

**4101:8-44-01 Referenced standards.**

**4401.1 General.** *This chapter lists the standards that are referenced in various sections of this code. The standards are listed herein by the promulgating agency of the standard, the standard identification, the effective date and title. The application of the referenced standards shall be as specified in Section 102.5.*

**4401.2 Referenced codes.** *When indicated in this code, the following codes refer to provisions in the listed chapters of the administrative code:*

<b>Referenced Code</b>	<b>Ohio Administrative Code Chapters</b>
<i>Ohio Building Code</i>	<i>4101:1-1 to 4101:1-35</i>
<i>Fire Code</i>	<i>1301:7-1 to 1301:7-7</i>
<i>Mechanical Code</i>	<i>4101:2-1 to 4101:2-15</i>
<i>Plumbing Code</i>	<i>4101:3-1 to 4101:3-15, <del>codified and published as the 2017 Ohio Plumbing Code, effective 11-1-2017, and as modified in Section 2501.1.1.</del></i>

**4401.3 Referenced standard list.**

<b>AAMA</b> American Architectural Manufacturers Association 1827 Walden Office Square, Suite 550 Schaumburg, IL 60173	
<b>Standard Referenced</b>	<b>Title</b>
AAMA/WDMA/CSA 101/ I.S.2/ A440—17: 450—10:	North American Fenestration Standards/ Specifications for Windows, Doors and Skylights Voluntary Performance Rating Method for Mulled Fenestration Assemblies
506—16:	Voluntary Specifications for Hurricane Impact and Cycle Testing of Fenestration Products
711— <del>16</del> 13:	Voluntary Specification for Self-adhering Flashing Used for Installation of Exterior Wall Fenestration Products
712—14:	Voluntary Specification for Mechanically Attached Flexible Flashing

<b>AAMA</b>	
American Architectural Manufacturers Association 1827 Walden Office Square, Suite 550 Schaumburg, IL 60173	
<b>Standard Referenced</b>	<b>Title</b>
714—15:	Voluntary Specification for Liquid Applied Flashing Used to Create a Water-resistive Seal around Exterior Wall Openings in Buildings
AAMA/NPEA/NSA 2100—12:	Specifications for Sunrooms
<b>ACCA</b>	
Air Conditioning Contractors of America 2800 Shirlington Road, Suite 300 Arlington, VA 22206	
<b>Standard referenced</b>	<b>Title</b>
Manual D—2016:	Residential Duct Systems
Manual J—2016:	Residential Load Calculation—Eighth Edition
Manual S—2014:	Residential Equipment Selection
<b>ACI</b>	
American Concrete Institute 38800 Country Club Drive Farmington Hills, MI 48331	
<b>Standard referenced</b>	<b>Title</b>
318—14:	Building Code Requirements for Structural Concrete
332—14:	Residential Code Requirements for Structural Concrete
<b>AISI</b>	
American Iron and Steel Institute 25 Massachusetts Avenue, NW Suite 800 Washington, DC 20001	
<b>Standard referenced</b>	<b>Title</b>
AISI S100—16:	North American Specification for the Design of Cold-formed Steel Structural Members, 2016
AISI S220—15:	North American Standard for Cold-formed Steel Framing—Nonstructural Members, 2015
AISI S230—15:	Standard for Cold-formed Steel Framing—Prescriptive Method for One- and Two-family Dwellings, 2015

<b>AISI</b>		American Iron and Steel Institute 25 Massachusetts Avenue, NW Suite 800 Washington, DC 20001
<b>Standard referenced</b>	<b>Title</b>	
AISI S240—15:	North American Standard for Cold-Formed Steel Structural Framing	
<b>AMCA</b>		Air Movement and Control Association International 30 West University Drive Arlington Heights, IL 60004
<b>Standard referenced</b>	<b>Title</b>	
ANSI/AMCA 210- ANSI/ASHRAE 51—07:	Laboratory Methods of Testing Fans for Aerodynamic Performance Rating	
<b>ANCE</b>		Association of the Electric Sector Av. Lázaro Cardenas No. 869 Col. Nueva Industrial Vallejo C.P. 07700 México D.F.
<b>Standard referenced</b>	<b>Title</b>	
<del>NMX J 521/2 40- ANCE—2014/ CAN/CSA 22.2 No. 60335-2 40—12/ UL 60335-2 40:</del>	<del>Safety of Household and Similar Electric Appliances, Part 2 40: Particular Requirements for Heat Pumps, Air Conditioners and Dehumidifiers</del>	
<b>ANSI</b>		American National Standards Institute 25 West 43rd Street, 4th Floor New York, NY 10036
<b>Standard referenced</b>	<b>Title</b>	
A108.1A—17:	Installation of Ceramic Tile in the Wet-set Method, with Portland Cement Mortar	
A108.1B—17: <b>[JR: most current A108 edition is 2017]</b>	Installation of Ceramic Tile, Quarry Tile on a Cured Portland Cement Mortar Setting Bed with Dry-set or Latex Portland Mortar	
A108.4—17:	Installation of Ceramic Tile with Organic Adhesives or Water-Cleanable Tile-setting Epoxy Adhesive	

<b>ANSI</b>	
American National Standards Institute 25 West 43rd Street, 4th Floor New York, NY 10036	
<b>Standard referenced</b>	<b>Title</b>
A108.5—17:	Installation of Ceramic Tile with Dry-set Portland Cement Mortar or Latex Portland Cement Mortar
A108.6—17:	Installation of Ceramic Tile with Chemical-resistant, Water-cleanable Tile-setting and -grouting Epoxy
A108.11—17:	Interior Installation of Cementitious Backer Units
ANSI 117—2015:	Standard Specifications for Structural Glued Laminated Timber of Softwood Species
A118.1—17:	American National Standard Specifications for Dry-set Portland Cement Mortar
A118.3—13:	American National Standard Specifications for Chemical-resistant, Water-cleanable Tile-setting and -grouting Epoxy, and Water-cleanable Tile-setting Epoxy Adhesive
A118.4—16:	American National Standard Specifications for Modified Dry-Set Cement Mortar
A118.10—17:	Specification for Load-bearing, Bonded, Waterproof Membranes for Thin-set Ceramic Tile and Dimension Stone Installation
A136.1—17:	American National Standard Specifications for Organic Adhesives for Installation of Ceramic Tile
A137.1—17:	American National Standard Specifications for Ceramic Tile
LC1/CSA 6.26— <del>13</del> 18:	Fuel Gas Piping Systems Using Corrugated Stainless Steel Tubing (CSST)
LC4/CSA 6.32—12:	Press-connect Metallic Fittings for Use in Fuel Gas Distribution Systems
Z21.1—2010:	Household Cooking Gas Appliances
Z21.5.1/ CSA 7.1—14:	Gas Clothes Dryers— Volume I—Type I Clothes Dryers
Z21.8—94 (R2002):	Installation of Domestic Gas Conversion Burners
Z21.10.1/ CSA 4.1—12:	Gas Water Heaters—Volume I—Storage Water Heaters with Input Ratings of 75,000 Btu per hour or Less
Z21.10.3/ CSA 4.3—11:	Gas Water Heaters—Volume III—Storage Water Heaters with Input Ratings above 75,000 Btu per hour, Circulating and Instantaneous

<b>ANSI</b>	
American National Standards Institute 25 West 43rd Street, 4th Floor New York, NY 10036	
<b>Standard referenced</b>	<b>Title</b>
Z21.11.2—11:	Gas-fired Room Heaters—Volume II—Unvented Room Heaters
Z21.13/ CSA 4.9—11:	Gas-fired Low-pressure Steam and Hot Water Boilers
Z21.15/ CSA 9.1—09:	Manually Operated Gas Valves for Appliances, Appliance Connector Valves and Hose End Valves
Z21.22—99 (R2015):	Relief Valves for Hot Water Supply Systems—with Addenda Z21.22a—2000 (R2003) and 21.22b—2001 (R2003)
Z21.24/ CSA 6.10—06:	Connectors for Gas Appliances
Z21.40.1/ CSA 2.91—96 (R2011):	Gas-fired, Heat-activated Air-conditioning and Heat Pump Appliances
Z21.40.2/ CSA 2.92—96 (R2011):	Air-conditioning and Heat Pump Appliances (Thermal Combustion)
Z21.42—2014:	Gas-fired Illuminating Appliances
Z21.47/ CSA 2.3—12:	Gas-fired Central Furnaces
Z21.50/ CSA 2.22—16:	Vented Gas Fireplaces
Z21.54—2009:	Gas Hose Connectors for Portable Outdoor Gas-fired Appliances
Z21.56/ CSA 4.7—17:	Gas-fired Pool Heaters
Z21.58—18/ CSA 1.6—18:	Outdoor Cooking Gas Appliances
Z21.60/ CSA 2.26—12:	Decorative Gas Appliances for Installation in Solid Fuel-burning Fireplaces
Z21.69/ CSA 6.16—09:	Connectors for Movable Gas Appliances
Z21.75/ CSA 6.27—07:	Connectors for Outdoor Gas Appliances and Manufactured Homes
Z21.80/ CSA 6.22—11:	Line Pressure Regulators
ANSI/ CSA FC 1—12:	Stationary Fuel Cell Power Systems
Z21.84—12:	Manually Listed, Natural Gas Decorative Gas Appliances for Installation in Solid Fuel-burning Fireplaces
Z21.86/ CSA 2.32—08:	Gas-fired Vented Space Heating Appliances
Z21.88/ CSA 2.33—16:	Vented Gas Fireplace Heaters
Z21.91—07:	Ventless Firebox Enclosures for Gas-fired Unvented Decorative Room Heaters

<b>ANSI</b>	
American National Standards Institute 25 West 43rd Street, 4th Floor New York, NY 10036	
<b>Standard referenced</b>	<b>Title</b>
Z21.93/ CSA 6.30—13:	Excess Flow Valves for Natural and LP Gas with Pressures up to 5 psig
Z21.97—12:	Outdoor Decorative Appliances
Z83.6—90 (R1998):	Gas-fired Infrared Heaters
Z83.8/ CSA 2.6—09:	Gas-fired Unit Heaters, Gas Packaged Heaters, Gas Utility Heaters and Gas-fired Duct Furnaces
Z83.19—01 (R2009):	Gas-fuel High-intensity Infrared Heaters
Z83.20—08:	Gas-fired Low-intensity Infrared Heaters Outdoor Decorative Appliances
Z97.1—2014:	Safety Glazing Materials Used in Buildings— Safety Performance Specifications and Methods of Test

<b>APA</b>	
APA—The Engineered Wood Association 7011 South 19th Tacoma, WA 98466	
<b>Standard referenced</b>	<b>Title</b>
ANSI/A190.1—2017:	Structural Glued-laminated Timber
ANSI/ APA PRP 210—2014:	Standard for Performance-rated Engineered Wood Siding
ANSI/ APA PRG 320—2017:	Standard for Performance-rated Cross Laminated Timber
ANSI/ APA PRR 410—2016:	Standard for Performance-rated Engineered Wood Rim Boards
ANSI/ APA PRS 610.1—2013:	Standard for Performance-Rated Structural Insulated Panels in Wall Applications
APA E30—15:	Engineered Wood Construction Guide

<b>ASCE/SEI</b>	
American Society of Civil Engineers Structural Engineering Institute 1801 Alexander Bell Drive Reston, VA 20191-4400	
<b>Standard referenced</b>	<b>Title</b>
7—16:	Minimum Design Loads and Associated Criteria for Buildings and Other Structures

<b>ASCE/SEI</b>	
American Society of Civil Engineers Structural Engineering Institute 1801 Alexander Bell Drive Reston, VA 20191-4400	
<b>Standard referenced</b>	<b>Title</b>
24—14: 32— <del>4701</del> :	Flood-resistant Design and Construction Design and Construction of Frost-protected Shallow Foundations
<b>ASHRAE</b>	
ASHRAE 1791 Tullie Circle NE Atlanta, GA 30329	
<b>Standard referenced</b>	<b>Title</b>
ASHRAE—2001: ASHRAE—2017:	2001 ASHRAE Handbook of Fundamentals for use in reference to Table 1105.5.2 (1) only ASHRAE Handbook of Fundamentals
ASHRAE 193—2010 (RA 2014): 34— <del>2016</del> <u>2022</u> :	Method of Test for Determining Air Tightness of HVAC Equipment Designation and Safety Classification of Refrigerants
<b>ASME</b>	
American Society of Mechanical Engineers Two Park Avenue New York, NY 10016-5990	
<b>Standard referenced</b>	<b>Title</b>
ASME A17.1—2016/ CSA B44—16: A18.1—2014: B1.20.1—2013: B16.33—2012: B16.44—2012: B36.10M—2004(R2015):	Safety Code for Elevators and Escalators Safety Standard for Platforms and Stairway Chair Lifts Pipe Threads, General-purpose (Inch) Manually Operated Metallic Gas Valves for Use in Gas Piping Systems up to 125 psig (Sizes $\frac{1}{2}$ through 2) Manually Operated Metallic Gas Valves for Use in Above-ground Piping Systems up to 5 psi Welded and Seamless Wrought-steel Pipe

<b>ASME</b>	
American Society of Mechanical Engineers Two Park Avenue New York, NY 10016-5990	
<b>Standard referenced</b>	<b>Title</b>
BPVC—2015:	ASME Boiler and Pressure Vessel Code (Sections I, II, IV, V, VI and VIII)
CSD-1—2016:	Controls and Safety Devices for Automatically Fired Boilers
<b>ASTM</b>	
ASTM International 100 Barr Harbor Drive, P.O. Box C700 West Conshohocken, PA 19428	
<b>Standard referenced</b>	<b>Title</b>
A36/A36M—14:	Specification for Carbon Structural Steel
A53/A53M—12:	Specification for Pipe, Steel, Black and Hot-dipped, Zinc-coated Welded and Seamless
A106/A106M—14:	Specification for Seamless Carbon Steel Pipe for High-temperature Service
A123/A123M—15:	Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
A153/A153M—09:	Specification for Zinc Coating (Hot Dip) on Iron and Steel Hardware
A167—99(2009):	Specification for Stainless and Heat-resisting Chromium-nickel Steel Plate, Sheet and Strip
A240/A240M—15A:	Standard Specification for Chromium and Chromium-nickel Stainless Steel Plate, Sheet and Strip for Pressure Vessels and for General Applications
A254—12:	Specification for Copper Brazed Steel Tubing
A268—2010:	Standard Specification for Seamless and Welded Ferritic and Martensitic Stainless Steel Tubing for General Service
A269—2015:	Standard Specification for Seamless and Welded Austenitic Stainless Steel Tubing for General Service
A307—14:	Specification for Carbon Steel Bolts and Studs, 60,000 psi Tensile Strength
A463/A463M—15:	Standard Specification for Steel Sheet, Aluminum-coated by the Hot-dip Process



<b>ASTM</b>	
ASTM International 100 Barr Harbor Drive, P.O. Box C700 West Conshohocken, PA 19428	
<b>Standard referenced</b>	<b>Title</b>
A539—99:	Specification for Electric-resistance-welded Coiled Steel Tubing for Gas and Fuel Oil Lines
A563—15:	Standard Specification for Carbon and Alloy Steel Nuts
A615/A615M—2015aE1:	Specification for Deformed and Plain Carbon-steel Bars for Concrete Reinforcement
A641/A641M—09a(2014):	Specification for Zinc-coated (Galvanized) Carbon Steel Wire
A653/A653M—15:	Specification for Steel Sheet, Zinc-coated (Galvanized) or Zinc-iron Alloy-coated (Galvannealed) by the Hot-dip Process
A706/A706M—15:	Specification for Low-alloy Steel Deformed and Plain Bars for Concrete Reinforcement
A755/A755M—2015:	Specification for Steel Sheet, Metallic Coated by the Hot-dip Process and Prepainted by the Coil-coating Process for Exterior Exposed Building Products
A792/A792M—10(2015):	Specification for Steel Sheet, 55% Aluminum-zinc Alloy-coated by the Hot-dip Process
A875/A875M—13:	Specification for Steel Sheet, Zinc-5%, Aluminum Alloy-coated by the Hot-dip Process
A924/A924M—14:	Standard Specification for General Requirements for Steel Sheet, Metallic-coated by the Hot-dip Process
A996/A996M—15:	Specifications for Rail-steel and Axle-steel Deformed Bars for Concrete Reinforcement
A1003/A1003M—15:	Standard Specification for Steel Sheet, Carbon, Metallic and Nonmetallic-coated for Cold-formed Framing Members
B42—2015A:	Specification for Seamless Copper Pipe, Standard Sizes
B43—15:	Specification for Seamless Red Brass Pipe, Standard Sizes
B75/B75M—11:	Specification for Seamless Copper Tube
B88—14:	Specification for Seamless Copper Water Tube
B101—12:	Specification for Lead-coated Copper Sheet and Strip for Building Construction

<b>ASTM</b>	
ASTM International 100 Barr Harbor Drive, P.O. Box C700 West Conshohocken, PA 19428	
<b>Standard referenced</b>	<b>Title</b>
B135—10:	Specification for Seamless Brass Tube
B209—14:	Specification for Aluminum and Aluminum-alloy Sheet and Plate
B251—10:	Specification for General Requirements for Wrought Seamless Copper and Copper-alloy Tube
B302—12:	Specification for Threadless Copper Pipe, Standard Sizes
B306—13:	Specification for Copper Drainage Tube (DWV)
B370—12:	Specification for Copper Sheet and Strip for Building Construction
B695—04(2009):	Standard Specification for Coatings of Zinc Mechanically Deposited on Iron and Steel
B813—10:	Specification for Liquid and Paste Fluxes for Soldering Applications of Copper and Copper Alloy Tube
B828—02(2010):	Practice for Making Capillary Joints by Soldering of Copper and Copper Alloy Tube and Fittings
C5—10:	Specification for Quicklime for Structural Purposes
C22/C22M—2015:	Specification for Gypsum
C27—98(2013):	Specification for Standard Classification of Fireclay and High-alumina Refractory Brick
C28/C28M—10(2015):	Specification for Gypsum Plasters
C33/C33M—13:	Specification for Concrete Aggregates
C34—13:	Specification for Structural Clay Load-bearing Wall Tile
C35/C35M—(2014):	Specification for Inorganic Aggregates for Use in Gypsum Plaster
C55—2014A:	Specification for Concrete Building Brick
C56—13:	Standard Specification for Structural Clay Nonloadbearing Tile
C59/C59M—00(2015):	Specification for Gypsum Casting Plaster and Molding Plaster
C61/C61M—00(2015):	Specification for Gypsum Keene's Cement

<b>ASTM</b>	
ASTM International 100 Barr Harbor Drive, P.O. Box C700 West Conshohocken, PA 19428	
<b>Standard referenced</b>	<b>Title</b>
C62—13A:	Standard Specification for Building Brick (Solid Masonry Units Made from Clay or Shale)
C73—14:	Specification for Calcium Silicate Face Brick (Sand Lime Brick)
C90—14:	Specification for Load-bearing Concrete Masonry Units
C91/C91M—12:	Specification for Masonry Cement
C94/C94M—15A:	Standard Specification for Ready-mixed Concrete
C126—15:	Standard Specification for Ceramic Glazed Structural Clay Facing Tile, Facing Brick, and Solid Masonry Units
C129—14A:	Specification for Nonload-bearing Concrete Masonry Units
C143/C143M—15:	Test Method for Slump of Hydraulic Cement Concrete
C145—85:	Specification for Solid Load-bearing Concrete Masonry Units
C150/C150M—15:	Specification for Portland Cement
C199—84(2011):	Test Method for Pier Test for Refractory Mortar
C203—05a(2012):	Standard Test Methods for Breaking Load and Flexural Properties of Block-type Thermal Insulation
C207—06(2011):	Specification for Hydrated Lime for Masonry Purposes
C208—12:	Specification for Cellulosic Fiber Insulating Board
C212—14:	Standard Specification for Structural Clay Facing Tile
C216—15:	Specification for Facing Brick (Solid Masonry Units Made from Clay or Shale)
C270—14A:	Specification for Mortar for Unit Masonry
C315—07(2011):	Specification for Clay Flue Liners and Chimney Pots
C406/C406M—2015:	Specifications for Roofing Slate
C411—11:	Test Method for Hot-surface Performance of High-temperature Thermal Insulation

<b>ASTM</b>	
ASTM International 100 Barr Harbor Drive, P.O. Box C700 West Conshohocken, PA 19428	
<b>Standard referenced</b>	<b>Title</b>
C475/C475M—15:	Specification for Joint Compound and Joint Tape for Finishing Gypsum Wallboard
C476—10:	Specification for Grout for Masonry
C503/C503M—2010:	Standard Specification for Marble Dimension Stone
C514—04(2014):	Specification for Nails for the Application of Gypsum Wallboard
C552—15:	Standard Specification for Cellular Glass Thermal Insulation
C557—03(2009)e01:	Specification for Adhesives for Fastening Gypsum Wallboard to Wood Framing
C568/C568M—2010:	Standard Specification for Limestone Dimension Stone
C578—15:	Specification for Rigid, Cellular Polystyrene Thermal Insulation
C587—04(2014):	Specification for Gypsum Veneer Plaster
C595/C595M—14E1:	Specification for Blended Hydraulic Cements
C615/C615M—11:	Standard Specification for Granite Dimension Stone
C616/C616M—10:	Standard Specification for Quartz-based Dimension Stone
C629/C629M—10:	Standard Specification for Slate Dimension Stone
C631—09(2014):	Specification for Bonding Compounds for Interior Gypsum Plastering
C645—14:	Specification for Nonstructural Steel Framing Members
C652—15:	Specification for Hollow Brick (Hollow Masonry Units Made from Clay or Shale)
C685/C685M—14:	Specification for Concrete Made by Volumetric Batching and Continuous Mixing
C726—12:	Standard Specification for Mineral Wool Roof Insulation Board
C728—15:	Standard Specification for Perlite Thermal Insulation Board
C744—14:	Standard Specification for Prefaced Concrete and Calcium Silicate Masonry Units

<b>ASTM</b>	
ASTM International 100 Barr Harbor Drive, P.O. Box C700 West Conshohocken, PA 19428	
<b>Standard referenced</b>	<b>Title</b>
C836/C836M—15:	Specification for High Solids Content, Cold Liquid-applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course
C841—03(2013):	Standard Specification for Installation of Interior Lathing and Furring
C842—05(2015):	Standard Specification for Application of Interior Gypsum Plaster
C843—99(2012):	Specification for Application of Gypsum Veneer Plaster
C844—2015:	Specification for Application of Gypsum Base to Receive Gypsum Veneer Plaster
C847—14A:	Specification for Metal Lath
C887—13:	Specification for Packaged, Dry, Combined Materials for Surface Bonding Mortar
C897—15:	Specification for Aggregate for Job-mixed Portland Cement-based Plasters
C920—14A:	Standard Specification for Elastomeric Joint Sealants
C926—15B:	Specification for Application of Portland Cement-based Plaster
C933—14:	Specification for Welded Wire Lath
C946—10:	Standard Practice for Construction of Dry-Stacked, Surface-Bonded Walls
C954—15:	Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.033 in (0.84 mm) or to 0.112 in. (2.84 mm) in Thickness
C957/C957M—15:	Specification for High-solids Content, Cold Liquid-applied Elastomeric Waterproofing Membrane for Use with Integral Wearing Surface
C1002—14:	Specification for Steel Self-piercing Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs

<b>ASTM</b>	
ASTM International 100 Barr Harbor Drive, P.O. Box C700 West Conshohocken, PA 19428	
<b>Standard referenced</b>	<b>Title</b>
C1029—15:	Specification for Spray-applied Rigid Cellular Polyurethane Thermal Insulation
C1032—14:	Specification for Woven Wire Plaster Base
C1047—14a:	Specification for Accessories for Gypsum Wallboard and Gypsum Veneer Base
C1063—15A:	Specification for Installation of Lathing and Furring to Receive Interior and Exterior Portland Cement-based Plaster
C1088—14:	Standard Specification for Thin Veneer Brick Units Made from Clay or Shale
C1107/C1107M—14A:	Standard Specification for Packaged Dry, Hydraulic-cement Grout (Nonshrink)
C1116/C116M—10(2015):	Standard Specification for Fiber-reinforced Concrete and Shotcrete
C1157—11/C1157M—11:	Standard Performance Specification for Hydraulic Cement
C1167—11:	Specification for Clay Roof Tiles
C1177/C1177M—13:	Specification for Glass Mat Gypsum Substrate for Use as Sheathing
C1178/C1178M—13:	Specification for Glass Mat Water-resistant Gypsum Backing Panel
C1186—08(2012):	Specification for Flat Fiber Cement Sheets
C1261—13:	Specification for Firebox Brick for Residential Fireplaces
C1278/C1278M—07a(2011):	Specification for Fiber-reinforced Gypsum Panels
C1283—11:	Practice for Installing Clay Flue Lining
C1288—14:	Standard Specification for Discrete Nonasbestos Fiber-cement Interior Substrate Sheets
C1289—15:	Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board
C1325—14:	Standard Specification for Nonasbestos Fiber-mat Reinforced Cement Interior Substrate Sheets Backer Units
C1328/C1328M—12:	Specification for Plastic (Stucco) Cement
C1363—11:	The Standard Test Method for Thermal Performance of Building Materials and

<b>ASTM</b>	
ASTM International 100 Barr Harbor Drive, P.O. Box C700 West Conshohocken, PA 19428	
<b>Standard referenced</b>	<b>Title</b>
	Envelope Assemblies by Means of a Hot Box Apparatus
C1364—10B:	Standard Specification for Architectural Cast Stone
C1396/C1396M—2014A:	Specification for Gypsum Board
C1405—15:	Standard Specification for Glazed Brick (Single Fired, Brick Units)
C1492—03(2009):	Specification for Concrete Roof Tile
C1513—2013:	Standard Specification for Steel Tapping Screws for Cold-formed Steel Framing Connections
C1634—15:	Standard Specification for Concrete Facing Brick
C1658/C1658M—13:	Standard Specification for Glass Mat Gypsum Panels
C1668—13a:	Standard Specification for Externally Applied Reflective Insulation Systems on Rigid Duct in Heating, Ventilation, and Air Conditioning (HVAC) Systems
C1670/1670M—16:	Standard Specification for Adhered Manufactured Stone Masonry Veneer Units
C1691—11:	Standard Specification for Unreinforced Autoclaved Aerated Concrete (AAC) Masonry Units
C1693—11:	Standard Specification for Autoclaved Aerated Concrete (AAC)
C1766—13:	Standard Specification for Factory-Laminated Gypsum Panel Products
D41/D41M—2011:	Specification for Asphalt Primer Used in Roofing, Dampproofing and Waterproofing
D43/D43M—2000(2012)E1:	Specification for Coal Tar Primer Used in Roofing, Dampproofing and Waterproofing
D226/D226M—09:	Specification for Asphalt-saturated (Organic Felt) Used in Roofing and Waterproofing
D227/D227M—03(2011)e1:	Specification for Coal Tar Saturated (Organic Felt) Used in Roofing and Waterproofing
D312/D321M—15:	Specification for Asphalt Used in Roofing
D422—63(2007)E2:	Test Method for Particle-size Analysis of Soils

<b>ASTM</b>	
ASTM International 100 Barr Harbor Drive, P.O. Box C700 West Conshohocken, PA 19428	
<b>Standard referenced</b>	<b>Title</b>
D449/D449M—03(2014)E1:	Specification for Asphalt Used in Dampproofing and Waterproofing
D450/D450M—07(2013)E1:	Specification for Coal-tar Pitch Used in Roofing, Dampproofing and Waterproofing
D1227—13:	Specification for Emulsified Asphalt Used as a Protective Coating for Roofing
D1248—12:	Specification for Polyethylene Plastics Extrusion Materials for Wire and Cable
D1693—15:	Test Method for Environmental Stress-cracking of Ethylene Plastics
D1784—11:	Standard Specification for Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds
D1863/D1863M—05(2011)e1:	Specification for Mineral Aggregate Used in Built-up Roofs
D1970/D1970M—2015A:	Specification for Self-adhering Polymer Modified Bitumen Sheet Materials Used as Steep Roofing
D2178/D2178M—15:	Underlayment for Ice Dam Protection Specification for Asphalt Glass Felt Used in Roofing and Waterproofing
D2412—11:	Test Method for Determination of External Loading Characteristics of Plastic Pipe by Parallel-plate Loading
D2447—03:	Specification for Polyethylene (PE) Plastic Pipe Schedules 40 and 80, Based on Outside Diameter
D2513—2014e1:	Specification for Gas Pressure Pipe, Tubing and Fittings
D2626/D2626M—04 (2012)e1:	Specification for Asphalt-saturated and Coated Organic Felt Base Sheet Used in Roofing
D2683—14:	Specification for Socket-type Polyethylene Fittings for Outside Diameter-controlled Polyethylene Pipe and Tubing
D2822/D2822M—05(2011)e1:	Specification for Asphalt Roof Cement, Asbestos Containing



<b>ASTM</b>	
ASTM International 100 Barr Harbor Drive, P.O. Box C700 West Conshohocken, PA 19428	
<b>Standard referenced</b>	<b>Title</b>
D2823/D2823M—05(2011)e1:	Specification for Asphalt Roof Coatings, Asbestos Containing
D2824/D2824M—2013:	Specification for Aluminum-pigmented Asphalt Roof Coatings, Nonfibered, Asbestos Fibered and Fibered without Asbestos
D2898—10:	Test Methods for Accelerated Weathering of Fire-retardant-treated Wood for Fire Testing
D3019—08:	Specification for Lap Cement Used with Asphalt Roll Roofing, Nonfibered, Asbestos Fibered and Nonasbestos Fibered
D3161/D3161M—15:	Test Method for Wind-Resistance of Steep Slope Roofing Products (Fan Induced Method)
D3201/D3201M—2013:	Test Method for Hygroscopic Properties of Fire-retardant Wood and Wood-base Products
D3309—96a(2002):	Specification for Polybutylene (PB) Plastic Hot- and Cold-water Distribution System
D3350—14:	Specification for Polyethylene Plastic Pipe and Fitting Materials
D3462/D3462M—10A:	Specification for Asphalt Shingles Made From Glass Felt and Surfaced with Mineral Granules
D3468/D3468M—99(2013)E1:	Specification for Liquid-applied Neoprene and Chlorosulfanated Polyethylene Used in Roofing and Waterproofing
D3679—13:	Specification for Rigid Poly (Vinyl Chloride) (PVC) Siding
D3737—2012:	Practice for Establishing Allowable Properties for Structural Glued Laminated Timber (Glulam)
D3747—79(2007):	Specification for Emulsified Asphalt Adhesive for Adhering Roof Insulation
D3909/D3909M—14:	Specification for Asphalt Roll Roofing (Glass Felt) Surfaced with Mineral Granules
D4022/D4022M—2007(2012)e1:	Specification for Coal Tar Roof Cement, Asbestos Containing
D4318—10E1:	Test Methods for Liquid Limit, Plastic Limit and Plasticity Index of Soils

<b>ASTM</b>	
ASTM International 100 Barr Harbor Drive, P.O. Box C700 West Conshohocken, PA 19428	
<b>Standard referenced</b>	<b>Title</b>
D4434/D4434M—12:	Specification for Poly (Vinyl Chloride) Sheet Roofing
D4479/D4479M—07(2012)e1:	Specification for Asphalt Roof Coatings— asbestos-free
D4586/D4586M—07(2012)e1:	Specification for Asphalt Roof Cemen— asbestos-free
D4601/D4601M—04(2012)e1:	Specification for Asphalt-coated Glass Fiber Base Sheet Used in Roofing
D4637/D4637M—14E1:	Specification for EPDM Sheet Used in Single- ply Roof Membrane
D4829—11:	Test Method for Expansion Index of Soils
D4869/D4869M—15:	Specification for Asphalt-saturated (Organic Felt) Underlayment Used in Steep Slope Roofing
D4897/D4897M—01(2009):	Specification for Asphalt Coated Glass-fiber Venting Base Sheet Used in Roofing
D4990—1997a(2013):	Specification for Coal Tar Glass Felt Used in Roofing and Waterproofing
D5019—07a:	Specification for Reinforced Nonvulcanized Polymeric Sheet Used in Roofing Membrane
D5055—13E1:	Specification for Establishing and Monitoring Structural Capacities of Prefabricated Wood I- joists
D5456—14B:	Standard Specification for Evaluation of Structural Composite Lumber Products
D5516—09:	Test Method for Evaluating the Flexural Properties of Fire-retardant-treated Softwood Plywood Exposed to the Elevated Temperatures
D5643/D5643M—06(2012)e1:	Specification for Coal Tar Roof Cement Asbestos-free
D5664—10:	Test Methods For Evaluating the Effects of Fire-retardant Treatments and Elevated Temperatures on Strength Properties of Fire- retardant-treated Lumber
D5665/D5665M—99a(2014)E1:	Specification for Thermoplastic Fabrics Used in Cold-applied Roofing and Waterproofing

<b>ASTM</b>	
ASTM International 100 Barr Harbor Drive, P.O. Box C700 West Conshohocken, PA 19428	
<b>Standard referenced</b>	<b>Title</b>
D5726—98(2013):	Specification for Thermoplastic Fabrics Used in Hot-applied Roofing and Waterproofing
D6083—05e01:	Specification for Liquid-applied Acrylic Coating Used in Roofing
D6162/D6162M—2000a(2015)E1:	Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using a Combination of Polyester and Glass Fiber Reinforcements
D6163/D6163M—2000(2015)E1:	Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using Glass Fiber Reinforcements
D6164/D6164M—11:	Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using Polyester Reinforcements
D6222/D6222M—11:	Specification for Atactic Polypropylene (APP) Modified Bituminous Sheet Materials Using Polyester Reinforcements
D6223/D6223M—02(2009)E1:	Specification for Atactic Polypropylene (APP) Modified Bituminous Sheet Materials Using a Combination of Polyester and Glass Fiber Reinforcement
D6298—13:	Specification for Fiberglass-reinforced Styrene Butadiene Styrene (SBS) Modified Bituminous Sheets with a Factory Applied Metal Surface
D6305—08(2015)E1:	Practice for Calculating Bending Strength Design Adjustment Factors for Fire-retardant-treated Plywood Roof Sheathing
D6380/D6380—03(2013)E1:	Standard Specification for Asphalt Roll Roofing (Organic Felt)
D6464—03a(2009)e1:	Standard Specification for Expandable Foam Adhesives for Fastening Gypsum Wallboard to Wood Framing
D6694/D6694M—08(2013)E1:	Standard Specification for Liquid-applied Silicone Coating Used in Spray Polyurethane Foam Roofing Systems

<b>ASTM</b>	
ASTM International 100 Barr Harbor Drive, P.O. Box C700 West Conshohocken, PA 19428	
<b>Standard referenced</b>	<b>Title</b>
D6754/D6754M—10:	Standard Specification for Ketone-ethylene-ester-based Sheet Roofing
D6757—2013:	Specification for Underlayment Felt Containing Inorganic Fibers Used with Steep Slope Roofing
D6841—08:	Standard Practice for Calculating Design Value Treatment Adjustment Factors for Fire-retardant-treated Lumber
D6878/D6878M—13:	Standard Specification for Thermoplastic-polyolefin-based Sheet Roofing
D6947/D6947M—07(2013)E1:	Standard Specification for Liquid Applied Moisture Cured Polyurethane Coating Used in Spray
D7032—14:	Polyurethane Foam Roofing System Standard Specification for Establishing Performance Ratings for Wood-plastic Composite Deck Boards and Guardrail Systems (Guards or Handrails)
D7158—D7158M—2016:	Standard Test Method for Wind Resistance of Asphalt Shingles (Uplift Force/Uplift Resistance Method)
D7254—15:	Standard Specification for Polypropylene (PP) siding
D7425/D7425M—13:	Standard Specification for Spray Polyurethane Foam Used for Roofing Application
D7672—14:	Standard Specification for Evaluating Structural Capacities of Rim Board Products and Assemblies
D7793—13:	Standard Specification for Insulated Vinyl Siding
E84—2016:	Standard Test Method for Surface Burning Characteristics of Building Materials
E96/E96M—2015:	Test Method for Water Vapor Transmission of Materials
E108—2016:	Test Methods for Fire Tests of Roof Coverings
E119—2016:	Test Methods for Fire Tests of Building Construction and Materials

<b>ASTM</b>	
ASTM International 100 Barr Harbor Drive, P.O. Box C700 West Conshohocken, PA 19428	
<b>Standard referenced</b>	<b>Title</b>
E136—2016:	Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C
E283—04(2012):	Test Method for Determining the Rate of Air Leakage through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences across the Specimen
E330/E330M—14:	Test Method for Structural Performance of Exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference
E331—00(2009):	Test Method for Water Penetration of Exterior Windows, Skylights, Doors and Curtain Walls by Uniform Static Air Pressure Difference
E779—10:	Standard Test Method for Determining Air Leakage Rate by Fan Pressurization
E814—2013A:	Standard Test Method for Fire Tests of Penetration Firestop Systems
E970—14:	Standard Test Method for Critical Radiant Flux of Exposed Attic Floor Insulation Using a Radiant Heat Energy Source
E1509—12:	Standard Specification for Room Heaters, Pellet Fuel-burning Type
E1602—03(2010)e1:	Guide for Construction of Solid Fuel Burning Masonry Heaters
E1827—11:	Standard Test Methods for Determining Airtightness of Building Using an Orifice Blower Door
E1886—13A:	Test Method for Performance Impact Protective Systems Impacted by Missile(s) and Exposed to Cyclic Pressure Differentials
E1996—2014a:	Standard Specification for Performance of Exterior Windows, Curtain Walls, Doors and Impact Protective Systems Impacted by Windborne Debris in Hurricanes
E2178—2013:	Standard Test Method for Air Permeance of Building Materials

<b>ASTM</b>	
ASTM International 100 Barr Harbor Drive, P.O. Box C700 West Conshohocken, PA 19428	
<b>Standard referenced</b>	<b>Title</b>
E2231—15:	Standard Practice for Specimen Preparation and Mounting of Pipe and Duct Insulation Materials to Assess Surface Burning Characteristics
E2273—03(2011):	Standard Test Method for Determining the Drainage Efficiency of Exterior Insulation and Finish Systems (EIFS) Clad Wall Assemblies
E2568—09e1:	Standard Specification for PB Exterior Insulation and Finish Systems
E2570/E2570M—07(2014)E1:	Standard Test Methods for Evaluating Water-resistant Barrier (WRB) Coatings Used Under Exterior Insulation and Finish Systems (EIFS) or EIFS with Drainage
E2634—11(2015):	Standard Specification for Flat Wall Insulating Concrete Form (ICF) Systems
F844—07a(2013):	Standard Specification for Washers, Steel, Plain (Flat), Unhardened for General Use
F876—15A:	Specification for Cross-linked Polyethylene (PEX) Tubing
F877—2011A:	Specification for Cross-linked Polyethylene (PEX) Plastic Hot- and Cold-water Distribution Systems
F1055—13:	Specification for Electrofusion Type Polyethylene Fittings for Outside Diameter Controlled Polyethylene and Crosslinked Polyethylene Pipe and Tubing
F1281—11:	Specification for Cross-linked Polyethylene/Aluminum/Cross-linked Polyethylene (PEX-AL-PEX) Pressure Pipe
F1282—10:	Specification for Polyethylene/Aluminum/Polyethylene (PE-AL-PE) Composite Pressure Pipe
F1554—15:	Specification for Anchor Bolts, Steel, 36, 55 and 105-ksi Yield Strength
F1667—15:	Specification for Driven Fasteners, Nails, Spikes and Staples
F1807—15:	Specification for Metal Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked

<b>ASTM</b>	
ASTM International 100 Barr Harbor Drive, P.O. Box C700 West Conshohocken, PA 19428	
<b>Standard referenced</b>	<b>Title</b>
	Polyethylene (PEX) Tubing and SDR9 Polyethylene of Raised Temperature (PE-RT) Tubing
F1924—12:	Standard Specification for Plastic Mechanical Fittings for Use on Outside Diameter Controlled Polyethylene Gas Distribution Pipe and Tubing
F1960—15:	Specification for Cold Expansion Fittings with PEX Reinforcing Rings for Use with Cross- linked Polyethylene (PEX) Tubing
F1970—12E1:	Standard Specification for Special Engineered Fittings, Appurtenances or Valves for Use in Poly (Vinyl Chloride) (PVC) or Chlorinated Poly (Vinyl Chloride) (CPVC) Systems
F1973—13E1:	Standard Specification for Factory Assembled Anodeless Risers and Transition Fittings in Polyethylene (PE) and Polyamide 11 (PA 11) Fuel Gas Distribution Systems
F 2090—17:	Specification for Window Fall Prevention Devices with Emergency Escape (Egress) Release Mechanisms
F2098—08:	Standard Specification for Stainless Steel Clamps for Securing SDR9 Cross-linked Polyethylene (PEX) Tubing to Metal Insert and Plastic Insert Fittings
F2389—15:	Standard for Pressure-rated Polypropylene (PP) Piping Systems
F2623—14:	Standard Specification for Polyethylene of Raised Temperature (PE-RT) SDRG Tubing
F2735—09:	Standard Specification for Plastic Insert Fittings for SDR9 Cross-linked Polyethylene (PEX) and Polyethylene of Raised Temperature (PE-RT) Tubing
F2769—14:	Polyethylene or Raised Temperature (PE-RT) Plastic Hot and Cold-Water Tubing and Distribution Systems

<b>ASTM</b>	
ASTM International 100 Barr Harbor Drive, P.O. Box C700 West Conshohocken, PA 19428	
<b>Standard referenced</b>	<b>Title</b>
F2806—10(2015):	Standard Specification for Acrylonitrile-butadiene-styrene (ABS) Plastic Pipe (Metric SDR-PR)
F2945—2015:	Standard Specification for Polyamide 11 Gas Pressure Pipe, Tubing and Fittings
F2969—12:	Standard Specification for Acrylonitrile-butadiene-styrene (ABS) IPS Dimensioned Pressure Pipe

<b>AWC</b>	
American Wood Council 222 Catoctin Circle SE, Suite 201 Leesburg, VA 20175	
<b>Standard referenced</b>	<b>Title</b>
AWC STJR—2015:	Span Tables for Joists and Rafters
ANSI/AWC WFCM—2018:	Wood Frame Construction Manual for One- and Two-family Dwellings
ANSI/AWC NDS—2018:	National Design Specification (NDS) for Wood Construction—with 2018 Supplement
ANSI/AWC PWF—2015:	Permanent Wood Foundation Design Specification

<b>AWPA</b>	
American Wood Protection Association P.O. Box 361784 Birmingham, AL 35236-1784	
<b>Standard referenced</b>	<b>Title</b>
C1—03:	All Timber Products—Preservative Treatment by Pressure Processes
M4—16:	Standard for the Care of Preservative-treated Wood Products
U1—16:	USE CATEGORY SYSTEM: User Specification for Treated Wood Except Commodity Specification H



<b>AWS</b>		American Welding Society 8669 NW 36 Street, #130 Miami, FL 33166
<b>Standard referenced</b>	<b>Title</b>	
ANSI/AWS A5.31M/A5.31—2012:	Specification for Fluxes for Brazing and Braze Welding Edition: 2nd	
<b>AWWA</b>		American Water Works Association 6666 West Quincy Avenue Denver, CO 80235
<b>Standard referenced</b>	<b>Title</b>	
C903—16:	Polyethylene-aluminum-polyethylene (PE-AL- PE) Composite Pressure Pipe, 12 mm ( <sup>1</sup> / <sub>2</sub> in.) through 50 mm (2 in.), for Water Service	
<b>CEN</b>		European Committee for Standardization (EN) Central Secretariat Rue de Stassart 36 B-10 50 Brussels
<b>Standard referenced</b>	<b>Title</b>	
EN 15250-2007:	Slow Heat Release Appliances Fired by Solid Fuel Requirements and Test Methods	
<b>CPA</b>		Composite Panel Association 19465 Deerfield Avenue, Suite 306 Leesburg, VA 20176
<b>Standard referenced</b>	<b>Title</b>	
ANSI A135.4—2012:	Basic Hardboard	
ANSI A135.5—2012:	Prefinished Hardboard Paneling	
ANSI A135.6—2012:	Engineered Wood Siding	
ANSI A135.7—2012:	Engineered Wood Trim	
A208.1—2016:	Particleboard	

<b>CPSC</b>	
Consumer Product Safety Commission 4330 East-West Highway Bethesda, MD 20814	
<b>Standard referenced</b>	<b>Title</b>
16 CFR, Part 1201—(2002):	Safety Standard for Architectural Glazing
16 CFR, Part 1209—(2002):	Interim Safety Standard for Cellulose Insulation
16 CFR, Part 1404—(2002):	Cellulose Insulation
<b>CSA</b>	
CSA Group 8501 East Pleasant Valley Road Cleveland, OH 44131-5516	
<b>Standard referenced</b>	<b>Title</b>
AAMA/WDMA/CSA 101/I.S.2/A440—17:	North American Fenestration Standard/ Specification for Windows, Doors and Unit Skylights
ANSI/CSA FC I—2014:	Fuel Cell Technologies—Part 3-100; Stationary fuel cell power systems-Safety
ASME A17.1/ CSA B44—2016: CSA 8—93:	Safety Code for Elevators and Escalators  Requirements for Gas Fired Log Lighters for Wood Burning Fireplaces
B44—2016:	Safety Code for Elevators and Escalators
B55.1—2015:	Test Method for Measuring Efficiency and Pressure Loss of Drain Water Heat Recovery Units
B55.2—2015:	Drain Water Heat Recovery Units
B137.9—16:	Polyethylene/Aluminum/Polyethylene (PE-AL- PE) Composite Pressure Pipe Systems
B137.10—13:	Cross-linked Polyethylene/Aluminum/Cross- linked Polyethylene (PE-AL-PE) Composite Pressure Pipe Systems
B137.18—13:	Polyethylene of Raised Temperature (PE-RT) Tubing Systems for Pressure Applications
C22.2 No. 218.1— M89(R2011):	Spas, Hot Tubs and Associated Equipment
C22.2 No. 236—15:	Heating and Cooling Equipment
CSA C448 Series—16:	Design and Installation of Earth Energy Systems
CSA O325—07:	Construction Sheathing
O437-Series—93:	Standards on OSB and Waferboard (Reaffirmed 2006)

<b>CSA</b>		CSA Group 8501 East Pleasant Valley Road Cleveland, OH 44131-5516
<b>Standard referenced</b>	<b>Title</b>	
<del>CAN/CSA</del> C22.2 No. 60335-2-40—2012 <u>2022</u> :	Safety of Household and Similar Electrical Appliances; <del>-Safety-</del> Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers	
<b>CSSB</b>		Cedar Shake & Shingle Bureau P.O. Box 1178 Sumas, WA 98295-1178
<b>Standard referenced</b>	<b>Title</b>	
CSSB—97:	Grading and Packing Rules for Western Red Cedar Shakes and Western Red Shingles of the Cedar Shake and Shingle Bureau	
<b>DASMA</b>		Door & Access Systems Manufacturers Association International 1300 Sumner Avenue Cleveland, OH 44115-2851
<b>Standard referenced</b>	<b>Title</b>	
105—2016:	Test Method for Thermal Transmittance and Air Infiltration of Garage Doors and Rolling Doors	
108—2017:	Standard Method for Testing Garage Doors, Rolling Doors and Flexible Doors; Determination of Structural Performance Under Uniform Static Air Pressure Difference	
115—2016:	Standard Method for Testing Sectional Garage Doors, Rolling Doors and Flexible Doors: Determination of Structural Performance Under Missile Impact and Cyclic Wind Pressure	
<b>DOC</b>		United States Department of Commerce 1401 Constitution Avenue, NW Washington, DC 20230
<b>Standard referenced</b>	<b>Title</b>	
PS 1—09:	Structural Plywood	

PS 2—10:	Performance Standard for Wood-based Structural-use Panels
PS 20—05:	American Softwood Lumber Standard

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**DOTn** U.S. Department of Transportation  
1200 New Jersey Avenue SE  
East Building, 2nd floor  
Washington, DC 20590

Standard referenced	Title
49 CFR, Parts 192.281(e) & 192.283 (b) (2009):	Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards

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**FEMA** Federal Emergency Management Agency  
500 C Street SW  
Washington, DC 20472

Standard referenced	Title
FEMA TB-2—08: FEMA TB-11—01:	Flood Damage-resistant Materials Requirements Crawlspace Construction for Buildings Located in Special Flood Hazard Area

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**FM** FM Approvals  
Headquarters Office  
1151 Boston-Providence Turnpike  
P.O. Box 9102  
Norwood, MA 02062

Standard referenced	Title
4450—(1989):	Approval Standard for Class 1 Insulated Steel Deck Roofs—with Supplements through July 1992
4880—(2015):	Approval Standard for Class 1 Rating of Building Panels or Interior Finish Materials

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**GA** Gypsum Association  
6525 Belcrest Road, Suite 480  
Hyattsville, MD 20782

Standard referenced	Title
GA-253—2016:	Application of Gypsum Sheathing

<b>HPVA</b>	
Hardwood Plywood & Veneer Association 1825 Michael Faraday Drive Reston, Virginia 20190	
<b>Standard referenced</b>	<b>Title</b>
ANSI/HPVA HP-1—2016:	American National Standard for Hardwood and Decorative Plywood
<b>HVI</b>	
Home Ventilating Institute 1000 North Rand Road Suite 214 Wauconda, IL 60084	
<b>Standard referenced</b>	<b>Title</b>
916—09	Airflow Test Procedure
<b>ICC</b>	
International Code Council, Inc. 500 New Jersey Avenue NW 6th Floor Washington, DC 20001	
<b>Standard referenced</b>	<b>Title</b>
ANSI/RESNET/ICC 301—2014:	Standard for the Calculation and Labeling of the Energy Performance of Low-Rise Residential Buildings using the Energy Rating Index, March 7, 2014, republished 2016
ANSI/RESNET/ICC 380—2016:	Standard for Testing Airtightness of Building Enclosures, Airtightness of Heating and Cooling Air Distribution and Airflow of Mechanical Ventilation Systems
ICC/ANSI A117.1—09: ICC 400—17:	Accessible and Usable Buildings and Facilities Standard on the Design and Construction of Log Structures
ICC 500—14:	ICC/NSSA Standard on the Design and Construction of Storm Shelters
ICC 600—14:	Standard for Residential Construction in High-wind Regions
ICC 900/SRCC 300—2015:	Solar Thermal System Standard
ICC 901/SRCC 100—2015:	Solar Thermal Collector Standard
IEBC—18:	International Existing Building Code®
IECC—18:	International Energy Conservation Code®

<b>ICC</b>	International Code Council, Inc. 500 New Jersey Avenue NW 6th Floor Washington, DC 20001
<b>Standard referenced</b>	<b>Title</b>
IECC—06:	International Energy Conservation Code® for use with 1101.6 only.
IFGC—18:	International Fuel Gas Code®
<b>IEEE</b>	Institute of Electrical and Electronic Engineers, Inc. 3 Park Avenue, 17th Floor New York, NY 10016-5997
<b>Standard referenced</b>	<b>Title</b>
515.1—2012:	IEEE Standard for the Testing, Design, Installation and Maintenance of Electrical Resistance Trace Heating for Commercial Applications
<b>ISO</b>	International Organization for Standardization Chemin de Blandonnet 8 CP 401 1214 Vernier Geneva, Switzerland
<b>Standard referenced</b>	<b>Title</b>
8336—2009:	Fibre-cement Flat Sheets-product Specification and Test Methods
15874—2002:	Polypropylene Plastic Piping Systems for Hot and Cold Water Installations
<b>MSS</b>	Manufacturers Standardization Society of the Valve and Fittings Industry 127 Park Street, NE Vienna, VA 22180
<b>Standard referenced</b>	<b>Title</b>
SP-58—09:	Pipe Hangers and Supports—Materials, Design, Manufacture, Selection, Application and Installation

<b>NAIMA</b>	
North American Insulation Manufacturers Association 11 Canal Center Plaza, Suite 101 Alexandria, VA 22314	
<b>Standard referenced</b>	<b>Title</b>
AH 116—09:	Fibrous Glass Duct Construction Standards, Fifth Edition
<b>NFPA</b>	
National Fire Protection Association 1 Batterymarch Park Quincy, MA 02169-7471	
<b>Standard referenced</b>	<b>Title</b>
13—16:	Standard for Installation of Sprinkler Systems
13D—16:	Standard for the Installation of Sprinkler Systems in One- and Two-family Dwellings and Manufactured Homes
13R—16:	Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies
<i>30-15</i>	<i>Flammable and combustible liquids code</i>
31—16:	Standard for the Installation of Oil-burning Equipment
<i>37-10</i>	<i>Standard for the installation and use of stationary combustion engines and gas turbines</i>
58—17:	Liquefied Petroleum Gas Code
70— <del>1723</del> :	National Electrical Code ( <i>as modified in Chapter 34</i> )
72—16:	National Fire Alarm and Signaling Code
85—15:	Boiler and Combustion Systems Hazards Code
<i>110-10</i>	<i>Standard for emergency and standby power systems</i>
<i>111-10</i>	<i>Standard on stored electrical energy emergency and standby power systems</i>
211—16:	Standard for Chimneys, Fireplaces, Vents and Solid Fuel Burning Appliances
259—18:	Standard for Test Method for Potential Heat of Building Materials
275—17:	Standard Method of Fire Tests for the Evaluation of Thermal Barriers
286—15:	Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth
501—17:	Standard on Manufactured Housing

<b>NFPA</b>	
National Fire Protection Association 1 Batterymarch Park Quincy, MA 02169-7471	
<b>Standard referenced</b>	<b>Title</b>
720—15:	Standard for the Installation of Carbon Monoxide (CO) Detectors and Warning Equipment
853—15:	Standard on the Installation of Stationary Fuel Cell Power Systems
<b>NFRC</b>	
National Fenestration Rating Council, Inc. 6305 Ivy Lane, Suite 140 Greenbelt, MD 20770	
<b>Standard referenced</b>	<b>Title</b>
100—2017:	Procedure for Determining Fenestration Products <i>U</i> -Factors
200—2017:	Procedure for Determining Fenestration Product Solar Heat Gain Coefficients and Visible Transmittance at Normal Incidence
400—2017:	Procedure for Determining Fenestration Product Air Leakage
<b>NSF</b>	
NSF International 789 N. Dixboro Road P.O. Box 130140 Ann Arbor, MI 48105	
<b>Standard referenced</b>	<b>Title</b>
14—2015:	Plastics Piping System Components and Related Materials
358-1—2014:	Polyethylene Pipe and Fittings for Water-based Ground Source “Geothermal” Heat Pump Systems
358-2—2012:	Polypropylene Pipe and Fittings for Water-based Ground Source “Geothermal” Heat Pump Systems
<b>PCA</b>	
Portland Cement Association 5420 Old Orchard Road Skokie, IL 60077	
<b>Standard referenced</b>	<b>Title</b>



100—12: Prescriptive Design of Exterior Concrete Walls for One- and Two-family Dwellings (Pub. No. EB241)

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<b>SBCA</b>	Structural Building Components Association 6300 Enterprise Lane Madison, WI 53719
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Standard referenced	Title
BCSI—2013 (Updated March 2015):	Building Component Safety Information Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses
CFS-BCSI—2008:	Cold-formed Steel Building Component Safety Information (CFSBCSI) Guide to Good Practice for Handling, Installing & Bracing of Cold-formed Steel Trusses
FS100—12:	Standard Requirements for Wind Pressure Resistance of Foam Plastic Insulating Sheathing Used in Exterior Wall Covering Assemblies

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<b>SMACNA</b>	Sheet Metal & Air Conditioning Contractors National Assoc. Inc. 4021 Lafayette Center Road Chantilly, VA 22021
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Standard referenced	Title
SMACNA—10:	Fibrous Glass Duct Construction Standards (2003)
SMACNA/ANSI—2016:	HVAC Duct Construction Standards—Metal and Flexible 4th Edition (ANSI) 2016

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<b>TMS</b>	The Masonry Society 105 South Sunset Street, Suite Q Longmont, CO 80501
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Standard referenced	Title
402—2016:	Building Code Requirements for Masonry Structures
403—2017:	Direct Design Handbook for Masonry Structures
404—2016:	Standard for the Design of Architectural Cast Stone
602—2016:	Specification for Masonry Structures

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<b>TPI</b>	
Truss Plate Institute 218 N. Lee Street, Suite 312 Alexandria, VA 22314	
<b>Standard referenced</b>	<b>Title</b>
TPI 1—2014:	National Design Standard for Metal-plate-connected Wood Truss Construction
<b>UL</b>	
UL LLC 333 Pfingsten Road Northbrook, IL 60062	
<b>Standard referenced</b>	<b>Title</b>
17—2008:	Vent or Chimney Connector Dampers for Oil-fired Appliances—with revisions through September 2013
55A—04:	Materials for Built-up Roof Coverings
58—96:	Steel Underground Tanks for Flammable and Combustible Liquids—with Revisions through July 1998
80—2007:	Steel Tanks for Oil-burner Fuel— with revisions through January 2014
103—2010:	Factory-built Chimneys for Residential Type and Building Heating Appliances— with revisions through July 2012
127—2011:	Factory-built Fireplaces— with revisions through May 2015
174—04:	Household Electric Storage Tank Water Heaters— with revisions through April 2015
180—2012:	Liquid-level Indicating Gauges for Oil Burner Fuels and Other Combustible Liquids
181—05:	Factory-made Air Ducts and Air Connectors—with revisions through May 2003
181A—2013:	Closure Systems for Use with Rigid Air Ducts and Air Connectors— with revisions through December 1998
181B—2013:	Closure Systems for Use with Flexible Air Ducts and Air Connectors— with revisions through August 2003
217—06:	Single- and Multiple-station Smoke Alarms— with revisions through October 2015
263—2011:	Standards for Fire Test of Building Construction and Materials—with revisions through June 2015
268—2009:	Smoke Detectors for Fire Alarm Systems

<b>UL</b>	
UL LLC 333 Pfingsten Road Northbrook, IL 60062	
<b>Standard referenced</b>	<b>Title</b>
325—02:	Door, Drapery, Gate, Louver and Window Operations and Systems—with revisions through May 2015
343—2008:	Pumps for Oil-burning Appliances—with revisions through June 2013
378—06:	Draft Equipment—with revisions through June 12, 2014
441—10:	Gas Vents—with revisions through June 12, 2014
507—99:	Standard for Electric Fans
508—99:	Industrial Control Equipment—with revisions through October 2013
515—11:	Electrical Resistance Heat Tracing for Commercial and Industrial Applications Including Revisions through July 2015
536—97:	Flexible Metallic Hose—with revisions through December 2014
641—2010:	Type L, Low-temperature Venting Systems—with revisions through June 2013
651—2011:	Schedule 40 and Schedule 80 Rigid PVC Conduit and Fittings—with revisions through May 2014
705—04:	Standard for Power Ventilators—with revisions through December 2013
723—08:	Standard for Test for Surface Burning Characteristics of Building Materials—with revisions through August 2013
726—95:	Oil-fired Boiler Assemblies—with revisions through October 2013
727—06:	Oil-fired Central Furnaces—with revisions through October 2013
729—03:	Oil-fired Floor Furnaces—with revisions through October 2013
730—03:	Oil-fired Wall Furnaces—with revisions through October 2013
732—95:	Oil-fired Storage Tank Water Heaters—with revisions through October 2013
737—2011:	Fireplaces Stoves—with revisions through August 2015

<b>UL</b>	
UL LLC 333 Pfingsten Road Northbrook, IL 60062	
<b>Standard referenced</b>	<b>Title</b>
790—04:	Standard Test Methods for Fire Tests of Roof Coverings—with revisions through July 2014
795—2011:	Commercial-industrial Gas Heating Equipment—with revisions through November 2013
834—04:	Heating, Water Supply and Power Boilers—Electric—with revisions through December 2013
842—07:	Valves for Flammable Fluids—with revisions through May 2015
858—05:	Household Electric Ranges—with revisions through June 2015
875—09:	Electric Dry-bath Heaters—with revisions through December 2013
896—93:	Oil-burning Stoves—with revisions through November 2013
923—2013:	Microwave Cooking Appliances—with revisions through June 2015
959—2010:	Medium Heat Appliance Factory-built Chimneys—with revisions through June 2014
1026—2012:	Electric Household Cooking and Food Serving Appliances—with revisions through August 2015
1040—96:	Fire Test of Insulated Wall Construction—with revisions through October 2012
1042—2009:	Electric Baseboard Heating Equipment—with revisions through September 2014
1256—02:	Fire Test of Roof Deck Construction—with revisions through July 2013
1261—01:	Electric Water Heaters for Pools and Tubs—with revisions through July 2012
1479—03:	Fire Tests of Through-Penetration Firestops—with revisions through June 2015
1482—2011:	Solid-Fuel-type Room Heaters—with revisions through August 2015
1563—2009:	Standard for Electric Spas, Hot Tubs and Associated Equipment—with revisions through March 2015
1618—09:	Wall Protectors, Floor Protectors, and Hearth Extensions—with revisions through October 2015

<b>UL</b>	
UL LLC 333 Pfingsten Road Northbrook, IL 60062	
<b>Standard referenced</b>	<b>Title</b>
1693—2010:	Electric Radiant Heating Panels and Heating Panel Sets—with revisions through October 2011
1703—02:	Flat-plate Photovoltaic Modules and Panels— with revisions through October 2015
1715—97:	Fire Test of Interior Finish Material— with revisions through January 2013
1738—2010:	Venting Systems for Gas-burning Appliances, Categories II, III and IV— with revisions through November 2014
1741—2010:	Inverters, Converters, Controllers and Interconnection System Equipment with Distributed Energy Resources— with revisions through January 2015
1777—07:	Chimney Liners— with revisions through October 2015
1897—12:	Uplift Tests for Roof Covering Systems— with revisions through September 2015
1995— <del>2011</del> <u>2015</u> :	Heating and Cooling Equipment— <del>with revisions through July 2015</del>
1996—2009:	Electric Duct Heaters— with revisions through June 2014
2034—08:	Standard for Single- and Multiple-station Carbon Monoxide Alarms—with revisions through March 2015
2075—2013:	Standard for Gas and Vapor Detectors and Sensors
2158A—2010:	Outline of Investigation for Clothes Dryer Transition Duct
2200-15	<i>Stationary engine generator assemblies</i>
2523—09:	Standard for Solid Fuel-fired Hydronic Heating Appliances, Water Heaters and Boilers— with revisions through February 2013
2703—14:	Mounting Systems, Mounting Devices, Clamping/Retention Devices and Ground Lugs for Use with Flat-Plate Photovoltaic Modules and Panels
9540—14:	Outline of Investigation for Energy Storage Systems and Equipment
<del>UL/CSA/ANCE</del> 60335-2-40— <del>2012</del> <u>2022</u> :	<del>Standard for Household and Similar Electrical Appliances, -Safety-Part 2-40:</del>

<b>UL</b>	UL LLC 333 Pfingsten Road Northbrook, IL 60062
<b>Standard referenced</b>	<b>Title</b>
	Particular Requirements for <del>Motor compressors</del> <u>Electrical Heat Pumps, Air-Conditioners and Dehumidifiers</u>
<b>ULC</b>	ULC 13775 Commerce Parkway Richmond, BC V6V 2V4
<b>Standard referenced</b>	<b>Title</b>
CAN/ULC S 102.2—2010:	Standard Methods for Test for Surface Burning Characteristics of Building Materials and Assemblies
<b>US-FTC</b>	United States-Federal Trade Commission 600 Pennsylvania Avenue NW Washington, DC 20580
<b>Standard referenced</b>	<b>Title</b>
CFR Title 16(2015):	R-value Rule
<b>WDMA</b>	Window and Door Manufacturers Association 2025 M Street NW, Suite 800 Washington, DC 20036-3309
<b>Standard referenced</b>	<b>Title</b>
AAMA/WDMA/CSA 101/ I.S.2/A440—17: I.S. 11—13:	North American Fenestration Standard/ Specifications for Windows, Doors and Skylights Industry Standard Analytical Method for Design Pressure (DP) Ratings of Fenestration Products
<b>WMA</b>	World Millwork Alliance (formerly Association of Millwork Distributors Standards AMD) 10047 Robert Trent Parkway New Port Richey, FL 34655-4649
<b>Standard referenced</b>	<b>Title</b>
ANSI WMA 100—2016:	Standard Method of Determining Structural Performance Ratings of Side Hinged Exterior

Door Systems and Procedures for Component  
Substitution

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Effective: 4/15/2024

Five Year Review (FYR) Dates: 7/1/2024

CERTIFIED ELECTRONICALLY

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Certification

03/29/2024

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Date

Promulgated Under: 119.03  
Statutory Authority: 3781.10(A)(1)  
Rule Amplifies: 3781.01, 3781.06, 3781.10, 3781.11, 3791.04, 4740.14  
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06/24/2008, 01/01/2009, 01/01/2013, 07/01/2014,  
01/01/2016, 01/01/2018, 07/01/2019