

# CHAPTER 44

## REFERENCED STANDARDS

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**User note:**

*About this chapter:* The one- and two-family dwelling code contains numerous references to standards promulgated by other organizations that are used to provide requirements for materials, products and methods of construction. Chapter 44 contains a comprehensive list of all standards that are referenced in this code. These standards, in essence, are part of this code to the extent of the reference to the standard.

*This chapter lists the standards that are referenced in various sections of this document. The standards are listed herein by the promulgating agency of the standard, the standard identification, the effective date and title, and the section or sections of this document that reference the standard. The application of the referenced standards shall be as specified in Section R102.4.*

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### AAMA

American Architectural Manufacturers Association  
1827 Walden Office Square, Suite 550  
Schaumburg, IL 60173

- AAMA/WDMA/CSA 101/IS.2/A440—17: North American Fenestration Standards/Specifications for Windows, Doors and Skylights**  
R308.6.9, R609.3, N1102.4.3
- 450—10: Voluntary Performance Rating Method for Mullled Fenestration Assemblies**  
R609.8
- 506—16: Voluntary Specifications for Hurricane Impact and Cycle Testing of Fenestration Products**  
R609.6.1
- 711—13: Voluntary Specification for Self-adhering Flashing Used for Installation of Exterior Wall Fenestration Products**  
R703.4
- 712—14: Voluntary Specification for Mechanically Attached Flexible Flashing**  
R703.4
- 714—15: Voluntary Specification for Liquid Applied Flashing Used to Create a Water-resistive Seal around Exterior Wall Openings in Buildings**  
R703.4
- AAMA/NPEA/NSA 2100—12: Specifications for Sunrooms**  
R301.2.1.1.1

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### ACCA

Air Conditioning Contractors of America  
2800 Shirlington Road, Suite 300  
Arlington, VA 22206

- Manual D—2016: Residential Duct Systems**  
Table R301.2(1), M1601.1, M1602.2
- Manual J—2016: Residential Load Calculation—Eighth Edition**  
N1103.7, M1401.3
- Manual S—2014: Residential Equipment Selection**  
N1103.7, M1401.3

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### ACI

American Concrete Institute  
38800 Country Club Drive  
Farmington Hills, MI 48331

- 318—14: Building Code Requirements for Structural Concrete**  
R301.2.2.2.5, R402.2, Table R404.1.2(2), Table R404.1.2(5), Table R404.1.2(6), Table R404.1.2(7),  
Table R404.1.2(8), R404.1.3, R404.1.3.1, R404.1.3.3, R404.1.3.4, R404.1.4.2, R404.5.1, R608.1,  
R608.1.1, R608.1.2, R608.2, R608.5.1, R608.6.1, R608.8.2, R608.9.2, R608.9.3

**ACI—continued**

- 332—14: Residential Code Requirements for Structural Concrete**  
R402.2, R403.1, R404.1.3, R404.1.3.4, R404.1.4.2, R506.1

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## AISI

American Iron and Steel Institute  
25 Massachusetts Avenue, NW Suite 800  
Washington, DC 20001

**AISI S100—16: North American Specification for the Design of Cold-formed Steel Structural Members, 2016**

R608.9.2, R608.9.3

**AISI S220—15: North American Standard for Cold-formed Steel Framing—Nonstructural Members, 2015**

R702.3.3

**AISI S230—15: Standard for Cold-formed Steel Framing—Prescriptive Method for One- and Two-family Dwellings, 2015**

R301.1.1, R301.2.1.1, R301.2.2.7, R301.2.2.8, R603.6, R603.9.4.1, R603.9.4.2, R608.9.2, R608.9.3,  
Figure 608.9(11), R608.10

**AISI S240—15: North American Standard for Cold-Formed Steel Structural Framing**

R505.1.3, R603.6, R702.3.3, R804.3.6

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## AMCA

Air Movement and Control Association International  
30 West University Drive  
Arlington Heights, IL 60004

**ANSI/AMCA 210-ANSI/ASHRAE 51—07: Laboratory Methods of Testing Fans for Aerodynamic Performance Rating**

Table M1505.3

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## ANCE

Association of the Electric Sector  
Av. Lázaro Cardenas No. 869  
Col. Nueva Industrial Vallejo  
C.P. 07700 México D.F.

**NMX-J-521/2-40-ANCE—2014/CAN/CSA-22.2 No. 60335-2-40—12/UL 60335-2-40: Safety of Household and Similar Electric Appliances, Part 2-40: Particular Requirements for Heat Pumps, Air-Conditioners and Dehumidifiers**

M1403.1, M1412.1, M1413.1

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## ANSI

American National Standards Institute  
25 West 43rd Street, 4th Floor  
New York, NY 10036

**A108.1A—16: Installation of Ceramic Tile in the Wet-set Method, with Portland Cement Mortar**

R702.4.1

**A108.1B—99: Installation of Ceramic Tile, Quarry Tile on a Cured Portland Cement Mortar Setting Bed with Dry-set or Latex Portland Mortar**

R702.4.1

**A108.4—99: Installation of Ceramic Tile with Organic Adhesives or Water-Cleanable Tile-setting Epoxy Adhesive**

R702.4.1

**A108.5—99: Installation of Ceramic Tile with Dry-set Portland Cement Mortar or Latex Portland Cement Mortar**

R702.4.1

**A108.6—99: Installation of Ceramic Tile with Chemical-resistant, Water-cleanable Tile-setting and -grouting Epoxy**

R702.4.1

**A108.11—99: Interior Installation of Cementitious Backer Units**

R702.4.1

**ANSI 117—2015: Standard Specifications for Structural Glued Laminated Timber of Softwood Species**

R502.1.3, R602.1.3, R802.1.3

**A118.1—16: American National Standard Specifications for Dry-set Portland Cement Mortar**

R702.4.1

**ANSI—continued**

- A118.3—13: American National Standard Specifications for Chemical-resistant, Water-cleanable Tile-setting and -grouting Epoxy, and Water-cleanable Tile-setting Epoxy Adhesive**  
R702.4.1
- A118.4—16: American National Standard Specifications for Modified Dry-Set Cement Mortar**  
R606.2.11
- A118.10—99: Specification for Load-bearing, Bonded, Waterproof Membranes for Thin-set Ceramic Tile and Dimension Stone Installation**  
P2709.2, P2709.2.4
- A136.1—08: American National Standard Specifications for Organic Adhesives for Installation of Ceramic Tile**  
R702.4.1
- A137.1—17: American National Standard Specifications for Ceramic Tile**  
R702.4.1
- LC1/CSA 6.26—13: Fuel Gas Piping Systems Using Corrugated Stainless Steel Tubing (CSST)**  
G2414.5.4, G2411.3, G2415.5
- LC4/CSA 6.32—12: Press-connect Metallic Fittings for Use in Fuel Gas Distribution Systems**  
G2414.10.1, G2414.10.2, G2414.10.3, G2415.5
- Z21.1—2010: Household Cooking Gas Appliances**  
G2447.1, M1503.2
- Z21.5.1/CSA 7.1—14: Gas Clothes Dryers—Volume I—Type I Clothes Dryers**  
G2438.1
- Z21.8—94 (R2002): Installation of Domestic Gas Conversion Burners**  
G2443.1
- 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**  
G2448.1
- 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**  
G2448.1
- Z21.11.2—11: Gas-fired Room Heaters—Volume II—Unvented Room Heaters**  
G2445.1
- Z21.13/CSA 4.9—11: Gas-fired Low-pressure Steam and Hot Water Boilers**  
G2452.1
- Z21.15/CSA 9.1—09: Manually Operated Gas Valves for Appliances, Appliance Connector Valves and Hose End Valves**  
Table G2420.1.1
- Z21.22—99 (R2003): Relief Valves for Hot Water Supply Systems—with Addenda Z21.22a—2000 (R2003) and 21.22b—2001 (R2003)**  
P2804.2, P2804.7
- Z21.24/CSA 6.10—06: Connectors for Gas Appliances**  
G2422.1, G2422.2
- Z21.40.1/CSA 2.91—96 (R2011): Gas-fired, Heat-activated Air-conditioning and Heat Pump Appliances**  
G2449.1
- Z21.40.2/CSA 2.92—96 (R2011): Air-conditioning and Heat Pump Appliances (Thermal Combustion)**  
G2449.1
- Z21.42—2014: Gas-fired Illuminating Appliances**  
G2450.1
- Z21.47/CSA 2.3—12: Gas-fired Central Furnaces**  
G2442.1
- Z21.50/CSA 2.22—16: Vented Gas Fireplaces**  
G2434.1
- Z21.54—2009: Gas Hose Connectors for Portable Outdoor Gas-fired Appliances**  
G2422.1
- Z21.56/CSA 4.7—17: Gas-fired Pool Heaters**  
G2441.1

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### ANSI—continued

- Z21.58—95/CSA 1.6—13: Outdoor Cooking Gas Appliances**  
G2447.1
- Z21.60/CSA 2.26—12: Decorative Gas Appliances for Installation in Solid Fuel-burning Fireplaces**  
G2432.1
- Z21.69/CSA 6.16—09: Connectors for Movable Gas Appliances**  
G2422.1.5
- Z21.75/CSA 6.27—07: Connectors for Outdoor Gas Appliances and Manufactured Homes**  
G2422.1
- Z21.80/CSA 6.22—11: Line Pressure Regulators**  
G2421.1
- ANSI/CSA FC 1—12: Stationary Fuel Cell Power Systems**  
M1903.1
- Z21.84—12: Manually Listed, Natural Gas Decorative Gas Appliances for Installation in Solid Fuel-burning Fireplaces**  
G2432.1, G2432.2
- Z21.86/CSA 2.32—08: Gas-fired Vented Space Heating Appliances**  
G2436.1, G2437.1, G2446.1
- Z21.88/CSA 2.33—16: Vented Gas Fireplace Heaters**  
G2435.1
- Z21.91—07: Ventless Firebox Enclosures for Gas-fired Unvented Decorative Room Heaters**  
G2445.7.1
- Z21.93/CSA 6.30—13: Excess Flow Valves for Natural and LP Gas with Pressures up to 5 psig**  
G2421.4
- Z21.97—12: Outdoor Decorative Appliances**  
G2454.1
- Z83.6—90 (R1998): Gas-fired Infrared Heaters**  
G2451.1
- Z83.8/CSA 2.6—09: Gas-fired Unit Heaters, Gas Packaged Heaters, Gas Utility Heaters and Gas-fired Duct Furnaces**  
G2444.1
- Z83.19—01 (R2009): Gas-fuel High-intensity Infrared Heaters**  
G2451.1
- Z83.20—08: Gas-fired Low-intensity Infrared Heaters Outdoor Decorative Appliances**  
G2451.1
- Z97.1—2014: Safety Glazing Materials Used in Buildings—Safety Performance Specifications and Methods of Test**  
R308.1.1, R308.3.1, Table R303.3.1(2)

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## APA

APA—The Engineered Wood Association  
7011 South 19th  
Tacoma, WA 98466

- ANSI/A190.1—2017: Structural Glued-laminated Timber**  
R502.1.3, R602.1.3, R802.1.2
- ANSI/APA PRP 210—2014: Standard for Performance-rated Engineered Wood Siding**  
R604.1, Table R703.3(1), R703.3.4
- ANSI/APA PRG 320—2017: Standard for Performance-rated Cross Laminated Timber**  
R502.1.6, R602.1.6, R802.1.6
- ANSI/APA PRR 410—2016: Standard for Performance-rated Engineered Wood Rim Boards**  
R502.1.7, R602.1.7, R802.1.7
- ANSI/APA PRS 610.1—2013: Standard for Performance-Rated Structural Insulated Panels in Wall Applications**  
R602.1.11, R610.3, R610.4
- APA E30—15: Engineered Wood Construction Guide**  
Table R503.2.1.1(1), R503.2.2, R803.2.2, R803.2.3

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## APSP

The Association of Pool & Spa Professionals  
211 Eisenhower Avenue, Suite 500  
Alexander, VA 22314

**ANSI/APSP/ICC 14—2014: American National Standard for Portable Electric Spa Energy Efficiency**  
N1103.11

**ANSI/APSP/ICC 15a—2011: American National Standard for Residential Swimming Pool and Spa Energy Efficiency—includes Appendix A Approved January 9, 2013**  
N1103.12

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## ASCE/SEI

American Society of Civil Engineers  
Structural Engineering Institute  
1801 Alexander Bell Drive  
Reston, VA 20191-4400

**7—16: Minimum Design Loads and Associated Criteria for Buildings and Other Structures**  
R301.2.1.1, R301.2.1.2, R301.2.1.2.1, R301.2.1.5, R301.2.1.5.1, Table R608.6(1), Table R608.6(2),  
Table R608.6(3), Table R608.6(4), Table R608.7(1A), Table R608.7(1B), Table R608.7(1C), R608.9.2,  
R608.9.3, R609.2, R609.6.2, AH107.4.3

**24—14: Flood-resistant Design and Construction**  
R301.2.4, R301.2.4.1, R322.1, R322.1.1, R322.1.6, R322.1.9, R322.2.2, R322.3.3

**32—01: Design and Construction of Frost-protected Shallow Foundations**  
R403.1.4.1

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## ASHRAE

ASHRE  
1791 Tullie Circle NE  
Atlanta, GA 30329

**ASHRAE—2001: 2001 ASHRAE Handbook of Fundamentals**  
Table N1105.5.2(1)

**ASHRAE—2017: ASHRAE Handbook of Fundamentals**  
N1102.1.5, P3001.2, P3101.4

**ASHRAE 193—2010(RA 2014): Method of Test for Determining Air Tightness of HVAC Equipment**  
N1103.3.2.1

**34—2016: Designation and Safety Classification of Refrigerants**  
M1411.1

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## ASME

American Society of Mechanical Engineers  
Two Park Avenue  
New York, NY 10016-5990

**ASME A17.1—2016/CSA B44—16: Safety Code for Elevators and Escalators**  
R321.1

**A18.1—2014: Safety Standard for Platforms and Stairway Chair Lifts**  
R321.2

**A112.1.2—2012: Air Gaps in Plumbing Systems (For Plumbing Fixtures and Water Connected Receptors)**  
P2717.1, Table P2902.3, P2902.3.1

**A112.1.3—2000 (Reaffirmed 2015): Air Gap Fittings for Use with Plumbing Fixtures, Appliances and Appurtenances**  
Table P2701.1, P2717.1, Table P2902.3, P2902.3.1

**A112.3.1—2007(R2012): Stainless Steel Drainage Systems for Sanitary, DWV, Storm and Vacuum Applications Above and Below Ground**  
Table P3002.1(1), Table P3002.1(2), Table P3002.2, Table P3002.3, Table P3302.1

**A112.3.4—2013/CSA B45.9—13: Macerating Toilet Systems and Related Components**  
Table P2701.1, P3007.5

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**ASME—continued**

- A112.4.1—2009: Water Heater Relief Valve Drain Tubes**  
P2804.6.1
- ASME A112.4.2—2015/CSA B45.16—15: Water-closet Personal Hygiene Devices**  
P2722.5
- A112.4.3—1999 (R2010): Plastic Fittings for Connecting Water Closets to the Sanitary Drainage System**  
P3003.14
- A112.4.14—2004 (R2016): Manually Operated, Quarter-turn Shutoff Valves for Use in Plumbing Systems**  
Table P2903.9.4
- A112.6.2—2000 (R2016): Framing-affixed Supports for Off-the-floor Water Closets with Concealed Tanks**  
Table P2701.1, P2702.4
- A112.6.3—2001 (R2016): Floor and Trench Drains**  
Table P2701.1
- A112.14.1—03(2012): Backwater Valves**  
P3008.3
- A112.18.1—2017/CSA B125.1—2017: Plumbing Supply Fittings**  
Table P2701.1, P2708.5, P2722.1, P2722.3, P2727.2, P2902.2, Table P2903.9.4
- A112.18.2—2015/CSA B125.2—2015: Plumbing Waste Fittings**  
Table P2701.1, P2702.2
- A112.18.3—2002(R2012): Performance Requirements for Backflow Protection Devices and Systems in Plumbing Fixture Fittings**  
P2708.5, P2722.3
- A112.18.6—2017/CSA B125.6—17: Flexible Water Connectors**  
P2906.7
- A112.19.1—2013/CSA B45.2—2013: Enameled Cast-iron and Enameled Steel Plumbing Fixtures**  
Table P2701.1, P2711.1
- A112.19.2—2013/CSA B45.1—2013: Ceramic Plumbing Fixtures**  
Table P2701.1, P2705.1, P2711.1, P2712.1, P2712.2, P2712.9
- A112.19.3—2008/CSA B45.4—08 (R2013): Stainless Steel Plumbing Fixtures**  
Table P2701.1, P2705.1, P2711.1, P2712.1
- A112.19.5—2017/CSA B45.15—2017: Flush Valves and Spuds for Water-closets, Urinals and Tanks**  
Table P2701.1
- A112.19.7—2017/CSA B45.10—2017: Hydromassage Bathtub Systems**  
Table P2701.1
- A112.19.12—2014: Wall-mounted and Pedestal-mounted, Adjustable, Elevating, Tilting, and Pivoting Lavatory and Sink, and Shampoo Bowl Carrier Systems and Drain Waste Systems**  
Table P2701.1, P2711.4, P2714.2
- A112.19.14—2013: Six-Liter Water Closets Equipped with Dual Flushing Device**  
P2712.1
- A112.19.15—2012: Bathtub/Whirlpool Bathtubs with Pressure-sealed Doors**  
Table P2701.1, P2713.2
- A112.36.2m—1991 (R2012): Cleanouts**  
P3005.2.10.2
- ASSE 1002—2015/ASME A112.1002—2015/CSA B125.12—15: Anti-Siphon Fill Valves**  
Table P2701.1, Table P2902.3, P2902.4.1
- B1.20.1—2013: Pipe Threads, General-purpose (Inch)**  
G2414.9, P3003.3.3, P3003.6.4, P3003.7.1, P3003.9.3
- B16.3—2016: Malleable-iron-threaded Fittings, 150 and 300**  
Table P2906.6
- B16.4—2016: Gray-iron-threaded Fittings**  
Table P2906.6, Table P3002.3
- B16.9—2012: Factory-made, Wrought-steel Buttwelding Fittings**  
Table P2906.6