DOCKETED	
Docket Number:	22-AAER-01
Project Title:	Commercial and Industrial Fans and Blowers
TN #:	248451
Document Title:	Notice of Approval of Regulatory Action
Description:	*** This document supersedes TN 248447 *** - Notice of approval of regulatory action by the Office of Administrative Law
Filer:	Alex Galdamez
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	1/19/2023 4:19:19 PM
Docketed Date:	1/19/2023

State of California
Office of Administrative Law

In re: **California Energy Commission**	**NOTICE OF APPROVAL OF REGULATORY ACTION**
Regulatory Action:	**Government Code Section 11349.3**
Title 20, California Code of Regulations	
Amend sections: 1601, 1602, 1604, 1606, and 1607	**OAL Matter Number: 2022-1206-02**
	OAL Matter Type: Regular (S)

In this regular rulemaking, the California Energy Commission (the "Commission") is adopting Appliance Efficiency Regulations for new commercial and industrial fans and blowers. Specifically, the Commission is adopting definitions, test procedures, and reporting requirements for commercial and industrial fans and blowers used in building applications.

OAL approves this regulatory action pursuant to section 11349.3 of the Government Code. This regulatory action becomes effective on 11/16/2023.

Date: January 17, 2023

Steven J. Escobar
Senior Attorney

Original: Drew Bohan, Executive Director
Copy: Corrine Fishman

For: Kenneth J. Pogue
Director

STATE OF CALIFORNIA—OFFICE OF ADMINISTRATIVE LAW

NOTICE PUBLICATION/REGU[illegible] REGULAR ee instructions on reverse)

STD. 400 (REV. 10/2019)

For use by Secretary of State only

OAL FILE NUMBERS	NOTICE FILE NUMBER	REGULATORY ACTION NUMBER	EMERGENCY NUMBER
	Z-2022-0215-01	2022-1206-02S	

For use by Office of Administrative Law (OAL) only

OFFICE OF ADMINISTRATIVE LAW

Electronic Submission

RECEIVED DATE	PUBLICATION DATE
2/15/2022	2/25/2022

NOTICE

OFFICE OF ADMIN. LAW
2022 DEC 6 AM 11:21

REGULATIONS

ENDORSED - FILED
In the office of the Secretary of State
of the State of California

JAN 17 2023

1:54PM

AGENCY WITH RULEMAKING AUTHORITY: California Energy Commission

AGENCY FILE NUMBER (If any): 22-AAER-01

A. PUBLICATION OF NOTICE (Complete for publication in Notice Register)

1. SUBJECT OF NOTICE	TITLE(S)	FIRST SECTION AFFECTED	2. REQUESTED PUBLICATION DATE
commercial and industrial fans and blowers	20	1601	February 25, 2022

3. NOTICE TYPE	4. AGENCY CONTACT PERSON	TELEPHONE NUMBER	FAX NUMBER (Optional)
☒ Notice re Proposed Regulatory Action ☐ Other	Corrine Fishman	916-805-7452	

OAL USE ONLY	ACTION ON PROPOSED NOTICE	NOTICE REGISTER NUMBER	PUBLICATION DATE
	☐ Approved as Submitted ☐ Approved as Modified ☐ Disapproved/ Withdrawn	2022, 8-Z	2/25/2022

B. SUBMISSION OF REGULATIONS (Complete when submitting regulations)

1a. SUBJECT OF REGULATION(S)	1b. ALL PREVIOUS RELATED OAL REGULATORY ACTION NUMBER(S)
commercial and industrial fans and blowers	

2. SPECIFY CALIFORNIA CODE OF REGULATIONS TITLE(S) AND SECTION(S) (Including title 26, if toxics related)

SECTION(S) AFFECTED (List all section number(s) individually. Attach additional sheet if needed.)	ADOPT	AMEND	REPEAL
TITLE(S): 20		1601, 1602, 1604, 1606, 1607	

3. TYPE OF FILING

- ☒ Regular Rulemaking (Gov. Code §11346)
- ☐ Certificate of Compliance: The agency officer named below certifies that this agency complied with the provisions of Gov. Code §§11346.2-11347.3 either before the emergency regulation was adopted or within the time period required by statute.
- ☐ Emergency Readopt (Gov. Code, §11346.1(h))
- ☐ Changes Without Regulatory Effect (Cal. Code Regs., title 1, §100)
- ☐ Resubmittal of disapproved or withdrawn nonemergency filing (Gov. Code §§11349.3, 11349.4)
- ☐ File & Print
- ☐ Print Only
- ☐ Emergency (Gov. Code, §11346.1(b))
- ☐ Resubmittal of disapproved or withdrawn emergency filing (Gov. Code, §11346.1)
- ☐ Other (Specify)

4. ALL BEGINNING AND ENDING DATES OF AVAILABILITY OF MODIFIED REGULATIONS AND/OR MATERIAL ADDED TO THE RULEMAKING FILE (Cal. Code Regs. title 1, §44 and Gov. Code §11347.1)
July 11 through July 26, 2022, and September 7 through September 21, 2022

5. EFFECTIVE DATE OF CHANGES (Gov. Code, §§ 11343.4, 11346.1(d); Cal. Code Regs., title 1, §100)
☐ Effective January 1, April 1, July 1, or October 1 (Gov. Code §11343.4(a)) ☐ Effective on filing with Secretary of State ☐ §100 Changes Without Regulatory Effect ☒ Effective other (Specify) November 16, 2023

6. CHECK IF THESE REGULATIONS REQUIRE NOTICE TO, OR REVIEW, CONSULTATION, APPROVAL OR CONCURRENCE BY, ANOTHER AGENCY OR ENTITY
☐ Department of Finance (Form STD. 399) (SAM §6660) ☐ Fair Political Practices Commission ☐ State Fire Marshal
☐ Other (Specify)

Per agency's request: 12/7/2023

7. CONTACT PERSON	TELEPHONE NUMBER	FAX NUMBER (Optional)	E-MAIL ADDRESS (Optional)
corrine fishman	916-805-7452		corrine.fishman@energy.ca.gov

8. I certify that the attached copy of the regulation(s) is a true and correct copy of the regulation(s) identified on this form, that the information specified on this form is true and correct, and that I am the head of the agency taking this action, or a designee of the head of the agency, and am authorized to make this certification.

SIGNATURE OF AGENCY HEAD OR DESIGNEE

DATE: 11/16/22

TYPED NAME AND TITLE OF SIGNATORY: Drew Bohan, Executive Director

For use by Office of Administrative Law (OAL) only

ENDORSED APPROVED

JAN 17 2023

Office of Administrative Law

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

§ 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]

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 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-depth 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.

...[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 unhoused 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 a 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 or blower" means a rotary-bladed machine used to convert electrical or mechanical power to air power, with an energy output limited to 25 kilojoule per kilogram (kJ/kg) of air. A commercial and industrial fan or blower has 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); 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.

(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 Standard 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 curtain unit as defined in Section 1602(d) of this Article; and

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

"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.

...[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 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 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;

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

(3) a Positive Pressure Ventilator; or

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

...[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 (x)]

The following documents are incorporated by reference in section 1602.

Number	*Title*

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

AIR MOVEMENT AND CONTROL ASSOCIATION INTERNATIONAL (AMCA)

ANSI/AMCA Standard 214-21	Test Procedure for Calculating Fan Energy Index (FEI) for Commercial and Industrial Fans and Blowers (Approved by ANSI on March 1, 2021)

...[skipping AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) through INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC)]

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO 80079-36:2016	Explosive atmospheres – Part 36: Non-electrical equipment for explosive atmospheres - Basic method and requirements

... [skipping INTERNATIONAL TELECOMMUNICATION UNION (ITU) through SOCIETY OF MOTION PICTURE AND TELEVISION ENGINEERS (SMPTE)]

UNDERWRITERS LAB (UL)

ANSI/UL 448-2013	Standard for Safety Centrifugal Stationary Pumps for Fire Protection Services
ANSI/UL 705 (August 23, 2021)	Standard for Safety for Power Ventilators

...[skipping UL 588 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

Appliance	Test Method
	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)
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 or 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 ANSI/AMCA Standard 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.

Number *Title*

...[skipping CALIFORNIA ENERGY COMMISSION TEST METHODS through AIR-CONDITIONING, HEATING, AND REFRIGERATION INSTITUTE (AHRI)]

AIR MOVEMENT AND CONTROL ASSOCIATION INTERNATIONAL, INC (AMCA)

ANSI/AMCA Standard 214-21	Test Procedure for Calculating Fan Energy Index (FEI) for Commercial and Industrial Fans and Blowers (Approved by ANSI on March 1, 2021)

... [skipping AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) through the end of section 1604]

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) 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 the MAEDbS.

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

	Appliance	Required Information	Permissible Answers
	Commercial and Industrial Fans and Blowers manufactured after November 16, 2023	Fan type	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
		Fan impeller diameter (in.)	
		Type of Motor (if fans sold with a motor)	None, Single-phase induction, Polyphase induction, Synchronous DC (including ECM), Permanent magnet AC, or Other
		Motor nameplate horsepower (if fan sold with an induction motor) (hp)	

		Pressure type	S = Static pressure T = Total pressure
		Transmission type (if fan is sold with a transmission)	Direct, V-belt, synchronous-belt, flexible coupling, none
		Type of Controller (if fan sold with controller)	None, Variable frequency drive, or Other
		Maximum fan speed (RPM)	
		Airflow at maximum fan speed (CFM)	
		Pressure at maximum fan speed (inches water gauge)	
		FEP_{act} at maximum fan speed (kW)	
		FEP_{ref} at maximum fan speed (kW)	
		Maximum pressure (inches water gauge)	
		Airflow at maximum pressure (CFM)	
		Fan speed at maximum pressure (RPM)	
		FEP_{act} at maximum pressure (kW)	
		FEP_{ref} at maximum pressure (kW)	
		Maximum air flow (CFM)	
		Pressure at maximum airflow (inches water gauge)	

		Fan speed at maximum airflow (RPM)	
		FEP_{act} at maximum airflow (kW)	
		FEP_{ref} at maximum airflow (kW)	
		Is the model a Series tested fan?	Yes, No
		Associated Series Tested Fan Model Number (if not a series tested fan)	Fan product line and model, (Field is N/A if it is a Series tested fan)
		Method used to determine FEP_{act} of test method in section 1604(d)(2), (ANSI/AMCA Standard 214-21)	Section 6.1, 6.2, 6.3, 6.4, or 6.5 of the test method in section 1604(d)(2), (ANSI/AMCA Standard 214-21)

...[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 or blower, manufactured after November 16, 2023, shall be marked, permanently and legibly on an accessible and conspicuous place on the unit, in characters no less than 1/4 inch in tabular form (as shown below):

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

Fan Energy Index ≥ 1.00 Efficiency boundaries

a. maximum air flow (CFM);

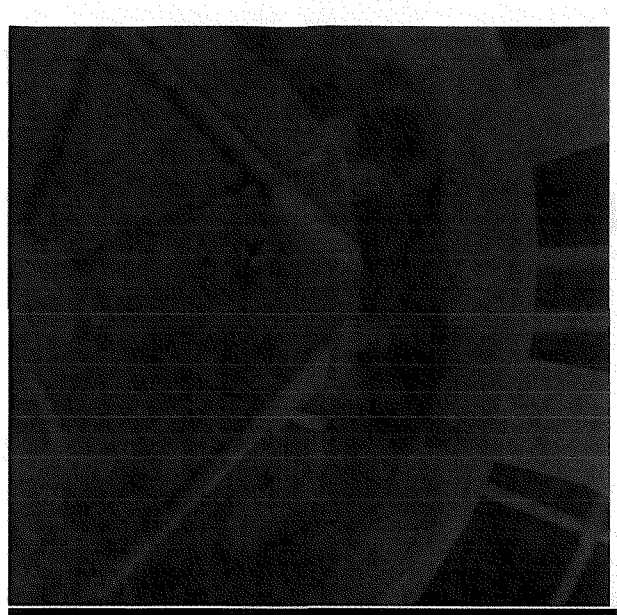
b. maximum fan speed (RPM);

c. maximum pressure (inches water gauge); and

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

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

Note: Authority cited: Sections 25213, 25218(e), 25401.9, 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.

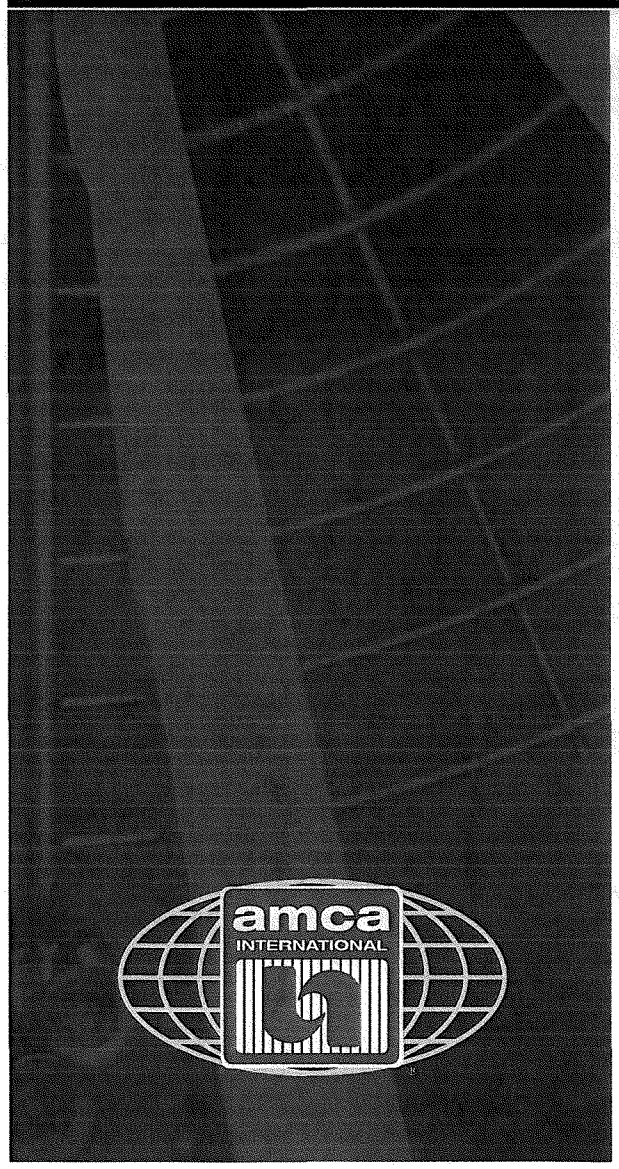


STANDARD

ADOPT

ANSI/AMCA Standard 214-21

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



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Part 36: Non-electrical equipment for explosive atmospheres – Basic method and requirements

Atmosphères explosives –
Partie 36: Appareils non électriques destinés à être utilisés en atmosphères explosives – Méthodologie et exigences

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