled substances and the emissions produced by electronic smoking devices.



BSR/ASHRAE Addendum d to ANSI/ASHRAE Standard 62.1-2013

# **Public Review Draft**

# **Proposed Addendum d to**

# Standard 62.1-2013, Ventilation for

# **Acceptable Indoor Air Quality**

### First Public Review (August 2014) (Draft shows Proposed Changes to Current Standard)

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

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

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

© 2014 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

(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 proposed addendum adds an exception to Section 5.8 (Particulate Matter Removal). In sensible-only cooling (i.e. sensible-only chilled beams) the equipment's purpose is to provide only sensible cooling. In this case the coil surface would never be wet and the filtration requirements intended for wetted surfaces should not apply. Latent cooling for these systems would be provided by other portions of the system, such as cooling coils in the primary air stream, which would then have independent upstream air filtration.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by <u>underlining</u> (for additions) and <del>strikethrough</del> (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 d to 62.1-2013

### Revise Section 5.8 as shown below:

**5.8 Particulate Matter Removal.** Particulate matter filters or air cleaners having a minimum efficiency reporting value (MERV) of not less than 8 when rated in accordance with ANSI/ASHRAE Standard 52.2<sup>15</sup> shall be provided upstream of all cooling coils or other devices with wetted surfaces through which air is supplied to an occupiable space.

Exception: Cooling coils that are designed, controlled, and operated to provide sensible cooling only.



BSR/ASHRAE Addendum e to ANSI/ASHRAE Standard 62.1-2013

# **Public Review Draft**

# **Proposed Addendum e to**

# Standard 62.1-2013, Ventilation for

# **Acceptable Indoor Air Quality**

### First Public Review (August 2014) (Draft shows Proposed Changes to Current Standard)

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

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

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

© 2014 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

(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 proposed addendum modifies Section 8, Operation and Maintenance, incorporating calibration requirements for airflow monitoring sensors and systems and harmonizes Table 8.4.1 (Minimum Maintenance Activity and Frequency) with ASHRAE/ACCA Standard 180-2012, Standard Practice for Inspection and Maintenance of Commercial-Building HVAC Systems.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by <u>underlining</u> (for additions) and <del>strikethrough</del> (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 e to 62.1-2013

### Modify Section 8 as shown below.

### 8.1 General

**8.1.1 Application.** The requirements of this section apply to buildings and their ventilation systems and their components constructed or renovated after the adoption date of this section.

**8.1.2 Building Alterations or Change-of-Use.** When buildings are altered or when changes in building use, occupant category, occupant density, other changes inconsistent with system design assumptions are made, the ventilation Ventilation system design, operation, and maintenance shall be reevaluated and the O&M manual updated as necessary. when changes in building use or occupancy category, significant building alterations, significant changes in occupant density, or other changes inconsistent with system design assumptions are made.

**8.2 Operations and Maintenance Manual.** An Operations and Maintenance (O&M) Manual, either written or electronic, shall be developed and maintained on site or in a centrally accessible location for the working life of the applicable ventilation system equipment or components. This manual shall be updated as necessary. The manual shall include the O&M procedures, ventilation system operating schedules and any changes made thereto, final design drawings, maintenance schedules and any changes made thereto, and the maintenance requirements and frequencies detailed in Section 8.4 summarized in Table 8.4.1.

**8.3 Ventilation System Operation.** Mechanical and natural ventilation systems shall be operated in a manner consistent with the O&M Manual. Systems shall be operated such that spaces are ventilated in accordance with Section 6 when they are expected to be occupied.

### 8.4 Ventilation System Maintenance

**8.4.1 Ventilation System Components.** The building ventilation system components shall be maintained in accordance with the O&M Manual or as <u>otherwise</u> required by this section and summarized in Table 8.4.1.

**8.4.1.1 Filters and Air-Cleaning Devices.** All filters and air cleaning devices shall be replaced or maintained as specified by the O&M manual.

**8.4.1.2 Outdoor Air Dampers.** At a minimum of once every three months or as specified in the O&M manual, the outdoor air dampers and actuators shall be visually inspected or remotely monitored to verify that they are functioning in accordance with the O&M manual.

**8.4.1.3 Humidifiers.** Humidifiers shall be cleaned and maintained to limit fouling and microbial growth. Any automatic chemical dosing equipment shall be calibrated and maintained in accordance with the O&M manual to maintain additive concentrations to comply with Section 5.12.1. These systems shall be inspected at a minimum of once every three months of operation and/or treated in accordance with the O&M manual.

**8.4.1.4 Dehumidification Coils.** All dehumidifying cooling coils shall be visually inspected for cleanliness and microbial growth regularly when it is likely that dehumidification occurs, but no less than once per year or as specified in the O&M manual, and shall be cleaned when fouling or microbial growth is observed.

**8.4.1.5 Drain Pans.** Drain pans shall be visually inspected for cleanliness and microbial growth at a minimum of once per year during the cooling season, or as specified in the O&M manual, and shall be cleaned if needed. Areas adjacent to drain pans that were subjected to wetting shall be investigated, cleaned if necessary, and the cause of unintended wetting rectified.

**8.4.1.6 Outdoor Air Intake Louvers.** Outdoor air intake louvers, bird screens, mist eliminators, and adjacent areas shall be visually inspected for cleanliness and integrity at a minimum of once every six months, or as specified in the O&M manual, and cleaned as needed. When visible debris or visible biological material is observed, it shall be removed. Physical damage to louvers, screens, or mist eliminators shall be repaired if such damage impairs their function in preventing contaminant entry.

**8.4.1.7 Sensors.** Sensors whose primary function is dynamic minimum outdoor air control, such as flow stations at an air handler and those used for demand control ventilation, shall have their accuracy verified as specified in the O&M Manual. This activity shall occur at a minimum of once every six months or periodically in accordance with the O&M Manual. A sensor failing to meet the accuracy specified in the O&M Manual shall be recalibrated or replaced.

**8.4.1.8 Outdoor Airflow Verification.** The total quantity of outdoor air to air handlers, except for units under 2000 cfm (1000 L/s) of supply air, shall be measured in minimum outdoor air mode once every five years. If measured minimum airflow rates are less than the design minimum rate ( $\pm 10\%$  balancing tolerance) documented in the O&M manual, they shall be adjusted or modified to bring them to the minimum design rate or evaluated to determine if the measured rates are in compliance with this standard.

**8.4.1.9 Cooling Towers.** Cooling tower water systems shall be treated to limit the growth of microbiological contaminants including *legionella sp.* in accordance with O & M Manual or the water treatment program.

**8.4.1.10 Equipment/Component Accessibility.** The space provided for routine maintenance and inspection around ventilation equipment shall be kept clear.

**8.4.1.11 Floor Drains.** Floor drains located in air plenums or rooms that serve as plenums shall be maintained to prevent transport of contaminants from the floor drain to the plenum.

8.4.2 Microbial Contamination. Visible microbial contamination shall be investigated and rectified.

**8.4.3 Water Intrusion.** Water intrusion or accumulation in ventilation system components such as ducts, plenums, and air handlers shall be investigated and rectified.

### Modify Table 8.4.1 as shown below.

# TABLE 8.4.1Minimum Maintenance Activity and Frequency forVentilation System Equipment and Associated Components

Inspection/Maintenance Task	Frequency*
a Investigate system for water intrusion or accumulation. Rectify as necessary.	As necessary
b Verify equipment/component accessibility and ensure space provided for routine maintenance and inspection shall be kept clear.	Monthly
<u>c</u> Maintain floor drains located in air plenums or rooms that serve as air plenums to prevent transport of contaminants from the floor drain to the plenum	<u>Monthly</u>
<u>d</u> Open cooling tower water systems shall be treated to limit the growth of microbiological contaminants including <i>legionella</i> <u>sp.</u>	<u>Monthly</u>
e Check for particulate accumulation on filters and air-cleaning devices. Clean or replace as necessary to ensure proper operation.	<u>Quarterly</u>
<u>f</u> Check ultraviolet lamp. Clean or replace as needed to ensure proper operation	Quarterly
g Visually inspect outdoor air dampers and actuators or remotely monitor to verify for proper function	Quarterly
h Visually inspect dehumidification and humidification devices. Clean and maintain to limit fouling and microbial growth.	
Measure relative humidity and adjust system controls as necessary.	<u>Quarterly</u>
i Closed cooling tower water systems shall be treated to limit the growth of microbiological contaminants including <i>legionella</i> <u>sp.</u>	<u>Quarterly</u>
j Check control system and devices for evidence of improper operation. Clean, lubricate, repair, adjust, or replace as needed to ensure proper operation.	<u>Semiannually</u>
<u>k</u> Check P-trap. Prime as needed to ensure proper operation	Semiannually
<u>1 Check fan belt tension. Check for belt wear and replace if necessary to ensure proper operation. Check sheaves for evidence of improper alignment or evidence of wear and correct as needed.</u>	<u>Semiannually</u>
m Check variable-frequency drive for proper operation. Correct as needed	Semiannually
<u>n</u> Check for proper operation of cooling or heating coil for damage or evidence of leaks. Clean, restore, or replace as required.	Semiannually
o Visually inspect outdoor air intake louvers, bird screens, mist eliminators, and adjacent areas for cleanliness and integrity;	
clean as needed; remove all visible debris or visible biological material observed, repair physical damage to louvers, screens, or mist eliminators if such damage impairs the item from providing the required outdoor air entry.	<u>Semiannually</u>
p Verify accuracy of sensors whose primary function is dynamic minimum outdoor air control, such as flow stations at an air handler and those used for demand control ventilation. Any sensor failing to meet the specified accuracy shall be recalibrated or replaced.	Semiannually
<u>q</u> Visually inspect natural ventilation openings and adjacent areas for cleanliness and integrity; clean as needed; remove all visible debris or visible biological material observed, repair physical damage to louvers, and screens, if such damage impairs the item from providing the required outdoor air entry. Manual and/or automatic opening apparatus shall be physically tested for	Semiannually
<u>proper operation and repaired or replaced as necessary.</u> <u>r</u> Verify the accuracy of permanently mounted sensors whose primary function is outdoor air delivery monitoring, outdoor air <u>delivery verification</u> , zone primary air measurement or dynamic minimum outdoor air control, such as flow stations at an air <u>handler</u> and those used for demand control ventilation. A sensor failing to meet the accuracy specified in the O&M Manual shall <u>be</u> recalibrated or replaced. Performance verification shall include output comparison to a reference standard with measurement superiority of at least 4-to-1, thereby minimizing the total uncertainty contained in the adjusted outputs. Reference standards <u>used for performance verification</u> shall have documented measurement uncertainty traceable to NIST <sup>**</sup> through certified lab calibration within 12 months prior to verification. Recalibrated sensors shall be adjusted such that control inputs reflect values within ±5% of both the design minimum and maximum outdoor airflow rates specified in the O&M Manual. Sensor output adjustment activities shall comply with the recommendations in the O&M Manual, and be consistent with the sensor <u>manufacturer's instructions.</u>	<u>Semiannually</u>
s Check air filter fit and housing seal integrity. Correct as needed.	Annually
t Check control box for dirt, debris and/or loose terminations. Clean and tighten as needed	Annually_
u Check motor contactor for pitting or other signs of damage. Repair or replace as needed.	Annually
v Check fan blades and fan housing. Clean, repair, or replace as needed to ensure proper operation.	Annually
w Check refrigerant system temperatures. If outside of recommended levels, find cause, repair, and adjust refrigerant charge to achieve optimal operating levels.	<u>Annually</u>
x Check integrity of all panels on equipment. Replace fasteners as needed to ensure proper integrity and fit/finish of equipment.	Annually
y Assess field serviceable bearings. Lubricate if necessary	Annually
z Check drain pan, drain line, and coil for biological growth. Clean as needed	Annually
aa Check for evidence of buildup or fouling on heat exchange surfaces. Restore as needed to ensure proper operation	Annually
ab Inspect unit for evidence of moisture carryover from cooling coils beyond the drain pan. Make corrections or repairs as	Annually

necessary.	
ac Check for proper damper operation. Clean, lubricate, repair, replace, or adjust as needed to ensure proper operation	<u>Annually</u>
ad Visually inspect areas of moisture accumulation for biological growth. If present, clean or disinfect as needed	Annually
ae Check condensate pump. Clean or replace as needed.	Annually
af Visually inspect exposed ductwork and external piping for insulation and vapor barrier for integrity. Correct as needed.	Annually
ag Verify the total quantity of outdoor air delivered by air handlers set to minimum outdoor air mode. If measured minimum	
airflow rates are less than the design minimum rate documented in the O&M Manual, $\pm a$ 10 % balancing tolerance; (1) confirm	
the measured rate does not conform with the provisions of this standard and; (2) adjust or modify the air-handler components to	5
correct the airflow deficiency. Ventilation systems shall be balanced in accordance with ASHRAE Standard 111 <sup>16</sup> , or	<u>5 years</u>
equivalent, at least to the extent necessary to verify conformance with the total outdoor airflow and space supply airflow	
requirements of this standard. Exception: Units under 2000 cfm (1000 L/s) of supply air are exempt from this requirement	

\*a. Minimum frequencies may be increased or decreased if indicated in the O&M manual
 \*\* National Institute of Standards and Technology, U.S. Department of Commerce, Gaithersburg, MD.

Item		Minimum Frequency *
Filters and air cleaning devices	A	Every three months or as specified in the O & M Manual
Outdoor air dampers and actuators	B	Every 12 months or as specified in the O & M Manual
Humidifiers	C	Every 12 months or as specified in the O & M Manual
Dehumidification coils	Ð	Regularly when it is likely that dehumidification occurs but no less than once per year or as specified in the O & M Manual
Drain pans and other adjacent surfaces subject to wetting	Ð	Every 12 months during cooling season or as specified in the O & M Manual
Outdoor air intake louvers, bird screens, mist eliminators, and adjacent areas	Ē	Every six months or as specified in the O & M Manual
Sensors used for dynamic minimum outdoor air control	F	Every six months or periodically in accordance with O & M Manual
Air handling systems except for units under 2,000 cfm (1000 L/s)	G	Once every five years
Cooling towers	H	Every one month for open systems, every three months for closed systems, or in accordance with O & M Manual or treatment system provider
Floor drains located in plenums or rooms that serve as air plenums	Ŧ	Periodically according to O & M Manual
Equipment/component accessibility	ł	
Visible microbial contamination	K	
Water intrusion or accumulation	K	

#### **ACTIVITY CODE:**

- A Maintain according to O & M Manual.
- B Visually inspect or remotely monitor for proper function.
- C Clean and maintain to limit fouling and microbial growth.
- D Visually inspect for cleanliness and microbial growth and clean when fouling is observed.
- E Visually inspect for cleanliness and integrity and clean when necessary.
- F Verify accuracy and recalibrate or replace as necessary.
- G Measure minimum quantity of outdoor air. If measured minimum air flow rates are less than 90% of the minimum outdoor air rate in the O & M Manual, they shall be adjusted or modified to bring them above 90% or shall be evaluated to determine if the measured rates are in conformance with this standard.
- H Treat to limit the growth of microbiological contaminants.
- I Maintain to prevent transport of contaminants from the floor drain to the plenum.
- J Keep clear the space provided for routine maintenance and inspection around ventilation equipment.

K Investigate and rectify.



BSR/ASHRAE Addendum p to ANSI/ASHRAE Standard 62.1-2013

# **Public Review Draft**

# **Proposed Addendum p to**

# Standard 62.1-2013, Ventilation for

# **Acceptable Indoor Air Quality**

### Second Public Review (August 2014) (Draft shows Proposed Changes to Current Standard)

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

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

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

© 2014 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

(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

At present, all occupancy types are required to provide no less than the area component of the minimum ventilation rate during periods when the space is "expected to be occupied." A previous interpretation clarified that this prohibited the use of occupancy sensors to reduce the ventilation rate to zero during these times. This proposed addendum would allow the ventilation to be reduced to zero through the use of occupancy sensors (not through contaminant or  $CO_2$  measurements) for spaces of selected occupancy types. These occupancy types are identified by a new Note H to Table 6.2.2.1 (Minimum Ventilation Rates in Breathing Zone). The occupancy types where this is allowed are most of those with an Area Outdoor Air Rate of 0.06 cfm/ft<sup>2</sup>.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by <u>underlining</u> (for additions) and <u>strikethrough</u> (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 p to 62.1-2013

Add the following definitions to Section 3:

occupied mode: when a zone is scheduled to be occupied.

*occupied-standby mode*: when a zone is scheduled to be occupied and an occupant sensor indicates zero population within the zone.

unoccupied mode: when a zone is not scheduled to be occupied.

*occupant sensor:* a device that detects the presence of one or more person(s) within a space, such as motion detectors or captive key systems.

Revise Section 6.2.7.1.1 and add a new Section 6.2.7.1.2 as shown below. Renumber subsequent sections.

**6.2.7.1.1** The For DCV zones in the occupied mode, breathing zone outdoor airflow  $(V_{bz})$  shall be reset in response to current population. occupancy and shall be no less than the building component  $(R_a \times A_z)$  of the DCV zone.

**6.2.7.1.2** For DCV zones in the occupied mode, breathing zone outdoor airflow  $(V_{bz})$  shall be not less than the building component  $(R_a \ge A_z)$  for the zone.

**Exception:** Breathing zone outdoor airflow shall be permitted to be reduced to zero for zones in occupied-standby mode for the occupancy categories indicated in Table 6.2.2.1 provided that airflow is restored to  $V_{bz}$  whenever occupancy is detected.

*Note:* Examples of reset methods or devices include population counters, carbon dioxide ( $CO_2$ ) sensors, timers, occupancy schedules, or occupancy sensors.

Revise Table 6.2.2.1 as shown below. Changes are shown highlighted in <u>vellow</u> to help identify them. The remainder of Table 6.2.2.1 is unchanged.

#### **Default Values People Outdoor** Area Outdoor Air Occupant Air Rate Rate **Combined Outdoor Air** Density $R_p$ $R_a$ Air (see Note Rate (see Note 5) **Occupancy Category** Notes Class 4) #/1000 ft<sup>2</sup> cfm/ft<sup>2</sup> $L/s \cdot m^2$ L/s•person cfm/person or #/100 cfm/person L/s·person m<sup>2</sup> **Correctional Facilities** Cell 5 2.5 0.12 0.6 25 10 4.9 2 0.06 0.3 3.5 Dayroom 5 2.5 30 7 1 5 2.5 0.06 0.3 15 9 4.5 Guard stations 1 0.3 50 9 4.4 2 Booking/waiting 7.5 3.8 0.06 **Educational Facilities** Daycare (through age 4) 10 5 0.18 0.9 25 17 8.6 2 Daycare sickroom 10 5 0.18 0.9 25 17 8.6 3 Classrooms (ages 5-8) 10 5 0.12 0.6 25 15 7.4 1 Classrooms (age 9 plus) 10 5 0.12 0.6 35 13 6.7 1 7.5 3.8 0.06 0.3 H 65 8 4.3 1 Lecture classroom Lecture hall (fixed seats) H 7.5 0.06 0.3 4.0 3.8 150 8 1 5 2 Art classroom 10 0.18 0.9 20 19 9.5 5 0.9 2 10 0.18 25 17 8.6 Science laboratories University/college 2 10 5 0.9 17 0.18 25 8.6 laboratories Wood/metal shop 10 5 0.18 0.9 20 19 9.5 2 5 7.4 10 0.12 0.6 25 15 1 Computer lab Media center 5 0.6 10 0.12 25 15 7.4 А 1 10 5 0.06 0.3 H 5.9 Music/theater/dance 35 12 1 7.5 3.8 0.06 0.3 100 Multi-use assembly H 8 4.1 1 **Food and Beverage Service** Restaurant dining rooms 7.5 3.8 0.18 0.9 70 10 2 5.1 7.5 Cafeteria/fast food dining 3.8 0.18 0.9 100 9 4.7 2 7.5 0.9 9 4.7 2 Bars, cocktail lounges 3.8 0.18 100 Kitchen (cooking) 7.5 3.8 0.12 0.6 20 14 7.0 2 General 0.06 7 3.5 Break rooms 5 2.5 0.3 Η 25 1 Coffee stations 5 2.5 0.06 0.3 H 20 8 4 1 Η 5 2.5 0.3 3.1 Conference/meeting 0.06 50 6 1 Corridors 0.06 0.3 H 1 Occupiable storage rooms 65 32.5 5 2 2 2.5 0.12 0.6 В for liquids or gels Hotels, Motels, Resorts, Dormitories

### TABLE 6.2.2.1 MINIMUM VENTILATION RATES IN BREATHING ZONE (This table is not valid in isolation; it must be used in conjunction with the accompanying notes.)

I		T						1	
Bedroom/living Room	5	2.5	0.06	0.3	<u>Н</u>	10	11	5.5	1
Barracks sleeping areas	5	2.5	0.06	0.3	<u>Н</u>	20	8	4.0	1
Laundry rooms, central Laundry rooms within	5	2.5	0.12	0.6		10	17	8.5	2
dwelling units	5	2.5	0.12	0.6		10	17	8.5	1
Lobbies/prefunction	7.5	3.8	0.06	0.3	<u>H</u>	30	10	4.8	1
Multipurpose assembly	5	2.5	0.06	0.3	<u>Н</u>	120	6	2.8	1
Office Buildings									
Breakrooms	5	2.5	0.12	0.6		50	7	3.5	1
Main entry lobbies	5	2.5	0.06	0.3	<u>H</u>	10	11	5.5	1
Occupiable storage rooms for dry materials	5	2.5	0.06	0.3		2	35	17.5	1
Office space	5	2.5	0.06	0.3	<u>H</u>	5	17	8.5	1
Reception areas	5	2.5	0.06	0.3	<u>H</u>	30	7	3.5	1
Telephone/data entry	5	2.5	0.06	0.3	<u>Н</u>	60	6	3.0	1
Miscellaneous Spaces									
Bank vaults/safe deposit	5	2.5	0.06	0.3	<u>н</u>	5	17	8.5	2
Banks or bank lobbies	7.5	3.8	0.06	0.3	<u>Н</u>	15	12	6.0	1
Computer (not printing)	5	2.5	0.06	0.3	<u>H</u>	4	20	10.0	1
Freezer and refrigerated spaces (<50°F)	10	5	0	0	Е	0	0	0	2
General manufacturing (excludes heavy industrial and processes using chemicals)	10	5.0	0.18	0.9		7	36	18	3
Pharmacy (prep. area)	5	2.5	0.18	0.9		10	23	11.5	2
Photo studios	5	2.5	0.12	0.6		10	17	8.5	1
Shipping/receiving	10	5	0.12	0.6	В	2	70	35	2
Sorting, packing, light assembly	7.5	3.8	0.12	0.6		7	25	12.5	2
Telephone closets	-	-	0.00	0.0		-			1
Transportation waiting	7.5	3.8	0.06	0.3	<u>H</u>	100	8	4.1	1
Warehouses	10	5	0.06	0.3	В	-			2
Public Assembly Spaces					•				•
Auditorium seating area	5	2.5	0.06	0.3	<u>Н</u>	150	5	2.7	1
Places of religious worship	5	2.5	0.06	0.3	<u>н</u>	120	6	2.8	1
Courtrooms	5	2.5	0.06	0.3	<u>H</u>	70	6	2.9	1
Legislative chambers	5	2.5	0.06	0.3	<u>H</u>	50	6	3.1	1
Libraries	5	2.5	0.12	0.6		10	17	8.5	1
Lobbies	5	2.5	0.06	0.3	<u>H</u>	150	5	2.7	1
Museums (children's)	7.5	3.8	0.12	0.6		40	11	5.3	1

Museums/galleries	7.5	3.8	0.06	0.3	<u>H</u>	40	9	4.6	1
Residential									
Dwelling Unit	5	2.5	0.06	0.3	F, G <u>, H</u>	F			1
Common Corridors	-	-	0.06	0.3	<u>H</u>				1
Retail									
Sales (except as below)	7.5	3.8	0.12	0.6		15	16	7.8	2
Mall common areas	7.5	3.8	0.06	0.3	<u>H</u>	40	9	4.6	1
Barber shop	7.5	3.8	0.06	0.3	<u>H</u>	25	10	5.0	2
Beauty and nail salons	20	10	0.12	0.6		25	25	12.4	2
Pet shops (animal areas)	7.5	3.8	0.18	0.9		10	26	12.8	2
Supermarket	7.5	3.8	0.06	0.3	<u>H</u>	8	15	7.6	1
Coin-operated laundries	7.5	3.8	0.12	0.6		20	14	7.0	2
Sports and Entertainment									
Gym, sports arena (play area)	20	10	0.18	0.9	Е	7	45	23	12
Spectator areas	7.5	3.8	0.06	0.3	<u>H</u>	150	8	4.0	1
Swimming (pool & deck)	-	-	0.48	2.4	С	-			2
Disco/dance floors	20	10	0.06	0.3	<u>H</u>	100	21	10.3	2
Health club/aerobics room	20	10	0.06	0.3		40	22	10.8	2
Health club/weight rooms	20	10	0.06	0.3		10	26	13.0	2
Bowling alley (seating)	10	5	0.12	0.6		40	13	6.5	1
Gambling casinos	7.5	3.8	0.18	0.9		120	9	4.6	1
Game arcades	7.5	3.8	0.18	0.9		20	17	8.3	1
Stages, studios	10	5	0.06	0.3	D <u>, H</u>	70	11	5.4	1

### **ITEM-SPECIFIC NOTES FOR TABLE 6.2.2.1**

H Ventilation air for this occupancy category shall be permitted to be reduced to zero when the space is in occupied-standby mode.



BSR/ASHRAE Addendum q to ANSI/ASHRAE Standard 62.1-2013

# **Public Review Draft**

# Proposed Addendum q to

# Standard 62.1-2013, Ventilation for

# **Acceptable Indoor Air Quality**

### Third Public Review (August 2014) (Draft shows Proposed Changes to Current Standard)

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

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

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

© 2014 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

(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 proposed addendum modifies Section 5.2 (Exhaust Duct Location) to clarify requirements by including air classes instead of descriptive language, and modifies the requirements by allowing positively pressurized exhaust ducts inside the space of origin.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by <u>underlining</u> (for additions) and <del>strikethrough</del> (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 q to 62.1-2013

### Revise Section 5.2 as shown below.

### 5.2 Exhaust Duct Location.

**5.2.1** Exhaust ducts that convey <u>Class 4 air</u> potentially harmful contaminants shall be negatively pressurized relative to <u>ducts</u>, <u>plenums or occupiable</u> spaces through which <u>the ducts</u> they pass. , so that exhaust air cannot leak into occupied spaces; supply, return, or outdoor air ducts; or plenums.

**5.2.2** Exhaust ducts under positive pressure that convey Class 2 or Class 3 air shall not extend through ducts, plenums or occupiable spaces other than the space from which the exhaust air is drawn.

**Exception:** Exhaust ducts <u>conveying Class 2 air and exhaust ducts conveying air from residential kitchen hoods</u> that are sealed in accordance with SMACNA Seal Class A.<sup>2</sup>

### Revise Table 5.16.1 as shown below.

### **TABLE 5.16.1** Airstreams

Description	Air Class			
Diazo printing equipment discharge	4			
Commercial kitchen grease hoods	4			
Commercial kitchen hoods other than grease	3			
Laboratory hoods	4			
Residential kitchen <del>vented</del> hoods	3			
Hydraulic elevator machine room	2			



BSR/ASHRAE Addendum j to ANSI/ASHRAE Standard 34-2013

# **First Public Review Draft**

# Proposed Addendum j to

# Standard 34-2013, Designation and

# **Safety Classification of Refrigerants**

## First Public Review (August 2014) (Draft shows Proposed Changes to Current Standard)

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

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

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

© 2014 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

BSR/ASHRAE Addendum j to ANSI/ASHRAE Standard 34-2013, Designation and Safety Classification of Refrigerants

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 adds the zeotropic refrigerant blend R-451A, to Table 4-2 and Table D-2. The recommended flammability classification 2L is based on an LFL of 7.0 vol. %, a heat of combustion of 9,790 kJ/kg (4,209 BTU/lb), and a burning velocity less than 4 cm/s. The recommended toxicity classification A is based on an adopted OEL of 520 ppm v/v. The recommended ATEL is 100,000 ppm v/v.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by <u>underlining</u> (for additions) and <del>strikethrough</del> (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 j to 34-2013

Add the following underlined data to Table 4-2 and Table D-2 in the columns indicated.

### TABLE 4-2 Data and Safety Classifications for Refrigerant Blends

Refrigerant Number =  $\underline{451A}$ Composition (Mass %) =  $\underline{R-1234yf/134a(89.8/10.2)}$ Composition tolerances =  $\underline{\pm 0.2/\pm 0.2}$ OEL (ppm v/v) =  $\underline{520}$ Safety Group =  $\underline{A2L}$ RCL =  $\underline{18,000}$  ppm v/v;  $\underline{5.3}$ lb/Mcf;  $\underline{81}$  g/m<sup>3</sup> Highly Toxic or Toxic Under Code Classification = <u>Neither</u>

### TABLE D-2 Data for Refrigerant Blends

Refrigerant Number = 451AComposition (Mass %) = R-1234yf/134a(89.8/10.2)

Average Molecular Mass =  $\underline{112.7}$ Bubble Point (°F) =  $\underline{-23.4}$ Dew Point (°F) =  $\underline{-22.9}$ Bubble Point (°C) =  $\underline{-30.8}$ Dew Point (°C) =  $\underline{-30.5}$ 



BSR/ASHRAE Addendum k to ANSI/ASHRAE Standard 34-2013

# **First Public Review Draft**

# Proposed Addendum k to

# Standard 34-2013, Designation and

# **Safety Classification of Refrigerants**

### First Public Review (August 2014) (Draft shows Proposed Changes to Current Standard)

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

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

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

© 2014 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

BSR/ASHRAE Addendum k to ANSI/ASHRAE Standard 34-2013, Designation and Safety Classification of Refrigerants

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 adds the zeotropic refrigerant blend R-451B, to Table 4-2 and Table D-2. The recommended flammability classification 2L is based on an LFL of 7.0 vol. %, a heat of combustion of 9,790 kJ/kg (4,209 BTU/lb), and a burning velocity less than 4 cm/s. The recommended toxicity classification A is based on an adopted OEL of 530 ppm v/v. The recommended ATEL is 100,000 ppm v/v.

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

### Addendum k to 34-2013

Add the following underlined data to Table 4-2 and Table D-2 in the columns indicated.

### TABLE 4-2 Data and Safety Classifications for Refrigerant Blends

Refrigerant Number =  $\underline{451B}$ Composition (Mass %) =  $\underline{R-1234yf/134a(88.8/11.2)}$ Composition tolerances =  $\underline{\pm 0.2/\pm 0.2}$ OEL (ppm v/v) =  $\underline{530}$ Safety Group =  $\underline{A2L}$ RCL =  $\underline{18,000}$  ppm v/v;  $\underline{5.3}$ lb/Mcf;  $\underline{81}$  g/m<sup>3</sup> Highly Toxic or Toxic Under Code Classification = <u>Neither</u>

### TABLE D-2 Data for Refrigerant Blends

Refrigerant Number = 451BComposition (Mass %) = R-1234yf/134a(88.8/11.2)

Average Molecular Mass =  $\underline{112.6}$ Bubble Point (°F) =  $\underline{-23.8}$ Dew Point (°F) =  $\underline{-23.1}$ Bubble Point (°C) =  $\underline{-31.0}$ Dew Point (°C) =  $\underline{-30.6}$ 



BSR/ASHRAE Addendum I to ANSI/ASHRAE Standard 34-2013

### **First Public Review Draft**

### **Proposed Addendum I to**

### Standard 34-2013, Designation and

## **Safety Classification of Refrigerants**

#### First Public Review (August 2014) (Draft shows Proposed Changes to Current Standard)

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

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

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

© 2014 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

BSR/ASHRAE Addendum 1 to ANSI/ASHRAE Standard 34-2013, Designation and Safety Classification of Refrigerants

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 adds the zeotropic refrigerant blend R-513A, to Table 4-2 and Table D-2. The recommended flammability classification is 1. The recommended toxicity classification A is based on an adopted OEL of 650 ppm v/v. The recommended ATEL is 72,000 ppm v/v.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by <u>underlining</u> (for additions) and <del>strikethrough</del> (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 l to 34-2013

Add the following underlined data to Table 4-2 and Table D-2 in the columns indicated.

#### TABLE 4-2 Data and Safety Classifications for Refrigerant Blends

Refrigerant Number = 513AComposition (Mass %) = <u>R-1234yf/134a(56.0/44.0)</u> Composition tolerances =  $\pm 1.0 / \pm 1.0$ OEL (ppm v/v) = 650Safety Group = <u>A1</u> RCL = 72,000 ppm v/v; 20lb/Mcf; 320 g/m<sup>3</sup> Highly Toxic or Toxic Under Code Classification = <u>Neither</u>

#### TABLE D-2 Data for Refrigerant Blends

Refrigerant Number = 513AComposition (Mass %) = <u>R-1234yf/134a(56.0/44.0)</u> Azeotropic Molecular Mass = <u>108.4</u> Azeotropic Temperature: 27.0°C (80.6°F) Normal Boiling Point: -29.2°C (-20.6°F)



BSR/ASHRAE Addendum m to ANSI/ASHRAE Standard 34-2013

### **First Public Review Draft**

### **Proposed Addendum m to**

### Standard 34-2013, Designation and

## Safety Classification of Refrigerants

#### First Public Review (August 2014) (Draft shows Proposed Changes to Current Standard)

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

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

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

© 2014 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

BSR/ASHRAE Addendum m to ANSI/ASHRAE Standard 34-2013, Designation and Safety Classification of Refrigerants

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 adds the zeotropic refrigerant blend R-452A, to Table 4-2 and Table D-2. The recommended flammability classification is 1. The recommended toxicity classification A is based on an adopted OEL of 780 ppm v/v. The recommended ATEL is 100,000 ppm v/v.

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

#### Addendum m to 34-2013

Add the following underlined data to Table 4-2 and Table D-2 in the columns indicated.

#### TABLE 4-2 Data and Safety Classifications for Refrigerant Blends

Refrigerant Number =  $\underline{452A}$ Composition (Mass %) =  $\underline{R-32 / 125 / 1234yf (11.0/59.0/30.0)}$ Composition tolerances =  $\pm 1.7 / \pm 1.8 / +0.1, -1.0$ OEL (ppm v/v) =  $\underline{780}$ Safety Group =  $\underline{A1}$ RCL =  $\underline{10,000}$  ppm v/v;  $\underline{27}$ lb/Mcf;  $\underline{440}$  g/m<sup>3</sup> Highly Toxic or Toxic Under Code Classification = <u>Neither</u>

#### TABLE D-2 Data for Refrigerant Blends

Refrigerant Number =  $\underline{452A}$ Composition (Mass %) =  $\underline{R-32 / 125 / 1234yf}$  (11.0/59.0/30.0) Average Molecular Mass =  $\underline{103.5}$ 

Bubble Point (°F) =  $\underline{-52.6}$ Dew Point (°F) =  $\underline{-45.8}$ Bubble Point (°C) =  $\underline{-47.0}$ Dew Point (°C) =  $\underline{-43.2}$ 



BSR/ASHRAE Addendum n to ANSI/ASHRAE Standard 34-2013

### **First Public Review Draft**

### **Proposed Addendum n to**

### Standard 34-2013, Designation and

## Safety Classification of Refrigerants

#### First Public Review (August 2014) (Draft shows Proposed Changes to Current Standard)

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

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

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

© 2014 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

BSR/ASHRAE Addendum n to ANSI/ASHRAE Standard 34-2013, Designation and Safety Classification of Refrigerants

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 modifies Section 6.1.3, *Flammability Classification*, on required validation tests for burning velocity measurement.

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

#### Addendum n to 34-2013

#### Change Section 6.1.3 as shown.

**6.1.3 Flammability Classification.** Burning velocity measurements shall be conducted according to a credible method. The method shall be in agreement with established methods of determining burning velocity by demonstrating measurement results of  $6.7 \pm 0.7$  cm/s burning velocity for R-32-and 23.0 +/-2.3 cm/s for R-152a, or by presenting other evidence supporting the accuracy of the method. When the burning velocity of the proposed refrigerant is above 6.7 cm/s, an additional test shall be required demonstrating the burning velocity for R-152a of 23.0+/-2.3 cm/s to validate the method, or by presenting other evidence supporting the accuracy of the method, or by presenting other evidence supporting the accuracy of the method. One acceptable method is the vertical-tube method as detailed by Jabbour and summarized by Jabbour and Clodic.<sup>8,9</sup> Measurements shall be conducted starting from the LFL to at least 125% of the stoichiometric concentration. Measurements shall be done with increments of, at most, 10% of the stoichiometric concentration, and each measurement shall be repeated at least two times. The burning velocity is the maximum value obtained from a least square-fit to the measure data.



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

### **Public Review Draft**

### **Proposed Addendum e to**

### Standard 90.1-2013, Energy Standard

### for Buildings Except Low-Rise

## **Residential Buildings**

#### First Public Review (August 2014) (Draft shows Proposed Changes to Current Standard)

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

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

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

© 2014 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

(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

Current requirements for existing building alterations don't require compliance with most mandatory control requirements even if it is a major alteration (e.g. gutting the space or building). Major renovations of lighting should require the same compliance as new construction. Furthermore, 90.1 is lagging behind the major codes in this arena. Title 24 2013 requires compliance with all the control requirements (in most cases) when more than 10% of the lighting is changed or more than 40 luminaires are modified-in-place. IECC 2012 requires compliance with all the control requirements when more than 50% of the lighting load is altered.

This proposal relaxes the existing threshold a little bit (20% instead of 10%) but captures a lot of energy efficiency by requiring more of the control requirements. The cost of lighting controls has decreased and can probably be expected to decrease further, so the addition of these lighting controls in an alteration no longer represents a large barrier

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by <u>underlining</u> (for additions) and <del>strikethrough</del> (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 e to 90.1-2013

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

**9.1.2 Lighting Alterations.** For the alteration of any lighting system in an interior space, that space shall comply with the lighting power density (LPD) requirements of Section 9.5.1 or 9.6.1, and the control requirements of Sections 9.4.1.1 (a), (b), (c), (d), (g), (h), and (i) as applicable to that space. and the automatic shutoff requirements of Section 9.4.1.1.

For the alteration of any lighting system in an exterior building application, that lighting system shall comply with the lighting power density (LPD) requirements of Section 9 applicable to the area illuminated by that lighting system and the applicable control requirements of Sections 9.4.21.7(a) and 9.4.1.47(b). Such alterations shall include all luminaires that are added, replaced or removed. This requirement shall also be met for alterations that involve only the replacement of lamps plus ballasts. Alterations do not include routine maintenance or repair situations.

Exception(s):

- 1. Alterations that involve <u>20% or</u> less than 10% of the connected lighting load in a space or area need not comply with these requirements, provided that such alterations do not increase the installed LPD.
- 2. Lighting alterations that only involve replacement of lamps plus ballasts or only involve one-forone luminaire replacement need only comply with LPD requirement and 9.4.1.1(h) or 9.4.1.1(i).
- 3. Routine maintenance or repair situations.



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

### **Public Review Draft**

### **Proposed Addendum f to**

### Standard 90.1-2013, Energy Standard

### for Buildings Except Low-Rise

## **Residential Buildings**

#### First Public Review (August 2014) (Draft shows Proposed Changes to Current Standard)

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

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

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

© 2014 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

(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 clarifies the exception to the automatic daylight responsive controls requirements for daylight areas under skylights.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by <u>underlining</u> (for additions) and <del>strikethrough</del> (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 f to 90.1-2013

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

f. Automatic daylight responsive controls for toplighting:

In any space where the combined input power for all general lighting completely or partially within daylight areas under skylights and daylight areas under roof monitors is 150 W or greater, general lighting in the daylight area shall be controlled by photocontrols having the following characteristics:

- 1. The calibration adjustments shall be readily accessible.
- 2. The photocontrol shall reduce electric lighting in response to available daylight using continuous dimming or with at least one control point that is 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. General lighting in overlapping toplighted and Sidelighted daylight areas shall be controlled together with general lighting in the daylight area under skylights or daylight areas under roof monitors.

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

- 1. Daylight areas under skylights where it is documented that existing adjacent structures or natural objects block direct sunlight for more than 1500 daytime hours per year between 8 a.m. and 4 p.m.
- 2. Daylight areas where the skylight visual transmittance (VT) is less than 0.4 Daylight areas under skylights where the overall skylight effective aperture for the enclosed space is less than 0.006.
- 3. In each space within buildings in Climate Zone 8 where the input power of the general lighting within daylight areas is less than 200W



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

### **Public Review Draft**

## Proposed Addendum j to

### Standard 90.1-2013, Energy Standard

### for Buildings Except Low-Rise

## **Residential Buildings**

#### First Public Review (August 2014) (Draft shows Proposed Changes to Current Standard)

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

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

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

© 2014 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

(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

Additional analysis of the interaction between ventilation optimization and exhaust recovery ventilation (ERV) has determined that in all climates, having VAV system ventilation optimization in addition to ERV is cost effective. Previously, Ventilation optimization was generally excepted wherever ERV was installed. The change proposed here removes the exception to the VAV system ventilation optimization when ERV is installed

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by <u>underlining</u> (for additions) and <del>strikethrough</del> (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 j to 90.1-2013

Modify the standard as follows (IP and SI Units)

#### 6.5.3.3 Multiple-Zone VAV System Ventilation Optimization

**Control.** Multiple-zone VAV systems with DDC of individual zone boxes reporting to a central control panel shall include means to automatically reduce outdoor air intake flow below design rates in response to changes in system ventilation efficiency as defined by Appendix A of ASHRAE Standard 62.1. **Exceptions:** 

1. VAV systems with zonal transfer fans that recirculate air from other zones without directly mixing it with outdoor air, dual-duct dual-fan VAV systems, and VAV systems with fan-powered terminal units 2. Systems required to have the exhaust air energy recovery complying with Section 6.5.6.1 3. Systems where total design exhaust airflow is more than 70%



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

### **Public Review Draft**

### Proposed Addendum k to

### Standard 90.1-2013, Energy Standard

### for Buildings Except Low-Rise

## **Residential Buildings**

#### First Public Review (August 2014) (Draft shows Proposed Changes to Current Standard)

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

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

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

© 2014 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

(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 requires envelope assemblies to comply with Appendix A when complying with the Energy Cost Budget Method in Appendix G.

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

#### Addendum k to 90.1-2013

#### Modify Table G3.1 as follows (IP and SI Units)

5. Building Envelope	
<b>Proposed Building Performance</b>	<b>Baseline Building Performance</b>
<ul> <li>a. All components of the building envelope in the proposed design shall be modeled as shown on architectural drawings or as built for existing building envelopes.</li> <li>Exceptions: The following building elements are permitted to differ from architectural drawings. <ol> <li>All uninsulated assemblies (e.g., projecting balconies, perimeter edges of intermediate floor stabs, concrete floor beams over parking garages, roof parapet) shall be separately modeled using either of the following techniques: <ol> <li>Separate model of each of these assemblies within the energy simulation model.</li> <li>Separate calculation of the U-factor for each of these assemblies. The U-factors of these assemblies are then averaged with larger adjacent surfaces using an areaweighted average method. This average U-factor is modeled within the energy simulation model.</li> <li>Any other envelope assembly that covers less than 5% of the total area of that assembly type (e.g., exterior walls) need not be separately described, provided that it is similar to an assembly being modeled. If not separately described, the area of an envelope assembly shall be added to the area of an assembly of that same type with the same orientation and thermal properties.</li> </ol> </li> <li>Exterior surfaces whose azimuth orientation and tilt differ by less than 45 degrees and are otherwise the same may be described as either a single surface or by using multipliers.</li> <li>The exterior roof surface shall be modeled using the aged solar reflectance and thermal emittance determined in accordance with Section 5.5.3.1.1(a). Where aged test data are unavailable, the roof surface may be modeled with a reflectance of 0.30 and a thermal emittance of 0.90.</li> </ol></li></ul>	<ul> <li>Equivalent dimensions shall be assumed for each exterior envelop component type as in the proposed design; i.e., the total gross area o exterior walls shall be the same in the proposed and baseline building designs. The same shall be true for the areas of roofs, floors, and doors, and the exposed perimeters of concrete slabs on grade shal also be the same in the proposed and baseline building designs. The baseline building designs. The baseline building designs. The baseline building design additional requirements shall apply to the modeling of the baseline building design: <ul> <li>a. Orientation. The baseline building performance shall be generated by simulating the building with its actual orientation and again after rotating the entire building 90, 180, and 270 degrees, then averaging the results. The building shall be modeled so that it does not shade itself.</li> </ul> </li> <li>Exceptions: <ul> <li>1. If it can be demonstrated to the satisfaction of the program evaluator that the building orientation is dictated by site considerations.</li> <li>2. Buildings where the vertical fenestration area on each orientation varies by less than 5%.</li> </ul> </li> <li>b. Opaque Assemblies. Opaque assemblies used for new buildings, existing buildings, or additions shall conform with the following common, lightweight assembly types assemblie detailed in Appendix A and shall match the appropriate assembly maximum U-factors in Tables 5.5-1 through 5.5-8: <ul> <li>Roofs—Insulation entirely above deck (A2.2)</li> <li>Above-grade walls—Concrete block (A4.1)</li> <li>Floors—Steel joist (A5.3)</li> <li>Slab-on-grade floors shall match the F-factor for unheated slabs from the same tables. (A6)</li> <li>Opaque door types shall be of the same tables. (A7)</li> <li>(Continued on next page)</li> </ul> </li> </ul>



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

### **Public Review Draft**

## **Proposed Addendum L to**

### Standard 90.1-2013, Energy Standard

### for Buildings Except Low-Rise

## **Residential Buildings**

#### First Public Review (August 2014) (Draft shows Proposed Changes to Current Standard)

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

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

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

© 2014 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

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

#### FOREWORD

The scope of this proposal is to address the following:

- 1. Verification of delivered envelope performance is an essential next step in improving the Standard.
- 2. Critical areas of envelope performance could be easily inspected and verified within the context and scope of the Standard.
- 3. While some types of longer-term performance verification were desirable, there is some concern that verification activities post-occupancy were outside the current scope of the Standard.
- 4. While ALL areas of envelope performance governed by the Standard are important, compliance with air leakage control provisions of the Standard were seen as critical and should be more robustly addressed.

#### Actions in this proposal:

Part 1 seeks to update the mandatory inspection provisions defined in Chapter 4

Part 2 provides new language to more robustly address critical envelope inspections and verification of assemblies and materials

Part 3 adds new reference standards that support the proposed new text

#### Justification for Part 1:

This list of items to be inspected is incomplete and does not convey all of the requirements of the Standard (for envelope, mechanical, lighting or other sections.) As such, this incomplete list leads to confusion over what inspections the standard <u>actually</u> requires and what is to be verified in each section of the Standard. The list of items to be verified should more appropriately be in each section of the Standard and in the User's Manual checklists.

Added under Section 4.2.4 are provisions for the building official to determine when a qualified commissioning agent or third party inspection service can provide services, when they are to report, and to whom the agency is to submit a report. This is designed to address the administrative requirements for current provisions on commissioning and for future provisions on commissioning and third party inspections.

#### Justification for Part 2

The proposal also adds provisions concerning a verification process and includes a new Section focusing on this topic. While inspection and verification may be implied by the Standard's provisions there are certain key elements of envelope performance that should be supported by appropriate levels of required inspection, testing and verification. These include all envelope areas currently governed under the Standard, which include opaque envelope, fenestration and air barrier components. While ALL areas of envelope performance governed by the Standard are important, compliance with air leakage control provisions of the Standard were seen as critical and should be more robustly addressed as shown in this proposal.

Added to the inspection requirement are inspection provisions for features now addressed in the Standard. These focus on the aspects of fenestration and daylighting.

#### Justification for Part 3

This proposal also adds whole building testing to the air barrier provisions for all buildings governed under this Standard. This recommendation builds upon the recent findings and reported results from hundreds of commercial building air leakage tests, demonstrating the value of tests in determining and achieving the levels of air leakage control defined by the Standard. Two new normative standards are recommended to be included in the standard as verification tools for determining compliance, that of ASTM E779 and ASTM 1827.

This proposal also seeks to comply with the planned organizational structure for each Chapter according to the following conceptual framework for numbering with a new sub-section on inspection and verification:

- X.1 General
- *X.2 Compliance Paths*
- X.3 Simple Buildings or Systems
- X.4 Mandatory Requirements
- *X.5 Compliance Path #1*
- *X.6 Compliance Path #2*
- X.7 Submittals
- X.8 Products
- X.9 Inspection and verification

This proposal will increase the cost of construction. The verification options proposed are intended to assure that intended envelope energy performance will be delivered to the building owner for the lifetime of those assemblies. Data provided to the TG showed that the costs of these various approaches to envelope performance verification more than justify the potential increases in first cost. Additionally, the costs of these procedures will go down over time as builders become more familiar with envelope performance verification techniques and their construction practices improve due to the feedback provided by these techniques.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by <u>underlining</u> (for additions) and <del>strikethrough</del> (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 L to 90.1-2013

Modify the standard as follows (IP and SI Units)

#### Modify Section 4.2.4 governing "Inspections"

**4.2.4 Inspections.** All building construction, additions, or alterations <u>work</u> subject to the provisions of this standard shall be subject to inspection by the building official, and all such work shall remain accessible and exposed for inspection purposes until approved in accordance with the procedures specified by the building official. Items for inspection include at least the following:, <u>but are not limited to:</u> insulation, fenestration, mechanical systems, water heating systems, and lighting systems.

a. wall insulation after the insulation and vapor retarder are in place but before concealment b. roof/ceiling insulation after roof/insulation is in place but before concealment

c. slab/foundation wall after slab/foundation insulation is in place but before concealment

d. fenestration after all glazing materials are in place

e. continuous air barrier after installation but before concealment

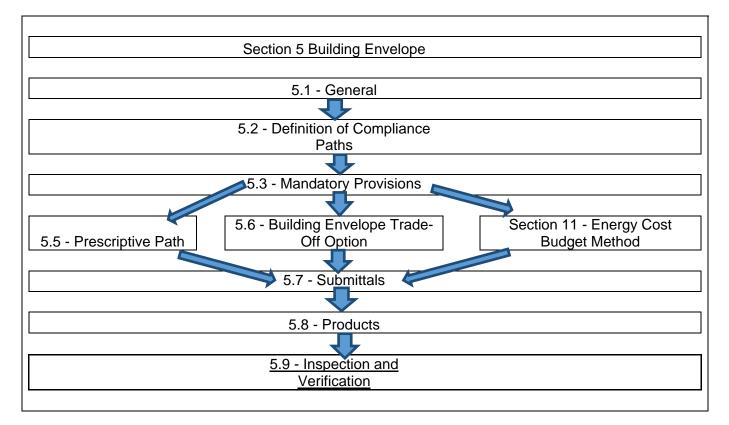
f. mechanical systems and equipment and insulation after installation but before concealment

g. electrical equipment and systems after installation but before concealment

**4.2.5 Verification and commissioning reporting.** Where reporting is required, the building official or other approved agencies shall report to the contractor their findings of conformance and non-conformance for correction.

**4.2.5.1** Non-conformance. If the non-conforming work is found not to be corrected within a predetermined time agreed upon with the contractor, the non-conforming work shall be brought to the attention of the building official and design professional prior to the completion of the project. At a time agreed upon by the building official or other approved agencies, a final report shall be submitted to the building official and the contractor that outlines the inspection findings, and documents the correction of non-conforming work.

#### Modify the graphic at the start of Section 5



#### Modify 5.2 as follows:

#### **5.2 Compliance Paths**

**5.2.1 Compliance.** For the appropriate climate, space-conditioning category, and class of construction, the building envelope shall comply with Section 5.1, General; Section 5.4, Mandatory Provisions; Section 5.7, Submittals; and Section 5.8, Product Information and Installation Requirements; and 5.9 Inspection and verification; and either

a. Section 5.5, "Prescriptive Building Envelope Option", provided that the fenestration area does not exceed the maximum allowed by Section 5.5.4.2, orb. Section 5.6, "Building Envelope Trade-Off Option".

#### Add the following new sub-section 5.9 as follows:

#### 5.9 Inspection and verification

**5.9.1 Inspections.** In addition to the requirements of Section 4.2.4, envelope components and assemblies shall be inspected in accordance with Sections 5.9.1.1 through 5.9.1.4.

**5.9.1.1 Inspection of fenestration and door requirements.** Fenestration and doors shall be inspected to ensure compliance with the requirements of 5.4.3.2, 5.8.2.1, 5.8.2.2, and 5.8.2.3. Where testing is required to demonstrate compliance with the air leakage requirements, it shall be conducted by an independent third party. Operation of the door and closer or operating mechanism shall be inspected for conformance with the manufacturer's instructions, and that the seals or gaskets are installed and in accordance with the manufacturer's instructions.

**5.9.1.2 Inspection of loading dock weatherseals.** Where there is a loading dock, weatherseals shall be inspected for proper installation and that the seals are in good condition.

**5.9.1.3 Inspection of opaque envelope air tightness requirements.** Opaque roof, above and below grade walls, and floors, shall be subject to the following inspections during construction:

a. Use of compliant materials and assemblies as indicated in 5.4.3.1.3.

b. integration with adjoining fenestration and continuous air barrier elements

### **5.9.1.4 Fenestration Inspections**. Fenestration shall be subject to the following inspections during construction:

a. skylights size and location in relation to the designed primary and secondary lighted areas below.

b. rooftop monitors size and location in relation to the designed primary and secondary lighted areas below.

c. dynamic glazing compliance with SHGC and U-factor in accordance with Sections 5.5.4.4.1 and 5.5.4.4.2, and testing of the operation for conformance with the manufacturer's instructions.

<u>d. permanent fenestration projection(s) installation and performance in accordance with Section</u> 5.5.4.4.1 and the construction documents.

#### 5.9.2 Verification.

**5.9.2.1 Building envelope performance verification.** The performance of the building envelope shall be verified in accordance with this section, and Section 4.2.5.

**5.9.2.2 Whole building air leakage verification.** Air leakage shall be determined in accordance with one of the following methods:

a. Whole building pressurization testing shall be conducted in accordance with ASTM E779 or ASTM E1827 by an independent third party. The measured air leakage rate of the *building envelope* shall not exceed 0.40 cfm/ft2 (2.0 L/s•m2) under a pressure differential of 0.3 in. water (75 Pa), with this air leakage rate normalized by the sum of the above and below grade *building envelope* areas of the *conditioned* and *semiheated space*.

**Exception.** Buildings having over 250,000 ft2 (25,000 m2) of *gross conditioned floor area*, air leakage testing shall be permitted to conduct testing on representative above grade sections of the building. Tested areas shall total at least 25% of the conditioned floor area. All tested areas shall comply with the performance requirement in 5.9.2.2 (a).

b. Air barrier performance verification. An air barrier performance verification program shall be implemented and shall include the following elements:

i. A design review shall be conducted to assess compliance with the requirements in section 5.4.3.1;

ii. Periodic field inspection of *continuous air barrier* components and assemblies shall be conducted during construction while the air barrier is still accessible for inspection and repair to verify compliance with the requirements of Section 5.4.3.1; and,

iii. Reporting in compliance with 4.2.5.

#### Update the organization title and add the following normative standards to Chapter 12:

American Society for Testing and Materials

#### **ASTM International**

100 Barr Harbor Dr., West Conshohocken, PA 19428-2959

Reference	Title
ASTM E1827-	Standard Test Methods for Determining Airtightness of Buildings Using an
2011	Orifice Blower Door



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

### **Public Review Draft**

# Proposed Addendum m to

### Standard 90.1-2013, Energy Standard

### for Buildings Except Low-Rise

## **Residential Buildings**

#### First Public Review (August 2014) (Draft shows Proposed Changes to Current Standard)

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

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

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

© 2014 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

(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 updates the text in Section 10.4.1 on electric motors to provide information about the required efficiency of small electric motors shown in Tables 10.8-4 and 10.8-5. It also makes a correction to the standard, based on the fact that small electric motors were not included in the scope of the 2007 law, but now have performance requirements

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

#### Addendum m to 90.1-2013

Modify the standard as follows (IP Units)

#### **10. OTHER EQUIPMENT**

#### **10.4.1 Electric Motors.**

....as shown in Table 10.8-3.

Small electric motors with a power rating of 0.25 hp or more, and less than or equal to 3 hp, shall have a minimum average full-load efficiency that is not less than as shown in Table 10.8-4 for polyphase small electric motors and Table 10.8-5 for capacitor-start capacitor-run small electric motors and capacitor-start induction run small electric motors.

Fire-pump electric motors shall have a minimum nominal full-load efficiency that is not less than that shown in Table 10.8-6.

Motors that are not included in the scope of the Energy Independence and Security Act of 2007, Section 313, have no performance requirements in this section.

(rest of the section is unchanged)

Modify the standard as follows (SI Units)

#### **10. OTHER EQUIPMENT**

#### **10.4.1 Electric Motors.**

....as shown in Table 10.8-3.

Small electric motors with a power rating of 0.19 kW or more, and less than or equal to 2.2 kW, shall have a minimum average full-load efficiency that is not less than as shown in Table 10.8-4 for polyphase small electric motors and Table 10.8-5 for capacitor-start capacitor-run small electric motors and capacitor-start induction run small electric motors.

Fire-pump electric motors shall have a minimum nominal full-load efficiency that is not less than that shown in Table 10.8-6.

Motors that are not included in the scope of the Energy Independence and Security Act of 2007, Section 313, have no performance requirements in this section.

(rest of the section is unchanged)



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

### **Public Review Draft**

## **Proposed Addendum n to**

### Standard 90.1-2013, Energy Standard

### for Buildings Except Low-Rise

## **Residential Buildings**

#### First Public Review (August 2014) (Draft shows Proposed Changes to Current Standard)

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

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

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

© 2014 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

(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

In 2010, ASHRAE approved amendments to Standard 90.1 which established for the first time new part load integrated energy efficiency ratios (IEER) for variable refrigerant flow (VRF) air-cooled air conditioners and heat pumps greater than 65,000 Btu/h. The amendments had two tiers of minimum IEERs. The first tier became effective on January 1, 2010, and the second tier on July 1, 2012.

This proposal updates the IEER values for air-cooled VRF air conditioners and heat pumps above 65,000 Btu/h. Depending on the cooling capacity and product classes, the new IEERs are between 15 and 20% better than the values they are replacing. The new IEERs will become effective on January 1, 2017.

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

#### Addendum n to 90.1-2013

Modify the standard as follows (IP and SI Units)

Revise Tables 6.8.1-9 and 6.8.1-10 as follows:

Equipment Type	Size Category	Heating Section Type	Subcategory or Rating Condition	Minimum Efficiency	Test Procedure
VRF air conditioners, air cooled	<65,000 Btu/h	All	VRF multisplit system	13.0 SEER	
	≥65,000 Btu/h and <135,000 Btu/h	Electric resistance (or none)	VRF multisplit system	11.2 EER 13.1 IEER <u>(before 1/1/2017)</u> <u>15.5 IEER (as of 1/1/2017)</u>	AHRI 1230
	≥135,000 Btu/h and <240,000 Btu/h	Electric resistance (or none)	VRF multisplit system	11.0 EER 12.9 IEER <u>(before 1/1/2017)</u> <u>14.9 IEER (as of 1/1/2017)</u>	

### TABLE 6.8.1-9 Electrically Operated Variable-Refrigerant-Flow Air Conditioners Minimum Efficiency Requirements

≥240,000 Btu/h	Electric resistance (or none)	VRF multisplit system	10.0 EER 11.6 IEER <u>(before 1/1/2017)</u> <u>13.9 IEER (as of 1/1/2017)</u>
----------------	----------------------------------	--------------------------	---

#### 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
	<65,000 Btu/h	All	VRF multisplit system	13.0 SEER	_
	> <5 000 D. 4			11.0 EER	
	≥65,000 Btu/h and <135,000 Btu/h	Electric resistance (or none)	VRF multisplit system	12.3 IEER (before 1/1/2017) 14.6 IEER (as of 1/1/2017)	
	≥65,000 Btu/h and <135,000 Btu/h	Electric resistance (or none)	VRF multisplit system with heat recovery	10.8 EER 12.1 IEER <u>(before 1/1/2017)</u> <u>14.4 IEER (as of 1/1/2017)</u>	_
VRF air cooled (cooling mode)	≥135,000 Btu/h and <240,000 Btu/h	Electric resistance (or none)	VRF multisplit system	10.6 EER 11.8 IEER <u>(before 1/1/2017)</u> <u>13.9 IEER (as of 1/1/2017)</u>	AHRI 1230
	≥135,000 Btu/h and <240,000 Btu/h	Electric resistance (or none)	VRF multisplit system with heat recovery	10.4 EER 11.6 IEER <u>(before 1/1/2017)</u> <u>13.7 IEER (as of 1/1/2017)</u>	_
-	≥240,000 Btu/h	Electric resistance (or none)	VRF multisplit system	9.5 EER 10.6 IEER <u>(before 1/1/2017)</u> <u>12.7 IEER (as of 1/1/2017)</u>	
	≥240,000 Btu/h	Electric resistance (or none)	VRF multisplit system with heat recovery	9.3 EER 10.4 IEER <u>(before 1/1/2017)</u> <u>12.5 IEER (as of 1/1/2017)</u>	
	<65,000 Btu/h	All	VRF multisplit systems 86°F entering water	12.0 EER	
	<65,000 Btu/h	All	VRF multisplit systems with heat recovery 86°F entering water	11.8 EER	_
	≥65,000 Btu/h and <135,000 Btu/h	All	VRF multisplit system 86°F entering water	12.0 EER	
VRF water source (cooling mode)	≥65,000 Btu/h and <135,000 Btu/h	All	VRF multisplit system with heat recovery 86°F entering water	11.8 EER	AHRI 1230
	≥135,000 Btu/h	All	VRF multisplit system 86°F entering water	10.0 EER	_
	≥135,000 Btu/h	All	VRF multisplit system with heat recovery 86°F entering water	9.8 EER	-
VRF groundwater	<135,000 Btu/h	All	VRF multisplit system	16.2 EER	AHRI 1230

source			59°F entering water		
(cooling mode) <sup>–</sup>	<135,000 Btu/h	All	VRF multisplit system with heat recovery 59°F entering water	16.0 EER	
	≥135,000 Btu/h	All	VRF multisplit system 59°F entering water	13.8 EER	
	≥135,000 Btu/h	All	VRF multisplit system with heat recovery 59°F entering water	13.6 EER	
	<135,000 Btu/h	All	VRF multisplit system 77°F entering water	13.4 EER	
VRF ground source	<135,000 Btu/h	All	VRF multisplit system with heat recovery 77°F entering water	13.2 EER	AUDI 1220
(cooling mode)	≥135,000 Btu/h	All	VRF multisplit system 77°F entering water	11.0 EER	— AHRI 1230
-	≥135,000 Btu/h	All	VRF multisplit system with heat recovery 77°F entering water	10.8 EER	
	<65,000 Btu/h (cooling capacity)	_	VRF multisplit system	7.7 HSPF	
	≥65,000 Btu/h and	_	VRF multisplit system 47°F db/43°F wb outdoor air	3.3 COP <sub>H</sub>	
VRF air cooled (heating mode)	<135,000 Btu/h		17°F db/15°F wb outdoor air	2.25 COP <sub>H</sub>	AHRI 1230
	≥135,000 Btu/h		VRF multisplit system 47°F db/43°F wb outdoor air	3.2 COP <sub>H</sub>	
	(cooling capacity)		17°F db/15°F wb outdoor air	2.05 COP <sub>H</sub>	
VRF water source	<135,000 Btu/h (cooling capacity)	—	VRF multisplit system 68°F entering water	4.2 COP <sub><i>H</i></sub>	
(heating mode)	≥135,000 Btu/h (cooling capacity)		VRF multisplit system 68°F entering water	3.9 COP <sub><i>H</i></sub>	— AHRI 1230
VRF groundwater source (heating mode)	<135,000 Btu/h (cooling capacity)	_	VRF multisplit system 50°F entering water	3.6 COP <sub>H</sub>	AHRI 1230
	≥135,000 Btu/h (cooling capacity)	_	VRF multisplit system 50°F entering water	3.3 COP <sub><i>H</i></sub>	
VRF ground source (heating mode)	<135,000 Btu/h (cooling capacity)	_	VRF multisplit system 32°F entering water	3.1 COP <sub>H</sub>	AHRI 1230



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

### **Public Review Draft**

### **Proposed Addendum o to**

### Standard 90.1-2013, Energy Standard

### for Buildings Except Low-Rise

## **Residential Buildings**

#### First Public Review (August 2014) (Draft shows Proposed Changes to Current Standard)

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

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

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

© 2014 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

(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 proposed change clarifies the wording regarding duct seal class to avoid any possible misinterpretation that compliance with the text that is struck out could substitute for the seal class requirement.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by <u>underlining</u> (for additions) and <del>strikethrough</del> (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 o to 90.1-2013

#### Modify 6.4.4.2.1 as follows (IP and SI Units)

**6.4.4.2.1 Duct Sealing.** Ductwork and all plenums with pressure class ratings shall be constructed to Seal Class A, as required to meet the requirements of Section 6.4.4.2.2, and with standard industry practice (see Informative Appendix E). Openings for rotating shafts shall be sealed with bushings or other devices that seal off air leakage. Pressure-sensitive tape shall not be used as the primary sealant unless it has been certified to comply with UL-181A or UL-181B by an independent testing laboratory and the tape is used in accordance with that certification. All connections shall be sealed, including but not limited to spin-ins, taps, other branch connections, access doors, access panels, and duct connections to equipment. Sealing that would void product listings is not required. Spiral lock seams need not be sealed. All duct pressure class ratings shall be designated in the design documents.



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

### **Public Review Draft**

## Proposed Addendum p to

### Standard 90.1-2013, Energy Standard

### for Buildings Except Low-Rise

## **Residential Buildings**

#### First Public Review (August 2014) (Draft shows Proposed Changes to Current Standard)

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

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

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

© 2014 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

(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

Reference to CTI Standard 201 in Table 6.8.1-7, <u>Performance Requirements for Heat Rejection</u> <u>Equipment</u>, has been updated. This certification standard has been divided into Standard 201 RS and Standard 201 OM. Standard 201 RS sets forth a program whereby the Cooling Tower Institute will certify that all models of a line of evaporative heat rejection equipment offered for sale by a specific manufacturer will perform thermally in accordance with the manufacturer's published ratings. Standard 201 OM is a manual to guide program participants in complying with the provisions of the latest edition of Standard 201 RS. Taken together, STD-201 RS (13) and STD-201 OM (13) are functionally equivalent to the original STD-201 (11).

For the purpose of this table, STD-201 RS and either CTI ATC-105 (open circuit cooling towers) or CTI ATC-105S (closed circuit cooling towers) are the proper reference standards for rating and testing this equipment. References to the appropriate test codes (ATC-105 and ATC-105S) remain unchanged. Section 12, Normative References, has also been updated to reflect this change to STD-201. STD-201, the Operating Manual for the CTI Thermal Certification Program, has also been added to Informative Appendix E for reference.

Finally, note that all CTI Standards referenced in Standard 90.1 have been developed using the consensus procedure outlined in the CTI Operating Procedure 304.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by <u>underlining</u> (for additions) and <u>strikethrough</u> (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 p to 90.1-2013

Modify the standard as follows (IP and SI Units)

The addition of "RS" is the only change to this table. The same addition will be made to the SI table, but the SI table is not duplicated in this review draft.

<b>TABLE 6.8.1-7</b>	Performance Rec	uirements for Heat	<b>Rejection Equipment</b>
----------------------	-----------------	--------------------	----------------------------

Equipment Total System He Rejection Capac Type at Rated Condition	Subcategory or Bating 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 <u>RS</u>
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 <u>RS</u>
Propeller or axial fan closed-circuit cooling towers	All	102°F entering water 90°F leaving water 75°F entering wb	≥14.0 gpm/hp	CTI ATC-105S and CTI STD-201 <u>RS</u>
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 <u>RS</u>
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

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.

The reference to CTI STD-201 in the Normative Reference Section has also been updated to reflect the change to STD-201 RS (Rating Standard). STD-201 OM, the Operating Manual for the CTI Thermal Performance Certification Program, has also been added to Informative Appendix E:

#### **12. NORMATIVE REFERENCES**

Cooling Technology Institute (CTI) 2611 FM 1960 West, Suite A-101, Houston, TX 77068-3730; P.O. Box 73383, Houston, TX 77273-3383		
CTI ATC-105 (00)	Acceptance Test Code for Water Cooling Towers	
CTI ATC-105S (11)	Acceptance Test Code for Closed-Circuit Cooling Towers	
CTI ATC-106 (11)	Acceptance Test Code for Mechanical Draft Evaporative Vapor Condensers	
<del>CTI STD-201 (11)</del>	Standard for Thermal Performance Certification of Evaporative Heat Transfer Equipment	
<u>CTI STD-201 RS (13)</u>	Performance Rating of Evaporative Heat Rejection Equipment	

#### INFORMATIVE APPENDIX E INFORMATIVE REFERENCES

#### **Address/Contact Information**

#### **Cooling Technology Institute (CTI)**

<u>2611 FM 1960 West, Suite A-101, Houston, TX 77068-3730; P.O. Box 73383, Houston, TX 77273-3383</u>

Subsection No.	Reference	Title/Source
<u>6.4.1</u>	<u>CTI STD-201 OM (13) Operations Manual</u> for Thermal Performance Certification of Evaporative Heat Rejection Equipment	Cooling Technology Institute



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

### **Public Review Draft**

## **Proposed Addendum q to**

### Standard 90.1-2013, Energy Standard for

## **Buildings Except Low-Rise Residential**

## **Buildings**

First Public Review (August 2014) (Draft shows Proposed Changes to Current Standard)

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

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

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

© 2014 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

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

BSR/ASHRAE/IES Addendum q 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 proposed change limits the systems that can take advantage of the fan power pressure allowance for fully ducted return and/or exhaust air systems. For example, a rooftop unit with a ducted return in a small commercial office building or with a concentric diffuser currently qualifies for the fully ducted fan power credit, but would not if this addendum is accepted.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by <u>underlining</u> (for additions) and <del>strikethrough</del> (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 q to 90.1-2013

Modify Table 6.5.3.1-2 as follows (IP and SI Units)

 TABLE 6.5.3.1-2
 Fan Power Limitation Pressure Drop Device (IP)

Fully ducted return and/or exhaust air systems

Return and/or exhaust systems required by code or accreditation standards to be fully ducted, or systems required to maintain air pressure differentials between adjacent rooms. 0.5 in. wc (2.15 in. wc for laboratory and vivarium systems)

#### TABLE 6.5.3.1-2 Fan Power Limitation Pressure Drop Device (SI)

Fully ducted return and/or exhaust air systems

Return and/or exhaust systems required by code or accreditation standards to be fully ducted, or systems required to maintain air pressure differentials between adjacent rooms. 125 Pa (538 Pa for laboratory and vivarium systems)



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

### **Public Review Draft**

# Proposed Addendum r to

### Standard 90.1-2013, Energy Standard

### for Buildings Except Low-Rise

# **Residential Buildings**

#### First Public Review (August 2014) (Draft shows Proposed Changes to Current Standard)

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

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

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

© 2014 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

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

BSR/ASHRAE/IES Addendum r 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

Section G3.1.1 Baseline HVAC System Type and Description is revised to confirm the hierarchy for selecting baseline HVAC systems, clarify what floors to count, and specify what building type to use when no one use is predominant. Table G3.1.1-3 Baseline HVAC System Types is revised so heading names are consistent with Section G3.1.1.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by <u>underlining</u> (for additions) and <del>strikethrough</del> (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 r to 90.1-2013

Modify the standard as follows (IP and SI Units)

**G3.1.1 Baseline HVAC System Type and Description.** <u>HVAC systems in the baseline</u> <u>building design shall comply with the following:</u>

- 1. HVAC systems in the *baseline building design* shall be <u>determined in the following order of</u> <u>priority based on:</u>
- a. usage the building type with the largest conditioned floor area,
- <u>b.</u> number of floors <u>(including floors above and below grade, but not including floors solely</u> <u>devoted to parking)</u>,
- c. gross conditioned floor area, and

<u>d.</u> heating source <u>climate zone</u> as specified in Table G3.1.1-3 and shall conform with the system descriptions in Table G3.1.1-4. For systems 1, 2, 3, 4, 9, 10, 11, and 12, each thermal block shall be modeled with its own HVAC system. For systems 5, 6, 7, and 8 each floor shall be modeled with a separate HVAC system. Floors with identical thermal blocks can be grouped for modeling purposes.

#### Exceptions:

Existing exceptions renumbered as 2-9 on this list

#### TABLE G3.1.1-3 Baseline HVAC System Types

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

Number of Floors, and Gross Conditioned Floor Area	and 4-8	
	•••	•••



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

### **Public Review Draft**

### **Proposed Addendum s to**

### Standard 90.1-2013, Energy Standard

### for Buildings Except Low-Rise

# **Residential Buildings**

#### First Public Review (August 2014) (Draft shows Proposed Changes to Current Standard)

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

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

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

© 2014 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

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

BSR/ASHRAE/IES Addendum s 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

Exception 2 to 6.5.2.1 addresses single duct VAV reheat systems with DDC. It unintentionally places undue requirements on other VAV systems with DDC that have an alternate means of heating such as fan-powered boxes, dual duct, and baseboard, and even non-VAV systems such as DOAS with radiant or chilled beams. This is resolved by making Exception 1 also apply to systems with DDC but with lower reheat minimums compared to systems without DDC (e.g. pneumatic control). This would allow, for example, a fan-powered box with a 20% minimum on the primary air

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by <u>underlining</u> (for additions) and <u>strikethrough</u> (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 s to 90.1-2013

Modify Exception 1 to 6.5.2.1 Zone Controls. (All existing exceptions are listed for context.) (IP and SI Units)

#### **Exceptions:**

1. Zones without DDC for which the volume of air that is reheated, recooled, or mixed is less than the larger of the following:

a. <u>20% of the zone design peak supply for systems with DDC and</u> 30% of the zone design peak supply rate for other systems

b. The outdoor airflow rate required to meet the ventilation requirements of ASHRAE Standard 62.1 for the zone

c. Any higher rate that can be demonstrated, to the satisfaction of the authority having jurisdiction, to reduce overall system annual energy usage by offsetting reheat/recool energy losses through a reduction in outdoor air intake for the system

d. The airflow rate required to comply with applicable codes or accreditation standards, such as pressure relationships or minimum air change rates

2. Zones with DDC that comply with all of the following:

a. The airflow rate in deadband between heating and cooling does not exceed the larger of the following:

(1) 20% of the zone design peak supply rate

(2) The outdoor airflow rate required to meet the ventilation requirements of

ASHRAE Standard 62.1 for the zone

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

(3) Any higher rate that can be demonstrated, to the satisfaction of the authority having jurisdiction, to reduce overall system annual energy usage by offsetting reheat/recool energy losses through a reduction in outdoor air intake(4) The airflow rate required to comply with applicable codes or accreditation standards, such as pressure relationships or minimum air change rates

b. The airflow rate that is reheated, recooled, or mixed shall be less than 50% of the zone design peak supply rate.

c. The first stage of heating consists of modulating the zone supply air temperature setpoint up to a maximum setpoint while the airflow is maintained at the dead band flow rate.

d. The second stage of heating consists of modulating the airflow rate from the deadband flow rate up to the heating maximum flow rate.

- 3. Laboratory exhaust systems that comply with Section 6.5.7.2
- 4. Zones where at least 75% of the energy for reheating or for providing warm air in mixing systems is provided from a site-recovered (including condenser heat) or site-solar energy source



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

### **Public Review Draft**

# **Proposed Addendum u to**

### Standard 90.1-2013, Energy Standard

### for Buildings Except Low-Rise

# **Residential Buildings**

#### First Public Review (August 2014) (Draft shows Proposed Changes to Current Standard)

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

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

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

© 2014 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

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

BSR/ASHRAE/IES Addendum u 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 adds new requirements for transfer air in exhaust systems.

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

#### Addendum u to 90.1-2013

Modify the standard as follows (IP and SI Units)

#### 6.5.7 Exhaust Systems

**6.5.7.1 Transfer Air.** Conditioned supply air delivered to any space with mechanical exhaust shall not exceed the greater of:

a) the supply flow required to meet the space heating or cooling load, or

- b) The ventilation rate required by the Authority Having Jurisdiction, the facility
  - Environmental Health & Safety department, or ASHRAE Standard 62.1, or
- c) the mechanical exhaust flow minus the available transfer air from adjacent conditioned spaces or adjacent return air plenums common to other conditioned spaces. Available
  - transfer air is that portion of outdoor ventilation air that:
    - 1. is not required to satisfy other exhaust needs, and
    - 2. is not required to maintain pressurization of other spaces, and
    - 3. is transferrable according to applicable codes and standards and to the Class of Air
    - Recirculation Limitations in ASHRAE Standard 62.1.

#### 6.5.7.12 Kitchen Exhaust Systems

- 6.5.7.-12.1 Replacement air introduced directly into the hood cavity of kitchen exhaust hoods shall not exceed 10% of the hood exhaust airflow rate.
- 6.5.7.1.2 Conditioned supply air delivered to any space with a kitchen hood shall not exceed the greater of

a. the supply flow required to meet the space heating or cooling load or

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

- b. the hood exhaust flow minus the available transfer air from adjacent spaces. Available transfer air is that portion of outdoor ventilation air not required to satisfy other exhaust needs, such as restrooms, and not required to maintain pressurization of adjacent spaces
- **6.5.7.12.23** If a kitchen/dining facility has a total kitchen hood exhaust airflow rate greater than 5000 cfm then ...

Renumber the rest of 6.5.7 and associated references and tables accordingly

Revision to NSF/ANSI 46-2013 Draft 1, Issue 25 (August 2014)

Not for publication. This document is part of the NSF International standard development process. This draft text is for circulation for review and/or approval by a NSF Standards Committee and has not been published or otherwise officially adopted. All rights reserved. This document may be reproduced for informational purposes only.

# Evaluation of components and devices used in wastewater treatment systems

• • 12.6 Performance testing and evaluation • •

12.6.3.5.2

Chlorine disinfection devices shall achieve an average a geometric mean fecal coliform concentration of all hydraulic loading conditions of  $\leq$  200 organisms / 100 mL on the first day that the influent requirements are met.

Reason: This is to clarify the calculation method (and is consistent with other wastewater standards). In the near future, the chlorine devices will be removed from NSF/ANSI 46 as they will be covered under the new standard, NSF 385 Disinfection.

Revision to NSF/ANSI 49-2012 Issue 61, Draft 2 (August 2014)

Not for publication. This document is part of the NSF International standard development process. This draft text is for circulation for review and/or approval by a NSF Standards Committee and has not been published or otherwise officially adopted. All rights reserved. This document may be reproduced for informational purposes only.

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

- •
- •
- •

#### 5 Design and construction

- •
- •
- -
- •

#### 5.19.4 Sliding sash alarm

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

- •
- •
- •

#### 5.25.1 Sliding sash alarm

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

- •
- •
- •

#### F.7.3.1.1 Sash alarms

On cabinets equipped with a sliding sash, it shall be raised 1.0 in (2.5 cm 25 mm) above and lowered 1.0 in (25 mm) below the manufacturer's recommended height. Signaling of an audible and visual alarm shall be verified for both conditions. For cabinets that have been tested and certified to editions of NSF/ANSI Standard 49 earlier than the 2014 edition, alarm activation is only required when the sash is raised 1.0 in (25 mm) above the manufacturer's recommended height.

Revision to NSF/ANSI 51 – 2012 Issue 11, Revision 1 (August 2014)

Not for publication. This document is part of the NSF International standard development process. This draft text is for circulation for review and/or approval by a NSF Standards Committee and has not been published or otherwise officially adopted. All rights reserved. This document may be reproduced for informational purposes only.

NSF/ANSI International Standard for Food Equipment –

#### Food equipment materials

- •
- •
- •

**4.1.2** Food zone materials shall not contain lead, arsenic, cadmium, or mercury as intentional ingredients. Brass and bronze materials may contain lead as permitted under 4.2.3.2.

- •
- •
- •

**4.2.3.2** Brass and bronze may be used in a food zone or splash zone only where rendered corrosion resistant or where exposure to food is clearly and specifically limited to tea, coffee, or water. When used, the lead content of brass and bronze components shall not exceed 8.0%.

**4.2.3.3** Equipment having brass or bronze components in contact with tea, coffee, or water (as permitted in 4.2.3.2), which is intended for human consumption, shall not impart a lead (Pb) concentration greater than 15  $\mu$ g/L when tested in accordance with Annex B. shall be evaluated for weighted average lead content in accordance with NSF/ANSI 372 – *Drinking Water System Components – Lead Content.* The weighted average lead content of the water contact portion of the equipment shall be  $\leq 0.25\%$ .

NOTE 1 – If a coating (organic or metallic) is applied to the brass or bronze components, testing in accordance with annex B evaluation to NSF/ANSI 372 is still applicable.

NOTE 2 – Equipment such as but not limited to proofers, steamers, combination ovens and other systems with similar humidification and vaporization pathways shall be exempt from 4.2.3.3.

- •
- .
- .
- •

#### Annex B

#### (normative)

#### Method for conducting in-unit extraction testing of equipment

#### B.1 Purpose

This annex describes the method for conducting extraction testing of equipment, including coffee makers, espresso machines, and related equipment covered under the scope of NSF/ANSI 4.

Revision to NSF/ANSI 51 – 2012 Issue 11, Revision 1 (August 2014)

Not for publication. This document is part of the NSF International standard development process. This draft text is for circulation for review and/or approval by a NSF Standards Committee and has not been published or otherwise officially adopted. All rights reserved. This document may be reproduced for informational purposes only.

The method has been developed for equipment in which beverages are in contact with a fixed system of tanks, tubing, valves, fixtures, and other components before being dispensed for consumption.

While this method is primarily intended for use in determining the extent to which lead (Pb) is extracted from equipment into a beverage product, it may be used to determine the extraction levels of other substances as needed to ensure conformance to the food zone material requirements of NSF/ANSI 51.

#### **B.2** Preparation of exposure water

The exposure water shall have the following characteristics:

рН	<del>8.0 ± 0.5</del>
alkalinity	<del>500 ± 25 ppm (as NaHCO<sub>3</sub>)</del>
dissolved inorganic carbon	<del>122 ± 5 ppm</del>
free available chlorine	<del>2 ± 0.5 ppm</del>

This exposure water shall be prepared by adding 46 g sodium bicarbonate (NaHCO<sub>3</sub>), 3 mL of 5% sodium hypochlorite (aq) (NaOCI), and 32 mL of 1.86% hydrochloric acid (HCI) to 50 L of deionized water (ASTM D 1193 Type II reagent water).<sup>14</sup>

<sup>14</sup> ASTM D 1193-99: *Standard Specification for Reagent Water*. ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428 <www.astm.org>.

Exposure water shall be stored in a vessel and distribution system that will not impart substances to or affect the characteristics of the water. If the exposure water is to be stored for more than 24 h prior to use, the storage container shall be pressurized with nitrogen to 10-15 psi (70-105 kPa).

#### **B.3** Exposure protocol

a) The exposure water storage vessel shall be pressurized to  $50 \pm 5.0$  psi ( $350 \pm 35$  kPa) using nitrogen gas. A 125-mL control sample shall be collected from the distribution system.

b) The beverage unit shall be connected to the exposure water storage vessel using only stainless steel valves and fittings and polytetrafluoroethylene (PTFE) tubing.

c) While the beverage unit is operated in accordance with manufacturer's instructions, the unit shall be purged with a volume of exposure water equal to between 1.0 and 1.5 times the total volumetric capacity of the unit. If there are multiple beverage outlets (e. g, dispensing spouts), it shall be ensured that approximately equal volumes of exposure water are purged from each outlet. Purged water shall be discarded.

d) With the exposure water in contact with all surfaces having contact with beverages under normal idle operating conditions, static conditions shall be maintained for  $24 \pm 1$  h. The equipment shall be operated (including any heating operations) as intended without any water being dispensed. No ingredients or product shall be added during the exposure period.

#### Revision to NSF/ANSI 51 – 2012 Issue 11, Revision 1 (August 2014)

Not for publication. This document is part of the NSF International *standard* development process. This draft text is for circulation for review and/or approval by a NSF Standards Committee and has not been published or otherwise officially adopted. All rights reserved. This document may be reproduced for informational purposes only.

e) 1.0 L of water, or a volume of water equal to the total volumetric capacity of the unit, whichever is less, shall be dispensed into a clean polyethylene or PTFE container with an airtight lid. If there are multiple beverage outlets (e. g, dispensing spouts), it shall be ensured that approximately equal volumes of extraction water are drawn from each outlet. If the extraction water is to be analyzed for lead and other metals, the sample container shall contain HNO<sub>3</sub> as a preservative.

f) The steps in Annex B, sections B.3 c) through B.3 c) shall be repeated two additional times so that there is a composite volume comprised of three samples taken at 24-h intervals.

g) The composite volume shall be stirred with a PTFE or stainless steel stirring rod. A 125mL sample shall be drawnfrom the composite volume into polyethylene or PTFE sample bottles containing 1.0 mL of HNO<sub>3</sub>.

h) The composite water sample and the control sample shall be analyzed for the concentration of contaminant of concern. The control sample concentration shall be subtracted from the composite sample concentration to determine the contaminant concentration imparted by the beverage unit.

- •
- •
- •

Not for publication. This document is part of the NSF International standard development process. This draft text is for circulation for review and/or approval by a NSF Standards Committee and has not been published or otherwise officially adopted. All rights reserved. This document may be reproduced for informational purposes only.

#### <u>Changes in this revision 2 ballot are shown with underline and highlight.</u> Sustainability Assessment for Carpet

2.1 Normative references

BS EN 1307:2008. Textile floor coverings - Classification<sup>1</sup>

International Organization for Standardization (ISO) 139: Textiles – Standard atmospheres for conditioning and testing<sup>2</sup>

International Organization for Standardization (ISO) 1957: Machine made textile floorcoverings – Sampling and cutting of specimens for physical tests<sup>2</sup>

:

**3.4 carpet:** Heavy functional and ornamental floor coverings consisting of pile yarns or fibers and a backing system. May be tufted, flocked, or woven.

•

#### 9.3 **Performance durability (prerequisite)**

Durability testing provides an indication of the potential longevity of a carpet product when the product is properly selected for the intended use environment (e.g., high or low use/foot traffic areas). Demonstration of durability is achieved through assessment under the accelerated laboratory carpet performance tests and minimum performance requirements referenced in this section.

A manufacturer shall receive one point for demonstrating that the product meets the applicable performance durability testing requirements listed in Table 9.2 and Table 9.2A.

Table 9.2 – Carpet performance Testing					
Characteristic	Commercial		Residential		Validity of
	Performance Standard		Performa	nce Standard	Test Data
	Value	Method	Value	Method	
Texture	Moderate	ASTM			Within the
Appearance	Traffic:	D5252-			previous 24
Retention	min 2.5 TARR	Hexapod			months
Rating (TARR)	Heavy Traffic: min	drum at			
	3.0 TARR	12000			
	Severe Traffic:	cycles			
	min 3.5 TARR				
		CRI TM			
		101-			
		TARR			
Tuft Bind	8.0 lbs for loop	ASTM	6.2 lbs for	ASTM D1335	Within the
(not flocked	pile yarns	D1335	loop pile		previous 12
carpet)			yarns		months

#### Table 9.2 – Carpet performance Testing

<sup>1</sup> British Standards institute (BSI), 389 Chiswick High Road, London, W4 4AL, UK <www.bsigroup.com>

<sup>&</sup>lt;sup>2</sup> International Organization for Standardization, ISO Central Secretariat, 1, ch. De la Voie-Cruese, CP 56, CH-1211 Geneva 20, Switzerland <www.iso.org>.

Not for publication. This document is part of the NSF International standard development process. This draft text is for circulation for review and/or approval by a NSF Standards Committee and has not been published or otherwise officially adopted. All rights reserved. This document may be reproduced for informational purposes only.

	3.0 lbs for cut pile yarns		3.0 lbs for cut pile yarns		
Blade Test (for flocked carpets)	Less than 50% backing clearly visible after test	Blade Test (Annex D)	Less than 50% backing clearly visible after test	Blade Test (Annex D)	Within the previous 12 months
Delamination Strength	Minimum average value of 2.5 lbs/in	ASTM D3936	Minimum average value of 2.5 lbs/in	ASTM D3936	Within the previous 12 months
Flammability (Pill Test)	Must meet federal requirements	DOC FF 1-70	Must meet Federal requirements	DOC FF 1-70	Within the previous 24 months
Flammability (Radiant Panel)	Must meet local building/fire code regulations Class 1- minimum 0.45 watts/cm <sup>2</sup> Class 2- minimum 0.22 watts/cm <sup>2</sup>	ASTM E648	n/a		Within the previous 24 months
Flammability (Smoke Density)	Must meet local building/fire code regulations Maximum specific optical density not exceeding 450 (flaming exposure)	ASTM E662	n/a		Within the previous 24 months
Electrostatic Propensity	Equal to or less than 3.5kv	AATCC- 134, step test			Within the previous 36 months
Colorfastness to Light	Minimum grade 4 at 40 AFU	AATCC 16E	Minimum grade 4 at 40 AFU	AATCC 16E	Within the previous 12 months

Not for publication. This document is part of the NSF International standard development process. This draft text is for circulation for review and/or approval by a NSF Standards Committee and has not been published or otherwise officially adopted. All rights reserved. This document may be reproduced for informational purposes only.

Table 9.2A – Performance testing for wool rich carpet
---

Characteristic	Commercial performance standard		Residential performance standard		Validity of Test Data
	Value	Method	Value	Method	
Overall Appearance Change (OAC) Light use Moderate use Heavy use Severe use	≥ 3 ≥ 3 ≥ 3-4 ≥ 3-4	ASTM D55252 – Hexapod drum test (1500 & 8000 cycles) CRI TM 101 - ARR grading assessment Value calculated combining OAC at both test durations	≥ 2-3 ≥ 3 ≥ 3-4	ASTM D55252 – Hexapod drum test (1500 & 8000 cycles) CRI TM 101 - ARR grading assessment Value calculated combining OAC at both test durations	Within the previous 24 months
Tufted carpets: loop pile cut pile	≥ 4.4 lbs ≥ 2.2 lbs	ASTM D1335	≥ 4.4 lbs ≥ 2.2 lbs	ASTM D1335	Within the previous 12 months
Woven carpets (cut or loop)	≥ 0.77 lbs		≥ 0.77 lbs		
Delamination strength	Minimum average value of 2.5 lbs/in	ASTM D3936	Minimum average value of 2.5 lbs/in	ASTM D3936	Within the previous 12 months
Soiling resistance	ΔE≤3	ASTM D6540 Drum Soiling Test using AATCC standard soil	ΔE≤3	ASTM D6540 Drum Soiling Test using AATCC standard soil	Within the previous 24 months
Flammability (Pill test)	Must meet federal requirements	DOC FF 1-70	Must meet federal requirements	DOC FF 1-70	Within the previous 24 months
Flammability (Radiant panel test)	Must meet local building/fire code regulations Class 1- minimum 0.45 watts/cm <sub>2</sub>	ASTM E648	Not applicable		Within the previous 24 months

NOTE - Overall Appearance Change = 1/3 (2 x (short term texture change) + long term texture change)

:

Not for publication. This document is part of the NSF International standard development process. This draft text is for circulation for review and/or approval by a NSF Standards Committee and has not been published or otherwise officially adopted. All rights reserved. This document may be reproduced for informational purposes only.

#### (normative)

#### Blade test for Flocked floor coverings<sup>1</sup>

#### D.1 Test description

This annex covers blade testing for flocked floor coverings. This annex should be used for flocked floor coverings.

#### D.2 Scope

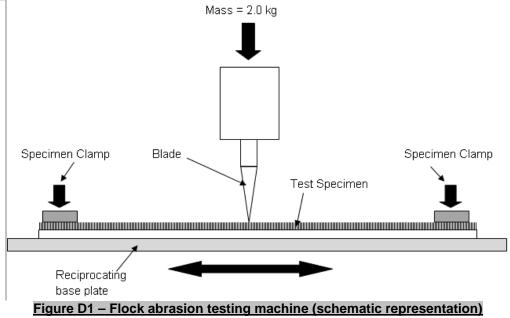
This test describes a laboratory test method to measure the abrasion resistance of flocked floor coverings. This test references both ISO 139<sup>2</sup> and ISO 1957<sup>2</sup>.

#### D.3 Principle

A specimen of the flocked floor covering to be tested <u>shall be</u> is placed on the test apparatus pile face up. A blade is <u>shall</u> then <u>be</u> lowered onto the pile surface which rubs against the pile surface for a determined number of cycles, after which a visual assessment is <u>shall be</u> made.

#### D.3.1 Apparatus

<u>The</u> flock abrasion testing machine <u>(see figure D1)</u>, having a reciprocating base plate onto which the flocked flooring sample can <u>shall</u> be clamped. The blade and weight assembly <u>shall be</u> is capable of being lowered onto the sample.



#### D.3.2 Blade

The following items shall be set prior to beginning blade test:		
Material	Tool Steel	
Width	20 mm <u>(0.78 in)</u>	

Not for publication. This document is part of the NSF International standard development process. This draft text is for circulation for review and/or approval by a NSF Standards Committee and has not been published or otherwise officially adopted. All rights reserved. This document may be reproduced for informational purposes only.

Thickness	5 mm <u>(0.20 in)</u>
Tip radius	0.3 mm <u>(0.1 in)</u>
Angle	15°
Weight	2 ± 0.05 kg (4.4 ± 1.1 lbs)
	(weight assembly and blade)

The apparatus operates at 60 cycles\*/minute over a distance of 100 mm (3.93 in). A cycle is shall be defined as one forward and backward movement of the blade.

#### D.3.3 Conditioning

The sample shall be conditioned the sample at standard atmosphere (20 °C [68 °F], 65% relative humidity) for a minimum of 24 hours.

#### D.3.4 Preparation of Test Specimens

A specimen of size 40 x 300 mm (1.6 in x 11.8 in) shall be is cut from the flocked floor covering (pile direction is not important).

#### D.4 Procedure

1) Place the test specimen, pile uppermost, under the clamps and thread through under the raised blade.

2) Lower and tighten the clamps at each end while making sure that the test specimen is held taut (during the test the sample should remain flat without significant lifting in front of the blade).

3) Carefully lower the blade onto the specimen and ensure that the weight is in place on the spindle above the blade.

4) Set the counter to the required number of cycles and switch on the apparatus. After the pre-set number of cycles has been completed, the apparatus will stops automatically.

5) Remove the specimen from the apparatus and brush it lightly to remove any loose fibers.

#### D.5 Assessment of Results

The sample shall be assessed the specimen for wear. The pass criterion shall be is that the pile shall not be removed such that 50% backing becomes clearly visible.

#### D.6 Test Report

The test report shall include the following information:

- 1) all the information necessary for complete identification of the sample;
- 2) the conditioning and testing atmosphere;
- 3) reference to this Standard;
- 4) whether or not the sample has passed or failed the test;
- 5) any operations or conditions not specified in this standard, which might have affected the results;

and

6) date of report.

### BSR/UL 1561, Standard for Safety for Dry-Type General Purpose and Power Transformers

#### PROPOSAL

#### **Table 23.1**

Material or component			°C (10)
a) Fiber used as electrical insulation			50,00
b) Any point on a surface adjacent to a transformer, including the surface on which the transformer is mounted			°C From 50 for for orthis
c) Insulated wire	temperature rating		
d) Any point within a ter installed conductor migh itself, unless the transfo	minal or wiring on t contact, incluc rmer is marked	compartment that a field- ding such a conductor in accordance with 38.12.3	
1) Field-wiring conduct	ctor current ratir	ng of 100 amperes or less	20 <sup>a,b</sup>
amperes		ng of greater than 100	35 <sup>a,b</sup>
as indicated in 23.2.1 ar	nd 23.3.1	former enclosure, except	50
f) Transformer winding i	nsulation syster	ns (resistance method)	
Insulation System Ambient Hot Spot Differential			
-			
Class 105	40	10	55
Class 105 Class 130	<b>40</b>	10 <del>30</del> 15	55 <del>60</del> <u>75</u>
Class 105 Class 130 Class 155			1
Class 105 Class 130 Class 155 Class 180	40 40 40 40	<del>30</del> 15	<del>60</del> <u>75</u>
		<del>30</del> 15 <del>30</del> 20	60 75 85 95
Class 180	40	30 15           30 20           30 25	60 75 85 95 110 115
Class 180 Class 200	40 40	30 15           30 20           30 25           30 25	60 75         85 95         110 115         130 135
Class 180 Class 200 Class 220	40 40 40 40	30 15         30 20         30 25         30 25         30 30	60 75         85 95         110 115         130 135         150

<sup>a</sup> The temperature on a wiring terminal or lug is measured at the point most likely to be contacted by the insulation of a conductor installed as in actual service.

<sup>b</sup> If the rise is 35°C or less and an aluminum bodied connector is used or aluminum wire is intended, the connector shall be marked AL7CU or AL9CU. If the terminal H. contraction of the second s temperature rise exceeds 35°C but does not exceed 50°C, the connector shall be marked AL9CU. See 38.12.3 and 38.12.4 for additional markings.

BSR/UL 8750, Standard for Safety for Light Emitting Diode (LED) Equipment for Use in Lighting Products

### 1. Correlate bridging capacitor use in paragraph 7.9.2 with UL 60950-1 requirements

7.9.2 A component that bridges two circuits otherwise required to be isolated from one another shall be one of the following:

a) A Class Y1 capacitor complying with the antenna coupling requirements specified in the Standard for Capacitors and Suppressors for Radio- and Television-Type Appliances, UL 1414 Class Y capacitor complying with the requirements specified in the Fixed Capacitors for Use in Electronic Equipment - Part 14: Sectional Specification -Fixed Capacitors for Electromagnetic Interference Suppression and Connection to the Supply Mains, UL 60384-14 (see Table 7.7),

b) A Class Y1 capacitor complying with the requirements specified in the Standard for Fixed Capacitors for use in Electronic Equipment, UL 60384-14,

e) b) Two capacitors connected in series, each capacitor individually complying with the dielectric voltage withstand test of 8.4,

d) Two Y2 capacitors in series complying with the antenna coupling requirements specified in the Standard for Capacitors and Suppressors for Radio- and Television-Type Appliances, UL 1414,

e) Two Y2 capacitors in series complying with the requirements specified in the Standard for Fixed Capacitors for use in Electronic Equipment, UL 60384-14,

f) <u>c)</u> An optical isolator complying with the requirements of the Standard for Optical Isolators, UL 1577, with a suitable isolation voltage rating, or

g) d) A transformer that complies with the dielectric voltage withstand test of 8.4.

#### **Table 7.7**

#### **Bridging capacitor**

<u>Capacitor subclass according to the Standard</u> <u>for Fixed Capacitors for Use in Electronic</u> <u>Equipment - Part 14: Sectional Specification -</u> <u>Fixed Capacitors for Electromagnetic</u> <u>Interference Suppression and Connection to the</u> <u>Supply Mains, UL 60384-14</u>	Rated voltage of the capacitor	
<u>Y1</u>	Up to and including 500V	
<u>Y2</u>	Over 150V up to any including 300V	
<u>Y4</u>	Up to and including 150V	
Rules for the application of Table 7.7:	itho	
1) The voltage rating of the capacitor shall be equal t insulation being bridged.	o the RMS working voltage across the	
2) It is permitted to use a higher grade capacitor than	the one specified, as follows:	
- Subclass Y1 if subclass Y2 is specified;	105	
- Subclass Y1 or Y2 if subclass Y4 is specified.		
3) It is permitted to use two or more capacitors of ser specified, as follows:		
- Subclass Y1 or Y2 if subclass of is specifie		
- Subclass Y2 or Y4 if subclass Y2 is specifie	ed;	
<ul> <li>Voltage rating of each individual capacitor n working voltage of insulation being bridged.</li> </ul>	nust be equal to or greater than the RMS	

APPENDIX A (Note: Appendix A tertal hot a (Note: Appendix A is not shown here in its entirety. The following includes only entries being revised.)

Standards under which components of the products covered by this standard are evaluated include the following:

Capacitors and Suppressors for Radio- and Television-Type Appliances - UL 1414

Fixed Capacitors for Use in Electronic Equipment - Part 14: Sectional Specification - Fixed Capacitors for Electromagnetic Interference Suppression and Connection to the Supply Mains -UL 60384-14