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.

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
Comment Deadline: June 15, 2008

NSF (NSF International)

Revisions

BSR/NSF 49-200x (i19), Class II (laminar flow) biosafety cabinetry (revision of ANSI/NSF 49-2007)
Issue 19 - Revise Noise Level Test acceptance criteria to be consistent with background noise levels.
   Click here to see these changes in full, or look at the end of “Standards Action.”
Send comments (with copy to BSR) to: Mindy Costello, NSF; mcostello@nsf.org; aburr@nsf.org

BSR/NSF 49-200x (i20), Class II (laminar flow) biosafety cabinetry (revision of ANSI/NSF 49-2007)
Issue 20 - To add language in the Section F.7.3.2 for consistency throughout the standard.
   Click here to see these changes in full, or look at the end of “Standards Action.”
Send comments (with copy to BSR) to: Mindy Costello, NSF; mcostello@nsf.org; aburr@nsf.org

BSR/NSF 50-200x (i32), Circulation system components and related materials for swimming pools, spas/hot tubs (revision of ANSI/NSF 50-2007)
Issue 32 - Use of hydrogen peroxide with DE filters at high concentrations (Note location).
   Click here to see these changes in full, or look at the end of “Standards Action.”
Send comments (with copy to BSR) to: Mindy Costello, NSF; mcostello@nsf.org; aburr@nsf.org

UL (Underwriters Laboratories, Inc.)

Revisions

Revises the Normal Operation Test.
   Click here to see these changes in full, or look at the end of “Standards Action.”
Send comments (with copy to BSR) to: Kristin Andrews, UL-CA; Kristin.L.Andrews@us.ul.com

BSR/UL 588-200x, Standard for Seasonal and Holiday Decorative Products (Proposal dated 5-16-08) (revision of ANSI/UL 588-2008)
Revises the marking requirements in 117.3.7.
   Click here to see these changes in full, or look at the end of “Standards Action.”
Send comments (with copy to BSR) to: Megan Cahill, UL-IL; Megan.M.Cahill@us.ul.com

The following is being proposed:
(1) Adding a requirement and cycling test to address weather protection for wet location generators with external receptacles and adding an exception to allow thinner enclosure thicknesses;
(2) Adding a marking requirement for generators fueled by natural gas or liquefied petroleum gas; and
(3) Revising paragraph 2.6 to correct a typographical error.
   Click here to see these changes in full, or look at the end of “Standards Action.”
Send comments (with copy to BSR) to: Jeffrey Prusko, UL-IL; Jeffrey.Prusko@us.ul.com

Comment Deadline: June 30, 2008

API (American Petroleum Institute)

New Standards

BSR/API Spec 11D1/ISO 14310, 1st edition-200x, Petroleum and Natural Gas Industries - Downhole Equipment - Packers and Bridge Plugs (new standard)
Provides requirements for packers and bridge plugs for use in the petroleum and natural gas industry. Application of this International Standard is limited to those products meeting the definition of a packer or ridge plug intended for petroleum and natural gas industry subsurface operations. Installation and maintenance of these products is outside the scope of this document.
Single copy price: $25.00
Obtain an electronic copy from: kurylac@api.org
Order from: Carriann Kuryla, API (Organization); kurylac@api.org
Send comments (with copy to BSR) to: Same

ASA (ASC S12) (Acoustical Society of America)

Revisions

Provides a method to predict sleep disturbance in terms of percent awakenings or numbers of people awakened associated with noise levels in terms of indoor A-weighted sound exposure level (ASEL). Developed from field studies of behavioral awakening primarily in homes near areas of routine jet aircraft takeoff and landing operations, railroads, roads, and highways. The database used in derivation of the method consists of about 10,000 subject-nights of observations in a variety of communities.
Single copy price: $120.00
Obtain an electronic copy from: sblaeser@aip.org
Order from: Susan Blaeser, ASA; sblaeser@aip.org; asastds@aip.org
Send comments (with copy to BSR) to: Same

Reaffirmations

Contains the recommended methods for testing, determining, and reporting the vibration levels induced by small air-moving devices (AMDs) that are found in cooling equipment used for information technology and telecommunications. The use of this standard is encouraged to promote uniformity in the measurement and reporting of the vibration levels induced by AMDs for use in information technology and telecommunications equipment.
Single copy price: $25.00
Obtain an electronic copy from: sblaeser@aip.org
Order from: Susan Blaeser, ASA; sblaeser@aip.org; asastds@aip.org
Send comments (with copy to BSR) to: Same

Specifies in detail a laboratory method for determining and reporting airborne noise emissions of small air-moving devices used primarily for cooling electronic equipment like computer and business equipment. Descriptor of overall noise emission of air-moving device under test is A-weighted sound power level. 1/3-octave-band sound power level is the detailed descriptor of noise emission. Octave band sound power levels may be provided in addition to 1/3-octave-band sound power levels.

Single copy price: $99.00
Obtain an electronic copy from: sblaeser@aip.org
Order from: Susan B. Blaeser, ASA; sblaeser@aip.org; asastds@aip.org
Send comments (with copy to BSR) to: Same

ASABE (American Society of Agricultural and Biological Engineers)

New Standards

BSR/ASA S608-200x, Headlamps for Agricultural Equipment (new standard)
Provides performance and general design requirements and related test procedures for headlamps for use on agricultural equipment that may be operated on public roads.

Single copy price: $48.00
Obtain an electronic copy from: vangilder@asabe.org
Order from: Carla VanGilder, ASABE; vangilder@asabe.org
Send comments (with copy to BSR) to: Same

OLA (ASC Z80) (Optical Laboratories Association)

Revisions

BSR Z80.23-200x, Corneal Topography Systems - Standard Terminology, Requirements (revision of ANSI Z80.23-1999)
Applies to instruments, systems and methods that are intended to measure the shape of the cornea of the human eye over a majority of its anterior surface. Terms peculiar to the characterization of corneal shape are defined. Minimum requirements for instruments and systems classified as corneal topographers are outlined. Tests and procedures that verify that a system or instrument complies with the standard and thereby qualifies as a corneal topographer per this standard are described.

Single copy price: $10.00
Obtain an electronic copy from: kdinkle@ola-labs.org
Order from: Kris Dinkle, OLA (ASC Z80); kdinkle@ola-labs.org
Send comments (with copy to BSR) to: Same

SCTE (Society of Cable Telecommunications Engineers)

New Standards

BSR/SCTE 135-1-200x, DOCSIS 3.0 Part 1: Physical Layer Specification (new standard)
This specification is part of the DOCSIS (R) family of specifications. In particular, this specification is part of a series of specifications that defines the third generation of high-speed data-over-cable systems. This specification was developed for the benefit of the cable industry, and includes contributions by operators and vendors from North America, Europe, and other regions.

Single copy price: $50.00
Obtain an electronic copy from: standards@scte.org
Order from: Global Engineering Documents; www.global.ihs.com
Send comments (with copy to BSR) to: Steve Oksala, SCTE; standards@scte.org

BSR/SCTE 135-2-200x, DOCSIS 3.0 Part 2: MAC and Upper Layer Protocols (new standard)
This specification is part of the DOCSIS (R) family of specifications. In particular, this specification is part of a series of specifications that define the third generation of high-speed data-over-cable systems. This specification was developed for the benefit of the cable industry, and includes contributions by operators and vendors from North America, Europe, and other regions.

Single copy price: $50.00
Obtain an electronic copy from: standards@scte.org
Order from: Global Engineering Documents; www.global.ihs.com
Send comments (with copy to BSR) to: Steve Oksala, SCTE; standards@scte.org

UL (Underwriters Laboratories, Inc.)

Revisions

BSR/UL 67-200x, Standard for Safety for Panelboards (revision of ANSI/UL 67-2006)
The following changes in requirements are being proposed: 42-circuit limit on lighting and appliance branch circuit panelboards.

Single copy price: Contact comm2000 for pricing and delivery options
Order from: comm2000
Send comments (with copy to BSR) to: Tim Corder, UL-NC; William.T.Corder@us.ul.com

Covers:
(1) Materials tables revisions including:
   (i) Revision of SI units for tensile strength;
   (ii) Deletion of Fahrenheit temperature from wire and cable temperature ratings;
   (iii) Deletion of class number for material identification; and
   (iv) Miscellaneous revisions for consistency with other wire and cable standards and revisions; and
(2) Deletion of requirements in UL 1581 due to the publication of UL 2556 and miscellaneous editorial corrections and clarifications.

Single copy price: Contact comm2000 for pricing and delivery options
Order from: comm2000
Send comments (with copy to BSR) to: Camille Alma, UL; Camille.A.Alma@us.ul.com
BSR/UL 60947-4-1A-200x, Standard for Low-Voltage Switchgear and Controlgear - Part 4-1: Contactors and motor-starters - Electromechanical contactors and motor-starters (Proposal dated 5-16-08) (revision of ANSI/UL 60947-4-1-2004)

Covers:
(1) Harmonization of IEC utilization categories with the UL ratings for control of external loads;
(2) Modification of 6.2DV.3.5, 9.3.4.2.3.DV.4.1, Table 8.2.2DV.1 and Table 6.2DV.1; and
(3) Deletion of 6.2DV.3.3, 8.1DV.2.1, 8.1.5.1DV, all sub-clauses requiring handle position marking, 8.2.5DV.1.2, 8.2.5DV.1.4, 9.1.5DV.1, 9.3.3.2.2DV.1 - 9.3.3.2.2DV.4, Table 5.5DV.1, and associated references to standard VA ratings based on size of contactor.

Single copy price: Contact comm2000 for pricing and delivery options
Order from: comm2000
Send comments (with copy to BSR) to: Megan Cahill, UL-IL; Megan.M.Cahill@us.ul.com

Reaffirmations

BSR/UL 466-2004 (R200x), Electric Scales and Accessories (Proposal dated 5/16/08) (reaffirmation of ANSI/UL 466-2004)
Covers portable scales, including counter, jewelry, grain, floor and other electronic scale designations. These scales are ordinarily of the computing type, that are rated 250 volts or less. These scales consist of an attachment plug, a length of flexible cord, a switch, one or more lamps, lampholders, ballasts if electric-discharge lamps are used, and associated internal wiring. They are intended to be used in accordance with the National Electrical Code, NFPA 70.

Single copy price: Contact comm2000 for pricing and delivery options
Order from: comm2000
Send comments (with copy to BSR) to: Linda Phinney, UL-CA; Linda.L.Phinney@us.ul.com

Comment Deadline: July 15, 2008
Reaffirmations and withdrawals available electronically may be accessed at: webstore.ansi.org

ASME (American Society of Mechanical Engineers)

New Standards

BSR/ASME B18.16.6-200x, Nylon Insert Locknuts (Inch Series) (new standard)
Covers the complete general, dimensional, mechanical, and performance data for carbon steel, inch series nylon insert locknuts for property grades NE2, NE5, and NE8 designated as the American National Standard. The inclusion of dimensional data is not intended to imply that all of the locknut sizes in conjunction with various options described herein are stock items. Consumers should consult with suppliers concerning lists of stock production nylon insert locknuts.

Single copy price: $20.00
Obtain an electronic copy from: http://cstools.asme.org/publicreview
Order from: Mayra Santiago, ASME; ANSIBOX@asme.org
Send comments (with copy to BSR) to: Ryan Crane, ASME; craner@asme.org

BSR/ASME B18.31.2-200x, Continuous and Double End Studs - Inch Series (new standard)
Covers the complete dimensional and general data for continuous thread and double end inch dimensioned studs recognized as the American National Standard. The following configurations are covered:
- Continuous Thread Stud: Studs that are threaded over their complete length;
- Double End Stud (Clamping Type - Identical Ends): Studs with screw threads of the same length and configuration on each end. This type stud serves the function of clamping two bodies together with a nut on each end; and
- Double End Stud (Tap End Type): A stud designed to be installed in a tapped hole and usually with different threaded lengths on each end. For the tap end of the studs, both regular unified threads and interference fit threads are covered. Double end studs of the following body diameters are covered: Reduced Diameter, Body, and Full Body.

Single copy price: $20.00
Obtain an electronic copy from: http://cstools.asme.org/publicreview
Order from: Mayra Santiago, ASME; ANSIBOX@asme.org
Send comments (with copy to BSR) to: Angel Guzman, ASME; guzman@asme.org

Reaffirmations

Provides performance and safety requirements for pliers (also known as Cannon Plug Pliers) that are used primarily for connecting or disconnecting threaded lock collars of electrical connectors. This Standard may be used as a guide by state authorities or other regulatory bodies in the formulation of laws or regulations. It is also intended for voluntary use by establishments that use or manufacture the tools covered.
Single copy price: $32.00
Obtain an electronic copy from: http://cstools.asme.org/publicreview
Order from: Mayra Santiago, ASME; ANSIBOX@asme.org
Send comments (with copy to BSR) to: Jack Karian, ASME; karianj@asme.org

AWWA (American Water Works Association)

Revisions

BSR/AWWA B501-200x, Sodium Hydroxide (Caustic Soda) (revision of ANSI/AWWA B501-2003)
Describes sodium hydroxide, anhydrous and liquid, for use in the treatment of municipal and industrial water supplies.
Single copy price: $20.00
Order from: Ed Baruth, AWWA; ebaruth@awwa.org
Send comments (with copy to BSR) to: Same

UL (Underwriters Laboratories, Inc.)

Revisions

BSR/UL 218-200x, Standard for Fire Pump Controllers (revision of ANSI/UL 218-2005)
Covers controllers intended for starting and stopping centrifugal and positive displacement fire pumps, including automatic and non-automatic types for electric-motor or engine-driven pumps in accordance with NFPA 20, Stationary Pumps for Fire Protection. Types of controllers covered include diesel engine, electric-motor, limited-service, high-voltage, and residential. Controllers may be suitable for use as service equipment. This proposed tri-national edition of UL 218 is fundamentally the current UL 218 standard with the addition of national differences for Canada and Mexico.
Single copy price: Contact comm2000 for pricing and delivery options
Order from: comm2000
Send comments (with copy to BSR) to: Alan McGrath, UL-IL; Alan.T.McGrath@us.ul.com
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:

UL (Underwriters Laboratories, Inc.)

BSR/UL 2239-200x, Hardware for the Support of Conduit, Tubing, and Cable (revision of ANSI/UL 2239-2004)

Covers:
(1) Revision to update normative references in clause 2;
(2) Addition of new definition for positioning device;
(3) Clarification that all devices are to be subjected to mechanical tests in clause 5.1.3;
(4) Deletion of the option for the carbon-arc test method in the resistance to ultraviolet light and water test;
(5) Clarification of ISO test method references in clauses 6.4.5.4 and 6.8.2;
(6) Editorial correction to clause 7.2.1(c);
(7) Revision of marking requirement in clause 10.8 to add option for classification codes.

Draft Standards for Trial Use

In accordance with Annex B: Draft American National Standards for trial use of the ANSI Essential Requirements, the availability of the following draft standard for trial use is announced:

Trial use period: April 13, 2007 through April 13, 2010

LEO (Leonardo Academy, Inc.)

BSR/SCS-001-200x, Sustainable Agriculture Practice Standard (trial use standard)

Scope: This standard establishes a comprehensive framework and common set of environmental, social, and quality requirements by which to demonstrate that an agricultural product has been produced and handled in a sustainable manner, from soil preparation and seed planting through production, harvest, post-harvest handling, and distribution for sale.

Leonardo Academy is re-announcing this DSTU to ensure that all materially affected parties are aware of this draft standard and have the opportunity to participate in the development process. Leonardo Academy has also updated its ANSI standard development procedures to clarify the committee selection process and other standard development procedures. The deadline for applications to participate on the standard development committee has been re-extended to July 7 to allow everyone interested in participating additional time to apply. See the next page for more information.

Single copy price: Free

Order from: Amanda Raster, LEO;
Development-SCS-1@leonardoacademy.org

Send comments (with copy to BSR) to: Michael Arny, LEO;
michaelarny@leonardoacademy.org
Draft Standards for Trial Use

In accordance with Annex B: Draft American National Standards for trial use of the ANSI Essential Requirements, the availability of the following draft standard for trial use is announced:

Trial use period: April 13, 2007 through April 13, 2010

LEO (Leonardo Academy, Inc.)
BSR SCS-001-200x, Sustainable Agriculture Practice Standard (trial use standard)

Scope: This standard establishes a comprehensive framework and common set of environmental, social, and quality requirements by which to demonstrate that an agricultural product has been produced and handled in a sustainable manner, from soil preparation and seed planting through production, harvest, post-harvest handling, and distribution for sale.

Order from: Amanda Raster, LEO; Development-SCS-1@leonardoacademy.org
Send comments (with copy to BSR) to: Michael Arny, LEO; michaelarny@leonardoacademy.org

Leonardo Academy is re-announcing this DSTU to ensure that all materially affected parties are aware of this draft standard and have the opportunity to participate in the development process. Leonardo Academy has also updated its ANSI standard development procedures to clarify the committee selection process and other standard development procedures. The deadline for applications to participate on the standard development committee has been re-extended to July 7 to allow everyone interested in participating additional time to apply. Standards Committee members will be announced July 28, and the first meeting of the Standards Committee will be held on September 10, 2008. Leonardo Academy is re-announcing this DSTU in response to several complaints filed with Leonardo Academy that the initial announcement of the DSTU did not sufficiently inform all materially affected parties of this DSTU process. The purpose of re-announcing the DSTU is to ensure that all interested and materially affected parties are aware of the draft standard and have the opportunity to participate in the process and to apply to serve on the Standards Committee. Awareness of the DSTU also gives materially affected parties the opportunity, if they so choose, to challenge the decision to register this DSTU with ANSI. Leonardo Academy has conducted extensive outreach to increase awareness of this DSTU from September 2007 to the present and has developed a contact list of 1400 interested and potentially affected parties. To date, 70 applications have been submitted to serve on the Standards Committee or advisory subcommittees. To ensure a broad awareness of the opportunity to participate in this standard development process, Leonardo Academy asks all readers of this announcement to forward information about this DSTU to anyone who may be interested and/or affected by this standard.
Call for Comment Contact Information

The addresses listed in this section are to be used in conjunction with standards listed in Call for Comment. This section is a list of developers who have submitted standards for public review in this issue of Standards Action – it is not intended to be a list of all ANSI developers. Please send all address corrections to: Standards Action Editor, American National Standards Institute, 25 West 43rd Street, New York, NY 10036 or standact@ansi.org.

Order from:

API (Organization)
American Petroleum Institute
1220 L Street, N.W.
Washington, DC 20005
Phone: (202) 682-8565
Fax: (202) 962-4797
Web: www.api.org

ASA (ASC S1)
ASC S1
35 Pinelawn Road Suite 114E
Melville, NY 11747
Phone: (631) 390-0215
Fax: (631) 390-0217
Web: asa.aip.org/index.html

ASABE
American Society of Agricultural and Biological Engineers
2950 Niles Road
St Joseph, MI 49085
Phone: (269) 429-0300
Web: www.asabe.org

ASME
American Society of Mechanical Engineers
3 Park Avenue, 20th Floor (20N2)
New York, NY 10016
Phone: (212) 591-8521
Fax: (212) 591-8501
Web: www.asme.org

AWWA
American Water Works Association
6666 West Quincy Avenue
Denver, CO 80235
Phone: (303) 347-6176
Fax: (303) 795-7603
Web: www.awwa.org/asp/default.asp

comm2000
1414 Brook Drive
Downers Grove, IL 60515

Global Engineering Documents
Global Engineering Documents
15 Inverness Way East
Englewood, CO 80112-5704
Phone: (303) 854-7179
Fax: (303) 379-2740

LEO
Leonardo Academy, Inc.
1526 Chandler Street
Madison, WI 53711
Phone: (608) 255-720
Fax: (608) 255-7202
Web: www.leonardoacademy.org

OLA (ASC Z80)
ASC Z80
11096 Lee Hwy., A101
Fairfax, VA 22030-5039
Phone: (703) 359-2830
Fax: (703) 359-2834
Web: www.ola-labs.org
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.

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

**Office:** 1110 N Glebe Road  
Suite 220  
Arlington, VA 22201

**Contact:** Hillary Woehrle  
**Phone:** (703) 525-4890 x215  
**Fax:** (703) 276-0793  
**E-mail:** hwoehrle@aami.org

BSR/AAMI/ISO 15223-2-200x, Medical devices - Symbols to be used with medical device labels, labelling and information to be supplied - Part 2: Symbol development, selection and validation (identical national adoption of ISO DIS 15223-2)


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**API (American Petroleum Institute)**

**Office:** 1220 L Street, N.W.  
Washington, DC 20005

**Contact:** Carriann Kuryla  
**Phone:** (202) 962-8565  
**Fax:** (202) 962-4797  
**E-mail:** kurylac@api.org

BSR/API Spec 11D1/ISO 14310, 1st edition-200x, Petroleum and Natural Gas Industries - Downhole Equipment - Packers and Bridge Plugs (new standard)

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**BIFMA (Business and Institutional Furniture Manufacturers Association)**

**Office:** 2680 Horizon Drive, S.E., Suite 1-A  
Grand Rapids, MI 49546-7500

**Contact:** Richard Driscoll  
**Phone:** (616) 285-3963  
**Fax:** (616) 285-3765  
**E-mail:** rdriscol@bifma.org


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

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

New Standards

AWWA (American Water Works Association)

New Standards

IEEE (Institute of Electrical and Electronics Engineers)

New Standards

Revisions

IESNA (Illuminating Engineering Society of North America)

Addenda

NSF (NSF International)

Revisions

UL (Underwriters Laboratories, Inc.)

New Standards
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: 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.

AIHA (ASC Z9) (American Industrial Hygiene Association)
Office: 2700 Prosperity Avenue Suite 250
Fairfax, VA 22031
Contact: Mili Mavely
Fax: (703) 207-8558
E-mail: mmavely@aiha.org

BSR/AIHA Z9.4-200x, Abrasive-Blasting Operations - Ventilation and Safe Practices for Fixed Location Enclosures (new standard)
Stakeholders: Manufacturers, users, and general interest.
Project Need: To review the existing guidance and update any change in knowledge since the previous edition was published.
Applies to all operations in fixed-location abrasive-blast enclosures in which an abrasive forcibly comes in contact with a surface by pneumatic or hydraulic pressure or by centrifugal force. It shall not apply to steam blasting, steam cleaning, or hydraulic cleaning methods in which work is done without the aid of abrasives. It also shall not apply to abrasive blasting conducted outdoors (e.g., bridges, water towers) even though temporary enclosures may be built at such locations.

ASME (American Society of Mechanical Engineers)
Office: 3 Park Avenue, 20th Floor (20N2)
New York, NY  10016
Contact: Mayra Santiago
Fax: (212) 591-8501
E-mail: ansibox@asme.org

BSR/ASME B18.31.1M-200x, Metric Continuous and Double End Studs (revision of ANSI/ASME B18.31.1M-2005)
Stakeholders: Users, distributors, and manufacturers.
Project Need: To update a few sections as well as several tables of the standard.
Covers the complete dimensional and general data for continuous-thread and double-end metric-series studs recognized as an American National Standard. The following configurations are covered:
- Continuous Thread Stud: Studs that are threaded over their complete length;
- Double-End Stud (Clamping Type): Studs with screw threads of the same length and configuration on each end. This type of stud serves the function of clamping two bodies together with a nut on each end; and
- Double-End Stud (Tap End Type): A stud designed to be installed in a tapped hole and usually with different threaded lengths on each end. The tap end studs covered by this standard have the same thread form on each end with the length of the tap end threads equal to approximately 1-1/2 times the nominal thread diameter.

ATIS (Alliance for Telecommunications Industry Solutions)
Office: 1200 G Street NW, Ste 500
Washington, DC  20005
Contact: Kerrianne Conn
Fax: 202-347-7125
E-mail: kconn@atis.org

BSR ATIS 0600016-200x, Splitters - CPE Side (new standard)
Stakeholders: Telecommunications industry.
Project Need: To incorporate static splitter performance requirements for older DSLs (ADSL) as well as newer DSLs (VDSL2).
Incorporates static splitter performance requirements for older DSLs (ADSL) as well as newer DSLs (VDSL2).
Stakeholders: Office furniture manufacturers, suppliers to the office furniture industry, emissions testing laboratories.
Project Need: To revise the existing standard test method in ANSI/BIFMA M7.1-2007 to include the results of latest research.

Stakeholders: Office furniture manufacturers, suppliers to the office furniture industry, emissions testing laboratories.
Project Need: To revise the existing ANSI/BIFMA X7.1-2007 standard to include performance limits for individual furniture components and items.

Provides performance requirements for the emissions of volatile organic compounds (VOCs including aldehydes) emissions from office furniture and seating under environmental and product usage conditions that are typical of those found in office buildings. It is capable of identifying VOCs emitted and determining the emission rates for individual compounds and total VOCs that may be selected for the purpose of product certification, rating, or determination of workstation system, component, or material emission characteristics.

Stakeholders: Homeland defense, biometrics, other government and commercial applications.
Project Need: To correct technical and editorial errors discovered by users and to help new developers that need to encode/decode these structures.
Adds support to CBEFF for more detailed biometric quality information. The proposed revision will also correct technical errors and incorporate modifications noted by users and implementers of the standard, as well as clarifications to further help new users and developers of these data structures.
American National Standards
Maintained Under Continuous Maintenance

The ANSI Essential Requirements: Due Process Requirements for American National Standards provide 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
- AAMVA
- AGA
- AGRSS, Inc.
- ASHRAE
- ASME
- ASTM
- HMI (ASC MH10)
- NBBPVI
- NCPDP
- NSF International
- TIA
- Underwriters Laboratories, Inc. (UL)

To obtain additional information with regard to these standards, such as contact information at the ANSI accredited standards developer, please visit ANSI Online at www.ansi.org, select Internet Resources, click on "Standards Information," and see "American National Standards Maintained Under Continuous Maintenance". This information is also available directly at www.ansi.org/publicreview.

Alternatively, you may contact the Procedures & Standards Administration Department (PSA) at psa@ansi.org or via fax at 212-840-2298. If you request that information be provided via E-mail, please include your E-mail address; if you request that information be provided via fax, please include your fax number. Thank you.
ISO and 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 Henrietta Scully at ANSI's New York offices, those regarding IEC documents to Charles T. Zegers, also at ANSI New York offices. The final date for offering comments is listed after each draft.

ISO Standards

RUBBER AND RUBBER PRODUCTS (TC 45)


SHIPS AND MARINE TECHNOLOGY (TC 8)

ISO/DIS 15371, Ships and marine technology - Fire-extinguishing systems for protection of galley deep-fat cooking equipment - Fire tests - 8/7/2008, $88.00

SMALL TOOLS (TC 29)

ISO 13399-1/DAm1, Cutting tool data representation and exchange - Part 1: Overview, fundamental principles and general information model - Amendment 1 - 8/7/2008, $58.00

IEC Standards

65/420/FDIS, IEC 62424: Representation of process control engineering - Requests in P&I diagrams and data exchange between P&ID tools and PCE-CAE tools, 07/11/2008
80/527/FDIS, IEC 62288 Ed.1: Maritime navigation and radiocommunication equipment and systems - Presentation of navigation-related information on shipborne navigational displays - General requirements, methods of testing and required test results, 07/11/2008
25/382/FDIS, IEC 62428 Ed.1: Electric power engineering - Modal components in three-phase AC systems - Quantities and transformations, 07/04/2008
64/1641/FDIS, CEI 60364-4-43 Ed.3: Installations électriques à basse tension - Partie 4-43: Protection pour assurer la sécurité - Protection contre les surintensités, 07/04/2008
**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.

### GRAPHIC TECHNOLOGY (TC 130)
- **ISO 12637-4:2008**, Graphic technology - Vocabulary - Part 4: Postpress terms, $49.00

### PAINTS AND VARNISHES (TC 35)
- **ISO 15181-5:2008**, Paints and varnishes - Determination of release rate of biocides from antifouling paints - Part 5: Calculation of the tolyfluanid and dichlofluanid release rate by determination of the concentration of dimethyltolylsulfamide (DMST) and dimethylyphenylsulfamide (DMSA) in the extract, $92.00

### PLASTICS PIPES, FITTINGS AND VALVES FOR THE TRANSPORT OF FLUIDS (TC 138)
- **ISO 10147/Amd1:2008**, Pipes and fittings made of crosslinked polyethylene (PE-X) - Estimation of the degree of crosslinking by determination of the gel content - Amendment 1, $16.00

### PLASTICS (TC 61)
- **ISO 15512:2008**, Plastics - Determination of water content, $86.00
- **ISO 25761:2008**, Plastics - Polyols for use in the production of polyurethanes - Determination of basicity (total amine value), expressed as percent nitrogen, $57.00

### ROAD VEHICLES (TC 22)
- **ISO 9129:2008**, Motorcycles - Measurement methods for moments of inertia, $92.00

### TEXTILE MACHINERY AND ALLIED MACHINERY AND ACCESSORIES (TC 72)
- **ISO 28239:2008**, Textile machinery - Opener and cleaner for staple fibres preparation - Vocabulary and principles of construction, $49.00

### TEXTILES (TC 38)
- **ISO 9073-17:2008**, Textiles - Test methods for nonwovens - Part 17: Determination of water penetration (spray impact), $49.00

### TRACTORS AND MACHINERY FOR AGRICULTURE AND FORESTRY (TC 23)
- **ISO 26402:2008**, Agricultural vehicles - Steering systems for agricultural trailers - Interface for articulated steering device of semi-mounted trailers, $49.00

### ISO/IEC JTC 1, Information Technology
- **ISO/IEC 7811-9:2008**, Identification cards - Recording technique - Part 9: Tactile identifier mark, $43.00
- **ISO/IEC 29881:2008**, Information technology - Software and systems engineering - FiSMA 1.1 functional size measurement method, $86.00
Proposed Foreign Government Regulations

Call for Comment

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

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

NCSCI is the WTO TBT Inquiry Point for the U.S. and receives all notifications and full texts of regulations to disseminate to U.S. Industry. For further information, please contact: NCSCI, NIST, 100 Bureau Drive, Gaithersburg, MD 20899-2160; Telephone: (301) 975-4040; Fax: (301) 926-1559; E-mail: ncsci@nist.gov or notifyus@nist.gov.
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 for information technology developers, producers and users to create and maintain 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 30+ 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 seeks to broaden its membership base and is recruiting new participants in all membership categories:

- special interest (user, academic, consortia)
- non-business (government and major/minor SDOs)
- business (large/small businesses and consultants)

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.

ANSI Accredited Standards Developers

Application for Accreditation

International Kitchen Exhaust Cleaning Association (IKECA)

Comment Deadline: June 16, 2008

The International Kitchen Exhaust Cleaning Association (IKECA), a new ANSI Organizational Member in November 2007, has submitted an application for accreditation as an ANSI Accredited Standards Developer (ASD) under proposed operating procedures for documenting consensus on proposed American National Standards. IKECA’s proposed new scope of standards activity is as follows:

- Standards for the inspection, cleaning and maintenance of commercial kitchen exhaust systems and related mechanical components and building materials, for purposes of cleanliness, proper system operation and fire safety.

To obtain a copy of IKECA’s proposed operating procedures, or to offer comments, please contact: Mr. Glenn Fellman, Executive Vice President, IKECA, 12339 Carroll Avenue, Rockville, MD 20852; PHONE: (301) 230-0099; FAX: (301) 231.4871; E-mail: iagglenn@aol.com. Please submit your comments to IKECA by June 16, 2008, with a copy to the Recording Secretary, ExSC in ANSI’s New York Office (FAX: (212) 840.2298; E-mail: Jthompson@ANSI.org). As the proposed procedures are available electronically, the public review period is 30 days. You may also view or download a copy of IKECA’s proposed operating procedures from ANSI Online during the public review period at the following URL: http://publicaa.ansi.org/sites/apdl/Documents/Forms/AllItems.aspx?RootFolder=%2fsites%2fapdl%2fDocuments%2fStandards%20Activities%20&%20Review%20and%20Comment%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%2
Reaccreditation
Leonardo Academy (LEO)
Comment Deadline: June 16, 2008
The Leonardo Academy (LEO) has submitted revisions to the operating procedures under which it was originally accredited in 2005. As these revisions appear to be substantive in nature, the reaccreditation process is initiated.
To obtain a copy of the revised procedures, or to offer comments, please contact: Ms. Amanda Raster, Program Manager, Leonardo Academy, 1526 Chandler Street, Madison, WI 53711; PHONE: (608) 280-0255; FAX: (608) 255-7202; E-mail: amanda@leonardoacademy.org. You may view/download a copy of the revisions during the public review period at the following URL:
http://publicaa.ansi.org/sites/apdl/Documents/Forms/AllItems.aspx?RootFolder=%2fsites%2fapdl%2fDocuments%2fStandards%20Activities%2fPublic%20Review%20and%20Comment%2fANS%20Accreditation%20Actions&View=%7b21C60355%2dAB17%2d4CD7%2dA090%2dABE6C57C60%7d.
As these revisions are available electronically, the public review period is 30 days. Please submit your comments to LEO by June 16, 2008, with a copy to the Recording Secretary, ExSC in ANSI’s New York Office (FAX: (212) 840-2298; E-mail: Jthompson@ANSI.org).

ANSI-ASQ National Accreditation Board (ANAB)
Public Comments Sought
Revised ANAB Accreditation Manual (MA 6000.01)
Committee Deadline: June 15, 2008
Public comments are sought on the revised ANAB Accreditation Manual (MA 6000.01). Interested parties are invited to login to EQM at http://anab.remoteauditor.com/ to download the document and comment. (Note: A username and password are required. If you do not have a username and password for EQM, go to http://www.anab.org/UserRegistration/WebBallotUsers_Registration.aspx.) Please submit your comments by June 15, 2008.
NSF/ANSI 49-2007
Class II (laminar flow) biosafety cabinetry

F.11 Noise level tests

F.11.1 Purpose

This test is performed to measure the noise levels produced by the cabinet as a guide to satisfactory mechanical performance and an aid in minimizing cabinet operator's fatigue. The procedures can be performed in most acoustically ordinary rooms, such as a factory, where walls are neither sound absorbing nor completely sound reflecting.

F.11.2 Apparatus

A sound level meter having a minimum accuracy of ± 1 db and resolution of 1 db with a minimum range of at least 50 to 100 db and an "A" weighting scale set up in accordance with the manufacturer's instructions.

F.11.3 Method

a) Operate the cabinet within 5 ft/min (0.025 m/s) of the nominal set point with lights on.

b) Set the instrument to the "A" weighting mode.

c) Measure the noise level 12 in (30 cm) in front of the cabinet (leading front edge of the access opening) and 15 in (38 cm) above the plane of the work surface, in line with the vertical centerline of the cabinet (annex A, figure A3).

d) To measure the ambient noise level, turn the cabinet blower and lights off, and if applicable, leave the remote exhaust blower on and measure as in c) above.

F.11.4 Acceptance

A cabinet qualifies for field certification when the overall noise level in front of the cabinet does not exceed 70 dbA when measured where the maximum ambient sound level is no greater than 57 dbA. When the ambient sound level is greater than 57 dbA, the reading obtained in annex F, section F.11.3c) shall be corrected in accordance with curves or tables provided in the instrument operator's manual. If this information is not available, standard correction curves or tables shall be used (see below).

Correction chart for sound level readings

<table>
<thead>
<tr>
<th>Difference between total and background sound readings in dbA</th>
<th>Number to subtract from total to yield corrected noise level</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2</td>
<td>reduce background levels</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4-5</td>
<td>2</td>
</tr>
<tr>
<td>6-10</td>
<td>1</td>
</tr>
<tr>
<td>&gt;10</td>
<td>0</td>
</tr>
</tbody>
</table>

●
●
●
NSF/ANSI 49-2007
Class II (laminar flow) biosafety cabinetry

F.7.3 Method

F.7.3.1 Alarm functions

F.7.3.1.1 Airflow alarms (excluding building automation systems)

a) Whenever an alarm is present to monitor the performance of airflow, it must be performance verified. The alarms shall be performance verified at every certification.

b) The procedures outlined in the owner’s manual shall be followed. Once the cabinet is set or certified in its acceptable airflow range, audible and visual alarms shall be required to indicate a 20% loss of exhaust volume within 15 sec.

F.7.3.1.2 Sash alarms

The sash shall be raised 1.0 in (2.5 cm) above the manufacturer’s recommended height. Signaling of an audible alarm shall be verified.

F.7.3.2 Interlocks

Supply fan interlock on B2 cabinets:

a) Shall be tested at time of alarm verification.

b) Reduce exhaust volume 20% once the cabinet is set or certified in its acceptable airflow range, and verify that audible and visual alarms indicate a 20% loss of exhaust volume within 15 sec. The internal cabinet fan(s) shall be interlocked to shut off at the same time the alarms are activated.

F.7.3.3 Exhaust system performance – canopy connection

Using a visible smoke source, verify negative pressure at the gap. No smoke shall escape into the room once it enters the exhaust system.

NOTE – For hard ducted hoods, measure the static pressure in the duct-work between the hood and duct-mounted balancing dampers.

•
•
•
Circulation System Components and Related Materials for Swimming Pools Spas, and Hot Tubs

5.2 Diatomite and other precoat media-type filters
The requirements in this subsection apply only to pre-coat media-type filters utilizing diatomite or other pre-coat filter media (that conforms to 5.2.9) and their integral components designed for the filtration of swimming pool or spa / hot tub water.

NOTE – Ultraviolet-hydrogen peroxide at elevated concentrations processes may not be compatible for use with diatomite-type filters.

Reason: The task group will be investigating at what concentration the hydrogen peroxide becomes an issue with the diatomite-type filters. An issue does exist when hydrogen peroxide is used at some elevated concentration with diatomite-type filters (therapy pools, animal pools). There does not appear to be an issue with the hydrogen peroxide and diatomite-type filters in residential pools due to the lower concentration of hydrogen peroxide used.

5.2.1 Filtration area

11 General requirements for process equipment

11.1 Scope
Process equipment covered by this Standard in 11 through 16 for on-site generation and/or application of ozone, chlorine, bromine, ultraviolet light, and copper or copper/silver ions, may be used for treatment of swimming pool and spa/hot tub waters. Where regulatory agencies require a measurable residual disinfecting chemical, the equipment may be limited to supplemental treatment.

NOTE – Ultraviolet-hydrogen peroxide processes are not compatible for use with diatomite-type filters.

13 Ultraviolet light process equipment

13.1 General
Ultraviolet light process equipment covered by this section is intended for use in circulation systems of public and residential swimming pools and spas/hot tubs with hydrogen peroxide, chlorine, or bromine residual chemical. The residual chemical shall be easily and accurately measurable by a field test kit. If a system is used with hydrogen peroxide, a maximum concentration of 35% solution in water shall be continuously fed to maintain a minimum residual of 20 mg/L. Otherwise, these systems shall be used in conjunction with not less than 1 ppm free chlorine or 2 ppm bromine.

NOTE – Ultraviolet-hydrogen peroxide processes are not compatible for use with diatomite-type filters.
BSR/UL 38

14.1.5A The actuating means shall be operable with one hand, shall not require a striking action by grasping a tool, and shall not require tight grasping, pinching, or twisting of the wrist. The operation of the unit shall be verified using both a blunt hand (no use of the fingers) and an elbow.
Standard for Seasonal and Holiday Decorative Products, BSR/UL 588

PROPOSAL

117.3.7 A seasonal product which employs both push-in individually-flashing lamps and steady illuminating lamps in accordance with the exception to 28.3 shall be marked as follows: "CAUTION - This product contains lamps of two different sizes. To reduce the risk of overheating do not replace steady illuminating lamps with flashing lamps. Use ___ volt,____ watt flashing lamps and ____ volt,____ watt steady lamps only." The blanks shall be filled in with the voltage and wattage rating of the replacement lamps.
PROPOSAL

5.5.2 With reference to 5.5.1, the thickness of a sheet-metal enclosure shall not be less than that specified in Tables 5.2 and 5.3. Uncoated steel shall not be less than 0.032 inch (0.81 mm) thick, zinc-coated steel shall not be less than 0.034 inch (0.86 mm) thick, and nonferrous metal shall not be less than 0.045 inch (1.14 mm) thick for surfaces of an enclosure at which a wiring system is to be connected.

Exception No. 1: The thickness of a sheet metal enclosure is not prohibited from being less than specified in Tables 5.2 and 5.3 when investigated and determined to be mechanically equivalent.

Exception No. 2: The thickness of an enclosure may be two gauge sizes less than indicated in Tables 5.2 and 5.3, when uninsulated live parts are located at least 2-1/2 in (64 mm) from the surface, and 4 gauge sizes less when the uninsulated live parts are located at least 5 in (128 mm) from the surface. The thickness shall be not less than No. 24 MSG or GSG (steel), or No. 18 AWG (aluminum, copper, or brass), unless a lesser thickness is acceptable in accordance with Tables 5.2 and 5.3. An example of 2 gauge sizes less is No. 18 MSG instead of No. 16 MSG; an example of 4 gauge sizes less is No. 20 MSG instead of No. 16 MSG.

12.4 Receptacles

12.4.1 Output power receptacles mounted in wet locations shall be provided with either:

a) A raintight, while-in-use, cover in accordance with the Standard for Nonmetallic Outlet Boxes, Flush-Device Boxes, and Covers, UL 514C; or

b) A self closing enclosure, door or hinged cover that prevents wetting of live parts with the attachment plug inserted or removed. The construction shall comply with the requirements in Section 5, Frame and Enclosure, and Section 54.5, Cycling test, as preconditioning for the tests and requirements in Section 64 for Outdoor-Use Units.

53.1.1 Enclosures built in accordance with exception 2 of 5.5.2 shall be subjected to the test described in 53.4. Doors and covers built in accordance with exception 2 of 5.5.2 shall be subjected to the tests described in 53.2 and 53.3. Wet location
units shall apply these tests as preconditioning for the rain test in Section 66. The tests shall not result in:

a) Transient or permanent distortion to the extent that spacings are reduced below the values specified in Table 20.1;

b) Development of openings that expose uninsulated live parts that involve a risk of electric shock or electrical energy - high current levels. Any openings resulting from the tests are to be judged under the requirements in Section 6, Protection of Users - Accessibility of Uninsulated Live Parts, Film-Coated Wire, and Moving Parts; or

c) Wetting of live parts after this preconditioned unit is subjected to the rain test in Section 66.1.

53.4 For the test specified in 53.1.1, the enclosure is to be subjected to a 100-pound force (445-N) for 1 minute. The force is to be applied to the outside of the enclosure at various locations likely to result in the greatest distortion or damage by means of a steel hemisphere 1/2 inch (12.7 mm) in diameter.

54.5 Cycling test

54.5.1 In accordance with 12.4.1 an enclosure door, cover or hood that is positioned or moved in normal use shall be subjected to 1000 cycles of operation and then be subjected to the tests in Section 64 for Outdoor-Use Units.

54.5.2 The enclosure door, cover or hood shall not crack, deform, or allow wetting of live parts or the entrance of water.

APPENDIX A

Standards for Components

Standards under which components of the products covered by this standard are evaluated include the following:

Title of Standard - UL Standard Designation
Automatic Transfer Switches - UL 1008
Class 2 and Class 3 Transformers - UL 1585
Determination of Sharpness of Edges on Equipment - UL 1439
Electric Motors - UL 1004
Electrical Analog Instruments - Panelboard Types - UL 1437
Enclosures for Electrical Equipment - UL 50
Equipment Wiring Terminals for Use with Aluminum and/or Copper Conductors - UL 486E
Fittings for Conduit and Outlet Boxes - UL 514B
Fuses for Supplementary Overcurrent Protection - UL 198G
General-Use Snap Switches - UL 20
Industrial Control Equipment, Electrical - UL 508
Industrial Trucks, Internal Combustion Engine-Powered - UL 558
Marking and Labeling Systems - UL 969
Metallic Outlet Boxes - UL 514A
Nonmetallic Outlet Boxes, Flush-Device Boxes, and Covers - UL 514C
Polymeric Materials - Short Term Property Evaluations - UL 746A
Polymeric Materials - Use in Electrical Equipment Evaluations - UL 746C
Systems of Insulating Materials, General - UL 1446
Tests for Flammability of Plastic Materials for Parts in Devices and Appliances - UL 94
Test for Surface Burning Characteristics of Building Materials - UL 723
Test Performance of Air Filter Units - UL 900
Transformers and Motor Transformers for Use in Audio-Radio, and Television Type Appliances - UL 1411
Uninterruptible Power Supply Equipment - UL 1778

Wire Connectors and Soldering Lugs for Use with Copper Conductors - UL 486A

Wire Connectors for Use with Aluminum Conductors - UL 486B

61.2.22 Units that are fueled by natural gas or liquefied petroleum gas shall be additionally marked with the following:

   a) Fuel type to be supplied to the engine;

   b) Minimum fuel Btu (kW) output rating; and

   c) Maximum and minimum inlet pressure at the point of connection to the supply piping.

2.6 CELL - The main components are two electrodes of dissimilar material separated from one another by a common ioni
cally conductive electrolyte, that are intended to convert chemical energy directly into electrical energy.