Title 20 C&I Fans and Blowers Frequently Asked Questions

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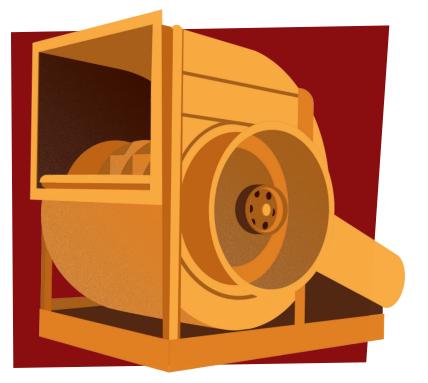
Commercial and industrial (C&I) fans and blowers manufactured on or after April 29, 2024, must comply with the <u>California Appliance Efficiency</u> <u>Regulations (Title 20)</u> before being sold or offered for sale in California. Manufacturers must test, mark, and certify their products to the California Energy Commission's (CEC) <u>Modernized Appliance</u> <u>Efficiency Database System (MAEDbS)</u>. This regulation will help ensure information is available to installers and purchasers so they can make informed purchasing decisions. These standards do not remove or ban any products from the market.

Scope

1. How are C&I fans or blowers defined?

C&I fans and blowers are defined as rotary-bladed machines used to convert electrical or mechanical power to air power and have the following criteria:

- Energy output limited to 25 kilojoules per kilogram (kJ/kg) of air
- 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 0.89 kilowatts (kW)
- Fan output power, static air power, or total air power less than or equal to 150 horsepower, as prescribed in paragraph(a)(4)(ii) of <u>10 Code of</u> <u>Federal Regulations (C.F.R.) Section 431.174</u>



Centrifugal housed fan

2. What products are covered in this regulation?

- Centrifugal housed fans
- Centrifugal inline fans
- Centrifugal unhoused fans
- Centrifugal power roof ventilator supply (PRV-S) fans
- Centrifugal power roof ventilator exhaust (PRV-E) fans
- ✦ Axial inline fans
- + Axial panel fans
- Axial power roof ventilator (PRV)
- Inline mixed-flow fans
- Power roof ventilator/power wall ventilator
- Radial housed fans



3. What products are *not* covered in this regulation?

- Radial housed unshrouded fan with blade diameter at tip less than 30 inches or a blade width of less than 3 inches
- + Safety fans, induced-flow fans, jet fans, and cross-flow fans
- + Fans manufactured exclusively to be powered by internal combustion engines
- + Fans that create a vacuum of 30-inch water gauge or more
- Fans that are designed and marketed to operate at or above 482°F (250°C)
- Fans and blowers embedded in the equipment listed in paragraph (a)(3) of 10 C.F.R. section 431.174
- Fans and blowers embedded in equipment other than the equipment listed in paragraph (a)(3) of 10 C.F.R. Section 431.174, that meets the following criteria: (i) the fan or blower is available only as part of a manufactured assembly that includes functions other than air movement or as a replacement part for that assembly, and (ii) the fan or blower is not subject to federal efficiency standards.

4. Are custom fans and blowers included in the scope of this regulation?

Yes. The compliance process for custom fans does not differ from non-custom fans; they must be tested, marked, and certified.

5. Are material handling and heavy industrial processing fans exempt from the Title 20 regulations?

C&I fans and blowers meeting the definition in <u>Section</u> <u>1602(d)</u> must comply with the Title 20 requirements. There are no specific exceptions for material handling or heavy industrial processing fans due to their application to transfer mass.

6. Does this regulation only apply to fans in buildings, or does it apply to other industries?

This regulation applies to all in-scope C&I fans and blowers, regardless of their application.

7. If a manufacturer sells fan parts to another manufacturer that packages it into a new fan product, are the fan parts in-scope with Title 20?

Products need to be tested, marked, and certified before retail sale. Non-retail sale and supply of original equipment manufacturer (OEM) components between manufacturers for incorporation into retail products are not subject to Title 20 requirements. However, the retail fan product will need to be tested, marked, and certified before being sold or offered for sale in California.

8. How can a fan qualify as a safety fan for use in explosive atmospheres under Title 20?

To qualify, the fan must: (1) be tested according to ISO 80079-36:2016 to ensure it meets the standard's requirements, (2) bear the appropriate ISO 80079-36:2016 markings indicating compliance, (3) include a brief description of the exemption in its product description when sold.

Compliance Responsibilities

9. Who is responsible for complying with Title 20?

Everyone in the sales chain – including manufacturers, distributors, retailers, contractors, and importers – is responsible for ensuring that only compliant products are available for sale within California. Each market actor must ensure that a Title 20 regulated product is compliant before selling or offering it for sale in California.

10. Are out-of-state retailers and distributors subject to the Title 20 requirements if they sell fans and blowers to someone in California via an internet or mail order sale?

Yes. Products sold online from out-of-state retailers, distributors, and manufacturers to California residents for final use must meet Title 20 requirements since they are being offered for sale and sold into California.



Testing Requirements

11. What test procedure do manufacturers have to use to comply with Title 20?

Beginning on April 29, 2024, as specified in <u>Section</u> <u>1604(d)</u>, manufacturers must use <u>10 C.F.R. Section</u> <u>431.174</u> (Appendix A to Subpart J of Part 431) to test their products. This includes and is not limited to provisions on the alternative efficiency determination method (AEDM) and additional testing requirements concerning selection of models to be tested if an AEDM is to be applied, in <u>10 C.F.R. Sections 429.69</u> and <u>429.70</u>.

12. Can manufacturers use their own labs to certify products?

Yes, manufacturers may apply for and receive approval for use of their own laboratories for product testing. Test lab applications are currently accessible. For more information on how to certify your laboratory, review this <u>Energy Code Ace Training</u>.

13. Do manufacturers have to complete a test lab application for the new federal test procedure if they have already completed a test lab application for the previous Title 20 procedure?

Yes, manufacturers must complete a new test lab application. Each application requires confirmation of the test methods used by your lab. Since the test method has changed, manufacturers will need to resubmit a new application indicating that your lab can perform the federal test procedure.

14. Can manufacturers use product data from a test conducted before 2024?

Yes, product data does not have to be recent. However, the test lab must have 1) conducted the required test method specified in Table D-3 of <u>Section 1604(d)</u>, 2) conducted the test within the last 12 months (on any product, not necessarily the one being certified) as specified in <u>Section 1603(a)</u>, and 3) ensured that the rating resulting from the historical test methods remains valid.

15. Why is the CEC requiring manufacturers to certify new C&I fans and blowers to the new federal test procedure?

When the Department of Energy (DOE) adopts a test procedure for a given product category, states are required to use the same test procedure for any standards they have. On May 1, 2023, the federal test method for fans and blowers went into effect. Any representations about fans and blowers made on or after August 8, 2023, including information certified to the CEC MAEDbS, must be made using those federal test procedures.



Axial inline fan



Marking Requirements

16. What are the marking requirements and who is responsible for complying?

Title 20 specifies marking requirements for manufacturers in <u>Section 1607(b)</u>. It states that the following must be permanently, legibly, and conspicuously displayed on an accessible place on each unit:

- 1. Manufacturer's name or brand name or trademark
- 2. Model number
- 3. Date of manufacture, including year and month or smaller increment

Additionally, the label shall include the following energy performance information, as described in <u>Section</u> <u>1607(d)16</u>, for C&I fans and blowers manufactured on and after April 29, 2024:

Fan Energy Index ≥ 1.00 Efficiency boundaries

- 1. Maximum air flow (CFM)
- 2. Maximum fan speed (RPM)
- 3. Maximum pressure (inches water gauge)
- 4. Type of pressure ("static" or "total")

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

SAMPLE LABEL

Manufacturer or Brand Name Model Number Manufacture Date

Fan Energy Index ≥ 1.00 Efficiency boundaries

- 1. Maximum air flow (CFM): _____
- 2. Maximum fan speed (RPM): _____
- 3. Maximum pressure (inches water gauge): _____
- 4. Type of pressure ("static" or "total"): _____*

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

*Enter "Static" or "Total" depending on AMCA214 designation, Table 7.1.

17. How can I find out if a particular product can be sold in my showroom?

Verify that the model number is listed in the MAEDbS before selling or offering the product for sale. If it is not certified for the MAEDbS, alert the manufacturer that the product cannot be sold until it has the required markings and is certified.

18. Does the pressure (total or static) refer to the pressure listed on the label or how the product was tested?

The type of pressure that appears on the label needs to correspond with what was used for the tested or calculated (where applicable) fan.



Certification Requirements

19. Are there fees associated with certifying product data to the MAEDbS?

No.

20. Where can I find the certification packet for C&I fans and blowers?

The certification packet for C&I Fans and Blowers can be found on the <u>California Energy Commission site</u>.

21. How often do I need to recertify a product?

Once listed in the MAEDbS, products do not need to be recertified each year. However, per <u>Section 1606(i)</u>, manufacturers must renew their certification every ten years to be considered in production and to be legally sold in California. Additionally, manufacturers should remove their product listings if the product is no longer available for sale and add new products or modify the ratings of products for any that have changed.

22. How does a manufacturer recertify a product in the MAEDbS if a product hasn't changed? Do I need to remove my old listing even if it's the same data?

When you recertify, you can use the same test report that was originally used. The data from that test report is still valid if the product has not changed at all. However, if the original test lab is no longer in operation, you may need to retest the product with a valid test lab.

Manufacturers can only recertify a product after the model has been archived (either by the manufacturer deleting the model or by the CEC archiving it). The recertified model will then be treated as a brandnew model. Attempting to re-certify a model that is currently listed as approved, will result in the submittal being rejected because the system will identify it as a duplicate.

23. Who is responsible for certifying private label products? Does each brand need to certify individually?

Since the private labeler sells the product in California under their brand name, they are considered the "manufacturer" for compliance and certification purposes. However, the OEM can also choose to act as a third-party certifier. Doing so involves creating an account on the MAEDbS, submitting a third-party certifier application, and the manufacturer submitting a Delegation of Authority Application (which can be found on the manufacturer account).

Additionally, the OEM can still be the manufacturer for compliance and certification purposes. To do so, they would list the private labeler as the brand name for the products. Ultimately, the OEM and the private labeler must decide who will own certification responsibilities.

24. If a fan, other than an air circulating fan, can be sold with different motor options, would each variant be considered a different model, and would it require a unique model name/ number?

If the motors have essentially identical electrical, physical, and functional characteristics that affect energy consumption, then each variant for fans other than air circulating fans would be considered the same model and would not require a unique model name or number.

25. Would subsidiaries of a company need to submit a Delegation of Authority Application if the parent company is submitting the subsidiaries' product data?

The subsidiaries' only responsibility is to ensure that the fan is certified and that it complies with the regulation before being offered for sale in California.

26. What happens if a fan is ordered today but will be built after April 29, 2024?

A fan that is manufactured before April 29, 2024 is exempt from the regulatory requirements. All fans manufactured (e.g., built fans) on and after April 29, 2024 must comply with the regulations.

27. Can manufacturers sell old stock if the products were manufactured before April 29, 2024?

Yes. The manufacture date is key to determining whether the product is in the scope of the regulations.

28. Will manufacturers have to recertify C&I fans and blowers certified before April 29, 2024 to the new test procedure?

Per <u>Section 1606 (c)(3)(A)</u>, manufacturers will not have to recertify to the new test procedure.



29. Who determines Title 20 standards and why?

The CEC adopts technically feasible and cost-effective standards by engaging with individual industries, energy efficiency advocates, and others through an open, transparent rulemaking process. These regulations aim to reduce individual products' energy and water consumption to produce greenhouse gas, energy, and water savings, as well as substantial economic benefits for California consumers.

30. Who enforces the requirements?

The CEC has the authority to enforce Title 20 requirements and administer administrative civil penalties for noncompliance. Any person involved with the manufacture, distribution, and sale of noncompliant appliances may be subject to administrative civil penalties of up to \$2,500 per unit. Section 1609 outlines enforcement procedures for violations with Title 20 standards. More information can be found on the <u>CEC's California Appliance Efficiency Program site</u>.

31. Where does manufacturer responsibility end?

The manufacturer is always responsible for the products offered on the market. However, if a manufacturer has documentation that proves a noncompliant product was intended for shipment and use outside of California and that the manufacturer did its due diligence to prevent that noncompliant product from entering the market, this can be used as supporting evidence in any future enforcement case.

32. Where can I find specific requirements for each product?

The California Code of Regulations (including Title 20) can be found on <u>WestLaw</u>, but a searchable format of the Title 20 standards is also located on the <u>Energy</u> <u>Code Ace Reference Ace</u>. This regulation updates Sections <u>1601(d)</u>, <u>1602(d)</u>, <u>1604(d)</u>, <u>1606</u>, and <u>1607(d)(15)</u> of the code.

33. If a product is not certified or marked correctly, what should I do?

If you have unsuccessfully tried to verify product compliance by confirming that the model number of the appliance is listed in the MAEDbS, the following steps may help:

- Check the date of manufacture of the product. If it was manufactured before April 29, 2024, it is not in scope of this regulation.
- Contact the manufacturer and ask them to identify which model number corresponds to the desired product.
- Alert the manufacturer if there are not appropriate markings on the product.

34. Can archived C&I fan and blower models still be sold in California?

Yes. Models that were manufactured and certified before April 29, 2024 can still be sold in California after the compliance date, and will be displayed in the archived section of the MAEDbS.



For More Information

Title 20 Primary Documents

- + California Appliance Efficiency Regulations
- <u>Section 1602(s)</u> Definitions
- + <u>Section 1603</u> Testing: All Appliances
- <u>Section 1604</u> Test Methods for Specific Appliances
- <u>Section 1605</u> Energy Performance, Energy Design, Water Performance, and Water Design Standards: In General
- + <u>Section 1606</u> Filing by Manufacturers; Listing of Appliances in Database
- + <u>Section 1607</u> Marking of Appliances
- + <u>Section 1608</u> Compliance, Enforcement, and General Administrative Matter

CALIFORNIA ENERGY COMMISSION

energy.ca.gov

- Appliances Call Center: (888) 838-1467 or outside California (916) 651-7100.
 Questions may also be emailed to: appliances@energy.ca.gov
- + California Appliance Efficiency Standards Site
- Modernized Appliance Efficiency Database (MAEDbS)
- Commercial and Industrial Fans and Blowers Rulemaking Documents: <u>docket # 22-AAER-01</u>

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A suite of interactive tools to help you understand the compliance process, required forms, installation techniques, and energy efficiency regulations applicable to building projects and appliances in California

 <u>Title 20 Reference Ace</u> Navigate the Title 20 Standards using an index, keyword search, and hyperlinked text. Your one-stop shop for no-cost tools, training and resources to help you comply with California's Title 24, Part 6 building energy code and Title 20 appliance standards.

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- Title 20 Training Ace
- <u>Title 20 Essentials: Using</u>
 <u>MAEDbS for Manufacturers</u>

Ace + Resources[™]

An array of downloadable materials providing practical and concise guidance on how and when to comply with California's building and appliance efficiency standards

- + Title 20 Commercial & Industrial Fans and Blowers Requirements
- Title 20 Basics Manufacturers

Submit a Question – Get your Title 20 questions answered directly by experts. Select the 'Appliances' drop-down menu, navigate to 'Resources,' and select 'Submit a Question.'

Energy Code Ace is here to help you ensure your products meet Title 20 requirements. This website can help prevent issues that impact your sales and bottom line, including civil penalties under Title 20 Section 1609 for non-compliant products. Create an account on the Energy Code Ace website and select an industry role for your profile to receive messages about our offerings!









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