July 14, 2009

Gary M. Stern, General Counsel
National Archives and Records Administration
NGC-Room 3110
8601 Adelphi Road
College Park, MD 20740

Dear Mr. Stern:

This is a request under the Freedom of Information Act (FOIA), 5 U.S.C. § 552 as further specified in the National Archives and Records Administration (NARA) FOIA Regulations, 36 C.F.R. § 1250. The purpose of this request is to obtain copies of all technical standards that have been Incorporated By Reference into the Code of Federal Regulations.

In addition to the requirements of the FOIA, this request should be granted because it is for access to the text of the binding laws that govern the operations and activities of government as well as all citizens. This request should be granted based on the specific requirements of 1 C.F.R. § 51 governing the Incorporation By Reference mechanism, the requirements of OMB Circular A–130, the policies of our new President, and long-standing principles of due process and equal protection clearly stated by the courts.

Incorporation By Reference and the Code of Federal Regulations

The U.S. Code requires publication in the Federal Register of "rules of procedure," "substantive rules," and other information published by agencies of the executive branch. However, the Act specifies "matter reasonably available to the class of persons affected thereby is deemed published in the Federal Register when incorporated by reference therein with the approval of the Director of the Federal Register." 5 U.S.C. § 552(a).

According to the NARA Incorporation By Reference Manual: "Congress authorized incorporation by reference in the Freedom of Information Act to reduce the volume of material published in the Federal Register and C.F.R.. (See 5 U.S.C. § 552(a) and 1 C.F.R. § 51). Congress gave complete authority to the Director of the Federal Register to determine whether a proposed incorporation by reference serves the public interest."

In 1 C.F.R. § 51, NARA spells out several requirements by which the Incorporation By Reference mechanism is carried out, including a requirement that the publication be...
placed on file with NARA. In addition, the mechanism is quite precise, requiring a specific version of a specific standard, and substantial requirements of notice, need, and limitation of scope, as well as an affirmative determination for each standard by the Director of the Office of the Federal Register.

Nowhere in the U.S. Code or the C.F.R. is there an exemption of these technical standards from the requirements of the FOIA to make records available. However, NARA does appear to have an informal policy, not published in the C.F.R. or other formal regulations, with prominent notices that proclaim "OFR does not distribute IBR materials" and "This site does not link to or contain standards incorporated by reference into the CFR." [emphasis in original at the OFR web site.]

What I Am Specifically Asking For

I would like NARA to make available some or all of the standards that have been incorporated by Reference through any one of the following mechanisms:

- NARA can simply scan all IBR materials and make them available in the E-C.F.R. website you maintain in conjunction with the Government Printing Office.
- NARA can allow Public.Resource.Org to scan or photocopy the materials at the Office of Federal Register’s downtown Washington, DC location. While there is a procedure for doing this listed on your web site it seems to indicate prior approval is required of each copy request and it also appears you may not allow more than limited copying.
- NARA can furnish the materials to Public.Resource.Org as photocopies or electronically under the usual and customary procedures of the FOIA.

I am particularly interested in technical standards from Underwriters Laboratories, the American National Standards Institute, and other standards that are expensive and unavailable on the Internet and in public libraries. For your convenience, a specific list of the standards I am interested in is attached as Appendix A. It is important to stress that these materials we are seeking are not readily available through other means:

- For example, Underwriters Laboratories Standard 727, “Oil-Fired Central Furnaces,” is a key safety standard that has been incorporated by reference into numerous parts of our Code of Federal Regulations including 10 C.F.R. § 434.403.1, 10 § C.F.R. 431.76(c)(1), and 24 § C.F.R. 200. To purchase this 124-page standard costs $708 and the Worldcat.Org system shows that the only library in the United States with a copy is the Washington State Department Labor & Industries library.
- The only reasonably complete collections of ANSI documents available to the public in the United States appear to be at the Illinois State Library in Springfield, Illinois and the Linda Hall Library in Kansas City, Missouri.
Request for News Media Fee Status

Public.Resource.Org asks that we not be charged search or review fees for this request because we qualify as a "representative of the news media" pursuant to the FOIA and 36 C.F.R. § 1250.2(g).

Public.Resource.Org, Inc. is a 501(c)(3) public charity chartered to make government information more broadly available without fee to any and all users. We have been certified as a "news media" requester for the purposes of obtaining and publishing government records under the FOIA and other acts by the Department of the Army, the Department of the Air Force, the Department of Veteran Affairs, and the Food and Drug Administration. I would be happy to furnish copies of these determinations at your request.

Public.Resource.Org is also engaged in a Joint Venture with the National Technical Information Service ("NTIS") under Agreement No. NTIS-1832 to more broadly disseminate hundreds of hours of video materials from the government onto the Internet. Documents from this current FOIA request will be promptly published, joining over 90 million pages of U.S. government documents we have made available on the Internet.

Due to our extensive publication activities of both raw materials and editorial products, Public.Resource.Org is a "representative of the news media" under the FOIA and agency regulations. As such, this request is subject only to duplication fees after the first 100 pages. However, all duplication fees should be waived, as discussed below, because disclosure of the information requested above is in the public interest.

Request for a Public Interest Fee Waiver

Public.Resource.Org is entitled to a waiver of duplication fees because disclosure of the requested information is in the public interest within the meaning of 36 C.F.R. §§ 1250.58 and 1250.60. This request clearly satisfies these criteria.

A fee waiver is appropriate here because Public.Resource.Org has no commercial interest in the disclosure of the requested records. Public.Resource.Org is a 501(c)(3) nonprofit organizations and will derive no commercial benefit from the information at issue here and will distribute all documents widely at no charge on the Internet.

Under 36 C.F.R. § 1260, several criteria are listed to be used in evaluating our request. This request meets all 6 of those criteria:

- As mentioned above, the primary legal materials published and binding on all citizens is the very essence of "operations and activities of the Federal Government" under 36 CFR § 1260(a)(1).
- Because these materials are out of the reach of most Americans and are only available in a small handful of libraries, this activity will release "meaningful information about Federal Government activities that [are] not already publicly known" under 36 CFR § 1260(a)(2).
- Technical standards are the very nuts and bolts of our public safety, environmental, and other codes will "advance the understanding of the general public on the issue" under 36 CFR § 1260(a)(3).
- Public.Resource.Org has published over 90 million pages of primary legal materials and we have substantial experience working with technical standards
for 3 decades, demonstrating an "expertise in or a thorough understanding of these records" under 36 CFR § 1260(a)(4).

- Public.Resource.Org maintains one of the most popular and visible document servers on the Internet for legal information and have demonstrated significant expertise to "disseminate this information to a broad spectrum of the public" under 36 CFR § 1260(a)(5).

- Disclosure of this material, making available standards that govern our daily activities but have been inaccessible to those without significant wealth will "lead to a significantly greater understanding of the Government by the public" under 36 CFR § 1260(a)(6).

It is particularly important to note that our prior work in making available public safety codes at the state level has demonstrated that the general public has a tremendous interest in reading and consulting these technical standards. The building, electrical, plumbing, boiler, elevator, fire, and other public safety codes we published for all 50 states have been extremely popular not only with specialists in the trades but with the general public, journalists, homeowners, and many others.

**Limitation of Fees**

If you decide that we qualify neither as News Media or for a Public Interest Fee Waiver, we agree to pay fees up to a maximum of $5,000. If $5,000 is not sufficient to fully satisfy the request of all IBR documents, please provide a partial response with $5,000 worth of documents.

**NARA's Obligations Under OMB Circular A-130 and Title 44**

Irrespective of your determination under the FOIA, we respectfully submit that NARA is required to make this information available under the requirements of the E-Government Act and related statutes and regulations. In particular, 44 U.S.C. § 1510(a) requires that the Code of Federal Regulations contain the "complete codifications of the documents of each agency of the Government having general applicability and legal effect, issued or promulgated by the agency by publication in the Federal Register or by filing with the Administrative Committee." Nowhere are standards incorporated by Reference excluded from this requirement.

Publication of the C.F.R. is governed under the provisions of OMB Circular A-130 which states that "the free flow of information between the government and the public is essential to a democratic society" and requires that agencies, to the maximum extent possible, "disseminate information dissemination products on equitable and timely terms." Requiring purchase of a $1,120 document in order to read the law of the land is not equitable and does not promote a democratic society.

The policies of the E-Government Act and OMB promoting dissemination of government information should be considered in light of the clear, unequivocal language of the President's January 21, 2009 Memorandum: "In the face of doubt, openness prevails." The President's instructions are very clear: "All agencies should adopt a presumption in favor of disclosure, in order to renew their commitment to the principles embodied in FOIA, and to usher in a new era of open Government. The presumption of disclosure should be applied to all decisions involving FOIA."
Given the lack of any specific regulations governing disclosure of materials incorporated by reference, given the importance of these core materials, and given the clear, unqualified language of the President, NARA should disclose this material.

**Primary Legal Materials Must Be Available To the Public**

In *Veeck v. Southern Building Code Congress*, 293 F.3d 791 (5th Circuit, 2002), Chief Judge Edith H. Jones clearly stated that "a continuous understanding that 'the law,' whether articulated in judicial opinions or legislative acts or ordinances, is in the public domain and thus not amenable to copyright."

Chief Judge Jones and the 5th Circuit were ruling consistently with a long line of decisions dating back to *Wheaton v. Peters*, 33 U.S. (8 Pet.) 591 (1834) which stated that "the law, which, binding every citizen, is free for publication to all, whether it is a declaration of unwritten law, or an interpretation of a constitution or statute."

It is important to note that the Veeck decision was specifically on point in addressing the mechanism of incorporation by reference, the same mechanism used by NARA for the documents we are requesting. Indeed, when the Veeck decision was appealed to the Supreme Court, the Court specifically invited the views and then followed the strong recommendation of the Solicitor General in denying certiorari and upholding the decision. In that Amicus Brief, Solicitor General Olson stressed that the standards incorporated by reference are "indistinguishable from other laws of general applicability that the public has always had the right to copy freely." Brief for the United States as Amicus Curiae, No. 02-355, May 2003.

The purpose of the Federal Register system is to notify citizens what laws they must obey. Access to the materials that make up the regulations of the executive branch is a foundational issue of our system of government. There can be no due process or equal protection under the law if the texts that make it up are not available for citizens to read. This FOIA request should be granted because it is the very purpose of the Office of the Federal Register to broadly disseminate the law and this request will further that purpose.

**Timeline for Response**

As the FOIA provides, I will anticipate a determination on this request from your office within 20 working days.

Thank you for your consideration of this request.

Respectfully yours,

Carl Malamud  
President & CEO  
Public.Resource.Org
Appendix A

Standards Incorporated by Reference and Requested Under FOIA
Office of the Federal Register, Code of Federal Regulations

For More Information, Please Consult the Standards Incorporated by Reference Database

AA-AES 35-80 Specifications for Aluminum Sheet Metal in Building Construction Aluminum Association, 900 19th Street, NW., Wash
AAT-RMA Specifications for Anhydrous Ammonia Hose, Agriculture Ammonia Institute-Rubber Manufacturers (AAT-RMA) Association, 1400
AMA 605-95 Voluntary Specification Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions
AMA 1504-88 Voluntary Standards for Thermal Performance of Windows, Doors and Glazed Wall Sections
AMA 1701.2-95 Voluntary Standard Primary Window and Sliding Glass Door for Utilization in Manufactured Housing
AMA 1704-1985 Voluntary Standard Exterior Window Systems for Utilization in Manufactured Housing
AMA-800-92 Voluntary Specifications and Test Methods for Sealants American Architectural Manufacturers Association

AASHTO Guide to Metric Conversion, AASHTO, 1993
AASHTO Standard Specifications for Highway Bridges, AASHTO 1994
AASHTO, A Policy on Design Standards Interstate System, AASHTO, January 2005
AASHTO, A Policy on Geometric Design of Highways and Streets, AASHTO 2001 American Association of State Highway and Traffic Officials
AASHTO, Interim Specifications-Bridges, AASHTO 1993
AASHTO, Interim Specifications-Bridges, AASHTO 1994
AASHTO, Interim Specifications-Bridges, AASHTO 1995

ABS Guide for High Speed Craft, 1997
ABS Rules for Building and Classing Aluminum Vessels (1975)
ABS Rules for Building and Classing Mobile Offshore Drilling Units (1994)
ABS Rules for Building and Classing Mobile Offshore Drilling Units, 1998
ABS Rules for Building and Classing Steel Vessels (1995)
ABS Rules for Building and Classing Steel Vessels for Service on Rivers and Intracoastal Waterways, 1995
ABS Rules for Building and Classing Steel Vessels Under 61 Meters (200 feet) in Length, 1983
ABS Rules for Building and Classing Steel Vessels, 1981
ABS Rules for Building and Classing Steel Vessels, 1986
ABS Rules for Building and Classing Steel Vessels, 1989
ABS Rules for Building and Classing Steel Vessels, 1995
ABS Rules for Building and Classing Steel Vessels, 1996
ABS Rules for Building and Classing Steel Vessels, 1997
ABS Rules for Building and Classing Steel Vessels, 1998
ABS U.S. Supplement to ABS Rules for Mobile Offshore Drilling Units, 1 June 1998
ABS U.S. Supplement to ABS Rules for Steel Vessels for Vessels on International Voyages, 1 August 1997
ABS U.S. Supplement to ABS Rules for Steel Vessels for Vessels on International Voyages, 21 October 1996
ABYC A-1-78—"Marine LPG-Liquefied Petroleum Gas Systems"
ABYC A-1-93-Marine Liquefied Petroleum Gas (LPG) Systems
ABYC A-3-70—"Recommended Practices and Standards Covering Galley Stoves"
ABYC A-1-1973 Galley Stoves
ABYC A-2-1970 Recommended Practices and Standards Covering Boat Heating Systems
ABYC A-16-89/Electric Navigation Lights
ABYC A-16-97 American Boat and Yacht Council, Inc., 3069 Solomons Island Road, Edgewater, Maryland 21037-1416; ABYC A-16 Electric
ABYC A-22-78 "Marine NG Compressed Natural Gas Systems"
ABYC A-22-93-Marine Compressed Natural Gas (CNG) Systems
ABYC E-1-1972 Bonding of Direct-Current Systems
ABYC E-E-1985-Alternating Current (AC) Electrical Systems on Boats
ABYC E-B-1994 Alternating-Current (AC) Electrical Systems on Boats
ABYC E-S-1981-Recommended Practices and Standards Covering Direct Current (DC) Electrical Systems on Boats
ABYC H-2-1989-Direct-Current (DC) Electrical Systems on Boats
ABYC H-2-1989-Ventilation of Boats Using Gasoline
ABYC H-22-86-DC Electric Bilge Pumps Operating Under 50 Volts
ABYC H-24-93-Gasoline Fuel Systems
ABYC H-24.9 (g) and (h)-"Fuel Strainers and Fuel Filters" (1975)
ABYC H-25-1986 American Boat and Yacht Council (ABYC), 3069 Solomons Island Road, Edgewater, MD 21037-1416m H-25-1986-Portable Fuel Systems and Portable Containers for Flammable Liquids
ABYC H-25-1994-Portable Fuel Systems for Flammable Liquids
ABYC H-32-87-Ventilation of Boats Using Diesel Fuel
ABYC H-33-1989-Diesel Fuel Systems
ABYC P-1-1973 American Boat and Yacht Council (ABYC) P-1-73, Safe Installation of Exhaust Systems for Propulsion and Auxiliary Machinery
ABYC P-1-1986-Installation of Exhaust Systems for Propulsion and Auxiliary Engines
ABYC P-1-1993-Installation of Exhaust Systems for Propulsion and Auxiliary Engines
ABYC P-4-89-Marine Inboard Engines
ACGIH American Conference of Governmental Industrial Hygienists (ACGIH), 1014 Broadway, Cincinnati, OH 45202, Threshold limit values
ACGIH Chapter 3, "Local Exhaust Hoods" and Chapter 5, "Exhaust System Design Procedure" of "Industrial Ventilation: A Manual of Recommended Practice" (22nd ed., 1995); or
ACGIH's "Industrial Ventilation: A Manual of Recommended Practice" (22nd ed., 1995); or
ACT 211.1-89 Standard Practice for Selecting Proportions for Normal, Heavyweight and Mass Concrete American Concrete Institute
ACT 211.2-91 Standard Practice for Selecting Proportions for Structural Lightweight Concrete
ACT 213R-87 Guide for Structural Lightweight Aggregate Concrete
ACT 301-89 Specifications for Structural Concrete for Buildings
ACT 302.1R-86 Guide for Concrete Floor and Slab Construction
ACT 304R-89 Guide for Measuring, Mixing, Transporting and Placing Concrete
ACT 305R-77 Hot Weather Concreting (Revised 1989)
ACT 306R-78 Cold Weather Concreting (Revised 1988)
ACT 311.4R-80 Guide for Concrete Inspection (Revised 1988)
ACT 315-80 Guide for Detailing of Concrete Reinforcement
ACT 318-89 Building Code Requirements for Reinforced Structural Plain Concrete (Revised 1992)
ACT 322-72 Structural Plain Concrete
ACT 347-78 Recommended Practice for Concrete Formwork (Reapproved 1984)
ACT 504R-77 Guide to Joint Sealants for Concrete Structures
ACT 505-90 Recommended Practice for Shotcreting
ACT 515.1R-79 A Guide to the Use of Waterproofing, Dampproofing, Protective and Decorative Barrier Systems for Concrete (Revised 1996)
ACT 533.1R-69 Quality Standards and Tests for Precast Concrete Wall Panels
ACT 533.2R-69 Selection and Use of Materials for Precast Concrete Wall Panels
ACT 533.3R-70 Fabrication, Handling and Erection of Precast Concrete Wall Panels
ACT Standard 318-95, Building Code Requirements for Reinforced Concrete (ACI 318-95) and Commentary (ACI 318R-95)
APPA Design Values for Joists and Rafters 1992, APPA
APPA Span Tables for Joists and Rafters-PS-20-70, 1993, APPA
APPA Wood Structural Design Data, 1989, Revised 1992, APPA
AGA American Gas Association Report No. 3: Orifice Metering of Natural Gas and Other Related Hydrocarbon Fluids, Part 1: General
AGA American Gas Association Transmission Measurement Committee Report No. 7: Measurement of Gas by Turbine Meters (Second Revisor
ANSI Z33.1-61 Installation of Blower and Exhaust Systems for Dust, Stock, and Vapor Removal or Conveying
ANSI Z33.1-66 Installation of Blower and Exhaust Systems for Dust, Stock, and Vapor Removal or Conveying,
ANSI Z33.1-1961. Installation of Blower and Exhaust Systems for Dust, Stock, and Vapor Removal or Conveying,
ANSI Z34.1-1993 Third-Party Certification Programs for Products, Processes, and Services
ANSI Z34.1-1987 American National Standard for Personnel Protection-Protective Headwear Program
ANSI Z35.1-68 Specifications for Accident Prevention Signs
ANSI Z41-91 Personal Protection-Protective Footwear
ANSI Z41-1991 “American National Standard for Personal Protection-Protective Footwear,”
ANSI Z41.1-1967 American National Standard for Men’s Safety-Toe Footwear,
ANSI Z49.1 “Safety in Welding, Cutting and Allied Processes,” sections 4.3 and E4.3 (1995) (incorporated by reference, see §851.27)
ANSI Z87.1-1968 Practice of Occupational and Educational Eye and Face Protection
ANSI Z87.1-1979 Practice for Occupational and Educational Eye and Face Protection, 1979
ANSI Z88.3-1980 Practices for Respiratory Protection
ANSI Z88.4-1980-Practices for Respiratory Protection
ANSI Z88.4-1980-Practices for Respiratory Protection
ANSI Z89.1-1986 Safety Requirements for Industrial Head Protection, 1969
ANSI Z89.1-1986 Protective Headwear for Industrial Workers Requirements
ANSI Z89.1-1986 Safety Requirement for Industrial Head Protection
ANSI Z89.1-1986-Safety Requirements for Industrial Head Protection.
ANSI Z89.1-1986 Personnel Protection-Protective Headwear for Industrial Workers-Requirements
ANSI Z89.1-1986 Personnel Protection-Protective Headwear for Industrial Workers-Requirements
ANSI Z89.1-1984 Personnel Protection-Protective Headwear for Industrial Workers-Requirements
ANSI Z89.2-71 Safety Requirements for Industrial Protective Helmets for Electrical Workers, Class B
ANSI Z89.2-1986 “Personnel Protection-Protective Headwear for Industrial Workers-Requirements,”
ANSI Z124.3-1986. Plastic Lavatories with Addendum 124.3a-1980–
ANSI Z124.3-1990 Plastic Lavatories with Addendum 124.3a-1990– ANSI Z124.3-1990
ANSI Z124.5-1989 American National Standard for Plastic Toilet Seats (Water Closet Seats)
ANSI/AIIM MS1-1986 Standard Recommended Practice for Alphabetical Computer-Output Microforms—Operational Practice
- ANSI/AIIM MS14-1996 August 6, 1996, Standard Recommended Practice-Specifications for 16mm and 35mm Roll Microfilm.

ANSI/AIIM MS45-1990 January 22, 1990, Recommended Practice for Inspection of Stored Silver-Gelatin Microforms for Evidence of Det

ANSI/AISC 360-05 Specification for Structural Steel Buildings


ANSI/ASA 1-1984 Mosaic-Parchment Hardboard Slab Flooring


ANSI/ASHRAE 34-78—Number Designation of Refrigerants, approved 1978.


ANSI/ASME A14.1-1975 Safety Requirements for Portable Wood Ladders

- ANSI/ASME A14.1-1990 Safety Requirements for Portable Wood Ladders

ANSI/ASME A14.2-1956 Safety Code for Portable Metal Ladders, Supplemented by ANSI A14.2a-77

ANSI/ASME A14.2-1972 Safety Requirements for Portable Metal Ladders

- ANSI/ASME A14.2-1990 Safety Requirements for Portable Metal Ladders


ANSI/ASME A14.5-1992 Safety Requirements for Portable Reinforced Plastic Ladders

ANSI/ASME A17.1-1965 Safety Code for Elevators, Dumbwaiters and Moving Walks, Including Supplement, A17.1a (1967); A17.1b (1968);

ANSI/ASME A17.2-1965 including Supplement A 17.2a and 8-1985—Safety Code for Elevators and Escalators


ANSI/ASME A92.2-1969 "Vehicle Mounted Elevating and Rotating Work Platforms,”

ANSI/ASME A108.1A-92 Specifications for Installation of Ceramic Tile, in the Wet Set Method with Portland Cement Mortar


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- ANSI/ASME A112.4-1-1993, Water Heater Relief Valve Drain Tubes—
- ANSI/ASME A112.18.1M-1996 "Plumbing Fixture Fittings."
- ANSI/ASME A112.18.1M99 Plumbing Fixture Fittings
- ANSI/ASME A112.19.5-179. Trim for Water Closet, Bowls, Tanks, and Urinals—
- ANSI/ASME A112.19.6-1995 "Hydraulic Performance Requirements for Water Closets and Urinals."
- ANSI/ASME A135.4-1995. Basic Hardboard—
- ANSI/ASME A137.1-1988 Specifications for Ceramic Tile
- ANSI/ASME A208.1-1999 Wood Particleboard
- ANSI/ASME B1.1-82 Unified Inch Screw Threads (UN and UNR Thread Form)
- ANSI/ASME B1.20.3-76 (reaffirmed 1982) Dryseal Pipe Threads (Inch)
- ANSI/ASME B15.1-1953 (R 1958); Safety Code for Mechanical Power Transmission Apparatus,
- ANSI/ASME B16.1-1975 Cast Iron Flanges and Flanged Fittings, Class 25, 125, 250 and 800

Appendix A, Page 7
ASME Boiler and Pressure Vessel Code, Section I, Power Boilers, July 1989 with 1989 addenda
ASME Boiler and Pressure Vessel Code, Section I, Rules for Construction of Power Boilers; including Appendices 2004 Edition; and Jt
ASME Boiler and Pressure Vessel Code, Section IV, Rules for Construction of Heating Boilers; including Appendices 1, 2, 3, 5, 6, ar
ASME Boiler and Pressure Vessel Code, Section IX, "Welding and Brazing Qualifications," (2004 edition, including addenda through Jt
ASME Boiler and Pressure Vessel Code, Section V, Nondestructive Examination (1986)
ASME Boiler and Pressure Vessel Code, Section VIII, Division 1, "Rules for Construction of Pressure Vessels," (2004 edition, incl
ASME Boiler and Pressure Vessel Code, Section VIII, Division 1, Pressure Vessels, 1989, with Addenda issued December 31, 1989 ("AS
ASME Boiler and Pressure Vessel Code, Section VIII, Division 1, Pressure Vessels, July 1989 with 1989 addenda
ASME Boiler and Pressure Vessel Code, Section VIII, Division 2, "Rules for Construction of Pressure Vessels—Alternative Rules," (21
ASME Boiler and Pressure Vessel Code, Section VIII, Division 3, "Rules for Construction of Pressure Vessels; Divisions 1 and 2, 2004 Edition; Jt
ASME Boiler and Pressure Vessel Code: Section I, Power Boilers, 1986 with addenda
ASME Code for Pressure Vessels, 1968 Ed.
ASME Code for Unfired Pressure Vessels for Petroleum Liquids and Gases of the API and the ASME, 1951 Ed.
ASME Internationally Recognized Instrumentation and Apparatus, 1961 Ed.
ASME Measurement of Fluid Flow in Pipes Using Orifice, Nozzle, and Venturi
ASME Performance Test Code 4.2 (1991), Test Code for Coal Pulverizers
ASME PTC 19.10-1981, Flue and Exhaust Gas Systems, Part 10, Instruments and Apparatus, IBR approved for §60.106(e)(2) of subpart 
ASME QRO-1-1994 Standard for the Qualification and Certification of Resource Recovery Facility Operators, IBR approved for §§80.56c
ASME QRO-1-1994 and QRO-1d-1996 Addenda, Quality Assurance and Certification of Safety and Pollution Prevention Equipment Used in 
ASME "Recommended Practice No. NQA-1-1994, Performance Qualification and Certification in Nondestructive Testing"
ASME Q9003-1994 Quality Systems—Model for Quality Assurance in Final Inspection and Test;
ASME 1002 ANSI Performance Requirements for Water Closet Flush Tank Fill Valves (Ballcocks)—ASSE 1002 Rev. 5-1986 (ASSE/ANSI-1
ASME 1002. Performance Requirements for Water Closet Flush Tank Fill Valves (Ballcocks)—ASSE 1002 Revision 5-1986 (ASME/ASSE/197
ASME 1006 (ASSE/ANSI-1986). Plumbing Requirements for Residential Use (Household) Dishwashers—
ASME 1016-1988 ANSI Performance Requirements for Nonresidential Apps—

ASSE 1021 ASSE-1979). Performance Requirements for Hot Water Dispensers, Household Storage Type Electrical—ASSE 1021, (ANSI/ ASSE—

ASSE 1025-1978 Performance Requirements for Diversities for Plumbing Faucets with Hose Spray, Anti-Siphon Type, Residential Application

ASSE 1037-1990 ANSI Performance Requirements for Pressurized Flushing Devices (Flushometers) for Plumbing Fixtures—ASSE 1037-1990 (ASSE-1978). Performance Requirements for Diversities for Plumbing Faucets with Hose Spray, Anti-Siphon Type, Residential Application

ASTM A20/A 20M-97a Standard Specification for General Requirements for Steel Plates for Pressure Vessels

ASTM A36/A 36M-97a, Standard Specification for Carbon Structural Steel

ASTM A47-68 Malleable Iron Castings


ASTM A47-Tub

ASTM A47-68 Malleable Iron Castings

ASTM A53-69 Welded and Seamless Steel Pipe


ASTM A53-90 Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless

ASTM A53-69 Grade B Electric Resistance Welded and Electric Flash Welded Pipe


ASTM A100-69 74, 93, Standard Specification for Ferronilicon, IBR approved for $60.261.

ASTM A106-95 Standard Specification for Seamless Carbon Steel Pipe for High-Temperature Service


ASTM A109-91 Standard Specification for Steel, Strip, Carbon Cold-Rolled;

ASTM A126-66 Gray Iron Casting for Valves, Flanges, and Pipe Fittings


ASTM A126-66

ASTM A134-96 Standard Specification for Pipe, Steel, Electric-Fusion (Arc)-Welded (Sizes NPS 16 and Over)


ASTM A139-96 Standard Specification for Electric-Fusion (Arc)-Welded Steel Pipe (NPS 4 and Over)

ASTM A151-82 (Reapproved 1987), Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware;


ASTM A182/A 183M-97c, Standard Specification for Forged or Rolled Alloy-Steel Pipe Flanges, Forged Fittings, and Valves and Parts for High-Temperature Service

ASTM A192/A 192M-91 (1996), Standard Specification for Seamless Carbon Steel Boiler Tubes for High-Pressure Service

ASTM A193/A 193M-98a, Standard Specification for Alloy-Steel and Stainless Steel Bolting Materials for High-Temperature Service

ASTM A194/A 194M-98b, Standard Specification for Carbon and Alloy Steel Nuts for Bolts for High Pressure or High Temperature Service


ASTM A203/A 203M-97, Standard Specification for Pressure Vessel Plates, Alloy Steel, Nickel


ASTM A213/A 213M-95a, Standard Specification for Seamlass Ferritic and Austenitic Alloy-Steel Boiler, Superheater, and Heat-Exchanger


ASTM A226/A 226M-95, Standard Specification for Electric-Resistance-Welded Carbon Steel Boiler and Superheater Tubes for High-Pressure Service

ASTM A244/A 244M-97, Standard Specification for Electric-Resistance-Welded Carbon Steel Boiler and Superheater Tubes for High-Pressure Service


ASTM A242-81 Standard Specification for High-Strength Low-Alloy Structural Steel

ASTM A249/A 249M-96a, Standard Specification for Welded Austenitic Steel Boiler, Superheater, Heat-Exchanger, and Condenser Tubes

ASTM A262-91a Standard Practices for Detecting Susceptibility to Intergranular Attack in Austenitic Stainless Steel Tube and Tubing

ASTM A268/A 268M-96, Standard Specification for Seamlass and Welded Ferritic and Martensitic Stainless Steel Tubing for General Service

ASTM A276-98 Standard Specification for Stainless Steel Bars and Shapes

ASTM A285-78 Pressure Vessel Plates, Carbon Steel, Low- and Intermediate-Tensile Strength

ASTM A300-58 Steel Plates for Pressure Vessels for Service at Low Temperatures

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ASTM A302/A 302M-93 Standard Specification for Pressure Vessel Plates, Alloy Steel, Manganese-Molybdenum and Manganese-Molybdenum

ASTM A107-97 Standard Specification for Carbon Steel Bolts and Studs, 60,000 PSI Tensile Strength

ASTM A312/A 312M-95a, Standard Specification for Seamless and Welded Austenitic Stainless Steel Pipes

ASTM A120/A 320M-97, Standard Specification for Alloy/Steel Bolting Materials for Low-Temperature Service

ASTM A336-67 Seamless and Welded Steel Pipe for Low-Temperature Service


ASTM A335/A 335M-95a, Standard Specification for Seamless Ferritic Alloy-Steel Pipe for High-Temperature Service


ASTM A351/A 515M-94a, Standard Specification for Castings, Austenitic, Austenitic-Ferritic (Duplex), for Pressure-Containing Parts

ASTM A352/A 525M-93 (1998), Standard Specification for Steel Castings, Ferritic and Martensitic, for Pressure-Containing Parts, Sulphur

ASTM A358/A 515M-95a, Standard Specification for Electric-Fusion-Welded Austenitic Chromium-Nickel Alloy Steel Pipe for High-Temperature Service

ASTM A366/A 566M-91, Standard Specification for Steel, Sheet, Carbon, Cold-Rolled, Commercial Quality;

ASTM A335/A 335M-92, Standard Specification for Carbon and Ferritic Alloy Steel Forged and Rolled Pipe for High-Temperature Service

ASTM A170-97a Standard Test Methods and Definitions for Mechanical Testing of Steel Products

ASTM A70-94 Standard Test Methods and Definitions for Mechanical Testing of Steel Products


ASTM A376/A 376M-96, Standard Specification for Seamless Austenitic Steel Pipe for High-Temperature Central-Station Service


ASTM A195-98 Ductile Iron for Use at Elevated Temperatures


ASTM A420/A 420M-96a, Standard Specification for Wrought Stainless Steel Fittings of Pressure Piping and Alloy Steel Fittings for Low-Temperature Service

ASTM A421-81 Standard Specification for High-Strength Low-Alloy Structural Manganese Vanadium Steel

ASTM A482-75 93, Standard Specification for Ferrocolumbium, IBR approved for $60.261.

ASTM A482-76 74 (Reapproved 1988), Standard Specification for Silicomanganese, IBR approved for $60.261.

ASTM A495-76 94, Standard Specification for Calcium-Columbium and Calcium-Manganese-Silicon, IBR approved for $60.261.

ASTM A504/A 504M-98, Standard Specification for Rolled, General Requirements for;

ASTM A514-91 Standard Specification for High-Yield Strength Quenched and Tempered Alloy Steel Plate, Suitable for Welding

ASTM A515/A 515M-03 Standard Specification for Pressure Vessel Plates, Carbon Steel, for Intermediate- and Higher-Temperature Service

ASTM A516/A 516M-90 Standard Specification for Pressure Vessel Plates, Carbon Steel, for Moderate and Lower-Temperature Service

ASTM A20-97 Standard Specification for Supplementary Requirements for Seamless and Electric-Resistance-Welded Carbon Steel Tubular Products, Suffix 955, Standard Specification for Steel, Cold-Rolled, Any Grade, Any Size, Any Length, Not Forged or Rolled 8 and 5% Nickel Alloy Steel Flanges, Pittings, Valves, and Parts

ASTM A259-91b Standard Specification for General Requirements for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process, Commercial Quality;

ASTM A265/A 256M-90, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process, Commercial Quality


ASTM A357/A 357M-91 Standard Specification for Pressure Vessel Plates, Heat-Treated, Carbon-Manganese-Silicon Steel

ASTM A359-90a Specification for Electric-Resistance-Welded Coiled Steel Tubing for Gas and Field Oil Lines, ASTM A539-90a


ASTM A539-90a Specification for Electric-Resistance-Welded Coiled Steel Tubing for Gas and Fuel Oil Lines

ASTM A359/A 539M-91a, Standard Specification for Steel, Carbon (0.15 Maximum, Percent), Hot-Rolled Sheet and Strip Commercial Quality

ASTM A572-82 Standard Specification for High-Strength Low-Alloy Columbian-Vanadium Steels of Structural Quality

ASTM A575-76 Standard Specification for Steel Bars, Carbon, Merchant Quality, N-Grades


ASTM A588-91 Standard Specification for High-Strength Low-Alloy Structural Steel with 50 Ksi Minimum Yield Point to 4 in. Thick

ASTM A606-75 Standard Specification for Steel Sheet and Strip Hot-Rolled and Cold-Rolled, High-Strength, Low-Alloy, with Improved Formability

ASTM A607-98 Standard Specification for Steel, Sheet and Strip, High-Strength, Low-Alloy, Columbium or Vanadium, or Both, Hot-Rolled or Cold-Rolled, for Intermediate or Moderately High-Temperature Service

ASTM A621/A 621M-92, Standard Specification for Steel, Sheet and Strip, Carbon, Hot-Rolled, Drawing Quality


ASTM A640-91 Standard Specification for Zinc-Coated Steel Strand for Messenger Support of Figure 8 Cable

ASTM A1008/A 1008M-93 Standard Specification for Steel Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability, Hot-Rolled and Cold-Finished, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability.
ASTM A1011/A 1011M-92 Standard Specification for Steel Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability.
ASTM Adjunct F 1626, Symbols for Use in Accordance with Regulation II-2/20 of the 1974 SOLAS Convention as amended PCN: 12-616260-
ASTM Adjunct F 1626, Symbols for Use in Accordance with Regulation II-2/20 of the 1974 SOLAS Convention, PCN 12-616260-01, © 1996
ASTM B3-90 Standard Specification for Soft or Annealed Copper Wire;
ASTM B16-92 Standard Specification for Free-Cutting Brass Rod, Bar, and Shapes for Use in Screw Machines;
ASTM B21-96 Standard Specification for Naval Brass Rod, Bar, and Shapes;
ASTM B26/B 26M-97, Standard Specification for Brass Sand Castings;
ASTM B33-91 Standard Specifications for Tinned Soft or Annealed Copper Wire for Electrical Purposes.
ASTM B42-96 Standard Specification for Seamless Copper Pipe, Standard Sizes
ASTM B68-95 Standard Specification for Seamless Copper Tube, Bright Annealed;
ASTM B75-97 Standard Specification for Seamless Copper Tube;
ASTM B88-66A Seamless Copper Water Tube;
ASTM B88-69 Seamless Copper Water Tube
ASTM B88-93 Standard Specification for Seamless Copper Water Tube, ASTM B88-93
ASTM B98-96 Standard Specification for Seamless Copper Water Tube
ASTM B88-93 Standard Specification for Seamless Copper Water Tube—ASTM B88-93
ASTM B95-93 Standard Specification for Copper-Silicon Alloy Plate, Sheet, Strip, and Rolled Bar for General Purposes and Pressure
ASTM B111-95 Standard Specification for Copper and Copper-Alloy Seamless Condenser Tubes and Ferrule Stock;
ASTM B117-64 Salt Spray (Fog) Test
ASTM B117-97 Standard Practice for Operating Salt Spray (Fog) Apparatus
ASTM B117-97 "Standard Practice for Operating Salt Spray (Fog) Apparatus" (ASTM B117-97) is hereby incorporated into §7.3.2 by ref
ASTM B122/B 122M-95, Standard Specification for Copper-Nickel-Tin Alloy, Copper-Nickel-Zinc Alloy (Nickel Silver), and Copper-Nickel-Alloy Sheet, Strip, Plate, and Rolled Bar
ASTM B124-96 Standard Specification for Copper and Copper Alloy Forging Rod, Bar, and Shapes
ASTM B127-98 Standard Specification for Nickel-Copper Alloy (UNS N04400) Plate, Sheet, and Strip
ASTM B132-97a Standard Specification for Copper-Alloy Plate and Sheet for Pressure Vessels, Condensers, and Heat Exchangers
ASTM B209-96 Standard Specification for Copper and Copper Alloy Sheet and Plate;
ASTM B209-93 Standard Specification for Copper and Copper Alloy Sheet and Plate;
ASTM B210-68 Aluminum-Alloy Drawn Seamless Tubes
ASTM B210-95 Standard Specification for Aluminum and Aluminum-Alloy Drawn Seamless Tubes
ASTM B221-76 Aluminum Alloy Extruded Bars, Rods, Shapes, and Tubes
ASTM B224-80 Standard Classification of Coppers;
ASTM B224-91 Standard Classification of Coppers;
ASTM B234-95 Standard Specification for Copper and Copper-Alloy Plate and Sheet for Pressure Vessels, Condensers, and Heat Exchangers
ASTM B241-69

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ASTM B290 A-95. Standard Specification for Seamless Copper Tube for Air Conditioning and Refrigeration Field Service—ASTM B290, A-
ASTM B280-97 Standard Specification for Seamless Copper Tube for Air Conditioning and Refrigeration Field Service
ASTM B283-96 Standard Specification for Copper and Copper-Alloy Die forgings (Hot-Pressed)
ASTM B315-93 Standard Specification for Seamless Copper Alloy Pipe and Tube
ASTM B557-91 Tension Testing Wrought and Cast Aluminum and Magnesium-Alloy Products
ASTM B694-86 Standard Specification for Copper, Copper Alloy, and Copper-Clad Stainless Steel Sheet and Strip for Electrical Cable
ASTM B736-92a Standard Specification for Aluminum, Aluminum Alloy, and Aluminum-Clad Steel Cable Shielding Stock
ASTM B858M-95 Standard Test Method for Determination of Susceptibility to Stress Corrosion Cracking in Copper Alloys Using an Ammon
ASTM C19-91 Standard Practice for Installing Vitrified Clay Pipe Lines
ASTM C31-99a, Standard Specification for Concrete Aggregates
ASTM C94/C 94M-99 Standard Specification for Ready-Mixed Concrete
ASTM C208-72 Insulating Board (Cellulose Fiber), Structural and Decorative (Reapproved 1982)
ASTM C209-84 Standard Methods of Testing Insulating Board (Cellulose Fiber), Structural and Decorative
ASTM C216-91c Standard Specification for Facing Brick (Solid Masonry Units Made from Clay or Shale)
ASTM C221-91 Standard Specification for Corrugated Asbestos-Cement Siding
ASTM C310-99, Standard Specification for Lightweight Aggregates for Structural Concrete
ASTM C509-91 Standard Specification for Elastomeric Cellular Preformed Gasket and Sealing Material
ASTM C549-81 Standard Specification for Perlite Loose Fill Insulation (Reapproved 1986)
ASTM C595-98 Standard Specification for Blended Hydraulic Cements
ASTM C640-83 Standard Specification for Insulation Board, Thermal (Cork)
ASTM C739-91 Standard Specification for Cellulosic Fiber (Wood-Based) Loose-Pile Thermal Insulation
ASTM C754-88 Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum
ASTM C834-91 Standard Specification for Latex Sealants
ASTM C841-90 Standard Specification for Installation of Interior Lathing and Furring
ASTM C846-76 Standard Practice for Application of Structural Insulating Board ( Fiberboard) Sheathing (Reapproved 1982)
ASTM C849-90 Standard Specification for Dense Elastomeric Compression Seal Gaskets, Setting Blocks and Spacers
ASTM C926-90 Standard Specification for Application of Portland Cement-Based Plaster
ASTM C1016-91 Standard Specification for Flat Glass
ASTM C1048-91 Standard Specification for Heat-Treated Flat Glass—Kind HS, Kind FT Coated and Uncoated Glass

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ASTM C1312-95 Standard Specification for Liquid Membrane-Forming Compounds Having Special Properties for Curing and Sealing Concrete
ASTM D5-65 Test for Penetration by Bituminous Materials
ASTM D5-65 Test for Penetration for Bituminous Materials, D-5-65
ASTM D7-87 Standard Terminology for Bituminous Materials

ASTM D56-70 Standard Method of Test for Flashpoint by Tag Closed Tester
ASTM D66-62 Test for Distillation of Petroleum Products
ASTM D66-82 Standard Method for Distillation of Petroleum Products
ASTM D66-78 82, 90, 93, 95, 96, Distillation of Petroleum Products, IBR approved for $60.562-2(d), 60.593(d), 60.593n(d), and 60.6
ASTM D86-82 "Standard Method for Distillation of Petroleum Products;"
ASTM D88-86 Test for Saybolt Viscosity
ASTM D88-81 "Standard Test Method for Saybolt Viscosity;"
ASTM D92-97 Standard Test Method for Flash and Fire Points by Cleveland Open Cup
ASTM D93-71 Test for Flash Point by Pensky-Marten's
ASTM D93-97 Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester
ASTM D93-71 Standard Method of Test for Flashpoint by Pensky-Martens Closed Cup Tester

ASTM D127-60 ("Standard Method of Test for Melting Point of Petroleum and Microcrystalline Wax" (Revised 1960)),
ASTM D129-00 (Reapproved 2005), Standard Test Method for Sulfur in Petroleum Products (General Bomb Method), IBR approved for $60.4
ASTM D129-64 78, 95, 00, Standard Test Method for Sulfur in Petroleum Products (General Bomb Method), IBR approved for $60.106(2)
ASTM D150-87 Standard Test Methods for AC Resistance or Conductance of Insulating Materials;
ASTM D156-82 "Standard Test Method for Saybolt Color of Petroleum Products (Saybolt Chromometer Method);"
ASTM D156-82 "Standard Test Method for Saybolt Color of Petroleum Products (Saybolt Chromometer Method);"
ASTM D240-00 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, for appendices A, D and I
ASTM D240-76 92, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, IBR approved for $560.1
ASTM D423-91 Standard Test Methods for D-C Resistance or Conductance of Insulating Materials;
ASTM D323-94 Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method)
ASTM D323-68 "Standard Method of Test for Vapor Pressure of Petroleum Products (Reid Method)," American Society for Testing and Mat
ASTM D323-94, Test Method for Vapor Pressure of Petroleum Products (Reid Method), IBR approved for $560.001(1), 60.111(a), 60.111
ASTM D381-91 Standard Test Method for Existent Gum in Fuels by Jet Evaporation,
ASTM D388-77 Standard Specification for Classification of Coals by Rank, ASTM D 388-77
ASTM D388-77 Standard Classification of Coals by Rank
ASTM D388-99 Standard Classification of Coals by Rank, incorporation by reference for appendix F of this part.
ASTM D388-78 Class I, Group 2, "Standard Specifications for Classification of Coal by Rank,"
ASTM D388-88 Class I, Group 2, "Standard Specifications for Classification of Coal by Rank,"
ASTM D388-99 Standard Classification of Coals by Rank, I, IBR approved for $63.7575.
ASTM D396-72 Standard Specification for Fuel Oils, IBR approved for $560.41b of subpart 1b of this part, 60.41c
ASTM D403-82 (1993), Standard Test Methods for Rubber Property-Adhesion to Flexible Substrate
ASTM D405-65 Test for Viscosity of Transparent and Opague Liquids
ASTM D405-65, Standard Method of Test for Viscosity of Transparent and Opague Liquids ( ASTM D405-65).
ASTM D405-74 "Test for Kinematic Viscosity of Transparent and Opague Liquids;"
ASTM D1480-93 (Reapproved 1997), Standard Test Method for Density and Relative Density (Specific Gravity) of Viscous Materials by I
ASTM D1481-93 (Reapproved 1997), Standard Test Method for Density and Relative Density (Specific Gravity) of Viscous Materials by I
ASTM D1492-78 "Standard Test Method for Bromine Index of Aromatic Hydrocarbons by Coulometric Titration."
ASTM D1492-78, "Standard Test Method for Bromine Index of Aromatic Hydrocarbons by Coulometric Titration."
ASTM D1518-85 (Reapproved 1990), Standard Test Method for Thermal Transmittance of Textile Materials
ASTM D1535-88 Standard Test Method for Specifying Color by the Munsell System;
ASTM D1552-01 Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method);
ASTM D1552-83 (Reapproved 1979), "Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method), IBR approved for $60.445(a)(1)(i)."
ASTM D1557-91 Test Method for Laboratory Compaction Characteristics of Soil Using the Modified Method (65,006 ft-lb/ft3)(2.708 kWh-
ASTM D1557-91 Test Method for Laboratory Compaction Characteristics of Soil Using the Modified Method (65,006 ft-lb/ft3)(2.708 kWh-
ASTM D1613-95 Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and
ASTM D1622-93 Standard Test Method for Apparent Density of Rigid Cellular Plastics
ASTM D1640-83 (Reapproved 1989), Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature;
ASTM D1654-92 Standard Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments;
ASTM D1692-68 Test for Flammability of Plastic Sheet and Cellular Plastics
ASTM D1693-70 (Reapproved 1988), Standard Test Method for Environmental Stress-Cracking of Ethylene Plastics;
ASTM D1709-01 Standard Test Method for Impact Resistance of Plastic Film by the Free-Falling Dart Method
ASTM D1785-96b Standard Specification for Poly (Vinyl Chloride)(PVC) Plastic Pipe, Schedules 40, 80, and 12056.60-25
ASTM D1785-96b Standard Specification for Poly (Vinyl Chloride)(PVC) Plastic Pipe, Schedules 40, 80, and 12056.60-25
ASTM D1834-9a Standard Specification for Liquefied Petroleum (LP) Gases, IBR approved for $60.416a of subpart Da of 1
ASTM D1834-9a Standard Specification for Liquefied Petroleum (LP) Gases, IBR approved for $60.416a of subpart Da of 1
ASTM D1835-97 91, 97, 03a, Standard Specification for Liquefied Petroleum (LP) Gases
ASTM D1838-64 Copper Strip Corrosion by Liquefied Petroleum (LP) Gases
ASTM D1922-00a Standard Test Method for Propagation Resistence of Plastic Film and Thin Sheeting by Pendulum Method
ASTM D1945-86 (Reapproved 2001), Standard Natural Gas by Gas Chromatography
ASTM D1945-86 76, 81, 96, Standard Method for Analysis of Natural Gas by Gas Chromatography, IBR approved for $60.45(f)(5)(i).
ASTM D1946-77 Standard Method for Analysis of Reformed Gas by Gas Chromatography
ASTM D1946-90 (Reapproved 2006), Standard Practice for Analysis of Reformed Gas by Gas Chromatography
ASTM D1946-77 90 (Reapproved 1994), Standard Method for Analysis of Reformed Gas by Gas Chromatography, IBR approved for $60.18(f)
ASTM D1946-77 90, 94, Standard Method for Analysis of Reformed Gas by Gas Chromatography, IBR approved for $60.18(f)
ASTM D2013-01 Standard Practice for Preparing Coal Samples for Analysis
ASTM D2013-01 Standard Practice for Preparing Coal Samples for Analysis, IBR approved for $60.416d of subpart DDDD of this part.
ASTM D2013-04 Standard Practice for Preparing Coal Samples for Analysis, IBR approved for $60.416d of subpart DDDD of this part.
ASTM D2013-72 86, Standard Method of Preparing Analyses, IBR approved for Appendix A: Method 19, Section 12.5.2.1.
ASTM D2019-00 Standard Test Method for Dynamic Water Resistance of Shoe Upper Leather by the Water Penetration Tester, IBR
ASTM D2117-82 "Standard Test Method for Melting Point of Semisolid Polymers by the Hot Stage Microscopy Method."
ASTM D2133-66 "Specifications for Acetal Resin Injection Molding and Extrusion Materials" (Revised 1966),
ASTM D2161-66 Conversion Tables For SUS
ASTM D2234-00: Standard Practice for Collection of a Gross Sample of Coal.
ASTM D2234-00.1: Standard Practice for Collection of a Gross Sample of Coal, 1, IBR approved for Table 6 to subpart DDDD of this part.
ASTM D2234-D2234M-03: Standard Practice for Collection of a Gross Sample of Coal, IBR approved for Table 6 to subpart DDDD of this part.
ASTM D4057-95 (Reapproved 2000), Standard Practice for Manual Sampling of Petroleum and Petroleum Products, IBR approved for §60.4(b)
ASTM D4066-96a Standard Classification System for Nylon Injection and Extrusion Materials (PA)
ASTM D4086-94, 95 Standard Test Method for Analysis of Hydrogen Sulfide in Gaseous Fuels (Lead Acetate Reaction Rate Method), IBR approved
ASTM D4177-95 (Reapproved 2000), Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, IBR approved for §60.4(b)
ASTM D4206-96 Standard Test Method for Sustained Burning of Liquid Mixtures Using the Small Scale Open-Cup Apparatus
ASTM D4268-93 Standard Test Method for Testing Fiber Ropes
ASTM D4359-90 Standard Test Method for Determining Whether a Material is a Liquid or a Solid
ASTM D4420-94 Standard Test Method for Determination of Aromatics in Finished Gasoline by Gas Chromatography, IBR approved for §61.1
ASTM D4444-84 92 Standard Test Methods for Direct Moisture Content Measurement in Wood and Wood-Base Materials, IBR approved for §61.2
ASTM D4457-85 Standard Test Method for Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings by Direct Injection Gas Chromatography
ASTM D4468-85 (Reapproved 2000), Standard Test Method for Total Sulfur in Gaseous Fuels by Hydrogenolysis and Ratemetric Colorimeter
ASTM D4565-90a Standard Test Methods for Physical and Environmental Performance Properties of Insulations and Jackets for Telecommunications Wire and Cables
ASTM D4566-89 Standard Test Methods for Electrical Performance Properties of Insulations and Jackets for Telecommunications Wire or Cables
ASTM D4568-86 Standard Test Methods for Evaluating Compatibility Between Cable Filling and Flooding Compounds and Polyolefin Cable Insulation
ASTM D4606-03 Standard Test Method for Determination of Arsenic and Selenium in Coal by the Hydride Generation/Atomic Absorption X-Ray
ASTM D4734-87 96 Standard Specification for Water-Carrying Capacity of Solid Fuels, 1994 for §61.270(a)
ASTM D4809-00 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Precision Method)
ASTM D4809-95 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Precision Method), IBR approved
ASTM D4809-95 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Precision Method), IBR approved
ASTM D4809-95 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Precision Method), IBR approved
ASTM D4872-88 Standard Test Method for Dielectric Testing of Wire and Cable Filling Compounds
ASTM D4986-98 Standard Test Method for Horizontal Burning Characteristics of Cellular Polymeric Materials
ASTM D5198-02 Standard Practice for Nitric Acid Digestion of Solid Waste, IBR approved for table 6 to subpart I
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ASTM D5453-00 Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Motor Fuels and Oils by Ultraviolet Fluorescence
ASTM D5453-05 Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Motor Fuels and Oils by Ultraviolet Fluorescence
ASTM D5504-01 Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and detection

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ASTM D5865-01a Standard Test Method for Gross Calorific Value of Coal and Coke, for appendixes A, D, and F of this part.
ASTM D5865-03a Standard Test Method for Gross Calorific Value of Coal and Coke, IRB approved for table 6 to subpart DDDDD of this part.
ASTM D5865-04 Standard Test Method for Gross Calorific Value of Coal and Coke, IRB approved for table 6 to subpart DDDDD of this part.
ASTM D5865-98 Standard Test Method for Gross Calorific Value of Coal and Coke, IRB approved for Table 6 to subpart DDDDD of this part.
ASTM D5865-02 “Standard Test Methods for Specific Gravity of Coating Resins,” IRB approved for §60.3151(b) and §6.3951(c).
ASTM D6091-97 (Reapproved 2003), “Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Used as...
ASTM D6228-98 (Reapproved 2003), Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography.
ASTM D6355-00a “Test Method for Determining the Amount of Volatile Organic Compound (VOC) Released from Waterborne Automotive Coatings and Related Coatings Substances,” IRB approved.
ASTM D6522-00 (Reapproved 2005), Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Solid Waste Combustors (Reapproved 2000), Standard Test Method for Tension Testing of Metallic Materials; and
ASTM E29-90 Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications.
ASTM E87-80 Standard Methods of Conducting Strength Tests of Panels for Building Construction.
ASTM E114-95 Standard Practice for Ultrasonic Pulse-Echo Straight-Beam Examination by the Contact Method.
ASTM E133-81a “Standard Definitions of Terms and Symbols Relating to Molecular-Spectroscopy.”
ASTM E168-67 77, 92 General Techniques of Infrared Quantitative Analysis, IRB approved for §60.485(a)(d)(1), 60.593(b)(2), 60.593a.
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ASTM E180-85 Standard Practice for Determining the Precision of ASTM Methods for Analysis and Testing of Industrial Chemicals, for

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ASTM F1476-95a Standard Specification for Performance of Gasketed Mechanical Couplings for Use in Piping Applications
ASTM G21-90 Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi; and
ASTM G23-50 Standard Practice for Operating Light-Exposure Apparatus (Carbon-Arc Type) With and Without Water for Exposure of Nonmet
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ATSC A/65A: “ATSC Program and System Information Protocol for Terrestrial Broadcast and Cable,” (Revision B) March 18, 2003, and II
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AMPA A1-91 Standard Methods for Analysis of Creosote and Oil-Type Preservatives. American Wood Preservers Association
AMPA A5-91 Standard Methods for Analysis of Oil-Borne Preservatives.
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AMPA C1-91 All Timber Products—Preservative Treatment by Pressure Processes.
AMPA C4-91 Poles—Preservative Treatment by Pressure Processes.
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AMPA C10-91 Lodgepole Pine Poles—Preservative Treatment by the Full-Length Thermal Process.
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AMPA M1-98 Standard for the Purchase of Treated Wood Products.
AMPA M2-91 Standard for Inspection of Treated Timber Products.
AMPA M3-81 Standard Quality Control Procedures for Wood Preserving Plants.
AMPA M4-91 Standard for the Care of Preservative-Treated Wood Products.
AMPA P1/P13-91 Standard for Coal Tar Creosote for Land and, Fresh Water and Marine (Coastal Water Use).
AMPA P5-91 Standards for Waterborne Preservatives.
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AWS B3.0-41 Standard Qualification Procedure
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AWS D1-1-73 American Welding Society Structural Welding Code D1-1-73 is available from the American Welding Society, Inc., 550 N.W.
AWS D1.0-1966 Code for Welding in Building Construction
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AWS D1.4-98 Structural Welding Code—Reinforcing Steel
AWS D2.0-69 Specifications for Welding Highway and Railway Bridges
AWS D2.0-69 Specifications for Welding Highway and Railway Bridges, AWS
AWS D3.6M:1999 Specification for Underwater Welding
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AWS D8.4-61 Recommended Practices for Automotive Welding Design, AWS.
AWS D10.9-69 Standard Qualification of Welding Procedures and Welders for Piping and Tubing, AWS.
AWS D14.4-77 "Classification and Application of Welded Joints for Machinery and Equipment,
AWWA C107-55, Steel Pipe Flanges, 1955 American Water Works Society
BOCA National Building Code, 1993 Edition,
BOCA National Mechanical Code, 1993 Edition
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