



# Appliance Definitions, Standards and Test Methods

CURRENT AS OF MAY 7<sup>TH</sup>, 2019

This document is a summary of appliance definitions, standards and test methods, prepared for the convenience of the public. Commerce will conduct a rulemaking process to implement the 2019 law that established these standards.

Product	Definition	Standard	Test Method
<p>Hot water dispensers and mini-tank electric water heaters</p>	<p>"Hot water dispenser" means a small electric water heater that has a measured storage volume of no greater than one gallon.</p> <p>"Mini-tank electric water heater" means a small electric water heater that has a measured storage volume of more than one gallon and a rated storage volume of less than twenty gallons.</p>	<p>(a) The standby energy consumption of hot water dispensers and mini-tank electric water heaters manufactured on or after January 1, 2010, shall be not greater than 35 watts.</p> <p>(b) This subsection does not apply to any water heater:</p> <p>(i) That is within the scope of <a href="#">42 U.S.C. Sec. 6292(a)(4)</a> or <a href="#">6311(1)</a>;</p> <p>(ii) That has a rated storage volume of less than 20 gallons; and</p> <p>(iii) For which there is no federal test method applicable to that type of water heater.</p> <p>Note: Same as <a href="#">20 CCR 1605.3(f)(1)</a>, (see pg. 203-204) through 2018.</p>	<p>(a) Hot water dispensers shall be tested in accordance with the method specified in the <a href="#">California Code of Regulations, Title 20, section 1604 in effect as of July 26, 2009</a>.</p> <p>(b) Mini-tank electric water heaters shall be tested in accordance with the method specified in the <a href="#">California Code of Regulations, Title 20, section 1604 in effect as of July 26, 2009</a>.</p>
<p>Bottle-type water dispensers and point-of-use water dispensers</p>	<p>"Bottle-type water dispenser" means a water dispenser that uses a bottle or reservoir as the source of potable water.</p> <p>"Point-of-use water dispenser" means a water dispenser that uses a pressurized water utility connection as the source of potable water.</p>	<p>The standby energy consumption of bottle-type water dispensers, and point-of-use water dispensers, dispensing both hot and cold water, manufactured on or after January 1, 2010, shall not exceed 1.2 kWh/day.</p>	<p>The test method for water dispensers shall be the environmental protection agency <a href="#">energy star program requirements for bottled water coolers version 1.1</a>.</p>
<p>Residential pool pumps</p>	<p>"Residential pool pump" means a pump used to circulate and filter pool water in order to maintain clarity and sanitation.</p>	<p>Residential pool pumps manufactured on or after January 1, 2010, and until July 18, 2021, must meet requirements specified in the <a href="#">California Code of Regulations, Title 20, section 1605.3</a> in effect as of July 26, 2009.</p> <p>Beginning July 19, 2021, residential pool pumps must meet requirements specified in the dedicated-purpose pool pump rule published by the United States department of energy on January 18, 2017, (<a href="#">82 Fed. Reg. 5650</a>) and effective on May 18, 2017.</p>	

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<p>Portable electric spas</p>	<p>"Portable electric spa" means a factory-built electric spa or hot tub, which may or may not include any combination of integral controls, water heating, or water circulating equipment.</p>	<p>Through December 31, 2019, portable electric spas manufactured on or after January 1, 2010, must meet requirements specified in the <a href="#">California Code of Regulations, Title 20, section 1605.3</a> in effect as of July 26, 2009. Beginning January 1, 2020, portable electric spas must meet the requirements of the American national standard for portable electric spa energy efficiency (<a href="#">ANSI/APSP/ICC-14 2014</a>).</p>	<p>Through December 31, 2019, portable electric spas must be tested in accordance with the method specified in the <a href="#">California Code of Regulations, Title 20, section 1604</a> in effect as of July 26, 2009. Beginning January 1, 2020, portable electric spas must be tested in accordance with the method specified in the American national standard for portable electric spa energy efficiency (<a href="#">ANSI/APSP/ICC-14 2014</a>).</p>
<p>Tub spout diverters</p>	<p>Scope and definition of the applicable regulation must meet the requirements in the <a href="#">California Code of Regulations, Title 20, section 1605.3</a> in effect as of January 1, 2018</p>	<p>The following products that are within the scope and definition of the applicable regulation must meet the requirements in the <a href="#">California Code of Regulations, Title 20, section 1605.3</a> in effect as of January 1, 2018,                      (b) Tub spout diverters,                      (c) Showerhead tub spout diverter combinations,</p>	<p>As measured in accordance with the test methods prescribed in the <a href="#">California Code of Regulations, Title 20, section 1604</a> in effect as of January 1, 2018.</p>
<p>Commercial hot food holding cabinets</p>	<p>"Commercial hot food holding cabinet" means a heated, fully enclosed compartment, with one or more solid or partial glass doors, that is designed to maintain the temperature of hot food that has been cooked in a separate appliance.                      "Commercial hot food holding cabinet" does not include heated glass merchandising cabinets, drawer warmers, or cook and hold appliances.</p>	<p>The idle energy rate of commercial hot food holding cabinets manufactured on or after January 1, 2010, shall be no greater than 40 watts per cubic foot of measured interior volume.</p>	<p>The idle energy rate of commercial hot food holding cabinets shall be determined using <a href="#">ANSI/ASTM F2140-11</a> standard test method for the performance of hot food holding cabinets (test for idle energy rate dry test).                      Commercial hot food holding cabinet interior volume shall be calculated using straight line segments following the gross interior dimensions of the appliance and using the following equation: Interior height x interior width x interior depth. Interior volume shall not account for racks, air plenums, or other interior parts.</p>

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Air compressors	<p>"Air compressor" means a compressor designed to compress air that has an inlet open to the atmosphere or other source of air and is made up of a compression element (bare compressor), a driver or drivers, mechanical equipment to drive the compressor element, and any ancillary equipment.</p> <p>"Compressor" means a machine or apparatus that converts different types of energy into the potential energy of gas pressure for displacement and compression of gaseous media to any higher pressure values above atmospheric pressure and has a pressure ratio at full-load operating pressure greater than 1.3.</p>	<p>Air compressors that meet the twelve criteria listed on page 350 to 351 of the "energy conservation standards for air compressors" final rule <a href="#">issued by the United States department of energy on December 5, 2016</a>, must meet the requirements in table 1 on page 352 following the instructions on page 353.</p>	<p>As measured in accordance with the "uniform test method for certain air compressors" under <a href="#">10 C.F.R. Part 431</a> (Appendix A to Subpart T) as in effect on July 3, 2017.</p>
Commercial fryers	<p>"Commercial fryer" means an appliance, including a cooking vessel, in which oil is placed to such a depth that the cooking food is supported by displacement of the cooking fluid rather than by the bottom of the vessel. Heat is delivered to the cooking fluid by means of an immersed electric element of band-wrapped vessel (electric fryers) or by heat transfer from gas burners through either the walls of the fryer or through tubes passing through the cooking fluid (gas fryers).</p>	<p>Commercial fryers included in the scope of the <a href="#">environmental protection agency energy star program product specification for commercial fryers, version 2.0</a>, must meet the qualification criteria for that specification.</p>	<p>Test requirements are included in the product specification</p>
Commercial dishwashers	<p>"Commercial dishwasher" means a machine designed to clean and sanitize plates, pots, pans, glasses, cups, bowls, utensils, and trays by applying sprays of detergent solution, with or without blasting media granules, and a sanitizing rinse.</p>	<p>Commercial dishwashers included in the scope of the environmental protection agency <a href="#">energy star program product specification for commercial dishwashers, version 2.0</a>, must meet the qualification criteria of that specification.</p>	<p>Test requirements are included in the product specification</p>

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Commercial steam cookers	"Commercial steam cooker" means a device with one or more food-steaming compartments in which the energy in the steam is transferred to the food by direct contact. Models may include countertop models, wall-mounted models, and floor models mounted on a stand, pedestal, or cabinet-style base.	Commercial steam cookers must meet the requirements of the <a href="#">environmental protection agency energy star program product specification for commercial steam cookers, version 1.2.</a>	Test requirements are included in the product specification.
Computers and computer monitors	"Computers and computer monitors must meet the requirements in the <a href="#">California Code of Regulations, Title 20, section 1605.3(v)</a> as adopted on May 10, 2017, and amended on November 8, 2017.	Computers and computer monitors that are within the scope and definition of the applicable regulation must meet the requirements in the <a href="#">California Code of Regulations, Title 20, section 1605.3(v)</a> as adopted on May 10, 2017, and amended on November 8, 2017,	As measured in accordance with test methods prescribed in <a href="#">California Code of Regulations, Title 20, section 1604(v)</a> of those regulations.
Faucets	Scope and definition of the applicable regulation must meet the requirements in the <a href="#">California Code of Regulations, Title 20, section 1605.3</a> in effect as of January 1, 2018.	The following products that are within the scope and definition of the applicable regulation must meet the requirements in the <a href="#">California Code of Regulations, Title 20, section 1605.3</a> in effect as of January 1, 2018,; (d) Lavatory faucets and replacement aerators, (e) Kitchen faucets and replacement aerators, (f) Public lavatory faucets and replacement aerators.	As measured in accordance with the test methods prescribed in the <a href="#">California Code of Regulations, Title 20, section 1604</a> in effect as of January 1, 2018.
High CRI fluorescent lamps	"High color rendering index fluorescent lamp" or "high CRI fluorescent lamp" means a fluorescent lamp with a color rendering index of eighty-seven or greater that is not a compact fluorescent lamp.	High CRI fluorescent lamps must meet the requirements in <a href="#">10 C.F.R. Sec. 430.32(n)(4)</a> in effect as of January 3, 2017.	As measured in accordance with the test methods prescribed in <a href="#">10 C.F.R. Sec. 430.23 (appendix R to subpart B of part 430)</a> in effect as of January 3, 2017.

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Portable air conditioners	<p>"Portable air conditioner" means a portable encased assembly, other than a packaged terminal air conditioner, room air conditioner, or dehumidifier that delivers cooled, conditioned air to an enclosed space, and is powered by single-phase electric current. It includes a source of refrigeration and may include additional means for air circulation and heating and may be a single duct or a dual-duct portable air conditioner.</p>	<p>(14) Portable air conditioners must have a combined energy efficiency ratio, that is greater than or equal to: where "SACC" is seasonally adjusted cooling capacity in Btu/h.</p>	<p>As measured in accordance with the test methods prescribed in 10 C.F.R. Sec. 430.23 (appendix CC to subpart B of part 430) in effect as of January 3, 2017.</p>
Residential ventilating fans	<p>"Residential ventilating fan" means a ceiling, wall-mounted, or remotely mounted in-line fan designed to be used in a bathroom or utility room whose purpose is to move objectionable air from inside the building to the outdoors.</p>	<p>Residential ventilating fans must meet the qualification criteria of the <a href="#">environmental protection agency energy star program product specification for residential ventilating fans, version 3.2</a>.</p>	<p>Residential ventilating fans must meet the qualification criteria of the <a href="#">environmental protection agency energy star program product specification for residential ventilating fans, version 3.2</a>.</p>
Showerheads	<p>Scope and definition of the applicable regulation must meet the requirements in the <a href="#">California Code of Regulations, Title 20, section 1605.3</a> in effect as of January 1, 2018</p>	<p>The following products that are within the scope and definition of the applicable regulation must meet the requirements in the <a href="#">California Code of Regulations, Title 20, section 1605.3</a> in effect as of January 1, 2018,:</p> <p>(a) Showerheads</p>	<p>As measured in accordance with the test methods prescribed in the <a href="#">California Code of Regulations, Title 20, section 1604</a> in effect as of January 1, 2018.</p>
Spray sprinkler bodies	<p>"Spray sprinkler body" means the exterior case or shell of a sprinkler incorporating a means of connection to the piping system designed to convey water to a nozzle or orifice.</p>	<p>Spray sprinkler bodies that are not specifically excluded from the scope of the <a href="#">environmental protection agency water sense program product specification for spray sprinkler bodies, version 1.0</a>, must include an integral pressure regulator and must meet the water efficiency and performance criteria and other requirements of that specification.</p>	<p>Spray sprinkler bodies that are not specifically excluded from the scope of the <a href="#">environmental protection agency water sense program product specification for spray sprinkler bodies, version 1.0</a>, must include an integral pressure regulator and must meet the water efficiency and performance criteria and other requirements of that specification.</p>

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Uninterruptible power supplies	"Uninterruptible power supply" means a battery charger consisting of a number of convertors, switches, and energy storage devices such as batteries, constituting a power system for maintaining continuity of load power in case of input power failure.	Uninterruptible power supplies that utilize a NEMA 1-15P or 5-15P input plug and have an AC output must have an average load adjusted efficiency that meets or exceeds the values shown on page 193 of the prepublication final rule " <a href="#">Energy Conservation Program: Energy Conservation Standards for Uninterruptible Power Supplies</a> " issued by the United States department of energy on <a href="#">December 28, 2016</a> .	As measured in accordance with test procedures prescribed in Appendix Y to Subpart B of Part 430 of Title 10 of the Code of Federal Regulations " <a href="#">Uniform Test Method for Measuring the Energy Consumption of Battery Chargers</a> " in effect as of <a href="#">January 11, 2017</a> .
Urinals	Scope and definition of the applicable regulation must meet the requirements in the <a href="#">California Code of Regulations, Title 20, section 1605.3</a> in effect as of January 1, 2018	The following products that are within the scope and definition of the applicable regulation must meet the requirements in the <a href="#">California Code of Regulations, Title 20, section 1605.3</a> in effect as of January 1, 2018, (g) Urinals	As measured in accordance with the test methods prescribed in the <a href="#">California Code of Regulations, Title 20, section 1604</a> in effect as of January 1, 2018
Water closets	Scope and definition of the applicable regulation must meet the requirements in the <a href="#">California Code of Regulations, Title 20, section 1605.3</a> in effect as of January 1, 2018	The following products that are within the scope and definition of the applicable regulation must meet the requirements in the <a href="#">California Code of Regulations, Title 20, section 1605.3</a> in effect as of January 1, 2018,; (h) Water closets	As measured in accordance with the test methods prescribed in the <a href="#">California Code of Regulations, Title 20, section 1604</a> in effect as of January 1, 2018.
Water coolers	"Water cooler" means a freestanding device that consumes energy to cool or heat potable water, including cold only units, hot and cold units, cook and cold units, storage-type units, and on-demand units.	(19) Water coolers included in the scope of the <a href="#">environmental protection agency energy star program product specification for water coolers, version 2.0</a> , must have an on mode with no water draw energy consumption less than or equal to the following values: (a) 0.16 kilowatt-hours per day for cold-only units and cook and cold units; (b) 0.87 kilowatt-hours per day for storage type hot and cold units; and (c) 0.18 kilowatt-hours per day for on demand hot and cold units.	As measured in accordance with the test requirements of <a href="#">environmental protection agency energy star program product specification for water coolers, version 2.0</a> .



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General service lamps	<p>"General service lamp" has the same meaning as set forth in the action published at <a href="#">82 Fed. Reg. 7276, 7321-22</a> (January 19, 2017) and modified by the action published at <a href="#">82 Fed. Reg. 7322, 7333</a> (January 19, 2017).</p>	<p>(20) General service lamps must meet or exceed a lamp efficacy of 45 lumens per watt.</p>	<p>Tested in accordance with the applicable federal test procedures for general service lamps prescribed in <a href="#">10 C.F.R. Sec. 430.23 in effect as of January 3, 2017.</a></p>
Electric storage water heaters	<p>"Electric storage water heater" means a consumer product that uses electricity as the energy source to heat domestic potable water, has a nameplate input rating of twelve kilowatts or less, contains nominally forty gallons but no more than one hundred twenty gallons of rated hot water storage volume, and supplies a maximum hot water delivery temperature less than one hundred eighty degrees Fahrenheit.</p>	<p>The product must have a modular demand response communications port compliant with:</p> <ul style="list-style-type: none"> <li>(i) The March 2018 version of the <a href="#">ANSI/CTA-2045-A</a> communication interface standard, or equivalent and</li> <li>(ii) the March 2018 version of the <a href="#">ANSI/CTA-2045-A</a> application layer requirements.</li> </ul> <p>(b) The interface standard and application layer requirements required in this subsection are the versions established in March 2018, unless the department adopts by rule a later version.</p>	