

## APPENDIX 1-A

# STANDARDS AND DOCUMENTS REFERENCED IN THE ENERGY EFFICIENCY REGULATIONS

### AIR-CONDITIONING, HEATING AND REFRIGERATION INSTITUTE

- AHRI 210/240-08 Performance Rating of Unitary Air Conditioning and Air-Source Heat Pump Equipment (2008 with Addendum 1)
- AHRI 310/380-04 Packaged Terminal Air-Conditioners and Heat Pumps (2004)
- AHRI 320-98 Water-Source Heat Pumps
- AHRI 325-98 Ground Water-Source Heat Pumps (1998)
- ANSI/AHRI 340/360-07 Performance Rating of Commercial and Industrial Unitary Air-Conditioning and Heat Pump Equipment (2007 with Addenda 1 and 2)
- ANSI/AHRI 365-09 Commercial and Industrial Unitary Air-Conditioning Condensing Units (2009)
- ANSI/AHRI 460-05 Performance Rating of Remote Mechanical-Draft Air-Cooled Refrigerant Condensers (2005)
- AHRI 550/590-11 Performance Rating of Water-Chilling Packages Using the Vapor Compression Cycle (2011)
- ANSI/AHRI 560-00 Absorption Water Chilling and Water Heating Packages (2000)
- AHRI 680 Performance Rating of Residential Air Filter Equipment (2009)
- Available from: Air-Conditioning and Refrigeration Institute  
4301 North Fairfax Drive, Suite 425  
Arlington, VA 22203  
(703) 524-8800

### AIR-CONDITIONING CONTRACTORS OF AMERICA

- Manual J—Residential Load Calculation, Eighth Edition (2003)
- Available from: Air-Conditioning Contractors of America, Inc.  
2800 Shirlington Road, Suite 300  
Arlington, VA 22206  
www.acca.org  
(703) 575-4477

### AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION

### CANADIAN STANDARDS ASSOCIATION

### WINDOW AND DOOR MANUFACTURERS ASSOCIATION

- AAMA/WDMA/  
CSA 101/I.S.2/  
A440-11
- NAFS 2011 – North American Fenestration Standard/Specification for Windows, Doors, and Skylights
- Available from: AAMA  
1827 Walden Office Square, Suite 550  
Schaumburg, IL 60173-4268  
(847)303-5664  
www.aamanet.org
- CSA  
5060 Spectrum Way, Suite 100  
Mississauga, ON, Canada L4W 5N6  
(800)463-6727  
www.csagroup.org
- WDMA  
2025 M Street, NW, Suite 800  
Washington, DC 20036-3309  
(202)367-1157  
www.wdma.com

### AMERICAN NATIONAL STANDARDS INSTITUTE

- ANSI Z21.10.3-01 Gas Water Heaters, Volume 1, Storage Water Heaters with Input Ratings above 75,000 Btu/h (2001)
- ANSI Z21.13-00 Gas-Fired Low Pressure Steam and Hot Water Boilers (2000)
- ANSI Z21.40.4-96 Performance Testing and Rating of Gas-Fired, Air-Conditioning and Heat Pump Appliances (1996)
- ANSI Z21.47-01 Gas-Fired Central Furnaces (2001)
- ANSI Z83.8-02 Gas Unit Heaters and Gas-Fired Duct Furnaces (2002)
- Available from: American National Standards Institute  
25 West 43rd Street, 4th floor  
New York, NY 10036  
(212) 642-4900
- ANSI/NSPI-5-03 Residential Inground Swimming Pools (2003)

**STANDARDS AND DOCUMENTS REFERENCED IN THE ENERGY EFFICIENCY REGULATIONS**

ANSI C82.6-05 Ballasts for High-Intensity Discharge Lamps—Methods of Measurement  
 Available from: Association of Pool & Spa Professionals  
 2111 Eisenhower Ave.  
 Alexandria, VA 22314  
 (703) 838-0083

**AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS (NATIONAL PUBLICATIONS)**

ASHRAE Standard 52.2 -2012  
 Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size

ASHRAE Standard 55-2010  
 Thermal Environment Conditions for Human Occupancy

ASHRAE Standard 62.2-2010  
 Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings

**ASHRAE Handbooks**

Applications Volume, Heating, Ventilating and Air-Conditioning Applications (2011)

Equipment Volume, Heating, Ventilating and Air-Conditioning Systems and Equipment (2008)

Fundamentals Volume, Fundamentals (2009)

Available from: American Society of Heating, Refrigerating and Air-Conditioning Engineers  
 1791 Tullie Circle N.E.  
 Atlanta, GA 30329  
 www.ashrae.org

**AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS (REGIONAL PUBLICATION)**

ASHRAE Climatic Data for Region X Arizona, California, Hawaii, Nevada, Publication SPCDX, 1982, ISBN #20002196 and Supplement, 1994, ISBN #20002596

Available from: Order Desk  
 Building News  
 10801 National Boulevard  
 Los Angeles, CA 90064  
 (800) 873-6397 or (310) 474-7771  
 www.bnibooks.com/

**AMERICAN SOCIETY OF MECHANICAL ENGINEERS**

ASME A112.18.1-2011/CSA B125.1-11  
 Plumbing Supply Fittings

Available from: ASME  
 Three Park Avenue  
 New York, NY 10016-5990  
 (800) 843-2763  
 http://www.asme.org/

**ASTM INTERNATIONAL**

ASTM C55-14 Standard Specifications for Concrete Brick (2014)

ASTM C177-13 Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded Hot Plate Apparatus (2013)

ASTM C272-12 Standard Test Method for Water Absorption of Core Materials for Structural Sandwich Constructions (2012)

ASTM C335-10 Standard Test Method for Steady-State Heat Transfer Properties of Horizontal Pipe Insulation (2010)

ASTM C518-10 Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus (2010)

ASTM C731-10 Standard Test Method for Extrudability, After Package Aging, of Latex Sealants (2010)

ASTM C732-12 Standard Test Method for Aging Effects of Artificial Weathering on Latex Sealants (2012)

ASTM C836-12 Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course (2012)

ASTM C1167-11 Standard Specification for Clay Roof Tiles (2011)

ASTM C1371-10 Standard Test Method for Determination of Emittance of Materials Near Room Temperature Using Portable Emissometers (2010)

ASTM C1492-09 Standard Specification for Concrete Roof Tile (2009)

ASTM C1549-14 Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer (2014)

ASTM C1583-13 Standard Test Method for Tensile Strength of Concrete Surfaces and the Bond Strength or Tensile Strength of Concrete Repair and Overlay Materials by Direct Tension (Pull-off Method) (2013)

ASTM D448-12 Standard Classification for Sizes of Aggregate for Road and Bridge Construction (2012)

ASTM D522-13 Standard Test Methods for Mandrel Bend Test of Attached Organic Coatings (2013)

**STANDARDS AND DOCUMENTS REFERENCED IN THE ENERGY EFFICIENCY REGULATIONS**

<p>ASTM D822-13</p> <p>ASTM D1003-13</p> <p>ASTM D1653-13</p> <p>ASTM D1863-11</p> <p>ASTM D2370-10</p> <p>ASTM D2824-13</p> <p>ASTM D3468-13</p> <p>ASTM D3805-09</p> <p>ASTM D4798-11</p> <p>ASTM D5870-11</p> <p>ASTM D6083-05e1</p> <p>ASTM D6694-13</p> <p>ASTM E96-14</p> <p>ASTM E283-12</p> <p>ASTM E408-13</p> <p>ASTM E972-13</p>	<p>Standard Practice for Filtered Open-Flame Carbon-Arc Exposures of Paint and Related Coatings (2013)</p> <p>Standard Test Method for Haze and Luminous Transmittance of Transparent Plastics (2013)</p> <p>Standard Test Methods for Water Vapor Transmission of Organic Coating Films (2013)</p> <p>Standard Specification for Mineral Aggregate Used on Built-Up Roofs (2011)</p> <p>Standard Test Method for Tensile Properties of Organic Coatings (2010)</p> <p>Standard Specification for Aluminum-Pigmented Asphalt Roof Coatings, Nonfibered, Asbestos Fibered, and Fibered without Asbestos (2013)</p> <p>Standard Specification for Liquid-Applied Neoprene and Chlorosulfonated Polyethylene Used in Roofing and Waterproofing (2013)</p> <p>Standard Guide for Application of Aluminum-Pigmented Asphalt Roof Coatings (2009)</p> <p>Standard Test Method Accelerated Weathering Test Conditions and Procedures for Bituminous Materials (Xenon-Arc Method) (2011)</p> <p>Standard Practice for Calculating Property Retention Index of Plastics (2011)</p> <p>Standard Specification for Liquid-Applied Acrylic Coating Used in Roofing (2005)</p> <p>Standard Specification for Liquid-Applied Silicone Coating Used in Spray Polyurethane Foam Roofing (2013)</p> <p>Standard Test Methods for Water Vapor Transmission of Materials (2014)</p> <p>Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen (2012)</p> <p>Standard Test Methods for Total Normal Emittance of Surfaces Using Inspection-Meter Techniques (2013)</p> <p>Standard Test Method for Solar Photometric Transmittance of Sheet Materials Using Sunlight (2013)</p>	<p>ASTM E1918-15</p> <p>ASTM E1980-1</p> <p>ASTM E2178-13</p> <p>ASTM E2357-11</p> <p>ASTM E779-10</p> <p>ASTM E1677-11</p> <p>Available from:</p> <p><b>CALIFORNIA BUILDING STANDARDS COMMISSION</b></p> <p><i>California Electrical Code</i></p> <p><i>California Plumbing Code</i></p> <p><i>California Mechanical Code</i></p> <p><i>California Building Code</i></p> <p>Available from:</p> <p><b>CALIFORNIA ENERGY COMMISSION</b></p> <p>Appliance Efficiency Regulations</p> <p>Nonresidential Alternative Calculation Method (ACM) Manual</p> <p>Nonresidential Compliance Manual</p> <p>Residential Alternative Calculation Method (ACM) Manual</p> <p>Residential Compliance Manual</p> <p>New Solar Homes Partnership Guidebook, currently adopted by the Energy Commission</p> <p>Available from:</p>	<p>Standard Test Method for Measuring Solar Reflectance of Horizontal and Low-Sloped Surfaces in the Field (2015)</p> <p>Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low-Sloped Opaque Surfaces (2011)</p> <p>Standard Test Method for Air Permeance of Building Materials (2013)</p> <p>Standard Test Method for Determining Air Leakage of Air Barrier Assemblies (2011)</p> <p>Standard Test Method for Determining Air Leakage Rate by Fan Pressurization (2010)</p> <p>Standard Specification for an Air Retarder (AR) Material or System for Low-Rise Framed Building Walls (2011)</p> <p>ASTM International 100 Barr Harbor Drive West Conshohocken, PA 19428-2959 (800) 262-1373 or (610) 832-9500</p> <p>California Building Standards Commission 2525 Natomas Park Drive, Suite 130 Sacramento, CA 95833-2936 (916) 263-0916 www.bsc.ca.gov</p> <p>California Energy Commission 1516 Ninth Street Sacramento, CA 95814 (916) 654-5106 or (800) 772-3300 (in California) www.energy.ca.gov/title24</p>
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**CALIFORNIA DEPARTMENT OF CONSUMER AFFAIRS**

Standards for Insulating Material

Available from: California Department of Consumer Affairs  
Bureau of Electronic and Appliance, Home Furnishings and Thermal Insulation  
4244 South Market Court, Suite D  
Sacramento, California 95834-1243  
(916) 999-2041

Ontario, CA 91761  
(800) 85-IAPMO (854-2766)  
www.iapmo.org

**INTERNATIONAL CODE COUNCIL**

*California Building Code*

Available from: International Code Council  
Los Angeles District Office  
5360 South Workman Mill Road  
Whittier, CA 90601-2298  
(888) 422-7233  
www.iccsafe.org

**COOLING TECHNOLOGY INSTITUTE**

CTI ATC-105-00 Acceptance Test Code for Water Cooling Towers (2000)

CTI STD-201-02 Standard for the Certification of Water-Cooling Tower Thermal Performance (2004)

Available from: Cooling Technology Institute  
2611 FM 1960 West, Suite A101  
Houston, Texas 77068-3730  
PO Box 73383  
Houston, TX 77273-3383  
(281) 583-4087

**INTERNATIONAL ORGANIZATION FOR STANDARDIZATION**

ISO-13256-1 Water-Source Heat Pumps-Testing and Rating for Performance-Part 1: Water-to-Air and Brine-to-Air Heat Pumps (1998)

Available from: ISO  
1, rue de Varembe  
Case postale 56  
CH-1211  
Geneve 20, Switzerland

**COOL ROOF RATING COUNCIL**

CRRC-1 Product Rating Program Manual (2014)

Available from: Cool Roof Rating Council  
449 15<sup>th</sup> Street, Suite 400  
Oakland, CA 94612  
(866) 465-2523  
www.coolroofs.org

**NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION**

NEMA SSL 7A-2013 “Phase Cut Dimming for Solid State Lighting: Basic Compatibility”

Available from: 1300 North 17th Street, Suite 1752  
Rosslyn, VA 22209  
708-841-3200  
www.nema.org

**HYDRONICS INSTITUTE**

HI Heating Boiler Standard 86, 6th Edition (1989)

Available from: Hydronics Institute  
35 Russo Place, P.O. Box 218  
Berkeley Heights, New Jersey 07922  
(908) 464-8200

**NATIONAL FENESTRATION RATING COUNCIL**

NFRC 100 Procedure for Determining Fenestration Product *U*-factors (2014)

NFRC 200 Procedure for Determining Fenestration Product Solar Heat Gain Coefficients and Visible Transmittance at Normal Incidence (2014)

NFRC 202 Procedure for Determining Translucent Fenestration Product Visible Transmittance at Normal Incidence (2014)

NFRC 203 Procedure for Determining Visible Transmittance of Tubular Daylighting Devices (2014)

NFRC 400 Procedure for Determining Fenestration Product Air Leakage (2014)

Available from: National Fenestration Rating Council  
6035 Ivy Lane, Suite 140  
Greenbelt, MD 20770  
(301) 589-1776  
www.NFRC.org  
Email: info@nfr.org

**ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA**

The IESNA Lighting Handbook, Ninth Edition (2000)

Available from: IESNA  
120 Wall Street, 17th Floor  
New York, NY 10005-4001  
(212) 248-5000  
Email: iesna@iesna.org

**INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS**

*California Mechanical Code*

Available from: International Association of Plumbing and Mechanical Officials  
4755 E. Philadelphia St.

**NSF INTERNATIONAL (formerly National Sanitation Foundation)**

NSF/ANSI 50 (2005) Circulation System Components and Related Materials for Swimming Pools, Spas/Hot Tubs (2005)

Available from: NSF International  
PO Box 130140  
Ann Arbor, MI 48113  
(735) 769-8010

**SHEET METAL AND AIR-CONDITIONING CONTRACTORS NATIONAL ASSOCIATION**

Residential Comfort System Installation Standards Manual (1998)

Available from: Sheet Metal and Air-Conditioning Contractors National Association (SMACNA)  
4201 Lafayette Center Drive  
Chantilly, VA 20151-1209  
(703) 803-2980  
ww.smacna.org

**UNDERWRITERS LABORATORIES**

UL 181 Standard for Safety for Factory-made Air Ducts and Connectors (1996)

UL 181A Standard for Safety for Closure Systems for Use with Rigid Air Ducts and Air Connectors (1994)

UL 181B Standard for Safety for Closure Systems for Use with Flexible Air Ducts and Air Connectors (1995)

UL 723 Standard for Test for Surface Burning Characteristics of Building Materials (1996)

UL 727 Standard for Oil-Fired Central Furnaces (1994)

UL 731 Standard for Oil-Fired Unit Heaters (1995)

UL 1574 Track Lighting Systems (2000)

UL 1598 Standard for Luminaires (2000)

UL 2108 Low Voltage Lighting Systems (2008)

Available from: Underwriters Laboratories  
333 Pfingsten Road  
Northbrook, IL 60062-2096  
(847) 272-8800

