

Energy and Water Efficiency Standards Adopted by State

Updated May 2020 by Appliance Standards Awareness Project

X = adopted standard (with effective date shown)

No shading = standard now preempted by equivalent or stronger federal standards

Yellow = state is implementing until federal standards take effect

Blue = no federal preemption applies

| STATE <i>(year(s) of enactment)</i> | AZ 2005 2009 | CA var. | CO 2014 2019 | CT 2004 2007 2011 | DC 2007 | GA 2010 | HI 2019 | MA 2005 | MD 2004 2007 | NH 2008 | NJ 2005 | NV 2007 2019 | NY ¹ 2005 2010 2019 | OR 2005 2007 2013 | RI 2005 2006 | TX 2009 | VT ² 2006 2017 2018 | WA 2005 2009 2019 | Federal standards initial effective date |
|--|--------------------|--------------------|--------------------|----------------------------|------------|------------|------------|------------|--------------------|------------|-------------------|--------------------|---|----------------------------|--------------------|------------|---|----------------------------|---|
| Air compressors | | X 2022 | X 2022 | | | | | | | | | | | | | | X 2020 | X 2022 | Jan 2025 |
| Automatic commercial ice makers | X 2008 | X 2007 | | | | | | | | | | | X 2010 | X 2008 | X 2010 | | | X 2008 | Jan. 2010 |
| Battery Chargers | | X 2013 | | | | | | | | | | | | X 2014 | | | | | May 2018 |
| Bottle-type water dispensers | | X 2007 | | X 2009 | X 2009 | | | | X 2009 | X 2009 | | | X | X 9/2009 | X 2008 | | | X 2010 | None |
| Ceiling fans and ceiling fan light kits | | X 2006 | | | | | | | X 3/2007 | | | | X | | | | | | Jan. 2007 |
| Commercial clothes washers | X 2008 | X 2005/ 2007 | | X 7/2007 | | | | | X 3/2007 | | X 2007 2010 | | | X 2009 | X 2007 | | | X 2007 | Jan. 2007 |
| Commercial dishwashers | | | X 2021 | | | | | | | | | | | | | | X 2020 | X 2021 | None |
| Commercial fryers | | | X 2021 | | | | | | | | | | | | | | X 2020 | X 2021 | None |
| Commercial hot-food holding cabinets | | X 2007 | X 2021 | X 2009 | X 2009 | | | | X 2009 | X 2009 | | | X | X 2009 | X 2008 | | X 2020 | X 2010 | None |
| Commercial pre-rinse spray valves | X 2008 | X 2006 | | | | | | | | | | | X | X 2007 | X 2007 | | | X 2007 | Jan. 2006 |
| Commercial refrigerators and freezers | X 2010 | X 2003/ 2006 | | X 7/2008 | | | | | X 9/2005 | | X 2010 | | X 2010 | X 2008 | X 2010 | | | X 2007 | Jan. 2010/2012 |
| Commercial steam cookers | | | X 2021 | | | | | | | | | | | | | | X 2020 | X 2021 | None |

¹ The New York law specified standards and effective dates for some products (those with effective dates shown) and required agency rulemaking to determine standards for other products. The rulemaking was never completed

² In 2017, Vermont enacted a state law (H.411) that "...adopts federal appliance and lighting efficiency standards in effect on January 19, 2017 so that the same standards will be in place in Vermont should the federal standards be repealed or voided."

| STATE (year(s) of enactment) | AZ 2005 2009 | CA var. 2014 2019 | CO 2014 2019 | CT 2004 2007 2011 | DC 2007 | GA 2010 | HI 2019 | MA 2005 | MD 2004 2007 | NH 2008 | NJ 2005 | NV 2007 2019 | NY ¹ 2005 2010 2019 | OR 2005 2007 2013 | RI 2005 2006 | TX 2009 | VT ² 2006 2017 2018 | WA 2005 2009 2019 | Federal standards initial effective date |
|---|--------------------|---------------------------------|--------------------|----------------------------|------------|------------|------------|------------|--------------------|------------|-------------|------------------------|---|----------------------------|--------------------|------------|---|----------------------------|---|
| Computers and computer monitors | | X 2018- 2021 ³ | X 2021 | | | | X 2021 | | | | | | | | | | X 2020 | X 2021 | None |
| Consumer audio and video products ⁴ | | X 2006/ 2007 | | X 2011 | | | | | | | | | X | X 2009 | | | | | None |
| Deep-dimming fluorescent ballasts | | X 2016 | | | | | | | | | | | | | | | | | None |
| Digital television adapters | | | | | | | | | | | | | X | | | | | | None ⁵ |
| Double-ended quartz halogen lamps | | | | | | | | | | | | | | X 2016 | | | | | None |
| External power supplies ⁶ | | X 2012 | | | | | | | | | | | | | | | | | None for this type |
| Faucets ⁷ (residential and public lavatory and kitchen) | | X 7/2016 | X 2016 | | | | X 2021 | | | | | | X 2022 | | | | X 2020 | X 2021 | Fed preemption waived |
| General service light bulbs Tier 1 | | X ⁸ 2011- 2013 | | | | | | | | | | X ⁹ 2012 | | | | | | | 2012 – 2014 ¹⁰ |
| General service light bulbs Tier 2 *45 lpw) ¹¹ | | X 2018 | X 2020 | | | | | | | | | X 2020 | | | | | X 2020 | X 2020 | TBD |
| HID lamp ballasts (mercury vapor) | | | | | | | | | | | | | | | X 2007 | | | | Jan. 2008 |
| High-CRI fluorescent lamps | | | X 2021 | | | | X 2021 | | | | | | | | | | X 2020 | X 2023 | None |
| Illuminated exit signs | X 2008 | X 3/2003 | | X 7/2006 | | | | | X 3/2005 | | X 3/2007 | | X | X 2007 | X 2007 | | | X 2007 | Jan. 2006 |

³ Compliance date varies by type of computer. Date for the most common computers is January 1, 2019; A second tier is effective July 1, 2021

⁴ Products in this category include only DVD players and compact audio products (i.e. shelf systems, but not portable music players or component systems).

⁵ ASAP no longer recommends state standards. The federal government offered a coupon to consumers in 2009 based on minimum federal standards.

⁶ These standards apply to certain EPS not covered by federal standards. See the [CA 2015 Appliance Efficiency Regulations](#) for definitions, scope and standards (see pages 77-79 and 173-174)

⁷ CA, HI, WA, and VT adopted 1.2 gallons per minute (gpm) standards for residential lavatory faucets; CO and NY adopted 1.5gpm.

⁸ CA implemented the Tier 1 federal standards for general service light bulbs one year earlier than federal implementation.

⁹ The NV standard of 25 lumens per watt was exempt from federal preemption because it predated and was stronger than the federal standard.

¹⁰ The initial federal standards took effect for lamps with lumen output equal to conventional 100-watt bulbs in 2012, for those with lumen output of conventional 75-watt bulbs in 2013 and for those with output equal to conventional 60- and 40-watt bulbs in 2014.

¹¹ According to federal statute, Tier 2 federal standards should be in effect as of January 2020, but DOE failed to implement the standards. The standards are under litigation. California and Nevada are free from preemption and able to implement Tier 2 general service lighting standards. CO, WA, VT (with lighter blue shading) are preempted from implementing standards for some bulb types due to legacy standards.

| STATE (year(s) of enactment) | AZ 2005 2009 | CA var. 2006/ 2010 | CO 2014 2019 | CT 2004 2007 2011 | DC 2007 | GA 2010 | HI 2019 | MA 2005 | MD 2004 2007 | NH 2008 | NJ 2005 | NV 2007 2019 | NY ¹ 2005 2010 2019 | OR 2005 2007 2013 | RI 2005 2006 | TX 2009 | VT ² 2006 2017 2018 | WA 2005 2009 2019 | Federal standards initial effective date |
|---|--------------------|---|--------------------|----------------------------|------------|------------|------------|------------|--------------------|------------|-----------------|--------------------|---|----------------------------|--------------------|------------|---|----------------------------|---|
| Large packaged AC >20 tons | X 2010 | X 2006/ 2010 | | X 7/2009 | | | | | X 8/2005 | | X 2010 | | X 2010 | | X 2010 | | | | Jan. 2010 |
| Light-emitting diodes (LEDs) | | X 2018 | | | | | | | | | | | | | | | | | None |
| Light-emitting diodes | | X 2019 | | | | | | | | | | | | | | | | | None |
| Low-voltage dry-type transformers ¹² | X 2008 | X 3/2003 | | X 7/2006 | | | | X 1998 | X 3/2005 | | X 3/ 2007 | | X 2003 | X 2003 | X 2007 | | | X 2007 | Jan. 2007 |
| Medium-voltage dry- type transformers ¹³ | | | | | | | | X 2008 | | | | | | | | | X 2008 | | 2010 |
| Metal halide lamp fixtures | X 2008 | X ¹⁴ 2006 08/10 /15 | | X 2010 | X 2009 | | | X 2009 | X 2009 | | | | X 2008 | X 2008 | X 2008 | | X 2009 | X 2009 | Jan. 2009 Jan. 2017 |
| Miscellaneous refrigerated products (wine chillers) | | X 2003 | | | | | | | | | | | | | | | | | Oct 2019 |
| Pool pumps | X 2012 | 2006 2008 2010 | | X 2010 | | | | | | | | | X | | | | | X 2010 2021 | May 2021 |
| Portable air conditioners | | X 2022 | X 2022 | | | | | | | | | | | | | | X 2022 | X 2022 | Jan 2025 |
| Portable electric spas ¹⁵ | X 2012 | X 2009/ 2019 | X 2021 | X 2009 | | | | | | | | | X | X 9/2009 | | | X 2021 | X 2010/ 2021 | None |
| Portable light fixtures | | X 2010 | | | | | | | | | | | X | | | | | | None |
| Residential boilers | | | | | | | | X | | | | | | | X | | X | | Sept. 2012 |
| Residential furnace fans | | | | | | | | X | X | X | | | | | X | | X | | Jan. 2017 ¹⁶ |
| Residential furnaces ¹⁷ | | | | | | | | X | X ¹⁸ | X | | | | | X | | X | | May 2013 |

¹² States with transformer standards pre-dating state laws either had building code requirements or earlier state legislation for this product.

¹³ US DOE issued final federal standards for medium voltage dry type transformers (and liquid immersed transformers) in October 2007 which became effective Jan. 2010. Preemption for this product occurred upon issuance of the final rule in 2007.

¹⁴ CA standards apply to vertical, base up fixtures as of 1/2006 and expanded to all other fixtures regardless of position effective 1/2008. CA standards for certain metal halide fixtures are exempt from federal preemption. See the [CA 2015 Appliance Efficiency Regulations](#).

¹⁵ AZ, CA, CT, NY, OR, and WA standards set a maximum limit on standby power. CO, VT, and WA updated to the 2014 ANSI (industry) standard. In 2019, CA adopted a more stringent standard in 2019, generally aligning with the 2019 ANSI standards.

¹⁶ The 2007 federal energy bill did not set a specific standard for furnace fans but instructed the DOE to set a standard by January 2014. Those standards were set in 2014.

¹⁷ States must seek and be granted waivers from federal preemption to implement state furnace and boiler standards. A petition from Massachusetts to enforce state gas furnace was denied by U.S. DOE in October 2010.

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| Residential ventilating fans | | | X 2021 | | | | | | | | | | | | | | X 2020 | X 2021 | None |
| Showerheads (2.0 gpm) | | X 2016 | X 2016 | | | | | | | | | | X 2022 | | | | X 2020 | | Fed preemption waived |
| Showerheads Tier 2 (1.8 gpm) | | X 2018 | | | | | X 2021 | | | | | | | | | | | X 2021 | Fed preemption waived |
| Single-voltage external power supplies | X 2008 | X 2007 2008 | | X 2008 | X 2012 | | | X 2008 | X 2012 | | | | X | X 2008 | X 2007 | | X 2008 | X 2008 | July 2008 ¹⁹ Feb 2014 |
| Small-diameter directional lamps | | X 2018 | | | | | | | | | | | | | | | | | None |
| Sprinkler spray bodies | | X 2021 | X 2021 | | | | X 2021 | | | | | | | | | | X 2020 | X 2021 | None |
| State regulated incandescent reflector lamps (BRs, ERs, R20s) ²⁰ | | X 2007 2020 | | X 2009 | X 2009 | | | X 2008 | X 2009 | | | X 2020 | X | X | X 2008 | | X 2008 | X 2008 | June 2008 |
| Televisions | | X 2011 2013 | | X 2011 | | | | | | | | | X | X 2014 | | | | | None |
| Toilets (1.28 gpf) | | X 2014 | X 2016 | | | X 2012 | | | | | | | X 2022 | | | X 2014 | X 2020 | X 2021 | Fed preemption waived |
| Torchieres | X 2008 | X 2003 | | X 7/2006 | | | | | X 3/2005 | | X 3/2007 | | X | X 2007 | X 2007 | | | X 2007 | Jan. 2006 |
| Traffic signals (pedestrian) | | X 2006 | | | | | | | | | | | X | | | | | | Jan. 2006 |
| Traffic signals (vehicular) | X 2008 | X 2003 | | X 7/2006 | | | | | X 3/2005 | | X 3/2007 | | X | X 2007 | X 2007 | | | X 2007 | Jan. 2006 |
| Uninterruptible power supplies | | X ²¹ | X 2021 | | | | | | | | | | | | | | X 2020 | X 2021 | Jan 2022 |
| Unit heaters | X 2008 | X 2006 | | X 7/2006 | | | | | X 9/2005 | | X 3/2007 | | X | X 2008 | X 2007 | | | X 2007 | Aug. 2008 |

¹⁸ The furnace standards in MD and NH only apply to natural gas and propane furnaces installed in new construction.

¹⁹ The federal standard (July 2008) has a narrower scope than most state standards because it does not apply to certain power supplies used with some products that include batteries. The 2014 standards expanded the scope of covered products.

²⁰ In 2019, CA and NV adopted light bulb standards that include these lamps.

²¹ Some UPS in CA are covered by the CA battery charger standard.

| STATE (year(s) of enactment) | AZ 2005 2009 | CA var. | CO 2014 2019 | CT 2004 2007 2011 | DC 2007 | GA 2010 | HI 2019 | MA 2005 | MD 2004 2007 | NH 2008 | NJ 2005 | NV 2007 2019 | NY ¹ 2005 2010 2019 | OR 2005 2007 2013 | RI 2005 2006 | TX 2009 | VT ² 2006 2017 2018 | WA 2005 2009 2019 | Federal standards initial effective date |
|---|--------------------|------------|--------------------|----------------------------|------------|------------|------------|------------|--------------------|------------|------------|--------------------|---|----------------------------|--------------------|------------|---|----------------------------|--|
| Urinals (0.5 gpf) | | X 2014 | X 2016 | | | | | | | | | | X 2022 | | | X 2014 | X 2020 | | Fed preemption waived |
| Wall-mounted urinals (0.125 gpf) | | X 2016 | | | | | | | | | | | | | | | | X 2021 | Fed preemption waived |
| Trough urinals | | X 2016 | | | | | | | | | | | | | | | MD check | | Fed preemption waived |
| Walk-in refrigerators and freezers | | X 2007 | | X 2009 | X 2009 | | | | X 2009 | | | | | X 9/2009 | X 2008 | | | | Jan. 2009 |
| Water coolers ²² | | X 2007 | X 2021 | X 2009 | X 2009 | | | X 2009 | X 2009 | | | | X | 9/2009 | X 2008 | | X 2020 | X 2010/ 2021 | None |
| Water heaters, electric storage ²³ | | | | | | | | | | | | | | | | | | X 2021 | None |

NOTES:

1. CA has standards for some products not covered in this document.
2. The last column shows the effective date for product standards either set by DOE or included in the 2005 and 2007 or subsequent federal energy laws. Under the general rules of federal preemption applied by these laws, states which set standards prior to federal enactment may enforce their state standards up until the federal standards become effective. But states that have not yet set standards are preempted upon federal enactment. (Note that there are some exceptions to this general rule.) State standards with no highlighting (no shading) are now preempted because (a) federal standards are now in effect or (b) federal standards will become effective prior to the state implementation date. Those highlighted in yellow will be implemented for some period of time before federal standards take effect.
3. Unless otherwise shown, standards become effective on January 1. Where two dates are shown, the standard has two levels or components which become effective on different dates.

²²This product was previously called bottled-water dispensers. CA, CT, DC, MD, NH, NY, OR, RI, and WA adopted an earlier version of the standard.

²³ This is a prescriptive standard that requires a demand-response communication capability.