

STANDARDS ACTION

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American National Standards

Call for comment on proposals listed

This section solicits your comments on proposed draft new American National Standards, including the national adoption of ISO and IEC 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 should 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.

★ Standard for consumer products

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

Comment Deadline: February 16, 2003

NSF (NSF International)

New Standards

BSR/NSF 3-A 14159-2-200x, Hygiene Requirements for the Design of Hand Held Tools Used in Meat and Poultry Processing (new standard)

This standard applies to hand held tools intended for use in the slaughter, processing, and packaging of meat and poultry products.

[Click here to see these changes in full, or look at the end of "Standards Action."](#)

Send comments (with copy to BSR) to: Joe Smucker, c/o Mark Connors, NSF: connors@nsf.org

Comment Deadline: March 18, 2003

Reaffirmations and withdrawals available electronically may be accessed at: webstore.ansi.org

CSA (ASC Z21/83) (CSA America, Inc.)

Revisions

BSR Z21.50-200x, Vented Gas-Fired Space Heating Appliances (revision of ANSI Z21.50-2000)

Details test and examination criteria for vented room heaters, direct vent wall furnaces, vented wall furnaces, and gravity and fan type floor furnaces for use with natural, manufactured and mixed gases, liquefied petroleum gases and LP gas-air mixtures.

Single copy price: \$50.00

Order from: Allen J. Callahan, CSA (ASC Z21/83);
al.callahan@csa-america.org

Send comments (with copy to BSR) to: Same

BSR Z21.86-200x, Vented Gas-Fired Heating Appliances (same as CGA 2.32) (revision of ANSI Z21.86-2000, ANSI Z21.86a-2002, ANSI Z21.86b-2002)

Details test and examination criteria for vented room heaters, direct vent wall furnaces, vented wall furnaces, and gravity and fan type floor furnaces for use with natural, manufactured and mixed gases, liquefied petroleum gases and LP gas-air mixtures.

Single copy price: \$50.00

Order from: Allen J. Callahan, CSA (ASC Z21/83);
al.callahan@csa-america.org

Send comments (with copy to BSR) to: Same

Supplements

BSR Z21.11.2a-200x, Gas-Fired Room Heaters, Volume II, Unvented Room Heaters (supplement to ANSI Z21.11.2-2002)

Details test and examination criteria for unvented heaters for use with natural, manufactured and mixed gases, liquefied petroleum gases, and LP gas-air mixtures. Such heaters are limited to Maximum input ratings of 40,000 Btu per hour.

Single copy price: \$30.00

Order from: Allen Callahan, CSA; al.callahan@csa-america.org
Send comments (with copy to BSR) to: Same

BSR Z21.60a-200x, Decorative Gas Appliances for Installation in Solid-Fuel Burning Fireplaces, First Addenda (same as CSA 2.26a) (supplement to ANSI Z21.60-1996 (R2001))

Details test and examination criteria for decorative appliances for installation in solid-fuel burning fireplaces for use with natural gas and propane. This appliance is defined as a "self-contained, free-standing, gas-burning appliance designed for installation only in a solid-fuel burning fireplace and whose primary function lies in the aesthetic effect of the flame."

Single copy price: \$50.00

Order from: Allen J. Callahan, CSA; al.callahan@csa-international.org
Send comments (with copy to BSR) to: Same

BSR Z21.84a-200x, Manually Lighted, Natural Gas Decorative Gas Appliances for Installation in Solid-Fuel Burning Fireplaces (supplement to ANSI Z21.84-2002)

Details test and examination criteria for manually lighted, natural gas, decorative gas appliances for installation in solid-fuel burning fireplaces for use with natural gas only at a maximum input rating of 90,000 Btu/hr. These appliances do not incorporate a pilot burner or an automatic gas ignition system. The main burner is intended to be lighted by hand each time the appliance is used.

Single copy price: \$30.00

Order from: Allen J. Callahan, CSA; al.callahan@csa-international.org
Send comments (with copy to BSR) to: Same

BSR Z21.88a-200x, Vented Gas Fireplace Heaters (same as CSA 2.33a) (supplement to ANSI Z21.88-2000)

Criteria for vented gas fireplace heaters for use with natural and liquefied petroleum (propane) gases, which allows the view of flames and provides the simulation of a solid fuel fireplace and furnishes warm air to the space in which it is installed with or without duct connections. Direct vent appliances may be installed in manufactured (mobile) homes and recreational vehicles.

Single copy price: \$30.00

Order from: Allen J. Callahan, CSA; al.callahan@csa-international.org
Send comments (with copy to BSR) to: Same

LIA (ASC Z136) (Laser Institute of America)

Revisions

BSR Z136.6-200x, Safe Use of Lasers Outdoors (revision of ANSI Z136.6-2000)

This standard provides guidance for the safe use of lasers and laser systems in an outdoor environment. It covers product performance of lasers used outdoors including those that have been granted a variance or exemption from the provisions of the Federal product performance standard (21 CFR 1040). Products and applications covered include laser light shows, lasers used for outdoor scientific research, wireless optical communication systems deployed outdoors and military lasers.

Single copy price: \$90.00

Order from: Barbara Sams, LIA (ASC Z136); bsams@laserinstitute.org
Send comments (with copy to BSR) to: Same

NEMA (ASC C119) (National Electrical Manufacturers Association)

Revisions

BSR C119.4-200x, Electric Connectors Connectors for Use Between Aluminum-to-Aluminum or Aluminum-to-Copper Bare Overhead Conductors (revision of ANSI C119.4-1998)

Covers connectors used for making electrical connections between aluminum-to-aluminum or aluminum-to-copper bare conductors used on overhead distribution and transmission lines for electric utility. This standard establishes the electrical and mechanical test requirements for electrical connectors. This standard is not intended to recommend operating conditions or temperatures.

Order from: Vince Baclawski, NEMA; vin_baclawski@nema.org;
jea_french@nema.org

Send comments (with copy to BSR) to: Same

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:

IEEE (Institute of Electrical and Electronics Engineers)

BSR/IEEE 830-199x, Recommended Practice for Software Requirements Specifications (revision of ANSI/IEEE 830-1993)

BSR/IEEE C57.113-2002, Guide for Partial Discharge Measurement in Liquid-Filled Power Transformers and Shunt Reactors (new standard)

UL (Underwriters Laboratories, Inc.)

BSR/UL 363-1994, Standard for Safety for Knife Switches (reaffirmation of ANSI/UL 363-1994)

BSR/UL 499-199x, Standard for Safety for Electric Heating Appliances (revision of ANSI/UL 499-1987)

BSR/UL 977-199x, Standard for Safety for Fused Power - Circuit Devices (new standard)

BSR/UL 1673-199x, Standard for Safety for Electric Space Heating Cables (revision of ANSI/UL 1673-1992)

ANSI Technical Reports

ANSI Technical Reports are not consensus documents. Rather, all material contained in ANSI Technical Reports is informational in nature. Technical reports may include, for example, reports of technical research, tutorials, factual data obtained from a survey carried out among standards developers and/or national bodies, or information on the "state of the art" in relation to standards of national or international bodies on a particular subject.

Comment Deadline: February 16, 2003

NPES (ASC CGATS) (Association for Suppliers of Printing and Publishing Technologies)

ANSI CGATS TR 012-2003, Graphic technology - Color reproduction and process control for packaging printing (technical report)

This technical report outlines the steps necessary to understand and objectively define the color and tone reproduction capabilities (and limitations) of a printing process. These steps include optimization, fingerprinting, process control, and characterization, which provide the information required in the package development workflow defined in CGATS TR 011. This report also suggests steps that may be taken to control the printing processes to achieve consistent and predictable color.

Single copy price: \$20.00

Order from: Mary Abbott, NPES; mabbott@npes.org
Send comments (with copy to BSR) to: Same

30 Day Notice of Withdrawal: ANS 5 to 10 years past approval date

In accordance with clause 4.4 Maintenance of American National Standards of the ANSI Procedures, the following American National Standards have not been reaffirmed or revised within the five-year period following approval as an ANS. Thus, they shall be withdrawn at the close of this 30-day public review notice in Standards Action.

ANSI/UL 130-1995, Electrical Heating Pads

ANSI/UL 351-1984 (R1990), Rosettes

ANSI/UL 363-1994, Knife Switches

ANSI/UL 482-1996, Portable Sun/Heat Lamps

ANSI/UL 499-1987, Electric Heating Appliances

ANSI/UL 542-1997, Standard for Safety for Lampholders, Starters, and Starter Holders for Fluorescent Lamps

ANSI/UL 773-1994, Photocontrols for Use with Area Lighting, Plug-In, Locking-Type

ANSI/UL 964-1997, Electrically Heated Bedding

ANSI/UL 1077-1995, Protectors for Use in Electrical Equipment, Supplementary

ANSI/UL 1412-1997, Standard for Safety for Fusing Resistors and Temperature-Limited Resistors for Radio- and Television-Type Appliances

ANSI/UL 1413-1996, High-Voltage Components for 86E-1987 Equipment Wiring Terminals for Use with Aluminum and/or Copper Conductors

ANSI/UL 1416-1996, Overcurrent and Overtemperature Protectors for Radio- and Television-Type Appliances

ANSI/UL 1417-1996, Special Fuses for Radio- and Television-Type Appliances

ANSI/UL 1557-1994, Electrically Isolated Semiconductor Devices

ANSI/UL 1559-1995, Insect-Control Equipment - Electrocutation Type

ANSI/UL 1577-1994, Optical Isolators

Notice of Withdrawal: ANS at least 10 years past approval date

The following American National Standards have not been revised or reaffirmed within ten years from the date of their approval as American National Standards and accordingly are withdrawn:

ANSI C57.12.25-1990, Pad-Mounted Compartmental-Type Self-Cooled Single-Phase Distribution Transformers with Separable Insulated High-Voltage Connectors, High-Voltage, 34 500 Grd Y/19 920 Volts and Below; Low-Voltage, 240/120; 167 kVA and Smaller, Requirements for

ANSI X9.2-1988, Interchange Message Specification for Debit and Credit Card Message Exchange among Financial Institutions

ANSI Z39.39-1979 (R1988), Compiling Newspaper and Periodical Publishing Statistics

ANSI/UL 977-1984, Fused Power-Circuit Devices

ANSI/UL 1322-1993, Fabricated Scaffold Planks and Stages

ANSI/UL 1431-1992, Personal Hygiene and Health Care Appliances

ANSI/UL 1673-1992, Electric Space Heating Cables

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:

CSA

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8501 East Pleasant Valley Road
Cleveland, OH 44131-5575
Phone: (216) 524-4990

Fax: (216) 642-3463

CSA (ASC Z21/83)

ASC Z21/83
8501 East Pleasant Valley Road
Cleveland, OH 44131-5575
Phone: (216) 524-4990 x8268
Fax: (216) 642-3463
Web: www.csa-international.org

LIA (ASC Z136)

Laser Institute of America
13501 Ingenuity Drive, Suite 128
Orlando, FL 32826
Phone: (407) 380-1553 x28
Fax: (407) 380-5588
Web: www.laserinstitute.org

NEMA

National Electrical Manufacturers
Association
1300 North 17th Street
Suite 1847
Rosslyn, VA 22209
Phone: (703) 841-3236
Fax: (703) 841-3336

NPES (ASC B65)

NPES The Association for
Suppliers of Printing, Publishing
and Converting Technologies
1899 Preston White Drive
Reston, VA 22091-4367
Phone: (703) 264-7200
Fax: (703) 620-0994
Web: www.npes.org

Send comments to:

CSA

CSA International
8501 East Pleasant Valley Road
Cleveland, OH 44131-5575
Phone: (216) 524-4990
Fax: (216) 642-3463

CSA (ASC Z21/83)

ASC Z21/83
8501 East Pleasant Valley Road
Cleveland, OH 44131-5575
Phone: (216) 524-4990 x8268
Fax: (216) 642-3463
Web: www.csa-international.org

LIA (ASC Z136)

Laser Institute of America
13501 Ingenuity Drive, Suite 128
Orlando, FL 32826
Phone: (407) 380-1553 x28
Fax: (407) 380-5588
Web: www.laserinstitute.org

NEMA

National Electrical Manufacturers
Association
1300 North 17th Street
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Rosslyn, VA 22209
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Fax: (703) 841-3336

NPES (ASC B65)

NPES The Association for
Suppliers of Printing, Publishing
and Converting Technologies
1899 Preston White Drive
Reston, VA 22091-4367
Phone: (703) 264-7200
Fax: (703) 620-0994
Web: www.npes.org

Initiation of Canvasses

The following ANSI-accredited standards developers have announced their intent to conduct a canvass on the proposed American National Standard(s) listed herein in order to develop evidence of consensus for submittal to ANSI for approval as an American National Standard. Directly and materially affected interests wishing to participate as a member of a canvass list, i.e., consensus body, should contact the sponsor of the standard within 30 days of the publication date of this issue of Standards Action. Please also review the section entitled "American National Standards Maintained Under Continuous Maintenance" contained in Standards Action for information with regard to canvass standards maintained under the continuous maintenance option.

CPA (Composite Panel Association)

Office: 18928 Premiere Court
Gaithersburg, MD 20879

Contact: Gary Heroux

Phone: (301) 670-0604

Fax: (301) 840-1252

E-mail: gheroux@cpamail.org

BSR/AHA A135.4-200x, Basic Hardboard (revision of ANSI/AHA
A135.4-1995)

BSR/AHA A135.5-200x, Prefinished Hardboard Paneling (revision of
ANSI/AHA A135.5-1995)

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.

ADA (American Dental Association)

New National Adoptions

ANSI/ADA 1-2003, Alloy for Amalgam and Dental Mercury (national adoption with modifications and revision of ANSI/ADA 1-1977 (R1993)): 1/9/2003

EIA (Electronic Industries Alliance)

Revisions

ANSI/EIA 364-52A-2003, TP-52, Solderability of Contact Terminations Test Procedure for Electrical Connectors (revision of ANSI/EIA 364-52-1993): 1/8/2003

NEMA (ASC C12) (National Electrical Manufacturers Association)

Revisions

ANSI C12.20-2003, Electricity Meters 0.2 and 0.5 Accuracy Classes (revision of ANSI C12.20-1998): 1/10/2003

NEMA (ASC C37) (National Electrical Manufacturers Association)

Reaffirmations

ANSI C37.17-1997 (R2003), Trip Devices for AC and General Purposes DC Low Voltage Power Circuit Breakers (reaffirmation of ANSI C37.17-1997): 1/10/2003

ANSI C37.22-1997 (R2003), Preferred Ratings and Related Required Capabilities for Indoor AC Medium-Voltage Switches Used in Metal-Enclosed Switchgear (reaffirmation of ANSI C37.22-1997): 1/10/2003

ANSI C37.51-1989 (R2003), Metal-Enclosed Low-Voltage AC Power-Circuit-Breaker Switchgear Assemblies-Conformance Test Procedures (reaffirmation of ANSI C37.51-1989 (R1995)): 1/9/2003

SCTE (Society of Cable Telecommunications Engineers)

New Standards

ANSI/SCTE 69-2003, Test Method for Moisture Inhibitor Corrosion Resistance (new standard): 1/8/2003

ANSI/SCTE 70-2003, Insulation Resistance Megohmmeter Method (new standard): 1/8/2003

UL (Underwriters Laboratories, Inc.)

Revisions

ANSI/UL 486D-2003, Standard for Safety for Insulated Wire Connector Systems for Underground Use or in Damp or Wet Locations (revision of ANSI/UL 486D-1985 (R1993)): 1/8/2003

Project Initiation Notification System (PINS)

ANSI Procedures require notification of ANSI by ANSI-accredited standards developers of the initiation and scope of activities expected to result in new or revised American National Standards. This information is a key element in planning and coordinating American National Standards. For additional information, see clause 1.2.8 of the ANSI Procedures for the Development and Coordination of American National Standards (2001 edition.)

Following is a list of proposed new American National Standards or revisions to existing American National Standards that have been received from ANSI-accredited standards developers that utilize the periodic maintenance option in connection with their standards. Please also review the section entitled "American National Standards Maintained Under Continuous Maintenance" contained in Standards Action for comparable information with regard to standards maintained under the continuous maintenance option. Directly and materially affected interests wishing to receive more information should contact the standards developer directly.

ASA (ASC S2) (Acoustical Society of America)

Office: 35 Pinelawn Road Suite 114E
Melville, NY 11747

Contact: Susan Blaeser

Fax: (631) 390-0217

E-mail: sblaeser@aip.org

BSR S2.25-200x, Guide for the Measurement, Reporting, and Evaluation of Hull and Superstructure Vibration in Ships (revision of ANSI S2.25-2001)

Contains guidelines for limiting the hull and superstructure vibration of ships for the purposes of habitability and mechanical suitability. The mechanical suitability guidelines result in a suitable environment for installed equipment and preclude many major vibration problems, such as unbalance, misalignment, and other damage to the propulsion system. To obtain data to compare with the guidelines, this standard also specifies data acquisition and processing procedures.

ASC X9 (Accredited Standards Committee X9, Incorporated)

Office: P.O. Box 4035
Annapolis, MD 21403

Contact: Isabel Bailey

Fax: (410) 663-7554

E-mail: Isabel.Bailey@X9.org

BSR X9.24 (Part 2)-200x, Retail Financial Service Symmetric Key Management - Part 2: Using Asymmetric Techniques for the Distribution of Symmetric Keys (new standard)

This part of ANS X9.24 covers the management of keying material used for financial services such as point of sale (POS) transactions, automated teller machine (ATM) transactions, messages among terminals and financial institutions, and interchange messages among acquirers, switches and card issuers.

CPA (Composite Panel Association)

Office: 18928 Premiere Court
Gaithersburg, MD 20879

Contact: Gary Heroux

Fax: (301) 840-1252

E-mail: gheroux@cpamail.org

BSR/AHA A135.4-200x, Basic Hardboard (revision of ANSI/AHA A135.4-1995)

This Standard defines hardboard and covers the dimensional and mechanical properties of five classes of basic hardboard.

BSR/AHA A135.5-200x, Prefinished Hardboard Paneling (revision of ANSI/AHA A135.5-1995)

This Standard covers requirements and methods for testing dimensional and mechanical properties of prefinished hardboard paneling and for the finish of the paneling. Methods of identifying products which conforms to the Standard are included.

IEEE (Institute of Electrical and Electronics Engineers)

Office: 445 Hoes Lane, P.O.Box 1331
Piscataway, NJ 08855-1331

Contact: Patricia Gerdon

Fax: (732) 562-1571

E-mail: p.gerdon@ieee.org

BSR/IEEE 493-200x, Recommended Practice for the Design of Reliable Industrial and Commercial Power Systems. (new standard)

This project will present the fundamentals of reliability analysis that should be used in planning, designing and operating reliable industrial and commercial power systems.

BSR/IEEE 686-200x, Standard Radar Definitions (revision of ANSI/IEEE 686-1997)

This standard is devoted to providing radar definitions. The standard includes terms formerly found in IEEE Std 172-1971, IEEE Standard Definitions of Navigation Aid Terms, with the exception of a few terms that are common to both fields, and new or updated terms. IEEE Std 172-1971 was withdrawn in 1983. As radar technology and literature evolve, new terms will be added and obsolete terms deleted.

BSR/IEEE 802.1D-200x, Standard for Local and Metropolitan Area Networks: Media Access Control (MAC) Bridges (revision of ANSI/IEEE 802.1D-1998)

Change the title of the standard to its original form, prior to the publication of the 1998 edition as an ISO/IEC standard; incorporate technical and editorial corrections, including those currently documented under P802.1y; incorporate existing published amendments (802.1t, 802.1w); remove the Spanning Tree protocol defined in Clause 8 and attendant textual corrections.

BSR/IEEE 802.1ad-200x, Local and Metropolitan Area Networks: Virtual Bridged Local Area Networks (supplement to ANSI/IEEE 802.1q-1998)

The scope of this standard is to develop an architecture and bridge (IEEE Std. 802.1D) protocols, compatible and interoperable with existing Bridged Local Area Network protocols and equipment, to provide separate instances of the MAC service (IEEE Std. 802) to multiple independent users of a Bridged Local Area Network (IEEE Std. 802.1D, IEEE Std. 802.1Q) in a manner that does not require cooperation among the users, and requires a minimum of cooperation between the users and the provider of the MAC service, and to define basic management of users' MAC services.

BSR/IEEE 802.11j-200x, Amendment to Standard for Information Technology -Telecommunications and information exchange between systems - Local and Metropolitan networks - Specific requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications: 4.9 GHz - 5 GHz Operation in Japan (supplement to ANSI/IEEE 802.11-1999)

The scope of the project is to enhance the 802.11 standard and amendments, to add channel selection for 4.9 GHz and 5 GHz in Japan to additionally conform to the Japanese rules for radio operation.

BSR/IEEE 802.11k-200x, Amendment to Standard for Information Technology -Telecommunications and information exchange between systems - Local and Metropolitan networks - Specific requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications: Radio Resource Measurement of Wireless LANs (supplement to ANSI/IEEE 802.11-1999)

This project will define Radio Resource Measurement enhancements to provide interfaces to higher layers for radio and network measurements.

BSR/IEEE 802.16d-200x, Amendment to IEEE Standard for Local and metropolitan area networks - Part 16: Air Interface for Fixed Broadband Wireless Access Systems - Detailed System Profiles for 2-11 GHz (supplement to ANSI/IEEE 802.16-2002)

This Amendment updates and expands Clause 12 of IEEE Std 802.16, which concerns system profiles that list sets of features and functions to be used in typical implementation cases. Errors and inconsistencies in IEEE Std 802.16 will also be corrected. The scope is limited to 2-11 GHz.

BSR/IEEE 802.16e-200x, Amendment to IEEE Standard for Local and Metropolitan Area Networks - Part 16: Air Interface for Fixed and Broadband Wireless Access Systems - Amendment for Physical and Medium Access Control Layers for Combined Fixed and Mobile Operation in Licensed Bands (supplement to ANSI/IEEE 802.16-2002)

This document provides enhancements to IEEE Std 802.16/802.16a to support subscriber stations moving at vehicular speeds and thereby specifies a system for combined fixed and mobile broadband wireless access. Functions to support higher layer handoff between base stations or sectors are specified. Operation is limited to licensed bands suitable for mobility between 2 and 6 GHz. Fixed 802.16a subscriber capabilities shall not be compromised.

BSR/IEEE 802.20-200x, Local and Metropolitan Area Networks - Standard Air Interface for Mobile Broadband Wireless Access Systems Supporting Vehicular Mobility - Physical and Media Access Control Layer Specification (new standard)

Specification of physical and medium access control layers of an air interface for interoperable mobile broadband wireless access systems, operating in licensed bands below 3.5 GHz, optimized for IP-data transport, with peak data rates per user in excess of 1 Mbps. It supports various vehicular mobility classes up to 250 Km/h in a MAN environment and targets spectral efficiencies, sustained user data rates and numbers of active users that are all significantly higher than achieved by existing mobile systems.

BSR/IEEE 1202-200x, Standard for Flame Propagation Testing of Wire & Cable (revision of ANSI/IEEE 1202-1991 (R1996))

This standard provides a protocol for exposing cable samples to a theoretical 20 kW flaming ignition source for a 20-minute test duration. The test determines the flame propagation tendency of single conductor and multi-conductor cables intended for use in cable trays. Revision to this document will include feedback from users including cable manufacturers, material suppliers, and test labs regarding changes needed to keep the standard current and up-to-date.

BSR/IEEE 1268-200x, Guide for the Safe Installation of Mobile Substation Equipment (revision of ANSI/IEEE 1268-1997)

This guide contains information on general topics and items pertaining to the installation of mobile substation equipment. The guide recognizes that mobile substations vary widely regarding the particular devices and equipment used. It is beyond the scope of this guide to provide a specific step-by-step set of instructions for individual units. This guide covers installation of mobile substation equipment up to 230 kV.

BSR/IEEE 1394-200x, Standard for a High Performance Serial Bus (revision of ANSI/IEEE 1394-1995)

This Revision will incorporate 1394a-2000 and 1394b-2000 into base standard. The 1394 High Speed Serial bus will be revised to keep with current technology and developments in the High Speed Serial Bus marketplace.

BSR/IEEE 1624-200x, Guide for Organizational Reliability Capability Definition (new standard)

This project will develop a guide for a protocol defining the self-definition of the reliability of organization-supply chain processes. This protocol will be useable by all organizations which design, manufacturer or procure electrical/electronic components or products. Footnote: This proposed standard does not seek to create or propose creation of certifying bodies that assess if any company meets the definitions of reliability capability. It is proposed that this standard be used only for self assessment by companies or for supplier/customer relationship development between members of supply chain.

BSR/IEEE 1635-200x, Guide for the Ventilation and Thermal Management of Batteries for Stationary Applications (new standard)

This guide discusses the ventilation and thermal management of stationary battery systems (flooded lead-acid batteries, VRLA and Ni-Cd). For each category, both the technology and the design of the battery are described in order to facilitate user understanding of the environmental issues associated with each type of technology. Ventilation for electrolyte spills is not discussed in this guide.

BSR/IEEE 1637-200x, Guide to Select Terminations for Shielded Power Cables 5-46kV (new standard)

This guide will discuss the reasons why a termination is necessary on a shielded power cable. Included is a short tutorial on termination theory, a general discussion of design and materials and a selection flow chart.

BSR/IEEE 1639-200x, Standard for transmission of Musical Instrument Digital Interface (MIDI) data within Local Area Networks: Distributed MIDI - DMIDI (new standard)

This standard specifies the communication protocol for the transmission of MIDI (Musical Instrument Digital Interface) data for communication between MIDI capable hardware and software within a local area network.

BSR/IEEE 1640-200x, Standard for Wireless Messaging Networks (new standard)

This project will provide specifications for interoperable protocols and other standards to support Wireless Messaging, historically used in the paging industry, including air protocols, end-to-end application protocols, and exterior and interior network protocols.

BSR/IEEE 1802.16.2-200x, Standard for Conformance to IEEE Standard 802.16 - Part 2: Test Suite Structure and Test Purposes (TSS&TP) for 10-66 GHz WirelessMAN-SC Air Interface (new standard)

This standard represents the Test Suite Structure and Test Purposes (TSS&TP), per ISO/IEC Standards 9646-1, and 9646-2 (1995) and ITU-T Standards X.290 and X.291, for conformance specification of base stations and subscriber stations based upon the WirelessMAN-SC (10-66 GHz) air interface specified in IEEE Std 802.16.

BSR/IEEE C37.13-200x, Standard for Low-Voltage AC Power Circuit Breakers Used in Enclosures (revision of ANSI/IEEE C37.13-1990 (R1996))

Includes enclose low-voltage ac power circuit breakers, as follows: (1) Stationary or draw-out type of two- or three-pole construction, with one or more rated maximum voltages of 635 V (600 V for units incorporating fuses), 508 V, and 254 V for application on systems having nominal voltages of 600 V, 480 V, and 240 V; (2) Unfused or fused type; (3) Manually operated or power operated, with or without electromechanical or electronic trip devices.

BSR/IEEE C37.26-200x, Guide for Methods of Power-Factor Measurement for Low-Voltage Inductive Circuits (revision of ANSI/IEEE C37.26-1991 (R1997))

This guide describes three methods used in the measurement of power factor of inductive low-voltage (1000 volts and below) test circuits. These methods may be used at any frequency; however, the values in the tables are specifically for 60 Hz test circuits. The three methods are: 1) Ratio Method, 2) dc decrement method, 3) Phase relationship method. Table 1 lists the preferred method to be used for different levels of test currents and for different levels of power factor. While this guide is primarily intended for use on low-voltage test circuits, the methods discussed are also usable at higher voltages.

BSR/IEEE C37.27-200x, Application Guide for Low-Voltage AC Nonintegrally Fused Power Circuit Breakers (Using Separately Mounted Current-Limiting Fuses) (revision of ANSI/IEEE C37.27-1987 (R1993))

This guide applies to low-voltage power circuit breakers of the 600 V insulation class with separately mounted current-limiting fuses for use on ac circuits with available short-circuit current of 200 000 A (rms symmetrical) or less. Low-voltage integrally fused power circuit breakers and combinations of fuses and molded-case circuit breakers are not covered by this guide.

BSR/IEEE C57.32-200x, Standard Requirements, Terminology and Test Procedures for Neutral Grounding Devices (revision and redesignation of ANSI/IEEE 32-1972 (R1998))

This standard applies to devices used for the purpose of controlling the ground current or the potentials to ground of an alternating current system. These devices are: grounding transformers, ground-fault neutralizers, resistors, reactors, capacitors, or combinations of these.

BSR/IEEE C57.106-200x, Guide for Acceptance and Maintenance of Insulating Oil in Equipment (revision of ANSI/IEEE C57.106-2002)

Applies to mineral oil used in transformers, load tap changers, voltage regulators, reactors, and circuit breakers.

BSR/IEEE C62.31-200x, Standard Test Specification for Gas-Tube Surge-Protective Devices (revision of ANSI/IEEE C62.31-1984 (R1998))

Applies to gas-tube surge-protective devices for application on systems with voltages, 1000 Vrms or 1200 Vdc. These protective devices are designed to limit voltage surges on balanced or unbalanced communication circuits and on power circuits operating from dc to 420 Hz. This standard contains a series of standard test criteria for determining the electrical characteristics of these gas-tube surge-protective devices.

BSR/IEEE C62.51-200x, Standard for Performance Criteria and test Methods of Hardwired Multiport (Multiservice) Surge-Protective Devices for Equipment Connected to 120/240 V Single Phase Power Service and Communication Lines (new standard)

The scope of the project is to define performance criteria and test methods of Hardwired Multiport (Multiservice) surge-protective devices to protect equipment connected to one or more communications lines and 120/240 V single phase AC power, with the neutral grounded at the service equipment.

BSR/IEEE C62.64-200x, Standard Specification for Surge Protectors Used in Data Communications and Signaling Circuits (revision of ANSI/IEEE C62.64-1996)

This standard is to be revised to include new technology and devices and like the original will provide preferred values and parameters used to specify the performance of these surge protectors. This standard will be coordinated with its companion document C62.36.

BSR/IEEE C62.82.2-200x, Guide for the Application of Insulation Coordination (revision of ANSI/IEEE 1313.2-1999)

The insulation coordination standard and guide apply to three-phase as systems above 1 kV and are divided into two parts. This guide, the second part, is an application guide with practice examples, intended to provide guidance in the determination of the withstand voltages and to suggest calculation methods and procedures. The insulation coordination examples for selected equipment are designed to explain the principles of Part 1.

MHI (ASC MH10) (Material Handling Industry)

Office: 8720 Red Oak Blvd., Suite 201
Charlotte, NC 28217-3992

Contact: Michael Ogle

Fax: (704) 676-1199

E-mail: mhstd@mhia.org

BSR MH10.8.8-200x, Radio Frequency Identification (RFID) for Packages, Parcels and Flat Mail (new standard)

BSR MH10.8.8 defines the application standard for packages, parcels, and flat mail with radio-frequency identification (RFID) devices. The purpose of this ANSI standard is to provide a common application standard comprised of application requirements, data content, reference to ANSI technology specifications, and conformance requirements for RFID devices that may be used by small package carriers.

American National Standards Maintained Under Continuous Maintenance

The ANSI Procedures for the Development and Coordination of American National Standards (ANSI Procedures) provide two options for the maintenance of American National Standards (ANS): periodic maintenance (see clause 4.4.1) and continuous maintenance (see clause 4.4.2). 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 4.4.1 and 4.4.3.

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.

- AAMVA
- AGRSS
- ASC B109 (AGA)
- ASHRAE
- ASME
- ASTM
- NBBPVI
- NSF International
- TIA
- Underwriters Laboratories Inc.

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 STANDARDS INFO, and choose "American National Standards Maintained Under Continuous Maintenance". This information is also available directly at http://web.ansi.org/public/ans_main/default.htm.

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 Draft International Standards

This section lists proposed standards that the International Organization for Standardization (ISO) is considering for approval. The proposals have received substantial support within the technical committees or subcommittees that developed them and are now being circulated to ISO 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. The final date for offering comments is listed after each draft.

Ordering Instructions

Global Engineering Documents
15 Inverness Way East
Englewood, CO 80112-5704
phone: (800) 854-7179
fax: (303) 379-7956
e-mail: global@ihs.com
web: <http://global.ihs.com>

APPLICATIONS OF STATISTICAL METHODS (TC 69)

ISO/DIS 16269-8, Statistical interpretation of data - Part 8:
 Determination of a prediction interval - 4/10/2003, \$116.00

BIOLOGICAL EVALUATION OF MEDICAL AND DENTAL MATERIALS AND DEVICES (TC 194)

ISO/DIS 10993-18, Biological evaluation of medical devices - Part 18:
 Chemical characterization of materials - 4/17/2003, \$50.00

MATERIALS, EQUIPMENT AND OFFSHORE STRUCTURES FOR PETROLEUM AND NATURAL GAS INDUSTRIES (TC 67)

ISO/DIS 10424-1, Petroleum and natural gas industries - Rotary drilling equipment - Part 1: Specification for rotary drilling equipment - 4/17/2003, \$94.00

PAINTS AND VARNISHES (TC 35)

ISO/DIS 8130-14, Coating powders - Part 14: Terminology - 4/17/2003, \$24.00

TEXTILES (TC 38)

ISO/DIS 105-C12, Textiles - Tests for colour fastness - Part C12:
 Colour fastness to industrial laundering - 4/10/2003, \$35.00

ISO/DIS 139, Textiles - Standard atmospheres for conditioning and testing - 4/10/2003, \$26.00

ISO/DIS 13936-3, Textiles - Determination of the fabric yarn slippage resistance of woven fabrics - Part 3: Needle clamp method - 4/10/2003, \$38.00

THERMAL INSULATION (TC 163)

ISO 6946/DAmD2, Building components and building elements - Thermal resistance and thermal transmittance - Calculation method - Amendment 2 - 4/10/2003, \$24.00

TRACTORS AND MACHINERY FOR AGRICULTURE AND FORESTRY (TC 23)

ISO/DIS 4254-1, Agricultural machinery - Technical means for ensuring safety - Part 1: General - 4/17/2003, \$68.00

WATER QUALITY (TC 147)

ISO/DIS 6878, Water quality - Determination of phosphorus - Ammonium molybdate spectrometric method - 4/17/2003, \$56.00

ISO/IEC JTC 1, Information Technology

ISO/IEC 10165-2/DAmD1, Information technology - Open Systems Interconnection - Structure of management information: Definition of management information - Amendment 1: States to support lifecycle - 4/17/2003, \$35.00



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 Global Engineering Documents.

Weblinks are now provided from Standards Action to ANSI's Electronic Standards Store. To purchase a PDF copy of the desired standard, click on the blue, underlined designation.

AGRICULTURAL FOOD PRODUCTS (TC 34)

[ISO 5739:2003](#), Caseins and caseinates - Determination of contents of scorched particles and of extraneous matter, \$38.00

[ISO 14675:2003](#), Milk and milk products - Guidelines for a standardized description of competitive enzyme immunoassays - Determination of aflatoxin M1 content, \$26.00

ANAESTHETIC AND RESPIRATORY EQUIPMENT (TC 121)

[ISO 5366-3/Cor1:2003](#), Tracheostomy tubes - Part 3: Paediatric tracheostomy tubes - Corrigendum, FREE

[ISO 17510-2:2003](#), Sleep apnoea breathing therapy - Part 2: Masks and application accessories, \$35.00

GEOSYNTHETICS (TC 221)

[ISO 13426-1:2003](#), Geotextiles and geotextile-related products - Strength of internal structural junctions - Part 1: Geocells, \$42.00

INDUSTRIAL AUTOMATION SYSTEMS AND INTEGRATION (TC 184)

[ISO 13584-42/Cor1:2003](#), Industrial automation systems and integration - Parts library - Part 42: Description methodology: Methodology for structuring part families - Corrigendum, FREE

INFORMATION AND DOCUMENTATION (TC 46)

[ISO 11620/Amd1:2003](#), Information and documentation - Library performance indicators - Amendment 1: Additional performance indicators for libraries, \$10.00

PLASTICS (TC 61)

[ISO 15106-1:2003](#), Plastics - Film and sheeting - Determination of water vapour transmission rate - Part 1: Humidity detection sensor method, \$26.00

[ISO 15106-2:2003](#), Plastics - Film and sheeting - Determination of water vapour transmission rate - Part 2: Infrared detection sensor method, \$26.00

[ISO 15106-3:2003](#), Plastics - Film and sheeting - Determination of water vapour transmission rate - Part 3: Electrolytic detection sensor method, \$26.00

RUBBER AND RUBBER PRODUCTS (TC 45)

[ISO 2303:2003](#), Isoprene rubber (IR) - Non-oil-extended, solution-polymerized types - Evaluation procedure, \$35.00

[ISO 4659:2003](#), Styrene-butadiene rubber (carbon black or carbon black and oil masterbatches) - Evaluation procedure, \$30.00

SMALL TOOLS (TC 29)

[ISO 8977:2003](#), Tools for pressing - Matrixes, \$30.00

TEXTILE MACHINERY AND ALLIED MACHINERY AND ACCESSORIES (TC 72)

[ISO 9398-1:2003](#), Specifications for industrial laundry machines - Definitions and testing of capacity and consumption characteristics - Part 1: Flatwork ironing machines, \$30.00

[ISO 9398-2:2003](#), Specifications for industrial laundry machines - Definitions and testing of capacity and consumption characteristics - Part 2: Batch drying tumblers, \$26.00

[ISO 9398-3:2003](#), Specifications for industrial laundry machines - Definitions and testing of capacity and consumption characteristics - Part 3: Washing tunnels, \$26.00

[ISO 9398-4:2003](#), Specifications for industrial laundry machines - Definitions and testing of capacity and consumption characteristics - Part 4: Washer-extractors, \$30.00

ISO Technical Reports

LIFTS, ESCALATORS, PASSENGER CONVEYORS (TC 178)

[ISO/TR 16765:2003](#), Comparison of worldwide safety standards on lift for firefighters, \$76.00

Registration of Organization Names in the United States

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

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

PUBLIC REVIEW

Misys Hospital Systems, Inc. d/b/a Misys Healthcare Systems

Organization: Misys Healthcare Systems
4801 E. Broadway
Tucson, AZ 85711

Contact: Michael Buchanan
PHONE: 520-570-2000; FAX: 520-733-6707

E-mail: Michael.buchanan@misyshealthcare.com

Public review: November 18, 2002 to February 16, 2003

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

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

Proposed Foreign Government Regulations

Call for Comment

U.S. manufacturers, exporters, regulatory agencies and standards developing organizations may be interested in proposed foreign technical regulations issued by members 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, who in turn disseminates the information to all WTO members. The purpose of this requirement is to provide trading partners with an opportunity to review and comment on the regulation before it becomes final.

To distribute information on these proposed foreign technical regulations, the National Center for Standards and Certification Information

(NCSCI), National Institute of Standards and Technology (NIST), provides an on-line service - Export Alert! - that allows interested parties to register and obtain notifications, via e-mail, for countries and industry sectors of interest to them. To register, go to <http://ts.nist.gov/ncsci> and click on "Export Alert!".

NCSCI serves as the U.S. WTO TBT inquiry point and receives copies of all notifications, in English, to disseminate to U.S. industry. To obtain copies of the full text of the regulations or for further information, contact NCSCI, NIST, 100 Bureau Drive, Stop 2160, Gaithersburg, MD 20899-2160; telephone (301) 975-4040; fax (301) 926-1559, e-mail - ncsci@nist.gov.

NCSCI will also request an extension of the comment period and transmit comments to the issuing foreign agency for consideration.

Information Concerning

Accredited Organizations

Approval of Reaccreditation

National Council for Clinical Laboratory Standards (NCCLS)

The Executive Standards Council has approved the reaccreditation of the National Council for Clinical Laboratory Standards (NCCLS) under revised operating procedures, effective January 9, 2003. For additional information, please contact: Mr. John Zlockie, M.B.A., Senior Assistant Executive Director for Standards, NCCLS, 940 West Valley Road, Suite 1400, Wayne, PA 19087-1898; PHONE: (610) 688-0100; FAX: (610) 688-0700; E-mail: jzlockie@nccls.org.

Reaccreditation

American Society of Sanitary Engineering (ASSE)

Comment Deadline: February 24, 2003

The American Society of Sanitary Engineering (ASSE) has submitted revisions to its accredited organizational operating procedures. 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. Shannon Corcoran, Executive Director, American Society of Sanitary Engineering, 901 Canterbury Road, Suite A, Westlake, OH 44145-1480; PHONE: (440) 835-3040; FAX: (440) 835-3488; E-mail: shannon@asse-plumbing.org. Please submit your comments to ASSE by February 24, 2003, with a copy to the Recording Secretary, ExSC in ANSI's New York Office (FAX: (212) 840-2298; E-mail: Jthompso@ANSI.org). As the revisions are available electronically, the public review period is 30 days. You may view or download a copy of the revised ASSE operating procedures from ANSI Online during the public review period at the following URL: <http://public.ansi.org/ansionline/Documents/Standards%20Activities/Public%20Review%20and%20Comment/Accreditation%20Actions/>.

ANSI-RAB National Accreditation Program for Quality Management Systems

Change in Name

Course Provider

BSI Management Systems

CEEM has changed its name as a QMS course provider for QMS Lead Auditor and QMS Internal Auditor courses to:

BSI Management Systems
Dennis Allmon
12110 Sunset Hills Road
Suite 100
Reston, VA 20190-3231
PHONE: (703) 464-1939
FAX: (703) 250-5313
E-mail: register@ceem.com
Website: www.ceem.com

Notice of Voluntary Withdrawal of Accreditation

Course Provider

BBI Quality Solutions

Effective immediately, BBI Quality Solutions has voluntarily withdrawn its ANSI-RAB NAP accreditation for its QMS Internal Auditor course.

ANSI-RAB National Accreditation Program for Environmental Management Systems

Application for Accreditation

Course Provider

QAI LLC

Comment Deadline: March 25, 2003

QAI LLC, based in Indianapolis, IN, has applied for accreditation under the ANSI-RAB National Accreditation Program for Course Providers of Environmental Management Systems, a joint program of the American National Standards Institute and the Registrar Accreditation Board.

Comments on the application of the above applicant are solicited from interested bodies.

Please send your comments by March 25, 2003 to Reinaldo Figueiredo, Program Director, Conformity Assessment, American National Standards Institute, 1819 L St., NW, 6th Floor, Washington, DC 20036, FAX: (202) 293-9287 or e-mail: RFigueir@ansi.org.

Change in Name

Course Provider

BSI Management Systems

CEEM has changed its name as an EMS course provider for its EMS Lead Auditor course to:

BSI Management Systems
Dennis Allmon
12110 Sunset Hills Road
Suite 100
Reston, VA 20190-3231
PHONE: (703) 464-1939
FAX: (703) 250-5313
E-mail: register@ceem.com
Website: www.ceem.com

Notice of Voluntary Withdrawal of Accreditation

Course Provider

O'Brien & Gere Engineers, Inc.

Effective December 31, 2002, O'Brien & Gere Engineers, Inc., has voluntarily withdrawn its ANSI-RAB NAP accreditation for its EMS Lead Auditor course.

Meeting Notices

Acoustical Society of America

The four Accredited Standards Committees and ten US Technical Advisory Groups administered by the Acoustical Society of America will meet in conjunction with the 145th meeting of the Acoustical Society of America at the Nashville Convention Center, Nashville, TN from April 28 to May 2, 2003. The specific meeting details and additional details regarding lodging, transportation, etc. can be found on the Acoustical Society of America's website at <http://asa.aip.org>.

Tracking# 14159-2 i1r7-5
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NSF/3-A 14159-2
Draft 7.5 January 2003

NSF/3-A Standard 14159-2 For Food Processing Equipment

Hygiene requirements for the design of hand held tools used in meat and poultry processing

4 Materials of construction

4.1.1 Unacceptable materials

The following materials shall not be used in product contact surface areas or non-product contact surface areas:

- materials containing antimony, arsenic, cadmium, lead, or mercury;
- metals containing selenium in excess of 0.50%;
- materials classified as hazardous substances (such as carcinogens, mutagens and teratogens);
- asbestos and asbestos containing materials;
- wood; enamelware; porcelain; leather; **paint.**

Rationale: Paint should not be used on Product contact, or non product contact surfaces.

4.3 Non-product contact surfaces

4.3.1 General

In addition to the general requirements (section 4.1), materials used for non-product contact surfaces, (including splash areas) under the conditions of intended use, shall:

- be of corrosion resistant material or material that is treated (e.g., coating, ~~painting~~) so as to be corrosion resistant to both product and cleaning/sanitizing materials. When coated, the coating shall adhere;
- be non-absorbent;
- not contaminate or otherwise have any adverse effect on the product.

Parts removable for cleaning having both product contact and non-product contact surfaces shall be designed to ensure that hygiene risks are eliminated in accordance with the requirements for product contact surfaces.

5 Design and construction

5.1.9 Internal angles, corners, and grooves

Internal corners and angles of less than 135° in product contact areas shall have a smooth and continuous radius of $\frac{1}{8}$ in (0.13 in, 3.2 mm) or greater. Internal 3-plane intersections shall have a radius of $\frac{1}{4}$ in (0.25 in, 6.4 mm). Lesser radii may be used for necessary functional reasons or to facilitate drainage provided these areas can be readily cleaned. ~~The radii shall not be less than $\frac{1}{32}$ in (0.031 in, 0.79 mm)~~ except that the radius intersection of press-fits, shrink-fits, and flat sealing surfaces may be zero. **The radius shall not be less than 1/32 in (0.031 in, 0.79 mm) except that the radius intersection of press-fits, shrink-fits, and flat sealing surfaces; and, when for safety or functional reasons on components which are to small to apply a 1/32 in (0.032 in, 0.79 mm) radius may be zero.**

Rationale: When necessary for critical design features, it may be necessary to have internal radii less than 1/32 in. Examples: key and slot arrangement that is used to align two parts together, gear teeth, and intersections of gear teeth and flanges.