

REFERENCE TITLE: energy efficiency standards; rules

State of Arizona  
House of Representatives  
Fifty-third Legislature  
Second Regular Session  
2018

## **HB 2347**

Introduced by  
Representatives Engel: Andrade, Blanc, Clark, Epstein, Hernandez,  
Martinez, Salman

AN ACT

AMENDING SECTIONS 44-1375, 44-1375.01, 44-1375.02 AND 44-1375.03, ARIZONA REVISED STATUTES; AMENDING TITLE 44, CHAPTER 9, ARTICLE 19, ARIZONA REVISED STATUTES, BY ADDING SECTION 44-1375.04; RELATING TO APPLIANCE AND EQUIPMENT ENERGY EFFICIENCY STANDARDS.

(TEXT OF BILL BEGINS ON NEXT PAGE)

1 Be it enacted by the Legislature of the State of Arizona:

2 Section 1. Section 44-1375, Arizona Revised Statutes, is amended to  
3 read:

4 44-1375. Definitions

5 In this article, unless the context otherwise requires:

6 1. "Automatic commercial icemaker" means a factory made assembly  
7 that is shipped in one or more packages, that consists of a condensing  
8 unit and icemaking section operating as an integrated unit, that makes and  
9 harvests ice cubes and that may store or dispense ice. Automatic  
10 commercial icemaker includes machines with capacities between fifty and  
11 two thousand five hundred pounds per twenty-four hours.

12 2. "Ballast" means a device used with an electric discharge lamp to  
13 obtain necessary circuit conditions such as voltage, current and waveform  
14 for starting and operating the lamp.

15 3. "Commercial clothes washer" means a soft mount horizontal or  
16 vertical axis clothes washer that both:

17 (a) Has a clothes container compartment no greater than three and  
18 one-half cubic feet in the case of a horizontal axis product or no greater  
19 than four cubic feet in the case of a vertical axis product.

20 (b) Is designed for use by more than one household, such as in  
21 multifamily housing, apartments or coin laundries.

22 4. "Commercial prerinse spray valve" means a handheld device  
23 designed to spray water on dishes, flatware and other food service items  
24 for the purpose of removing food residue prior to cleaning.

25 5. "Commercial refrigerator, freezer and refrigerator freezer"  
26 means self-contained refrigeration equipment that:

27 (a) Is not a consumer product as regulated pursuant to 42 United  
28 States Code chapter 77.

29 (b) Operates at a chilled, frozen, combination chilled-frozen or  
30 variable temperature for the purpose of storing or merchandising food,  
31 beverages or ice.

32 (c) May have transparent or solid or both transparent and solid  
33 hinged doors, sliding doors or a combination of hinged and sliding doors.

34 (d) Incorporates most components involved in the vapor-compression  
35 cycle and the refrigerated compartment in a single cabinet.

36 (e) Does not include:

37 (i) Units with eighty-five cubic feet or more of internal volume.

38 (ii) Walk-in refrigerators or freezers.

39 (iii) Units with no doors.

40 (iv) Freezers specifically designed for ice cream.

41 6. "GENERAL SERVICE LAMP":

42 (a) BEGINNING ON THE EFFECTIVE DATE OF THIS AMENDMENT TO THIS  
43 SECTION THROUGH DECEMBER 31, 2019, HAS THE SAME MEANING PRESCRIBED IN 10  
44 CODE OF FEDERAL REGULATIONS SECTION 430.2 IN EFFECT UNTIL JANUARY 1, 2020.

1 (b) FROM AND AFTER DECEMBER 31, 2019, HAS THE SAME MEANING  
2 PRESCRIBED IN 10 CODE OF FEDERAL REGULATIONS SECTION 430.2 IN EFFECT  
3 BEGINNING ON JANUARY 1, 2020.

4 ~~6.~~ 7. "High-intensity discharge lamp" means a lamp in which light  
5 is produced by the passage of an electric current through a vapor or gas  
6 and in which the light producing arc is stabilized by bulb wall  
7 temperature and the arc tube has a bulb wall loading in excess of three  
8 watts per square centimeter.

9 ~~7.~~ 8. "Illuminated exit sign" means an internally illuminated sign  
10 that is designed to be permanently fixed in place to identify a building  
11 exit and that consists of an electrically powered integral light source  
12 that both illuminates the legend "exit" and any directional indicators and  
13 provides contrast between the legend, any directional indicators and the  
14 background.

15 ~~8.~~ 9. "Large packaged air conditioning equipment" means  
16 electrically operated, air cooled air conditioning and air conditioning  
17 heat pump equipment that has cooling capacity greater than or equal to two  
18 hundred forty thousand BTU per hour but less than seven hundred sixty  
19 thousand BTU per hour and that is built as a package and shipped as a  
20 whole to end user sites.

21 ~~9.~~ 10. "Low voltage dry type distribution transformer" means a  
22 transformer to which all of the following apply:

- 23 (a) Has an input voltage of six hundred volts or less.
- 24 (b) Is air cooled.
- 25 (c) Does not use oil as a coolant.
- 26 (d) Is rated for operation at a frequency of sixty hertz.

27 ~~10.~~ 11. "Metal halide lamp" means a high intensity discharge lamp  
28 in which the major portion of the light is produced by radiation of metal  
29 halides and their products of dissociation, possibly in combination with  
30 metallic vapors.

31 ~~11.~~ 12. "Metal halide lamp fixture" means a light fixture designed  
32 to be operated with a metal halide lamp and a ballast for a metal halide  
33 lamp.

34 ~~12.~~ 13. "Portable electric spa" means a factory-built electric spa  
35 or hot tub that is supplied with equipment for heating and circulating  
36 water.

37 ~~13.~~ 14. "Probe start metal halide ballast" means a ballast used to  
38 operate metal halide lamps that does not contain an ignitor and ~~which~~ THAT  
39 instead starts lamps by using a third starting electrode probe in the arc  
40 tube.

41 ~~14.~~ 15. "Pull-down refrigerator" means a commercial refrigerator  
42 specifically designed to rapidly reduce all integrated product  
43 temperatures from ninety degrees fahrenheit to thirty-eight degrees  
44 fahrenheit over a twelve hour period when fully loaded with beverage  
45 containers.

1           ~~15.~~ 16. "Residential pool pump" means a pump that is used to  
2 circulate and filter residential swimming pool water in order to maintain  
3 clarity and sanitation and that consists, in part, of a motor and an  
4 impeller and housing.

5           ~~16.~~ 17. "Residential pool pump motor" means a definite purpose  
6 motor designed for use in a residential pool pump.

7           ~~17.~~ 18. "Single voltage external AC to DC power supply" means a  
8 device that:

9           (a) Is designed to convert line voltage AC input into lower voltage  
10 DC output.

11           (b) Is able to convert to only one DC output voltage at a time.

12           (c) Is sold with, or intended to be used with, a separate end use  
13 product that constitutes the primary power load.

14           (d) Is contained within a separate physical enclosure from the end  
15 use product.

16           (e) Is connected to the end use product via a removable or hard  
17 wired male/female electrical connection, cable, cord or other wiring.

18           (f) Does not have batteries or battery packs, including those that  
19 are removable and that physically attach directly to the power supply  
20 unit.

21           (g) Does not have a battery chemistry or type selector switch and  
22 indicator light or does not have a battery chemistry or type selector  
23 switch and a state of charge meter.

24           (h) Has a nameplate output power less than or equal to two hundred  
25 fifty watts.

26           ~~18.~~ 19. "Torchiere" means a portable electric lighting fixture  
27 with a reflective bowl that directs light upward onto a ceiling so as to  
28 produce indirect illumination on the surfaces below. A torchiere may  
29 include downward directed lamps in addition to the upward, indirect  
30 illumination.

31           ~~19.~~ 20. "Traffic signal module" means a standard eight inch or  
32 twelve inch traffic signal indication, consisting of a light source, a  
33 lens and all other parts necessary for operation.

34           ~~20.~~ 21. "Transformer" means a device that consists of two or more  
35 coils of insulated wire and that is designed to transfer alternating  
36 current by electromagnetic induction from one coil to another to change  
37 the original voltage or current value. Transformer does not include:

38           (a) Transformers with multiple voltage taps, with the highest  
39 voltage tap equaling at least twenty ~~percent~~ PERCENT more than the lowest  
40 voltage tap.

41           (b) Transformers, such as those commonly known as drive  
42 transformers, rectifier transformers, auto transformers, uninterruptible  
43 power system transformers, impedance transformers, regulating  
44 transformers, sealed and nonventilating transformers, machine tool  
45 transformers, welding transformers, grounding transformers or testing

1 transformers, that are designed to be used in a special purpose  
2 application and that are unlikely to be used in general purpose  
3 applications.

4 ~~21.~~ 22. "Unit heater" means a self-contained, vented fan type  
5 commercial space heater that uses natural gas or propane and that is  
6 designed to be installed without ducts within a heated space, except that  
7 unit heater does not include any products covered by federal standards  
8 established pursuant to 42 United States Code chapter 77 or any product  
9 that is a direct vent, forced flue heater with a sealed combustion burner.

10 Sec. 2. Section 44-1375.01, Arizona Revised Statutes, is amended to  
11 read:

12 44-1375.01. Applicability

13 A. This article applies to the following types of new products  
14 sold, offered for sale or installed in this state:

- 15 1. Automatic commercial icemakers.
- 16 2. Commercial clothes washers.
- 17 3. Commercial prerinse spray valves.
- 18 4. Commercial refrigerators, freezers and refrigerator freezers.
- 19 5. Illuminated exit signs.
- 20 6. Large packaged air conditioning equipment.
- 21 7. Low voltage dry type distribution transformers.
- 22 8. Metal halide lamp fixtures.
- 23 9. Single voltage external AC to DC power supplies.
- 24 10. Torchieres.
- 25 11. Traffic signal modules.
- 26 12. Unit heaters.
- 27 13. Portable electric spas.
- 28 14. Residential pool pumps and residential pool pump motors.

29 B. This article does not apply to:

- 30 1. New products manufactured in this state and sold outside this  
31 state.
- 32 2. New products manufactured outside this state and sold at  
33 wholesale inside this state for final retail sale and installation outside  
34 this state.
- 35 3. Products installed in mobile manufactured homes at the time of  
36 construction.
- 37 4. Products designed expressly for installation and use in  
38 recreational vehicles.
- 39 5. Products installed in a laundry facility located within an  
40 apartment complex or mobile home park at the time of construction or  
41 replacement. For the purposes of this paragraph, "apartment complex"  
42 means any real property that has one or more structures and that contains  
43 four or more dwelling units for rent or lease that are subject to the  
44 Arizona residential landlord and tenant act prescribed by title 33,  
45 chapter 10.

1           6. GENERAL SERVICE LAMPS.

2           7. EACH PRODUCT FOR WHICH THE DEPARTMENT OF ENVIRONMENTAL QUALITY  
3 IS REQUIRED TO ADOPT AN EFFICIENCY OR WATER CONSERVATION STANDARD BY RULE  
4 PURSUANT TO SECTION 44-1375.02.

5           Sec. 3. Section 44-1375.02, Arizona Revised Statutes, is amended to  
6 read:

7           44-1375.02. Standards; department of environmental quality  
8                                   rules

9           A. Except as provided in subsection C, the following standards  
10 apply beginning January 1, 2008:

11           1. Automatic commercial icemakers shall meet the requirements of  
12 section 1605.3 of the California Code of Regulations, title 20: division  
13 2, chapter 4, article 4, in effect on August 12, 2005.

14           2. Commercial clothes washers shall meet the requirements of  
15 section 1605.3 of the California Code of Regulations, title 20: division  
16 2, chapter 4, article 4, in effect on August 12, 2005.

17           3. Commercial prerinse spray valves shall have a flow rate equal to  
18 or less than 1.6 gallons per minute.

19           4. Commercial refrigerators, freezers and refrigerator freezers  
20 shall meet the requirements of section 1605.3 of the California Code of  
21 Regulations, title 20: division 2, chapter 4, article 4, in effect on  
22 August 12, 2005, except that pulldown refrigerators with transparent doors  
23 shall meet a requirement five ~~per cent~~ PERCENT less stringent than shown  
24 in the California regulations.

25           5. Illuminated exit signs shall have an input power demand of five  
26 watts or less per illuminated face and shall either have a power factor of  
27 at least 0.70 or meet the power factor product specification of the energy  
28 star program requirements, whichever is higher.

29           6. Large packaged air conditioning equipment shall meet a minimum  
30 energy efficiency ratio of 10.0 for air conditioning without an integrated  
31 heating component or with electric resistance heating integrated into the  
32 unit, 9.8 for air conditioning with heating other than electric resistance  
33 integrated into the unit, 9.5 for air conditioning heat pumps without an  
34 integrated heating component or with electric resistance heating  
35 integrated into the unit and 9.3 for air conditioning heat pump equipment  
36 with heating other than electric resistance integrated into the unit.  
37 Large packaged air conditioning heat pumps shall meet a minimum  
38 coefficient of performance in the heating mode of 3.2 measured at a high  
39 temperature rating of forty-seven degrees Fahrenheit.

40           7. Through December 31, 2010, low voltage dry type distribution  
41 transformers shall meet the class 1 efficiency levels for low voltage  
42 distribution transformers specified in table 4-2 of the guide for  
43 determining energy efficiency for distribution transformers, published by  
44 the national electrical manufacturers association (NEMA standard TP-  
45 1-2002), in effect on August 12, 2005.

1           8. Metal halide lamp fixtures designed to be operated with lamps  
2 rated greater than or equal to one hundred fifty watts but less than or  
3 equal to five hundred watts shall not contain a probe start metal halide  
4 lamp ballast.

5           9. Single voltage external AC to DC power supplies shall meet the  
6 tier one energy efficiency requirements of section 1605.3 of the  
7 California Code of Regulations, title 20: division 2, chapter 4, article  
8 4, in effect on August 12, 2005. This standard applies to single voltage  
9 AC to DC power supplies that are sold individually and to those that are  
10 sold as a component of or in conjunction with another product.

11           10. Torchieres shall not use more than one hundred ninety watts. A  
12 torchiere shall be deemed to use more than one hundred ninety watts if any  
13 commercially available lamp or combination of lamps can be inserted in its  
14 socket and cause the torchiere to draw more than one hundred ninety watts  
15 when operated at full brightness.

16           11. Traffic signal modules shall meet the product specification of  
17 the energy star program requirements for traffic signals developed by the  
18 United States environmental protection agency that took effect in February  
19 2001, shall have a power factor of at least 0.90 and shall be installed  
20 with compatible, electrically connected signal control interface devices  
21 and conflict monitoring systems.

22           12. Unit heaters shall be equipped with an intermittent ignition  
23 device and shall have either power venting or an automatic flue damper.

24           B. Beginning January 1, 2012, the following standards apply:

25           1. Portable electric spas shall not have a normalized standby power  
26 greater than five times the spa's fill volume in gallons raised to the  
27 two-thirds power.

28           2. Residential pool pumps and residential pool pump motors shall  
29 comply with both of the following:

30           (a) Motors shall not be split-phase or capacitor start-induction  
31 run type motors, except for the following:

32           (i) The low-speed section of two-speed motors may be capacitor  
33 start-induction run type.

34           (ii) Forty-eight-frame motors designed for use with aboveground  
35 pools are exempt from this requirement.

36           (b) Motors with a total horsepower capacity of one or more shall  
37 have the capability of operating at two or more speeds with a low speed  
38 having a rotation rate that is no more than one-half of the motor's  
39 maximum rotation rate and shall be operated with a pump control with the  
40 capability of operating the pump at two or more speeds. Residential pool  
41 pump motor controls that are sold for use with a two or more speed motor  
42 shall have a default circulation speed setting no more than one-half of  
43 the motor's maximum rotation rate. Any high speed override capability  
44 shall be for a temporary period not to exceed one twenty-four hour cycle  
45 without resetting to the default setting.

1 C. The standards prescribed by subsection A OF THIS SECTION apply  
2 beginning January 1, 2010, if the product is a commercial refrigerator,  
3 freezer or refrigerator freezer or large packaged air conditioning  
4 equipment.

5 D. Beginning on May 31, 2008, and every three years thereafter  
6 UNTIL MAY 31, 2017, the governor's energy office shall conduct a  
7 comparative review and assessment of the standards prescribed by  
8 ~~subsection A~~ THIS ARTICLE and energy efficiency standards adopted in other  
9 states. The GOVERNOR'S energy office shall:

10 1. Submit a report of its findings and recommendations to the  
11 speaker of the house of representatives and president of the senate.

12 2. Provide a copy of the report to the secretary of state.

13 E. BEGINNING ON MAY 31, 2020, AND EVERY THREE YEARS THEREAFTER, THE  
14 DEPARTMENT OF ENVIRONMENTAL QUALITY SHALL CONDUCT A COMPARATIVE REVIEW AND  
15 ASSESSMENT OF THE STANDARDS PRESCRIBED BY THIS ARTICLE AND ENERGY  
16 EFFICIENCY STANDARDS ADOPTED IN OTHER STATES. THE DEPARTMENT OF  
17 ENVIRONMENTAL QUALITY SHALL:

18 1. SUBMIT A REPORT OF ITS FINDINGS AND RECOMMENDATIONS TO THE  
19 SPEAKER OF THE HOUSE OF REPRESENTATIVES AND PRESIDENT OF THE SENATE.

20 2. PROVIDE A COPY OF THE REPORT TO THE SECRETARY OF STATE.

21 F. NOTWITHSTANDING ANY OTHER LAW, THE DEPARTMENT OF ENVIRONMENTAL  
22 QUALITY SHALL ADOPT RULES THAT ESTABLISH:

23 1. MINIMUM EFFICIENCY AND WATER CONSERVATION STANDARDS FOR EACH  
24 PRODUCT THAT IS SUBJECT TO A STANDARD UNDER 10 CODE OF FEDERAL REGULATIONS  
25 PARTS 430 AND 431 AS IN EFFECT ON THE EFFECTIVE DATE OF THIS AMENDMENT TO  
26 THIS SECTION. THE MINIMUM STANDARD AND THE TESTING PROTOCOL FOR EACH  
27 PRODUCT SHALL BE THE SAME AS ADOPTED IN 10 CODE OF FEDERAL REGULATIONS  
28 PARTS 430 AND 431 AS IN EFFECT ON THE EFFECTIVE DATE OF THIS AMENDMENT TO  
29 THIS SECTION.

30 2. A MINIMUM EFFICACY STANDARD FOR GENERAL SERVICE LAMPS OF  
31 FORTY-FIVE LUMENS PER WATT WHEN TESTED IN ACCORDANCE WITH 10 CODE OF  
32 FEDERAL REGULATIONS SECTION 430.23(gg) AS IN EFFECT ON THE EFFECTIVE DATE  
33 OF THIS AMENDMENT TO THIS SECTION.

34 Sec. 4. Section 44-1375.03, Arizona Revised Statutes, is amended to  
35 read:

36 44-1375.03. Certification and compliance; violation; civil  
37 penalty

38 ~~A. Except as provided in subsection B of this section, beginning~~  
39 ~~January 1, 2008:~~

40 ~~1.~~ A. A person engages in a deceptive trade practice when, in the  
41 course of the person's business, vocation or occupation, the person  
42 knowingly sells or installs a product that does not meet or exceed an  
43 applicable energy efficiency standard set forth in OR ADOPTED PURSUANT TO  
44 section 44-1375.02.



1           ~~2.~~ B. Manufacturers shall certify in writing to the ~~governor's~~  
2 ~~energy office~~ DEPARTMENT OF ENVIRONMENTAL QUALITY that products sold in  
3 this state meet THE efficiency standards of this article. Certification  
4 to other states with like standards that publish databases of compliant  
5 products shall be permitted as an alternative to certifying to the ~~energy~~  
6 ~~office~~ DEPARTMENT OF ENVIRONMENTAL QUALITY.

7           ~~B. The requirements prescribed by subsection A of this section~~  
8 ~~apply beginning January 1, 2010, if the product is a commercial~~  
9 ~~refrigerator, freezer or refrigerator freezer or large packaged air~~  
10 ~~conditioning equipment.~~

11           C. A deceptive trade practice pursuant to subsection A, ~~paragraph 1~~  
12 of this section is an unlawful practice under section 44-1522 and subject  
13 to enforcement by the attorney general. The attorney general may  
14 investigate and take appropriate action as prescribed by chapter 10,  
15 article 7 of this title. Notwithstanding section 44-1531, the penalty for  
16 A violation of this section ~~shall be~~ IS a civil penalty of not more than  
17 five hundred dollars per violation. All monies collected as civil  
18 penalties pursuant to this subsection shall be deposited ~~into~~ IN the state  
19 general fund.

20           Sec. 5. Title 44, chapter 9, article 19, Arizona Revised Statutes,  
21 is amended by adding section 44-1375.04, to read:

22           44-1375.04. Implementation

23           A. IF FEDERAL PREEMPTION UNDER 42 UNITED STATES CODE SECTION 6297  
24 APPLIES TO A STANDARD ADOPTED PURSUANT TO THIS ARTICLE FOR A PRODUCT, THE  
25 STANDARD ESTABLISHED BY THE DEPARTMENT OF ENVIRONMENTAL QUALITY PURSUANT  
26 TO SECTION 44-1375.02 BECOMES ENFORCEABLE ON THE OCCURRENCE OF THE  
27 EARLIEST OF THE FOLLOWING:

28           1. THE FEDERAL ENERGY OR WATER CONSERVATION STANDARD FOR THE  
29 PRODUCT UNDER 42 UNITED STATES CODE CHAPTER 77 IS WITHDRAWN, REPEALED OR  
30 OTHERWISE VOIDED. THIS PARAGRAPH DOES NOT APPLY TO ANY FEDERAL ENERGY OR  
31 WATER CONSERVATION STANDARD SET ASIDE BY A COURT OF COMPETENT JURISDICTION  
32 ON THE PETITION OF A PERSON WHO IS ADVERSELY AFFECTED BY THE RULE AS  
33 PROVIDED IN 42 UNITED STATES CODE SECTION 6306(b).

34           2. A WAIVER OF FEDERAL PREEMPTION IS ISSUED PURSUANT TO 42 UNITED  
35 STATES CODE SECTION 6297(d).

36           B. THE FEDERAL ENERGY STANDARD FOR GENERAL SERVICE LAMPS IS  
37 WITHDRAWN, REPEALED OR OTHERWISE VOIDED WITHIN THE MEANING OF SUBSECTION A  
38 OF THIS SECTION IF IT IS NOT EFFECTIVE ON JANUARY 20, 2020 PURSUANT TO 10  
39 CODE OF FEDERAL REGULATIONS PART 430.