

Links to NOPA and ISOR in docket:

[Notice of Proposed Action \(NOPA\)](#)

[Initial Statement of Reasons \(ISOR\)](#)

## Proposed Regulatory Language

---

**California Code of Regulations  
Title 20. Public Utilities and Energy  
Division 2. State Energy Resources Conservation and Development  
Commission  
Chapter 4. Energy Conservation  
Article 4. Appliance Efficiency Regulations  
Sections 1601 - 1609  
As related to Commercial and Industrial Fans and Blowers**

Amendments to the existing code that were made public with the Notice of Proposed Action published on February 25, 2022, are shown in strike through (~~example~~) to indicate deletion and underlined (example) to indicate additions. Additional amendments being proposed for a 15-day public comment period are shown in double strike (~~~~example~~~~) for deletions and double underline (example) for additions. Additional amendments being proposed for a second 15-day public comment period are shown in bold-italics strike through (~~*example*~~) for deletions and bold-italics underline (*example*) for additions.

### **§ 1601. Scope.**

This Article applies to the following types of new appliances, if they are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the state and those designed and sold exclusively for use in recreational vehicles, or other mobile equipment. Unless otherwise specified, each provision applies only to units manufactured on or after the effective date of the provision.

NOTE: For the applicability of these regulations to appliances installed in new building construction, see sections 110.0 and 110.1 of part 6 of Title 24 of the California Code of Regulations.

...[skipping (a) through (c)]

(d) Portable air conditioners, evaporative coolers, residential furnace fans, ceiling fans, ceiling fan light kits, whole house fans, residential exhaust fans, ~~and dehumidifiers, and commercial and industrial fans and blowers.~~

...[skipping (e) through (end of section 1601\*)]

~~The following documents is are incorporated by reference in section 1601.~~

~~Number~~

~~Title~~

~~ASSOCIATION INTERNATIONAL, INC (AMCA) AMERICAN NATIONAL STANDARDS  
INSTITUTE (ANSI)~~

~~ANSI/AMCA Standard 214-21~~

~~Test Procedure for Calculating Fan  
Energy Index (FEI) for Commercial  
and Industrial Fans and Blowers~~

~~...[skipping "INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC)" through end of  
section]~~

Note Authority cited: Sections 25213, 25218(e), 25401.9, 25402(a)-25402(c), and 25960, Public Resources Code; and Sections 16, 26, and 30, Governor's Exec. Order No. B-29-15 (April 1, 2015). Reference: Sections 25216.5(d), 25401.9, 25402(a)-25402(c), 25402.5.4, and 25960, Public Resources Code; and Section 16, Governor's Exec. Order No. B-29-15 (April 1, 2015).

## **§ 1602. Definitions.**

...[skipping (a) through (c)]

(d) Portable Air Conditioners, Evaporative Coolers, Ceiling Fans, Ceiling Fan Light Kits, Whole House Fans, Residential Exhaust Fans, Dehumidifiers, ~~and Residential Furnace Fans, and Commercial and Industrial Fans and or Blowers.~~

...[skipping "Adjusted cooling capacity at 83°F conditions" through "Adjusted cooling capacity at 95°F conditions"]

"Air curtain unit" means equipment that produces a directionally controlled stream of air with a minimum width-to-dept aspect ratio of 5:1 and a discharge that is not intended to be connected to unitary ductwork. The controlled stream of air spans the entire height and width of an opening and reduces the infiltration or transfer of air from one side of the opening to the other and/or inhibits the passage of insects, dust, or debris. ~~providing a directionally controlled stream of air moving across the entire height and width of an opening that reduces the infiltration or transfer of air from one side of the opening to the other and/or inhibits the passage of insects, dust, or debris.~~

...[skipping "Airflow" through "Annual energy consumption in off-cycle mode"]

“Axial impeller” means an impeller (propeller) with a number of blades extending radially from a central hub in which airflow through the impeller is axial in direction; that is, airflow enters and exits the impeller parallel to the shaft axis with a fan flow angle less than or equal to 20 degrees. Blades can either be single thickness or airfoil shaped.

“Axial-inline fan” means a fan with an axial impeller and a cylindrical housing with or without turning vanes. Inlets and outlets can optionally be ducted.

“Axial-panel fan” means a fan with an axial impeller mounted in a short housing, non-cylindrical, that can be a panel, ring, or orifice plate. The housing is typically mounted to a wall separating two spaces, and the fans are used to increase the pressure across this wall. Inlets and outlets are not ducted.

“Axial power roof ventilator (PRV)” means a fan with an axial impeller and a cylindrical housing as well as a housing to prevent precipitation from entering the building with or without turning vanes used to supply or exhaust air from a building. Inlets and outlets can optionally be ducted.

“Bare shaft fan” means a fan without a driver.

...[skipping “Basic model” through “Belt-driven ceiling fan”]

“Belt driven fan” means a driven fan configuration which the fan impeller is connected to the driver through a set of belts and sheaves mounted on the driver shaft and fan shaft. This includes fans with V-belt or synchronous belt power transmission.

...[skipping “Blade span” through “Centrifugal ceiling fan”]

“Centrifugal housed fan” means a fan with a centrifugal or mixed flow impeller in which airflow exits into a housing that is generally scroll-shaped to direct the air through a single fan outlet. Inlets and outlets can optionally be ducted. It does not include a radial impeller.

“Centrifugal impeller” means an impeller with a number of blades extending between a back plate and shroud in which airflow enters axially through one or two inlets and exits radially at the impeller periphery. The airflow exits either into open space, or into a housing with a fan flow angle greater than or equal to 70 degrees. Impellers can be classified as single inline or double inlet. Blades can be tilted backward or forward with respect to the direction of impeller rotation. Impellers with backward-tilted blades can be airfoil-shaped (AF), backward-curved single-thickness (BC), backward-incline single-

thickness flat (BI), or radial-tipped (RT). Impellers with forward titled blades are known as forward-curved impellers (FC).

"Centrifugal inline fan" means a fan with a centrifugal or mixed-flow impeller in which airflow enters axially at the fan inlet and the housing redirects radial airflow from the impeller to exit the fan in an axial direction. Inlets and outlets can optionally be ducted.

"Centrifugal power roof ventilator exhaust (PRV-E) fan" means a PRV with a centrifugal or mix-flow impeller that exhausts air from a building. Inlets are typically ducted, but outlets are not ducted.

"Centrifugal power roof ventilator supply (PRV-S) fan" means a PRV with a centrifugal or mix-flow impeller that supplies air to a building. Inlets are not ducted, and outlets are typically ducted.

"Centrifugal unhooded fan" means a fan with a centrifugal or mix-flow impeller in which airflow enters through a panel and discharges into free space. Inlets and outlets are not ducted. This fan type also includes fan designed for use in fan arrays that have partition walls separating the fan from other fans in the array.

"Circulating fan" means a fan that is not a ceiling fan that is used to move air within a space, that has no provision for connection to ducting or separation of the fan inlet from its outlet. The fan is designed to be used for the general circulation of air.

...[skipping "Combined energy efficiency ratio (CEER)"]

"Commercial and industrial fan ~~and or~~ blower" means a rotary-bladed machine used to convert electrical or mechanical power to air power, with an energy output ~~a~~ ~~specific work~~ limited to 25 kilojoule per kilogram (kJ/kg) of air. Have a ~~or less and~~ ~~have a~~ rated fan shaft power greater than or equal to 1 horsepower, or, for fans without a rated shaft input power, an electrical input power greater than or equal to 1 kilowatt (kW); ~~kW~~, and a fan output power less than or equal to 150 horsepower. They consist of an impeller, a shaft, bearings, and a structure or housing. It may include a transmission, driver, and/or controller at the time of sale, ~~including any transmission s, driver, and/or controls if integrated, assembled, or packaged by the manufacturer at the time of sale.~~

(1) Commercial and industrial fans and blowers do not include:

- (A) safety fans as defined in Section 1602(d) of this Article;
- (B) ceiling fans as defined in 10 CFR 430.2;
- (C) circulating fans;
- (D) induced flow fans;
- (E) jet fans;

- (F) cross-flow fans;
- (G) embedded fans as defined in ANSI/AMCA 214-21, including embedded fans sold exclusively for replacement of another embedded fan;
- (H) fans mounted in or on motor vehicles or other mobile equipment;
- (I) fans that create a vacuum of 30 in. water gauge or greater;
- (J) air curtains unit as defined in Section 1602(d) of this Article.
- (K) *a fan that is designed and marketed to operate at or above 482 degrees Fahrenheit (250 degrees Celsius)*

...[skipping "Cooling efficiency ratio (CER)"]

"Cross-flow fan" means a fan with a housing that creates an airflow path through the impeller, in a direction at right angles to the axis of rotation and with airflow both entering and exiting the impeller at the periphery. Inlets and outlets can optionally be ducted.

...[skipping "Dehumidifier" through "Direct evaporative cooler" ]

"Driver" means a machine, such as a motor, used to provide mechanical power to the impeller, either directly or through a transmission.

...[skipping "Dual-duct portable air conditioner"]

~~"Dual-use fan" means a fan having two operating modes to serve long-term ventilation purposes as well as short-time emergency duty at higher speeds for fire or smoke extraction.~~

...[skipping "Energy factor for dehumidifiers" through "Evaporative cooler" ]

"Fan array" means multiple fans in parallel and in a single enclosure between two plenum sections in an air distribution system, where plenum means a compartment or chamber that forms a part of the air distribution system, and that is not used for occupancy or storage.

“Fan Energy Index or FEI” means the ratio of the electrical input power of a reference fan to the electrical input power of the actual fan as calculated under the test method in section 1604(d)(2) of this Article.

“Fan Electrical Power or FEP” means the electrical power required to operate a fan, including any motor controllers at a given duty point. It is calculated in the test method in section 1604(d)(2) of this Article.

“Fan flow angle” means the angle of the centerline of the air-conducting surface of a fan blade measured at the midpoint of its trailing edge with the centerline of the rotation axis, in a plane through the rotation axis and the midpoint of the trailing edge.

“Fan output power” means the power delivered to air by the fan; it is proportional to the product of the fan airflow rate, the fan total pressure and the compressibility coefficient as determined in accordance with the test procedure specified in section 1604(d)(2) of this Article.

“Fan series” means a group of fan models that are geometrically similar per the proportionally and dimensional requirement explained in Annex K of the test method in section 1604(d)(2) of this Article.

“Fan shaft power” means the mechanical input power to the shaft that is connected directly to the impeller.

...[skipping “Furnace fan” through “Highly decorative ceiling fan”]

“Housing” means any component or components of the fan that direct airflow into or away from the impeller and/or provide protection to the internal components. It may serve as the structure of the fan.

...[skipping “Hugger ceiling fan”]

“Impeller” means a rotary bladed aerodynamic component of a fan that transfers mechanical energy to the airstream.

...[skipping “Indirect evaporative cooler”]

“Induced-flow fan” means a type of laboratory exhaust fan with nozzle and windband; the fan’s outlet airflow is greater than the inlet airflow due to induced airflow. All airflow

entering the inlet exits through the nozzle. Airflow exiting the windband includes the nozzle airflow as well as the induced airflow.

“Inline mixed-flow fan” means a fan with a mixed-flow impeller in which airflow enters axially at the fan inlet, and the housing redirects radial airflow from the impeller to exit the fan in an axial direction. Inlets and outlets can optionally be ducted.

...[skipping “Input power”]

“Jet fan” means a fan designed and marketed specifically to produce a high-velocity air jet in a space to increase its air momentum. Jet fans are rated using thrust. Inlets and outlets are not ducted but may include acoustic silencers.

...[skipping “Lamp ballast platform” through “Low-speed small-diameter (LSSD) ceiling fan”]

“Maximum airflow” means the maximum reported value for airflow in cubic feet per minute at standard air density that meets or exceeds the required minimum  $FEI \geq 1.00$  for at least one duty point. Maximum airflow is represented as Point 1 in figures H.1 through H.4 in Annex H of the test procedure in section 1604(d)(2).

“Maximum fan speed” means the maximum reported value for fan speed in revolutions per minute that meets or exceeds the minimum  $FEI \geq 1.00$  for at least one duty point. The maximum fan speed is represented as Point 3 in figures H.1 through H.4. in Annex H of the test procedure listed in section 1604(d)(2).

“Maximum pressure” means the maximum reported value for *total or static* fan pressure in inches water gauge at standard air density that meets or exceeds the minimum  $FEI \geq 1.00$  for at least one duty point. The maximum pressure is represented as Point 2 in figures H.1 through H.4 in Annex H of the test procedure in 1604(d)(2).

“Mixed-flow impeller” means an impeller with construction characteristics between those of an axial and centrifugal impeller with a fan flow angle greater than 20 degrees and less than 70 degrees. Airflow enters axially through a single inlet and exits with combined axial and radial directions at a mean diameter greater than the inlet.

“Mixed-flow fan” means a fan with fitted mixed-flow impeller that has a fan flow angle greater than 20 degrees and less than 70 degrees.

...[skipped “Multi-head ceiling fan” through “Portable or Spot Evaporative Cooler”]



“Positive pressure ventilator (PPV)” means a portable fan that can be positioned relative to an opening of an enclosure and cause it to be positively pressurized by discharge air velocity. It is principally used by firefighters to mitigate the effect of smoke and is also used to assist in inflation of hot air balloons.

“Power roof ventilator (PRV)” or “power wall ventilator (PWV)” means a fan with an internal driver and a housing to prevent precipitation from entering the building. It has a base designed to fit over a ~~roof~~ roof or wall opening, usually by means of a roof curb.

...[skipping “Product capacity for dehumidifiers”]

“Radial-housed fan” means a fan with a radial impeller in which airflow exits into a housing that is generally scroll-shaped to direct the air through a single fan outlet. Inlets and outlets can optionally be ducted.

“Radial impeller” means a form of centrifugal impeller with a number of blades extending radially from a central hub. The airflow enters axially through a single inlet and exits radially at the impeller periphery. The housing has impeller blades positioned such that the outward direction of the blade at the impeller periphery is perpendicular within 25 degrees to the axis of rotation. Impellers can optionally have a back plate and/or shroud.

...[skipping “Residential exhaust fan”]

“Safety fan” means:

~~(1) a fan that is designed and marketed to operate only at or above 482 degrees Fahrenheit (250 degrees Celsius);~~

~~(21) a reversible axial fan in cylindrical housing that is designed and marketed for use in ducted tunnel ventilation that will reverse operations under an emergency ventilation condition-conditions;~~

~~(32) a fan for use in explosive atmospheres tested and marked according to EN ISO Standards 80079-36:2016, Explosive atmospheres – Part 36: Non-electrical equipment for explosive atmospheres – Basic method and requirements; or~~

~~(43) a Positive Pressure Ventilator; or~~

(4) fans complying with ANSI/UL 705 Power Ventilators (dated August 23, 2021) and listed as "Power Ventilators for Smoke Control Systems".

~~(3) a fan bearing a Underwriter Laboratories or Electric Testing Laboratories listing for "Power Ventilators for Smoke Control Systems";~~

~~(4) an open discharge exhaust fan with integral discharge nozzles which develop or maintain a minimum discharge velocity of 3000 FPM;~~

~~(5) a fan constructed in accordance with, AMCA type A or B spark resistant construction as defined in AMCA Standard 99-16 Standards Handbook;~~

~~(6) a fan designed and marketed for use in explosive atmospheres and tested and marked according to EN 13463-1:2001 Non-electrical Equipment for Potentially Explosive Atmospheres; or~~

~~(7) an electric motor driven Positive Pressure Ventilator as defined in AMCA Standard 240-15 Laboratory Methods of Testing positive Pressure Ventilators for Aerodynamic Performance Rating.~~

...[skipping "Seasonally adjusted cooling capacity (SACC)"]

"Series calculated fan" means the fan models for which the performance data was calculated based on a series tested fan from the same fan series using the allowable fan laws listed in the test method in section 1604(d)(2) of this Article.

"Series tested fan" means the fan model tested in a laboratory to provide performance data for a fan series as explained in the test method in section 1604(d)(2) of this Article.

...[skipping "Single-duct portable air conditioner" through "~~Spot air conditioner(x)~~"]

~~...[skipping the rest of (d) through (x)]~~

The following documents are incorporated by reference in section 1602.

<i>Number</i>	<i>Title</i>
---------------	--------------

...[skipping FEDERAL STATUTES AND REGULATIONS through ADOBE SYSTEMS INCORPORATED]

AMERICAN NATIONAL STANDARDS INSTITUTE AIR MOVEMENT AND CONTROL  
ASSOCIATION INTERNATIONAL (AMCA ANSI)

<del>ANSI/AMCA STANDARD 214-21</del>	<del>Test Procedure for Calculating Fan Energy Index for Commercial and Industrial Fans and Blowers</del>
<del>ANSI/AMCA Standard 99-16</del>	<del>Standards Handbook</del>
<u>ANSI/AMCA Standard 214-21</u>	<u>Test Procedure for Calculating Fan Energy Index for Commercial and Industrial Fans and Blowers</u>
<del>ANSI/AMCA Standard 240-15</del>	<del>Laboratory Methods of Testing Positive Pressure Ventilators for Aerodynamic Performance Rating</del>

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

...[skipping ~~AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)~~ ANSI C78.1-1991 (R1996) through ~~SOCIETY OF MOTION PICTURE AND TELEVISION ENGINEERS (SMPTTE)~~ INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC)]

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION THE EUROPEAN  
COMMITTEE FOR STANDARDIZATION

<del>EN 13463-1:2001</del> <u>ISO 80079-26:2016</u>	<u>Explosive atmospheres – Part 36: Non-electrical equipment for explosive atmospheres - Basic method and requirements</u> <del>Non- electrical Equipment for Potentially Explosive Atmospheres</del>
---	---

... [skipping ~~ANSI C78.3-1991 (R1996)~~ INTERNATIONAL UNION (ITU) through **UL 588  
Standard for Seasonal and Holiday Decorative Products ]**

**ANSI/UL 705 (August 23, 2021)**      **Power Ventilators**

...[skipping **UL 1081-2016 (October 21, 2016)** to the end of section 1602]

Note: Authority cited: Sections 25213, 25128(e), 25401.9, 25402(a)-25402(c) and 25960, Public Resources Code; and Sections 16, 26 and 30, Governor's Exec. Order No. B-29-15 (April 1, 2015). Reference: Sections 25216.5(d), 25401.9, 25402(a)-25402(c), 25402.5.4 and 25960, Public Resources Code; and Section 16, Governor's Exec. Order No. B-29-15 (April 1, 2015).

## § 1604. Test Methods for Specific Appliances.

...[skipping (a) through (c)]

(d) Portable Air Conditioners, Evaporative Coolers, Ceiling Fans, Ceiling Fan Light Kits, Whole House Fans, Residential Exhaust Fans, Dehumidifiers, ~~and Residential Furnace Fans,~~ and Commercial and Industrial Fans and Blowers.

- (1) The test methods for portable air conditioners, evaporative coolers, ceiling fans, ceiling fan light kits, whole house fans, residential exhaust fans, dehumidifiers, and-residential furnace fans are shown in Table D-3.

**Table D-3**

~~Portable Air Conditioner, Ceiling Fan, Ceiling Fan Light Kit, Evaporative Cooler, Whole House Fan, Residential Exhaust Fan, Dehumidifier, and Residential Furnace Fan Test Methods-Testing Requirements for the following Appliances~~

Appliance	Test Method
Spot Air Conditioners	ANSI/ASHRAE 128-2001
Single-Duct and Dual-Duct Portable Air Conditioners	10 C.F.R. section 430.23(dd) (Appendix CC to subpart B of part 430)
Ceiling Fans	10 C.F.R. section 430.23(w) (Appendix U to subpart B of part 430)
Ceiling Fan Light Kits	10 C.F.R section 430.23(x) (Appendix V to subpart B of part 430)
Evaporative Coolers	ANSI/ASHRAE 133-2008 for packaged direct evaporative coolers and packaged indirect/direct evaporative coolers; ANSI/ASHRAE 143-2007 for packaged indirect evaporative coolers
Whole House Fans	HVI-Publication 916 29 September 2015 HVI Airflow Test Procedure, as specified in section 5.2. Use setups for whole house comfort ventilators.
Dehumidifiers	10 C.F.R. section 430.23(z) (Appendix X to subpart B of part 430, active mode portion only)

Appliance	Test Method
Portable Dehumidifiers and Whole-Home Dehumidifiers Manufactured On or After June 13, 2019	10 C.F.R. section 430.23(z) (Appendix X1 to subpart B of part 430)
Residential Exhaust Fans	HVI-Publication 916 29 September 2015 HVI Airflow Test Procedure, as specified in section 5.2.
Residential Furnace Fans	10 C.F.R. section 430.23(cc) (Appendix AA to subpart B of part 430)

- (2) Commercial and Industrial Fans and Blowers. The test method for Commercial and Industrial Fans and Blowers is ANSI/AMCA Standard 214-21 Test Procedure for Calculating Fan Energy Index (FEI) for Commercial and Industrial Fans and Blowers with the following additions:
- (A) lab reports and calculated results used for certification and marking shall be maintained by the manufacturer per the requirements of Annex J of AMCA 214-21. Records shall be retained per the requirements of section 1608(c)(1) of this Article.

...[skipping (e) through (x)]

The following documents are incorporated by reference in section 1604.

<i>Number</i>	<i>Title</i>
---------------	--------------

...[skipping "CALIFORNIA ENERGY COMMISSION TEST METHODS" through "~~AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)-AIR-CONDITIONING, HEATING, AND REFRIGERATION INSTITUTE (AHRI)~~"]

AIR MOVEMENT AND CONTROL ASSOCIATION INTERNATIONAL, INC (AMCA)

<u>ANSI/AMCA Standard 214-21</u>	<u>Test Procedure for Calculating Fan Energy Index (FEI) for Commercial and Industrial Fans and Blowers</u>
----------------------------------	---

... [skipping "~~ANSI C78.42-2004~~AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)" through the end of section 1604]

Note: Authority cited: Section cited: Sections 25213, 25218(e), 25401.9, 25402(a)-25402(c) and 25960, Public Resources Code; and Sections 16, 26 and 30, Governor's Exec. Order No. B-29-15 (April 1, 2015). Reference: Sections 25216.5(d), 25401.9,

25402(a)-25402(c) and 25960, Public Resources Code; and Section 16, Governor's Exec. Order No. B-29-15 (April 1, 2015).

**§ 1606. Filing by Manufacturers; Listing of Appliances in MAEDbS.**

...[Skipping (a) through "Residential Furnace Fans" section D of Table X]

Appliance	Required Information	Permissible Answers
<u>Commercial and Industrial Fans and Blowers manufactured after <del>August 10, November 1, 2023</del></u>	<u>Fan type</u>	<u>Centrifugal housed, centrifugal inline, centrifugal unhoused, centrifugal PRV supply, centrifugal PRV exhaust, axial inline, axial PRV, inline mixed-flow, power roof/wall ventilators, axial panel, radial housed</u>
	<u>Fan impeller diameter (in.)</u>	
	<u><del>Type of Motor (if fans sold with a motor) Motor model number (if fan is sold with a motor) certified with a motor</del></u>	<u><del>None, Single-phase induction, Polyphase induction, Synchronous DC (including ECM), Permanent magnet AC, or Other</del></u>
	<u>Motor nameplate horsepower (if fan sold with an induction motor)(hp)</u>	
	<u>Pressure type</u>	<u><del>S = Static pressure T = Total pressure</del></u>
	<u>Transmission type (if fan is sold with a transmission)</u>	<u>Direct, V-belt, synchronous-belt, flexible coupling, none</u>
	<u><del>Type of Controller (if fan sold with controller) Controll er model number (if fan is sold with</del></u>	<u><del>None, Variable frequency drive, or Other</del></u>

		<del>a controller)(if fan is certified with a controller)</del>	
		<del>Maximum fan speed (RPM) at FEI=1.0</del>	
		<del>Maximum pressure (inches water gauge) at FEI=1.0</del> <del>Airflow at maximum fan speed (SCFM)</del>	
		<del>Maximum compliant air flow (SCFM) at FEI=1.0</del> <del>Pressure at maximum fan speed (inches water)</del>	
		<del>FEP<sub>act</sub> at maximum fan speed (kW)</del>	<del>Tested, Calculated</del>
		<del>Associated Series Tested Fan Model Number (if calculated)</del> <del>FEP<sub>ref</sub> at maximum fan speed (kW)</del>	<del>Fan product line and model (N/A if tested)</del>
		<del>Method of FEP<sub>act</sub> determination</del> <del>Maximum pressure (inches water gauge)</del>	<del>Section 6.1, 6.2, 6.3, 6.4, or 6.5 of the test method</del>

		<u>FEP<sub>ref</sub> at FEI = 1.0</u> <u>Airflow at maximum</u> <u>pressure (<del>SCFM</del>)</u>	<u>Reference fan electrical power</u> <u>(kW)</u>
		<u>FEP<sub>act</sub> at FEI = 1.0</u> <u>Fan speed at</u> <u>maximum pressure</u> <u>(RPM)</u>	<u>Actual fan electrical power</u> <u>(kW)</u>
		<u>FEP<sub>act</sub> at maximum</u> <u>pressure (kW)</u>	
		<u>FEP<sub>ref</sub> at maximum</u> <u>pressure (kW)</u>	
		<u>Maximum air flow</u> <u>(<del>SCFM</del>)</u>	
		<u>Pressure at</u> <u>maximum airflow</u> <u>(inches water gauge)</u>	
		<u>Fan speed at</u> <u>maximum airflow</u> <u>(RPM)</u>	
		<u>FEP<sub>act</sub> at maximum</u> <u>airflow (kW)</u>	
		<u>FEP<sub>ref</sub> at maximum</u> <u>airflow (kW)</u>	
		<u>Is the model a Series</u> <u>tested fan?</u>	<u>Yes, No</u>
		<u>Associated Series</u> <u>Tested Fan Model</u> <u>Number (if not a</u> <u>series tested fan)</u>	<u>Fan product line and model,</u> <u>(Field is N/A if it is a Series</u> <u>tested fan)</u>



		Method used to determine FEP <sub>act</sub> of test method in section 1604(d)(2), <u>(AMCA 214-21)</u>	Section 6.1, 6.2, 6.3, 6.4, or 6.5 of the test method in section 1604(d)(2), <u>(AMCA 214-21)</u>
--	--	--	---

...[skipping through the end of section 1606]

Note: Authority cited: Sections 25213, 25218(e), 25401.9, 25402(a)-25402(c) and 25960, Public Resources Code; and Sections 16, 26 and 30, Governor's Exec. Order No. B-29-15 (April 1, 2015). Reference: Sections 25216.5(d), 25401.9, 25402(a)-25402(c), 25402.5.4 and 25960, Public Resources Code; and Section 16, Governor's Exec. Order No. B-29-15 (April 1, 2015).

## § 1607. Marking of Appliances.

...[skipping (a) through (d)(15)]]

(16) Commercial and Industrial Fans and Blowers. Each commercial and industrial fan and or blower, *manufactured after November 1, 2023*, shall be marked, permanently and legibly on an accessible and conspicuous place on the unit, in characters no less than 1/4 inch, with a legible and permanently fixed label, which may be in tabular form (as shown below):

(A) ~~The label shall include the following information:~~ For Commercial and Industrial fans and blowers the label shall include the following information:

Fan Energy Index  $\geq 1.00$  Efficiency boundaries

a. maximum air flow (~~SCFM~~);

b. maximum fan speed (RPM);

c. maximum pressure (inches water gauge);

*d. type of pressure ("static" or "total").*

NOTE: Operation outside of these boundaries will result in an energy inefficient operation.

~~1. manufacturer name;~~

~~2. brand name or brand code;~~

~~3. model number;~~

~~4. serial number;~~

~~5. date of manufacture;~~

~~6. FEP<sub>ref</sub> at FEI = 1.0;~~

~~7. maximum compliant air flow (SCFM) at FEI = 1.0;~~

~~8. maximum compliant speed (RPM) at FEI=1.0; and~~  
~~9. maximum pressure (inches water gauge) at FEI=1.0;~~

~~(B) No marketing or catalog information shall provide performance data for any duty point where the FEI is less than 1.0. Performance data provided to consumers shall be provided only for the operation of the fan where the FEI is equal or greater than 1.0.~~

...[skipping through the end of section 1607]

Note: Authority cited: Sections 25213, 25218(e), 25402(a)-25402(c) and 25960, Public Resources Code. Reference: Sections 25216.5(d), 25401.9, 25402(a)-25402(c) and 25960, Public Resources Code

Link to supporting Staff report in docket:

Staff Report

**STATE OF CALIFORNIA**

**STATE ENERGY RESOURCES  
CONSERVATION AND DEVELOPMENT COMMISSION**

**RESOLUTION: AMMENDMENTS TO COMMERCIAL AND INDUSTRIAL  
FANS AND BLOWERS STANDARDS (Docket 22-AAER-01)**

**WHEREAS**, on February 24, 2022, the State Energy Resources Conservation and Development Commission (CEC) mailed and posted on the CEC's website a Notice of Proposed Action (NOPA) formally notifying the public of the CEC's intent to adopt proposed regulations for Commercial and Industrial Fans and Blowers (CIFB), the Express Terms of the proposed regulations, the Initial Statement of Reasons (ISOR) describing the rationale for the proposal, and the Economic Impact Statement (Form 399); and

**WHEREAS**, on February 25, 2022, the NOPA was published in the California Regulatory Notice Register and delivered to the Secretary of the California Natural Resources Agency, stating that a public hearing to hear comments on the proposed amendments would be held on April 12, 2022, and that the CEC would consider and possibly adopt the proposed amendments at a June 8, 2022, Business Meeting of the CEC; and

**WHEREAS**, on March 10, 2022, an extension to the public comment period was published with a new deadline of April 29, 2022; and

**WHEREAS**, on April 12, 2022, the CEC staff held a public hearing for the proposed regulations, as noticed in the NOPA, to receive oral comments on the proposed regulation; and

**WHEREAS**, on April 29, 2022, the written comment period established by the NOPA and extended by a public notice closed; and

**WHEREAS**, on May 23, 2022, the CEC staff posted a Notice of Postponement of Adoption hearing, informing interested parties and the public that the proposed amendments to the CIFB regulations would be considered for adoption at a time later than the originally posted date of June 8, 2022; and

**WHEREAS**, on July 11, 2022, the CEC published a Notice of 15-day comment period proposing changes to the Express Terms based on comments received during the 45-day comment period and the April 12, 2022, public hearing; and

**WHEREAS**, on July 26, 2022, the 15-day comment period closed; and

**WHEREAS**, on September 7, 2022, the CEC published a second Notice of 15-day comment period proposing changes to the Express Terms based on comments received during the 15-day comment period; and

**WHEREAS**, on September 22, 2022, the second 15-day comment period closed; and

**WHEREAS**, each of the above-referenced documents and notices was provided to every person on the CEC's Appliances email subscription list and to every person who had requested notice of such matters, and was posted to the CEC's website; and;

**WHEREAS**, on November 16, 2022, the CEC considered adoption of the proposed regulations at its Business Meeting and adopted the regulations for CIFB as proposed;

**THEREFORE, THE CALIFORNIA ENERGY COMMISSION FINDS:**

With regard to California Environmental Quality Act:

- The CEC has considered the application of the California Environmental Quality Act (CEQA) to the proposed regulations and concluded that the proposed regulations are exempt from CEQA requirements under the categorical exemptions set forth in California Code of Regulations, title 14 sections 15307 and 15308 and the common sense exemption under section 15061(b)(3).

With regard to the Warren-Alquist Act:

- The proposed regulations will reduce the wasteful, uneconomic, inefficient, and unnecessary consumption of energy by informing consumers of the conditions under which a given product will operate efficiently, allowing for selection of efficient products that are best suited to the demands of a particular application.
- The proposed regulations do not result in any added total costs to the consumer over the designed life of the product.

With regard to the Administrative Procedure Act:

- The proposed regulations will not result in the creation of new businesses or elimination of existing businesses, will not result in the expansion of businesses currently doing business in California, and will not result in a significant statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states; and
- The proposed regulation will impose no direct cost or savings, or direct or indirect requirements or mandates, on state agencies, local agencies, or school districts, including but not limited to costs that are required to be reimbursed under Part 7 (commencing with section 17500) of Division 4 of the Government Code, when savings accruing over the lifetime of the appliance is considered; and

- The proposed regulations will not result in the creating or elimination of jobs within California; and
- The proposed regulations will result in no costs or savings in federal funding to the State of California; and
- The proposed regulations will result in no cost impacts to representative private persons or businesses in reasonable compliance with the regulations; and
- The proposed regulations will not adversely impact the health and welfare of California residents, or worker safety, or the state's environment; and
- The proposed regulations have no alternatives that would be more effective in carrying out the purpose of the statutes for which it is proposed, that would be as effective and less burdensome to affected private persons in carrying out those purposes, or that would be more cost effective to affected private persons and equally effective in implementing those purposes; and
- The proposed regulations will not have a significant adverse economic impact on small business and no alternatives were proposed that would lessen any adverse economic impact on small business; and
- The proposed regulations will not require completion on any new report; and
- None of the comments received during the three separate comment periods, public hearing, or at the public adoption hearing, and nothing else in the record, justified any changes to the proposed regulations as published on September 7, 2022.

**THEREFORE, BE IT RESOLVED** that, based on the entire record before it, the CEC finds that the proposed regulations are exempt from CEQA under the categorical exemption under California Code of Regulations title 14, sections 15307 and 15308 and the common sense exemption under section 15061(b)(3) or the reasons stated in the Notice of Exemption prepared for the project; and

**FURTHER BE IT RESOLVED**, after considering all comments received and the staff's responses, and based on the entire record of this proceeding, the CEC hereby adopts the amendments to its CFIB regulations, as set forth in the express terms. The CEC takes this action under the authority of sections 25213, 25218(e), and 25402(c) of the Public Resources Code, which authorize the CEC to adopt rules and regulations to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy, including the energy associated with the use of water, by prescribing efficiency standards and other cost-effective measures for appliances whose use requires a significant amount of energy or water statewide; and

**FURTHER BE IT RESOLVED**, that documents and other materials that constitute the rulemaking record can be found in the custody of the Docket Unit and online in [Docket Number 22-AAER-01](#), and <https://www.energy.ca.gov/rules-and-regulations/appliance-efficiency-regulations-title-20/appliance-efficiency-proceedings-11>

**FURTHER BE IT RESOLVED**, the CEC delegates the authority and directs the executive director or their designee to take, on behalf of the CEC, all actions reasonably necessary to have the proposed regulations go into effect, including but not limited to making any appropriate non-substantive changes to the regulations; preparing all appropriate documents, such as the Final Statement of Reasons; compiling and submitting the rulemaking file to the Office of Administrative Law (OAL); making any changes to the rulemaking file required by OAL; and preparing and filing the Notice of Exemption with the State Clearinghouse.

**CERTIFICATION**

The undersigned Secretariat to the CEC does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the CEC held on November 16, 2022.

AYE:

NAY:

ABSENT:

ABSTAIN:

Dated:

\_\_\_\_\_  
Liza Lopez  
Secretariat