

## CHAPTER 6 [CE]

# REFERENCED STANDARDS

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 106.

**AAMA** American Architectural Manufacturers Association  
1827 Walden Office Square  
Suite 550  
Schaumburg, IL 60173-4268

Standard reference number	Title	Referenced in code section number
AAMA/WDMA/CSA 101/LS.2/A C440—11	North American Fenestration Standard/ Specifications for Windows, Doors and Unit Skylights .....	Table C402.5.2

**AHAM** Association of Home Appliance Manufacturers  
1111 19th Street, NW, Suite 402  
Washington, DC 20036

Standard reference number	Title	Referenced in code section number
ANSI/AHAM RAC-1—2008	Room Air Conditioners .....	Table C403.2.3(3)
AHAM HRF-1—2007	Energy, Performance and Capacity of Household Refrigerators, Refrigerator-Freezers and Freezers .....	Table C403.2.14.1

**AHRI** Air-Conditioning, Heating, and Refrigeration Institute  
2111 Wilson Blvd, Suite 500  
Arlington, VA 22201

Standard reference number	Title	Referenced in code section number
ISO/AHRI/ASHRAE 13256-1 (2011)	Water-to-Air and Brine-to-Air Heat Pumps— Testing and Rating for Performance .....	Table C403.2.3(2)
ISO/AHRI/ASHRAE 13256-2 (2011)	Water-to-Water and Brine-to-Water Heat Pumps — Testing and Rating for Performance .....	Table C403.2.3(2)
210/240—08 with Addenda 1 and 2	Performance Rating of Unitary Air-Conditioning and Air-Source Heat Pump Equipment .....	Table C403.2.3(1), Table C403.2.3(2)
310/380—04 (CSA-C744-04)	Standard for Packaged Terminal Air Conditioners and Heat Pumps .....	Table C403.2.3(3)
340/360—2007 with Addendum 2	Performance Rating of Commercial and Industrial Unitary Air-Conditioning and Heat Pump Equipment .....	Table C403.2.3(1), Table C403.2.3(2)
365(I-P)—09	Commercial and Industrial Unitary Air-Conditioning Condensing Units .....	Table C403.2.3(1), Table C403.2.3(6)
390—03	Performance Rating of Single Package Vertical Air-Conditioners and Heat Pumps .....	Table C403.2.3(3)
400—2001	Liquid to Liquid Heat Exchangers with Addendum 1 and 2 .....	Table C403.2.3(10)
440—2008	Performance Rating of Room Fan Coils .....	C403.2.10
460—2005	Performance Rating of Remote Mechanical-Draft Air-Cooled Refrigerant Condensers .....	Table C403.2.3(8)

**REFERENCED STANDARDS**

**AHRI—continued**

550/590—2011 With Addendum 1	Performance Rating of Water-Chilling and Heat Pump Water-Heating Packages Using the Vapor Compression Cycle . . . . .	C403.2.3.1, Table C403.2.3(7)
560—00	Absorption Water Chilling and Water Heating Packages . . . . .	Table C403.2.3(7)
1160 (I-P)—09	Performance Rating of Heat Pump Pool Heaters . . . . .	Table C404.2
1200-2010	Performance Rating of Commercial Refrigerated Display Merchandisers and Storage Cabinets . . . . .	C403.2.14, Table C403.2.14(1), Table C403.2.14(2)

**AMCA**

Air Movement and Control Association International  
30 West University Drive  
Arlington Heights, IL 60004-1806

Standard reference number	Title	Referenced in code section number
205—12	Energy Efficiency Classification for Fans . . . . .	C403.2.12.3
220—08 (R2012)	Laboratory Methods of Testing Air Curtain Units for Aerodynamic Performance Rating . . . . .	C402.5.6
500D—12	Laboratory Methods for Testing Dampers for Rating . . . . .	C403.2.4.3

**ANSI**

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

Standard reference number	Title	Referenced in code section number
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 Tank and Instantaneous . . . . .	Table C404.2
Z21.47/CSA 2.3—12	Gas-fired Central Furnaces . . . . .	Table C403.2.3(4)
Z83.8/CSA 2.6—09	Gas Unit Heaters, Gas Packaged Heaters, Gas Utility Heaters and Gas-fired Duct Furnaces . . . . .	Table C403.2.3(4)

**APSP**

The Association of Pool & Spa Professionals  
2111 Eisenhower Avenue  
Alexandria, VA 22314

Standard reference number	Title	Referenced in code section number
14—11	American National Standard for Portable Electric Spa Efficiency . . . . .	C404.8

**ASHRAE**

American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.  
1791 Tullie Circle, NE  
Atlanta, GA 30329-2305

Standard reference number	Title	Referenced in code section number
ASHRAE 127-2007	Method of Testing for Rating Computer . . . . .	Table C403.2.3(9)
ANSI/ASHRAE/ACCA Standard 183—2007 (RA2011)	Peak Cooling and Heating Load Calculations in Buildings, Except Low-rise Residential Buildings . . . . .	C403.2.1
ASHRAE—2012	ASHRAE HVAC Systems and Equipment Handbook . . . . .	C403.2.1
ISO/AHRI/ASHRAE 13256-1 (2011)	Water-to-Air and Brine-to-Air Heat Pumps—Testing and Rating for Performance . . . . .	Table C403.2.3(2)

ASHRAE—continued

ISO/AHRI/ASHRAE 13256-2 (2011)	Water-to-Water and Brine-to-Water Heat Pumps—Testing and Rating for Performance . . . . .	Table C403.2.3(2)
90.1—2013	Energy Standard for Buildings Except Low-rise Residential Buildings . . . . .	C401.2, Table C402.1.3, Table C402.1.4, C406.2, Table C407.6.1, C502.1, C503.1, C504.1
140—2011	Standard Method of Test for the Evaluation of Building Energy Analysis Computer Programs . . . . .	C407.6.1
146—2011	Testing and Rating Pool Heaters . . . . .	Table C404.2

**ASME**

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

Standard reference number	Title	Referenced in code section number
ASME A17.1/ CSA B44—2013	Safety Code for Elevators and Escalators . . . . .	C405.9.2

**ASTM**

ASTM International  
100 Barr Harbor Drive  
West Conshohocken, PA 19428-2859

Standard reference number	Title	Referenced in code section number
C 90—13	Specification for Load-bearing Concrete Masonry Units . . . . .	Table C401.3
C 1363—11	Standard Test Method for Thermal Performance of Building Materials and Envelope Assemblies by Means of a Hot Box Apparatus. . . . .	C303.1.4.1, Table C402.1.4
C 1371—04a(2010)e1	Standard Test Method for Determination of Emittance of Materials Near Room Temperature Using Portable Emissometers . . . . .	Table C402.3
C 1549—09	Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using A Portable Solar Reflectometer . . . . .	Table C402.3
D 1003—11e1	Standard Test Method for Haze and Luminous Transmittance of Transparent Plastics . . . . .	C402.4.2.2
E 283—04	Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences Across the Specimen . . . . .	C402.5.1.2.2, Table C402.5.2, C402.5.7
E 408—71(2008)	Test Methods for Total Normal Emittance of Surfaces Using Inspection-meter Techniques . . . . .	Table C402.3
E 779—10	Standard Test Method for Determining Air Leakage Rate by Fan Pressurization . . . . .	C402.5
E 903—96	Standard Test Method Solar Absorptance, Reflectance and Transmittance of Materials Using Integrating Spheres (Withdrawn 2005). . . . .	Table C402.3
E 1677—11	Standard Specification for an Air-retarder (AR) Material or System for Low-rise Framed Building Walls. . . . .	C402.5.1.2.2
E 1918—06	Standard Test Method for Measuring Solar Reflectance of Horizontal or Low-sloped Surfaces in the Field . . . . .	Table C402.3
E 1980—11	Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low-sloped Opaque Surfaces . . . . .	Table C402.3, C402.3.2
E 2178—13	Standard Test Method for Air Permanence of Building Materials . . . . .	C402.5.1.2.1
E 2357—11	Standard Test Method for Determining Air Leakage of Air Barriers Assemblies . . . . .	C402.5.1.2.2

**REFERENCED STANDARDS**

**CRRC**

Cool Roof Rating Council  
449 15th Street, Suite 200  
Oakland, CA 94612

Standard reference number	Title	Referenced in code section number
ANSI/CRRC-1—2012	CRRC-1 Standard . . . . .	Table C402.3, C402.3.2, C402.3.2.1, Table C407.5.1(1)

**CSA**

CSA Group  
8501 East Pleasant Valley  
Cleveland, OH 44131-5516

Standard reference number	Title	Referenced in code section number
AAMA/WDMA/CSA 101/I.S.2/A440—11	North American Fenestration Standard/Specification for Windows, Doors and Unit Skylights. . . . .	Table C402.5.2
CSA B55.1—2012	Test Method for Measuring Efficiency and Pressure Loss of Drain Water Heat Recovery Units . . . . .	C404.8
CSA B55.2—2012	Drain Water Heat Recover Units . . . . .	C404.8

**CTI**

Cooling Technology Institute  
P. O. Box 73383  
Houston, TX 77273-3383

Standard reference number	Title	Referenced in code section number
ATC 105 (00)	Acceptance Test Code for Water Cooling Tower. . . . .	Table C403.2.3(8)
ATC 105S—11	Acceptance Test Code for Closed Circuit Cooling Towers . . . . .	Table C403.2.3(8)
ATC 106—11	Acceptance Test For Mechanical Draft Evaporative Vapor Condensers . . . . .	Table C403.2.3(8)
STD 201—11	Standard for Certification of Water Cooling Towers Thermal Performances . . . . .	Table C403.2.3(8)

**DASMA**

Door and Access Systems Manufacturers Association  
1300 Sumner Avenue  
Cleveland, OH 44115-2851

Standard reference number	Title	Referenced in code section number
105—92 (R2004)—13	Test Method for Thermal Transmittance and Air Infiltration of Garage Doors. . . . .	C303.1.3, Table C402.5.2

**DOE**

U.S. Department of Energy  
c/o Superintendent of Documents  
1000 Independence Avenue SW  
Washington, DC 20585

Standard reference number	Title	Referenced in code section number
10 CFR, Part 430—1998	Energy Conservation Program for Consumer Products: Test Procedures and Certification and Enforcement Requirement for Plumbing Products; and Certification and Enforcement Requirements for Residential Appliances; Final Rule . . . . .	Table C403.2.3(4), Table C403.2.3(5), Table C404.2
10 CFR, Part 430, Subpart B, Appendix N—1998	Uniform Test Method for Measuring the Energy Consumption of Furnaces and Boilers. . . . .	C202

DOE—continued

10 CFR, Part 431—2004	Energy Efficiency Program for Certain Commercial and Industrial Equipment: Test Procedures and Efficiency Standards; Final Rules. . . . .	Table C403.2.3(5), C405.7, C405.8, Table C405.8
10 CFR 431 Subpart B App B	Uniform Test Method for Measuring Nominal Full Load Efficiency of Electric Motors . . . . .	C403.4.4.4, Table C405.8(1), Table C405.8(2), Table C405.8(3), C405.8(4)
NAECA 87—(88)	National Appliance Energy Conservation Act 1987 [(Public Law 100-12 (with Amendments of 1988-P.L. 100-357))] . . . . .	Tables C403.2.3(1), C403.2.3(2), C403.2.3(4)

**IAPMO**

International Association of Plumbing and Mechanical Officials  
4755 E. Philadelphia Street  
Ontario, CA 91761

Standard reference number	Title	Referenced in code section number
UPC—2015	Uniform Plumbing Code . . . . .	C201.3

**ICC**

International Code Council, Inc.  
500 New Jersey Avenue, NW  
6th Floor  
Washington, DC 20001

Standard reference number	Title	Referenced in code section number
IBC—15	International Building Code® . . . . .	C201.3, C303.2, C402.5.3, C501.4
IFC—15	International Fire Code® . . . . .	C201.3, C501.4
IFGC—15	International Fuel Gas Code® . . . . .	C201.3, C501.4
IMC—15	International Mechanical Code® . . . . .	C403.2.4.3, C403.2.6, C403.2.6.1, C403.2.6.2, C403.2.7, C403.2.8, C403.2.8.1, C403.2.8.2, C403.2.9, C403.4.4, C403.4.4.6, C406.6, C501.4
IPC—15	International Plumbing Code® . . . . .	C201.3, C501.4
IMPC—15	International Property Maintenance Code® . . . . .	C501.4
IPSDC—15	International Private Sewage Disposal Code® . . . . .	C501.4

**IEEE**

The Institute of Electrical and Electronic Engineers Inc.  
3 Park Avenue  
New York, NY 10016

Standard reference number	Title	Referenced in code section number
IEEE 515.1—2012	IEE Standard for the Testing, Design, Installation, and Maintenance of Electrical Resistance Trace Heating for Commercial Applications . . . . .	C404.6.2

**IES**

Illuminating Engineering Society  
120 Wall Street, 17th Floor  
New York, NY 10005-4001

Standard reference number	Title	Referenced in code section number
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**REFERENCED STANDARDS**

ANSI/ASHRAE/ IESNA 90.1—2013 Energy Standard for Buildings, Except Low-rise Residential Buildings . . . . . C401.2, Table C402.1.3, Table C402.1.4, C406.2, C502.1, C503.1, C504.1

**ISO** International Organization for Standardization  
1, rue de Varembe, Case postale 56, CH-1211  
Geneva, Switzerland

Standard reference number	Title	Referenced in code section number
ISO/AHRI/ASHRAE 13256-1 (2011)	Water-to-Air and Brine-to-air Heat Pumps -Testing and Rating for Performance. . . . .	Table C403.2.3(2)
ISO/AHRI/ASHRAE 13256-2(2011)	Water-to-Water and Brine-to-Water Heat Pumps -Testing and Rating for Performance. . . . .	C403.2.3(2)

**NEMA** National Electrical Manufacturers Association  
1300 North 17th Street, Suite 1752  
Rosslyn, VA 22209

Standard reference number	Title	Referenced in code section number
MG1—1993	Motors and Generators . . . . .	C202

**NFPA** National Fire Protection Association  
1 Batterymarch Park  
Quincy, MA 02169-7471

Standard reference number	Title	Referenced in code section number
70—14	National Electrical Code . . . . .	C501.4

**NFRC** National Fenestration Rating Council, Inc.  
6305 Ivy Lane, Suite 140  
Greenbelt, MD 20770

Standard reference number	Title	Referenced in code section number
100—2009	Procedure for Determining Fenestration Products <i>U</i> -factors—Second Edition . . . . .	C303.1.3, C402.2.2
200—2009	Procedure for Determining Fenestration Product Solar Heat Gain Coefficients and Visible Transmittance at Normal Incidence—Second Edition . . . . .	C303.1.3, C402.4.1.1
400—2009	Procedure for Determining Fenestration Product Air Leakage—Second Edition . . . . .	Table C402.5.2

**SMACNA** Sheet Metal and Air Conditioning Contractors National Association, Inc.  
4021 Lafayette Center Drive  
Chantilly, VA 20151-1209

Standard reference number	Title	Referenced in code section number
SMACNA—2012	HVAC Air Duct Leakage Test Manual 2 <sup>nd</sup> Edition . . . . .	C403.2.8.1.3

# UL

UL LLC  
333 Pfingsten Road  
Northbrook, IL 60062-2096

Standard reference number	Title	Referenced in code section number
710—12	Exhaust Hoods for Commercial Cooking Equipment . . . . .	C403.2.8
727—06	Oil-fired Central Furnaces—with Revisions through April 2010 . . . . .	Table C403.2.3(4)
731—95	Oil-fired Unit Heaters—with Revisions through August 2012 . . . . .	Table C403.2.3(4)
1784—01	Air Leakage Tests of Door Assemblies— with Revisions through July 2009 . . . . .	C402.5.3

# US-FTC

United States-Federal Trade Commission  
600 Pennsylvania Avenue NW  
Washington, DC 20580

Standard reference number	Title	Referenced in code section number
CFR Title 16 (May 31, 2005)	R-value Rule. . . . .	C303.1.4

# WDMA

Window and Door Manufacturers Association  
2025 M Street, NW, Suite 800  
Washington, DC 20036-3309

Standard reference number	Title	Referenced in code section number
AAMA/WDMA/CSA 101/I.S.2/A440—11	North American Fenestration Standard/Specification for Windows, Doors and Unit Skylights . . . . .	Table C402.5.2

