

Public Review Draft

Proposed Addendum aq to Standard 189.1-2023

Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings

First Public Review (September 2026)
(Draft Shows Proposed Changes to Current Standard)

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Foreword

This addendum updates the references used in the standard.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~striketrough~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]

11. NORMATIVE REFERENCES

Section numbers indicate where the reference occurs in this document.

Reference	Title	Section
Acoustical Society of America (ASA) 1305 Walt Whitman Road Suite 300 Melville, NY 11747-4300 (516) 576-2360; http://acousticalsociety.org		
ANSI/ASA S1.13-2020 (R2025)	Measurement of Sound Pressure Levels in Air	10.5.3
ANSI/ASA S1.4-2014/Part 1/IEC 61672-1:2013 (R2019)	Electroacoustics Sound Level Meters	10.5.1
ANSI/ASA S12.60-2009/Part 2 (R2020)	Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools, Part 2: Relocatable Classroom Factors	8.7
ANSI/ASA S12.60-2010/Part 1 (R2020)	Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools, Part 1: Permanent Schools	8.7.5
ANSI/ASA S12.72-2015 (R2020/R2025)	Measuring the Ambient Noise Level in a Room	10.5.1
Air Movement and Control Association International, Inc. 30 West University Drive Arlington Heights, IL 60004-1893, United States 1-847-394-0150; www.amca.org		
AMCA 208-18	Calculation of the Fan Energy Index	3.2
American Association of Radon Scientists and Technologists (AARST) 527 N. Justice Street 638 Spartanburg Hwy Suite 70 – #364 Hendersonville, NC 28739 287-92-5921 (800)-269-4174 (828) 348-0185; http://standards.aarst.org		
ANSI/AARST CC-1000-2018 Rev. 5-23	Soil Gas Control Systems In New Construction of Buildings	8.8.1
ANSI/AARST RMS-LB-2018 with 12/2020 SGM-MFLB-2023 revisions	Radon Mitigation Standards for <u>Schools Existing Multifamily, School, Commercial and Large Mixed-Use Buildings</u>	10.8, 10.10.4
ANSI/AARST MALB-2014 with 1/2021 MA-MFLB-2023 revisions	Protocols for Conducting Measurements of Radon and Radon Decay Products in <u>Multifamily, School, Commercial and Large Mixed-Use Buildings</u>	10.8, 10.10.4
ANSI/AARST RMS-MF-2018 with 12/2020 revisions	Radon Mitigation Standards for Multifamily Buildings	10.8
ANSI/AARST MAMF-2017 with 1/2021 revisions	Protocol for Conducting Measurements of Radon and Radon Decay Products in Multifamily Buildings	10.8
American National Standards Institute- (ANSI) 25 West 43rd Street New York, NY 20036, United States 1-212-642-4900; www.ansi.org		
ANSI C78.377-2017 2024	[NEMA] American National Standard for Electric Lamps—Specifications for the Chromaticity of Solid-State Lighting (SSL) Products	8.9.3
ANSI/CTA-2045-B 2021	[CTA] Modular Communications Interface for Energy Management	Table 7.3.4
CSA/ANSI Z21.11.2-2019	Gas-fired room heaters, volume II, unvented room heaters	8.3.5.1
ANSI Z83.4-2022/ 2017 (R2022)/CSA 3.7-2022 2017 (R2022)	[CSA] Non-recirculating direct gas-fired industrial air heaters	8.3.5.1
ANSI Z83.19-2017 (R2022)/CSA 2.35-2017 (R2022)	[CSA] Gas-fired high-intensity infrared heaters	8.3.5.1

American Society of Agricultural and Biological Engineers

(ASABE) 2950 Niles Road

Saint Joseph, MI 49085, United

States 1-269-429-0300;

www.asabe.org

~~ANSI/ASABE S640-2017~~ 3640-July2017

(R2022)

Quantities and Units of Electromagnetic Radiation for Plants
(Photosynthetic Organisms) 3.2

ASABE/ICC 802-2020

Landscape Irrigation Sprinkler and Emitter Standard 6.3.1.2

Reference	Title	Section
American Society for Healthcare Engineering of the American Hospital Association (ASHE) 155 N. Wacker Drive, Suite 400 Chicago, IL 60606 312-422-3800; www.ashe.org		
2022 FGI Guidelines: Hospitals and Outpatient Facilities	Guidelines for Design and Construction of Hospitals	8.7
2022 FGI Guidelines: Hospitals and Outpatient Facilities	Guidelines for Design and Construction of Outpatient Facilities	8.7
2022 FGI Guidelines: Residential Health, Care and Support Facilities	Guidelines for Design and Construction of Residential Health, Care, and Support Facilities	8.7
American Society of Mechanical Engineers (ASME) Three Park Avenue New York, NY 10016-5990, United States 1-800-843-2763 and 1-973-882-1170; www.asme.org		
ASME A112.18.1- 2018 <u>2024</u> /CSA B125.1-18	Plumbing Supply Fittings	6.3.2.1
ASME A112.19.2- 2018 <u>2024</u> /CSA B45.1-18	Ceramic Plumbing Fixtures	6.3.2.1
ASME A112.19.14-2013 (R2018)	Six-Liter Water Closets Equipped with a Dual Flushing Device	6.3.2.1
ASME A112.19.19- 2016 <u>2024</u> (R2024)	Vitreous China Nonwater Urinals	6.3.2.1
APA—The Engineered Wood Association 7011 S. 19th Street, Tacoma, WA 98466-5333 (253) 565-6600; www.apawood.org		
ANSI A190.1-2022	Standard for Wood Products-Structural Glued Laminated Timber	8.6.1.4
ANSI/APA PRG 320- 2019 <u>2025</u>	Standard for Performance-Rated Cross-Laminated Timber	8.6.1.4
ASHRAE 180 Technology Parkway NW Peachtree Corners, GA 30092, United States 1-404-636-8400; www.ashrae.org		
ANSI/ASHRAE Standard 52.2- 2017 <u>2025</u>	Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size	8.3.3
ANSI/ASHRAE Standard 55- 2023 <u>2020</u>	Thermal Environmental Conditions for Human Occupancy	8.4, 10.10.8.2, 10.10.8.3
ANSI/ASHRAE Standard 62.1- 2025 <u>2022</u>	Ventilation and Acceptable Indoor Air Quality	3.2, 7.4.3.1, 7.4.3.7.2, 8.3, 8.3.1, 8.3.3, 8.3.4, 8.3.6, 8.8, 10.4.2, 10.7.3, 10.10.1, Table 10.10.7, 10.10.7.4, G3.2.2, G3.3.12
ANSI/ASHRAE Standard 62.2- 2025 <u>2022</u>	Ventilation and Acceptable Indoor Air Quality in Residential Buildings	8.3, 8.3.1, 8.3.5.2

Reference	Title	Section
ANSI/ASHRAE/IES Standard 90.1- 2025 <u>2022</u>	Energy Standard for Buildings Except Low-Rise Residential Buildings	3.1, 3.2, 5.3.5.2, 5.3.6.1, 7.3, 7.3.1.1, 7.3.1.2, 7.3.7, 7.3.8.1, 7.3.8.1.1, 7.4, 7.4.2, 7.4.2.1–7.4.2.5, 7.4.2.7–7.4.2.9, 7.4.3, 7.4.3.1–7.4.3.4, 7.4.3.5.1–7.4.3.5.3, 7.4.3.6, 7.4.3.7, 7.4.3.8.3, 7.4.3.9, 7.4.4, 7.4.4.1, 7.4.5, 7.4.6, 7.4.6.1, 7.4.6.1.1, 7.4.6.1.2, 7.4.6.2–7.4.6.4, 7.4.7, 7.4.7.6, 7.4.8, 7.5, 7.5.1, 7.5.1.1, 7.5.2, 7.5.2.1–7.5.2.4, 7.5.2.5.2–7.5.2.5.6, 7.5.2.6, 7.5.2.7.1–7.5.2.7.3, 7.5.2.8.1–7.5.2.8.7, 7.6, 7.6.1, 7.6.1.1, 7.6.3, 8.6.1.4, 10.6, Tables A-1 and A-2, B1.1, B1.2, B1.4.1, B1.4.2, Tables B1.1 and B1.2, G3.2.1, G3.3.3, G3.3.12, G3.6.7.7
ANSI/ASHRAE Standard 111- 2008 (RA-2017) <u>2024</u>	Measurement, Testing, Adjusting, and Balancing of Building HVAC Systems	8.3.2.2, 10.9.5, 10.10.2.2, Table 10.10.7
ANSI/ASHRAE Standard 154- 2016 <u>2022</u>	Ventilation for Commercial Cooking Operations	7.4.3.7.1
ANSI/ASHRAE Standard 160- 2016 <u>2021</u>	Criteria for Moisture-Control Design Analysis in Buildings	8.5
ANSI/ASHRAE Standard 169- 2013 <u>2021</u>	Climatic Data for Building Design Standards	7.3.1.1
ANSI/ASHRAE/ASHE Standard 170- 2025 <u>2024</u>	Ventilation of Health Care Facilities	8.3.3
ANSI/ASHRAE/ACCA Standard 180-2018	Standard Practice for Inspection and Maintenance of Commercial Building HVAC Systems	3.2, 10.9.8
ANSI/ASHRAE/ASHE Standard 189.3- 2024 <u>2025</u>	Design, Construction, and Operation of Sustainable High-Performance Health Care Facilities	4.1

ANSI/ASHRAE/IES Standard 202-2018-2024	Commissioning Process for Buildings and Systems	10.3.2, 10.3.2.2, 10.3.2.4, 10.3.2.5.1, 10.3.2.5.2, 10.3.2.5.4
ANSI/ASHRAE Standard 209- 2024 2018 with Addendum a	Energy Simulation Aided Design for Buildings Except Low-Rise Residential Buildings	7.6.4
ASTM International 100 Barr Harbor Dr. West Conshohocken, PA 19428-2959, United States 1-610-832-9585; www.astm.org		
ASTM C518- 15 21	Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus	Normative Appendix A
ASTM C919- 22 24	Standard Practice for Use of Sealants in Acoustical Applications.	8.7.2, 8.7.3.4.3, 8.7.4.2

Reference	Title	Section
ASTM C1371-15 <u>(2022)</u>	Standard Test Method for Determination of Emittance of Materials Near Room Temperature Using Portable Emissometers	5.3.5.4
ASTM C1549-16 <u>(2022)</u>	Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer	5.3.5.4
ASTM D1003-21	Standard Test Method for Haze and Luminous Transmittance of Transparent Plastics	8.10.1.3, 8.10.3, 8.12
ASTM D5197-21	Standard Test Method for Determination of Formaldehyde and Other Carbonyl Compounds in Air (Active Sampler Methodology)	8.6.1.1.1, 8.6.1.2.1, 8.6.1.3, 8.6.1.4, 8.6.1.6, 8.6.1.7
ASTM D5456-21 <u>e124</u>	Standard Specification for Evaluation of Structural Composite Lumber Products	8.6.1.4
ASTM D5055-19 <u>e124</u>	Standard Specification for Establishing and Monitoring Structural Capacities of Prefabricated Wood I-Joists	8.6.1.4
ASTM D2559-12a <u>(2018 2024)</u>	Standard Specification for Adhesives for Bonded Structural Wood Products for Use Under Exterior Exposure Conditions	8.6.1.4
ASTM E90-09 <u>(2016) 23</u>	Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements	8.7.2
ASTM E336-20 <u>25</u>	Standard Test Method for Measurement of Airborne Sound Attenuation Between Rooms in Buildings	8.7.2, 10.5.2
ASTM E408-13 <u>(2019 2025)</u>	Standard Test Methods for Total Normal Emittance of Surfaces Using Inspection-Meter Techniques	5.3.5.4
ASTM E492-09 <u>(2016) e125</u>	Standard Test Method for Laboratory Measurement of Impact Sound Transmission through Floor-Ceiling Assemblies Using the Tapping Machine	8.7.2
ASTM E779-19	Standard Test Method for Determining Air Leakage Rate by Fan Pressurization	10.6
ASTM E972-96 (2021)	Standard Test Method for Solar Photometric Transmittance of Sheet Materials Using Sunlight	3.2
ASTM E1007-24 <u>25</u>	Standard Test Method for Field Measurement of Tapping Machine Impact Sound Transmission through Floor-Ceiling Assemblies and Associated Support Structures	8.7.2, 10.5.2
ASTM E1186-17 <u>22</u>	Standard Practices for Air Leakage Site Detection in Building Envelopes and Air Barrier Systems	10.6
ASTM E1643-18a <u>24</u>	Standard Practice for Selection, Design, Installation, and Inspection of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs	8.8.1.1
ASTM E1745-17 <u>(2023)</u>	Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs	8.8.1.1
ASTM E1827-22	Standard Test Methods for Determining Airtightness of Buildings Using an Orifice Blower Door	10.6
ASTM E1903-14 <u>19</u>	Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process	3.2
ASTM E1918-21	Standard Test Method for Measuring Solar Reflectance of Horizontal and Low-Sloped Surfaces in the Field	5.3.5.4
ASTM E1980-14 <u>24</u>	Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low-Sloped Opaque Surfaces	5.3.5.4

ASTM E2399/E2399M-19	Standard Test Method for Maximum Media Density for Dead Load Analysis of Vegetative (Green) Roof Systems	5.3.5.5
ASTM E2843-4725	Standard Specification for Demonstrating that a Building is in Walkable Proximity to Neighborhood Assets	5.3.1.1

Reference	Title	Section
ASTM E2844-15e4 <u>23</u>	Standard Specification for Demonstrating That a Building's Location Provides Access to Public Transit	5.3.1.1
ASTM E2921-22 <u>25</u>	Standard Practice for Minimum Criteria for Comparing Whole Building Life Cycle Assessments for Use with Building Codes, <u>Standards</u> , and Rating Systems	9.5.2, 9.5.2.2, 9.5.2.3
ASTM E3158-24	<u>Standard Test Method for Measuring the Air Leakage Rate of a Large or Multizone Building</u>	<u>10.6</u>
BSI Customer Services 389 Chiswick High Road Seventh and Eighth Floors, The Acre, 90 Long Acre, London, W4 4AL, WC2E 9RA,, UK +44 345 086 9001; shop.bsigroup.com		
BS EN 636:2012+A1:2015	Plywood—Specifications	8.6.1.4
Business and Institutional Furniture Manufacturer's Association (BIFMA) 678 Front Avenue NW, Suite 150 Grand Rapids, MI 49504-5368, United States 1-616-285-3963; www.bifma.org; email@bifma.org		
ANSI/BIFMA e3-2019 <u>2024</u>	Furniture Sustainability Standard	8.6.1.5, 9.5.1.4
ANSI/BIFMA M7.1-2011 (R2021)	Standard Test Method For Determining VOC Emissions From Office Furniture Systems, Components and Seating	8.6.1.5 and 8.6.2
ANSI/BIFMA X7.1-2011 (R2021) FES Standard	Standard for Formaldehyde and TVOC Emissions of Low-Emitting Office Furniture Seating	8.6.1.5
California Air Resources Board (CARB) 1001 "I" Street P.O. Box 2815 Sacramento, CA 95812, United States 1-916-322-2990; www.arb.ca.gov/homepage.htm		
CARB SCM for Architectural Coatings 2019	California Air Resources Board (ARB) Suggested Control Measure for Architectural Coatings	8.6.1.2.2
California Code of Regulations, Title 17, Sections 93120-93120.12	Airborne Toxic Control Measure to Reduce Formaldehyde Emissions from Composite Wood Products	8.6.1.4
California Department of Public Health (CDPH) Indoor Air Quality Section 850 Marina Bay Parkway Richmond, CA 94804, United States 1-510-620-2802; www.cdph.ca.gov/programs/IAQ and www.cal-iaq.org		
CDPH/EHLB/Standard Method V1.2 (2017)	Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers—Version 1.2	8.6.1.1.1, 8.6.1.2.1, 8.6.1.3, 8.6.1.4, 8.6.1.6, 8.6.1.7, 8.6.2, Normative Appendix C
California Energy Commission 1516 Ninth St. Sacramento, CA 95814, United States 1-916-654-5106, www.energy.ca.gov		
<u>2022-2025</u> Title 24 Part 6, JA 10	Reference Appendices for the <u>2022- 2025</u> Building Energy Efficiency Standards. Joint Appendix JA10, Test Method for Measuring Flicker of Lighting Systems and Reporting	8.9.4.1, Table 8.9.4.1

Requirements

Canadian General Standards Board Place du Portage III, 6B1 11 Laurier Street Gatineau, Quebec K1A 1G6 Canada 819-956-0425 www.tpsgc-pwgsc.gc.ca/ongc-cgsb/index-eng.html		
CAN/CGSB 149.10.20242019	Determination of the Airtightness of Building Envelopes by the Fan Depressurization Method	10.6
CAN/CGSB 149.15-96	Determination of the Overall Envelope Airtightness of Buildings by the Fan Pressurization Method Using the Building's Air Handling Systems	10.6

Reference	Title	Section
Canadian Standards Association (CSA) 178 Rexdale Blvd. Toronto, ON, M9W 1R3, Canada 1-800-463-6727 and 1-416-747-4000; www.csa.ca		
CAN/CSA 439-18	Standard Laboratory Methods of Test for Rating the Performance of Heat/Energy-Recovery Ventilators	Table 7.4.3.5.3
CSA O121-17 (R2022)	Douglas Fir Plywood	8.6.1.4
CSA O151-17 (R2022)	Canadian Softwood Plywood	8.6.1.4
CSA O153-13 (R2017) 19 (R2024)	Poplar Plywood	8.6.1.4
CSA O325- 16 21	Construction Sheathing	8.6.1.4
Composite Panel Association 19465 Deerfield Avenue, Suite 306 Leesburg, Virginia 20176, (703) 724-1128; www.compositepanel.org/contact-us		
ANSI A208.1-2016 2022	Particleboard	3.2
ANSI A208.2- 2016 2022	Medium Density Fiberboard (MDF) for Interior Applications	3.2
Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) International Environment House 11 Chemin des Anémones CH-1219 Châtelaine, Geneva, Switzerland +41-(0)22-917-81-39/40		
CITES-1973, amended 1979 and 1983	Convention on International Trade in Endangered Species of Wild Fauna and Flora	9.3
Cooling Roof Rating Council (CRRC) 2435 N. Lombard St., Portland, OR 97217 1-866-465-2523; www.coolroofs.org		
ANSI/CRRC S100-2025-2024	Standard Test Methods for Determining Radiative Properties of Materials	5.3.5.4
Decorative Hardwoods Association 42777 Trade West Dr, Sterling, VA 20166 (703) 435-2900; www.decorativehardwoods.org		
ANSI/HPVA HP-1- 2016 2024	American National Standard for Hardwood and Decorative Plywood	3.2
European Committee for Standardization (CEN) Avenue Marnix 17—B-1000 Brussels, Belgium +32 2 550 08 11; www.cen.eu		
EN14500:2020 2021	Blinds and shutters—Thermal and visual comfort—Test and calculation methods	8.11.1
Green-e c/o Center for Resource Solutions 1012 Torney Ave., Second Floor San Francisco, CA 94129, United States 1- 415-561-2100; www.green-e.org		
Version 4.6 4.0, July 7, 2017- 2026	Green-e Renewable Energy Standard for Canada and the United States https://www.green-e.org/wp-content/uploads/2026/02/Green-e-Standard-US.pdf	10.9.6
Version 3.5, December 15, 2020	Renewable Energy Standard for Canada and the United States	7.4.1.1

Green Seal

**1001 Connecticut Avenue, NW, Suite
827 Washington, DC 20036-5525,
United States 1-202-872-6400;
www.greenseal.org**

GS-36, 2.4, July 12, 2013 , <u>March 11, 2025</u>	Standard for Adhesives for Commercial Use	8.6.1.1.2
GS-42, July 7, 2015	Standard for Commercial and Institutional Cleaning Services	10.9.4

Reference	Title	Section
Illuminating Engineering Society 420- Wall85 Broad Street, Floor 17New York, NY 10005-400410004, United States 1-212-248-50175000, www.ies.org		
ANSI/IES RP-6- 2024	Recommended Practice: Lighting Sports and Recreational Areas	Table 7.4.6.1C
ANSI/IES RP-28- 4820	Recommended Practice: Lighting and the Visual Environment for Older Adults and the Visually Impaired	3.2
ANSI/IES/AVIXA RP-38-17	Recommended Practice for Lighting Performance for Small to Medium Sized Videoconferencing Rooms	7.4.6.1.1(f)
ANSI/IES LM 83- 4223	Approved Method: IES Spatial Daylight Autonomy (sDA) and Annual Sunlight Exposure (ASE)	3.2, 8.10.4, 8.10.4.1
ANSI/IES TM-15- 2014 - <u>2020</u> including Annex A	Luminaire Classification System for Outdoor Luminaires	5.3.6.1, Table 5.3.6.1
ANSI/IES TM-30- 2020 <u>2024</u>	IES Method for Evaluating Light Source Color Rendition	8.9.3
International Association of Plumbing and Mechanical Officials (IAPMO) 5001 East Philadelphia Street Ontario, CA 91761, United States 1-909-472-4100; www.iapmo.org		
Z124.9-2004	Plastic Urinal Fixtures	6.3.2.1
International Code Council 500 New Jersey Ave NW # 300 Washington, DC 20001, United States 1-800-786-4452; www.iccsafe.org		
2015 -IFC- <u>15</u>	International Fire Code	5.3.5.5
2021 -IBC- <u>24</u>	International Building Code	4.5, 5.3.1.2, 5.3.7.3.1
International Electrotechnical Commission IEC Regional Centre for North America (IEC-ReCNA) 446 Main Street, 16th Floor Worcester, MA 01608 (USA) 1-508-755-5663; www.iec.ch		
IEC EN 60034-30-1: <u>2026</u> 2014	Rotating Electrical Machines—Part 30-1: Efficiency Classes of Line Operated AC Motors (IE code)	7.4.7.5
International Organization for Standardization (ISO) ISO Central Secretariat Chemin de Blandonnet 8 CP 401 - 1214 Vernier, Geneva, Switzerland +41-22-749-01-11; www.iso.org		
ISO 16890:2016	Air Filters for General Ventilation	8.3.3
ISO 9972:2015	Thermal Performance of Buildings—Determination of Air Permeability of Buildings—Fan Pressurization Method	10.6
ISO 14025: 2026 - <u>2006</u>	Environmental Labels and Declarations—Type III Environmental Declarations—Principles and Procedures	9.4.2
ISO 14040:2006/ <u>Amd 1:2020</u>	Environmental Management—Life Cycle Assessment—Principles and Framework	9.4.2
ISO 14044:2006/ <u>Amd 2:2020</u>	Environmental Management—Life Cycle Assessment—Requirements and Guidelines	9.4.2, 9.5.2

ISO 21930:2017	Sustainability in Buildings and Civil Engineering Works—Core Rules for Environmental Product Declarations of Construction Products and Services	9.4.2
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Reference	Title	Section
ISO/IEC 17025:2017	General Requirements for the Competence of Testing and Calibration Laboratories	8.6.1.1.1, 8.6.1.2.1, 8.6.1.3, 8.6.1.4, 8.6.1.6, 8.6.1.7
ISO/IEC 17065:2012	Conformity Assessment—Requirements for Bodies Certifying Products, Processes, and Services	7.4.1.3, 8.6.1.1.1, 8.6.1.2.1, 8.6.1.3, 8.6.1.4, 8.6.1.6, 8.6.1.7
ISO/IEC Guide 59:2019	ISO and IEC Recommended Practices for Standardization by National Bodies	9.5.1.3.1
Irrigation Association (IA) 8280 Willow Oaks Corporate Drive, Suite 400 Fairfax, VA 22031, United States 1-703-536-7080; www.irrigation.org		
Smart Water Application Technologies (SWAT) Climatologically Based Controllers, 8th Testing Protocol—September 2008	Smart Water Application Technologies (SWAT), Turf and Landscape Irrigation System Smart Controllers, Climatologically Based Controllers	3.2, 6.3.1.3
Low Impact Hydropower Institute (LIHI) 1167 Massachusetts Avenue, Office 407 Arlington, Massachusetts 02476 603-664-5097 https://lowimpacthydro.org		
Version 2.06, March 1, 2025 5, January 1, 2022	Low Impact Hydropower Certification Handbook	7.4.1.3
National Electrical Manufacturers Association (NEMA) 1300 North 17th Street, Suite 900 Rosslyn, VA 22209, United States 1-703-841-3200; www.nema.org		
NEMA 77-2017	Standard for Temporal Light Artifacts: Test Methods and Guidance for Acceptance Criteria	8.9.4.2
NEMA DC 3, Annex A-2013	Energy-Efficiency Requirements for Programmable Thermostats	7.4.7.3
NEMA SSL 7A-2015 (R2021)	Phase-Cut Dimming for Solid State Lighting—Basic Compatibility	8.9.1
National Fenestration Rating Council (NFRC) 6305 Ivy Lane, Suite 140, Greenbelt, MD 20770-6323 1-301-589-1776; www.nfrc.org		
ANSI/NFRC 200- 2026 2020	Procedure for Determining Fenestration Product Solar Heat Gain Coefficients and Visible Transmittance at Normal Incidence	3.2
National Fire Protection Association 1 Battery March Park Quincy, MA 02169-7471 United States 1-617-770-0700; www.nfpa.org		
NFPA 70- 2026 2020 (2023)	National Electrical Code	5.3.6.1
National Institute of Standards and Technology (NIST) 100 Bureau Drive Gaithersburg, MD 20899 301-975-2000; www.nist.gov/standardsgov/voluntary-product-standards-program		
Standard PS 1- 1922	Voluntary Product Standard —Structural Plywood	8.6.1.4

Standard PS 2-18	Voluntary Product Standard—Performance Standard for Wood- Based Structural-Use Panels	8.6.1.4
Standard PS 20-2520	American Softwood Lumber Standard	8.6.1.4

Reference	Title	Section
Natural Stone Council P.O. Box 539 Hollis, NH 03049, United States 978-391-4130; www.naturalstonecouncil.org; info@genuinestone.org		
ANSI/NSC 373- 2022 2023	Natural Stone Sustainability Standard	9.5.1.4
NSF International 789 Dixboro Road Ann Arbor, MI 48105, United States 734-769-8010; www.nsf.org; info@nsf.org		
NSF/ANSI 44- 2026 2018	Residential Cation Exchange Water Softeners	6.3.6.2, 6.3.6.4
NSF/ANSI 58- 2025 2024	Reverse Osmosis Drinking Water Treatment Systems	6.3.7
NSF/ANSI 140- 2025 2019	Sustainability Assessment for Carpet	9.5.1.4
NSF/ANSI 332- 2022 2015	Sustainability Assessment for Resilient Floor Coverings	9.5.1.4
NSF/ANSI 336- 2024 2018	Sustainability Assessment for Commercial Furnishings Fabric	9.5.1.4
NSF/ANSI 342-2019 (r2025)	Sustainability Assessment for Wallcovering Products	9.5.1.4
NSF/ANSI 347-2018	Sustainability Assessment for Single Ply Roofing Membranes	9.5.1.4
NSF/ANSI 350- 2026 2020	On-Site Residential and Commercial Water Reuse Systems	6.3.8
Pool & Hot Tub Alliance (formerly The Association of Pool & Spa Professionals) 2111 Eisenhower Ave., Suite 500 Alexandria, VA 22314-4679 (703) 838-0083 www.phta.org		
ANSI/APSP/ICC-14- 2012 2019	<u>American National Standard for</u> Portable Electric Spa Energy Efficiency	7.4.4.2
South Coast Air Quality Management District (SCAQMD) California Air Resources Board 1001 "I" Street P.O. Box 2815 Sacramento, CA 95812, United States 1-916-322-2990; www.arb.ca.gov		
SCAQMD Rule 4143- 1113 , Amended February 5, 2016 <u>October 26, 2020</u>	Architectural Coatings	8.6.1.2
SCAQMD Rule 1168, Amended October 6, 2017 <u>November 4, 2022</u>	Adhesive and Sealant Applications	8.6.1.1
Standards New Zealand Ministry of Business, Innovation & Employment 15 Stout Street, Wellington 6011. +64 3 943 4259; www.standards.govt.nz		
AS/NZS 2269.0:2012	Australian/New Zealand Standard: Plywood—Structural	8.6.1.4
Tile Council of North America 100 Clemson Research Boulevard Anderson, SC 29625, United States 864-646-8453; www.tcnatile.com; info@tileusa.com		
ANSI A138.1- 2012 2011 (R2021)	Green Squared American National Standard Specifications for Sustainable Ceramic Tiles, Glass Tiles, and Tile Installation Material	9.5.1.4

~~UL Environment and Safety~~
~~333 Pfingston Road~~
~~Northbrook, IL 60062, United States~~
~~1-847-272-8800; www.ul.com; cec.us@us.ul.com~~

UL 102-2012

Standard for Sustainability for Door Leafs

9.5.1.4

Reference	Title	Section
Underwriters Laboratories Inc. (UL) 333 Pfingsten Road Northbrook, IL 60062, United States 1-847-272-8800; www.ul.com; cec.us@us.ul.com		
UL 2854 (First edition, January 25, 2018)	Standard for Sustainability for Renewable Low-Impact Electricity Products- <u>with Revisions through January 25, 2018</u>	7.4.1.3
UL 2998 (2020)	Environmental Claim Validation Procedure (ECVP) for Zero Ozone Emissions from Air Cleaners- <u>with Revisions through November 13, 2020</u>	8.3.3
United States Congress Washington, DC 20515, United States 1-202-224-3121; http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109_cong_bills&docid=f:h6enr.txt.pdf and www.congress.gov/bill/110th-congress/house-bill/6/text		
EPA 2005 HR6 Public Law 109-58	The Energy Policy Act (EPA) of 2005	7.4.7.2
EISA 2007 HR6 Public Law 110-140	The Energy Independence and Security Act of 2007	7.4.7.2
United States Department of Agriculture (USDA) BioPreferred Program 1400 Independence Avenue, SW Washington, DC 20250, United States 1-202-720-2791; www.biopreferred.gov		
7 CFR Part 3201	Guidelines for Designating Biobased Products for Federal Procurement	9.5.1.3
7 CFR Part 3202	Voluntary Labeling Program for Biobased Products	9.5.1.3
United States Environmental Protection Agency (USEPA) 1200 Pennsylvania Avenue, NW Washington, DC 20460, United States www.epa.gov ENERGY STAR® (www.energystar.gov) WaterSense (www.epa.gov/watersense)		
Code of Federal Regulations, Title 40 Part 50 (40 CFR 50), as amended July 26, 2022 <u>March 6, 2024</u>	National Primary and Secondary Ambient Air Quality Standards	8.3.3
Code of Federal Regulations, Title 40 Part 770 (40 CFR 770), published May 22, 2017 <u>August 21, 2019</u>	Formaldehyde Standards for Composite Wood Products	8.6.1.4
January 18, 2022	NPDES General Permit for Stormwater Discharges From Construction Activities	10.4.1
USEPA Method TO-17 (1999)	Determination of Volatile Organic Compounds in Ambient Air Using Active Sampling Onto Sorbent Tubes	8.6.1.1.1, 8.6.1.1.2, 8.6.1.3, 8.6.1.4, 8.6.1.6, 8.6.1.7
Version 1.0, August 14, 2009	WaterSense Specification for Flushing Urinals	6.3.2.1
Version 1.0, October 1, 2007	WaterSense High-Efficiency Lavatory Faucet Specification	6.3.2.1
Version 1.1, September 2, 2021	WaterSense Specification for Weather-Based Irrigation Controllers	6.3.1.2
Version 1.0, December 23, 2016	ENERGY STAR Program Requirements for Connected Thermostat Products	7.4.7.3
Version 1.1, July 26, 2018	WaterSense Specification for Showerheads	6.3.2.1
Version 1.2, August 1, 2003	ENERGY STAR Program Requirements for Commercial Steam Cookers	7.4.7
Version 1.2, January 1, 2011	ENERGY STAR Program Requirements for Commercial Griddles	7.4.7.2

Version 1.2, June 2, 2014	WaterSense Tank-Type Toilet Specification	6.3.2.1
Version 3.0, July 27, 2021	ENERGY STAR Program Requirements for Commercial Dishwashers	6.3.2.2, 7.4.7.2

Reference	Title	Section
Version 3.0, March 23, 2022	ENERGY STAR Program Requirements for Water Coolers	7.4.7.2
Version 2.0, July 7, 2020	ENERGY STAR Program Requirements for Room Air Cleaners	7.4.7.2
Version 2.0, October 1, 2011	ENERGY STAR Program Requirements for Hot Food Holding Cabinets	7.4.7.2
Version 3.0, April 12, 2022	ENERGY STAR Program Requirements for Commercial Ovens	7.4.7.2
Version 3.0, January 2, 2018	ENERGY STAR Program Requirements for Commercial Ice Makers	6.3.2.5
Version 3.0, May 1, 2013	ENERGY STAR Program Requirements for Audio and Video	7.4.7.2
Version 3.0, October 1, 2014	ENERGY STAR Program Requirements for Telephony	7.4.7.2
Version 3.0, October 1, 2016	ENERGY STAR Program Requirements for Commercial Fryers	7.4.7.2
Version 3.2, October 11, 2019	ENERGY STAR Program Requirements for Imaging Equipment	7.4.7.2
Version 4.1, February 21, 2018	ENERGY STAR Specification for Residential Ventilating Fans Eligibility Criteria	Table 7.4.3.5.3
Version 4.1, October 1, 2015	ENERGY STAR Program Requirements for Residential Ventilating Fans	7.4.7.2
Version 5.1, January 1, 2018	ENERGY STAR Program Requirements for Set-Top Boxes	7.4.7.2
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Version 8.0, October 15, 2020	ENERGY STAR Program Requirements for Computers	7.4.7.2
Version 8.0, February 5, 2018	ENERGY STAR Program Requirements for Clothes Washers	6.3.2.2
Version 8.0, January 28, 2020	ENERGY STAR Program Requirements for Displays	7.4.7.2
Version 9.0, October 20, 2022	ENERGY STAR Program Requirements for Televisions	7.4.7.2
World Trade Organization (WTO) Centre William Rappard Rue de Lausanne 154, CH-1211 Geneva 21, Switzerland 41-22-739-51-11; www.wto.org		
WTO TBT-1994	WTO Technical Barriers to Trade (TBT) Agreement Annex 3 Code of Good Practice for the Preparation, Adoption and Application of Standards	9.5.1.3.1

