

What's Included?

What specific lighting products are covered by state or federal regulations?

California's Title 20

[Section 1605.1](#) of California's Appliance Efficiency Regulations (Title 20) provides federal standards adopted verbatim and include the same lighting products covered by the Department of Energy (DOE). [Section 1605.3](#) lists state standards that are required for lighting products sold or offered for sale in California. Lighting products in both sections must be certified to the California Energy Commission (Energy Commission) and be listed in its [Modernized Appliance Efficiency Database System \(MAEDbS\)](#).

California's Title 24, Part 6

Under California's Building Energy Efficiency Standards (Energy Code or Title 24, Part 6), LED light sources must be certified to the Energy Commission before they can be claimed as "high efficacy," according to the definition provided in the [Energy Code's Joint Reference Appendix 8 \(JA8\)](#). Section 110.9 (e) states that, to qualify as high efficacy, a residential LED luminaire or LED light engine must be certified to the Energy Commission.

2021 Changes: Effective March 16, 2021

- Self-contained lighting controls are no longer regulated by Title 20. They are now fully regulated under Title 24, Part 6, Sections [110.0](#), [110.1](#) and [110.9](#).
- Portable luminaires no longer have a minimum light output requirement.

What regulations apply to portable luminaires?

Title 20 includes performance requirements for portable luminaires verified by specified test procedures. The regulations also include prescriptive requirements for this product type (i.e., be equipped with a dedicated fluorescent lamp socket connected to a high frequency electronic ballast contained within the portable luminaire).

Certification to the Energy Commission using MAEDbS is required. Data submission requirements include type of portable luminaire (floor, table, other); total number of lamp sockets; base type; compliance method used; zero standby power; GU-24 sockets rated; and power factor (for luminaires labeled or sold for residential use only). LED luminaires must also have the following data reported: LED Light Output; LED Efficacy; Nominal Color Correlated Temperature (CCT); and Color Rendering Index (CRI).

Title 20-Regulated Lighting Products

Section 1605.1 Federal and State Standards for Federally-Regulated Appliances	Section 1605.3 State Standards for Non-Federally-Regulated Appliances
Fluorescent Lamp Ballasts General Service Fluorescent Lamps Incandescent Reflector Lamps Medium Base Compact Fluorescent Lamps General Service Incandescent Lamps and Modified Spectrum General Service Incandescent Lamps Candelabra Base Incandescent Lamps and Intermediate Base Incandescent Lamps Emergency Lighting Traffic Signal Modules and Traffic Signal Lamps Torchieres Metal Halide Lamp Fixtures Ceiling Fan Light Kits Mercury Vapor Lamp Ballasts Rough Service Lamps Vibration Service Lamps	State-Regulated Incandescent Reflector Lamps State-regulated LED Lamps State-regulated Small Diameter Directional Lamps General Service Lamps Deep-dimming Fluorescent Lamp Ballasts GU-24 Base Lamps Illuminated Exit Signs Metal Halide Luminaires Under-Cabinet Luminaires (commercial office only) Portable Luminaires GU-24 Adaptors



PHOTO: CLTC UC DAVIS

What is the structure of the regulations for ceiling fan light kits?

Effective January 2019, ceiling fan light kits have lumen, efficacy, rapid cycle stress test, and lifetime requirements for the lamps packaged along with the ceiling fan light kits. For more information, visit the U.S. DOE Appliance and Equipment Standards Program site.

Federally-regulated lamps must be certified to the CCMS (federal appliance database) and the MAEDBS.



PHOTO: CLTC UC DAVIS

Who Needs to Comply – and How?

Are retailers responsible for complying with Title 20?

How about installation contractors?

Yes and yes. Everyone in the sales chain – including manufacturers, distributors, retailers, contractors and importers – is responsible for ensuring regulated products are listed in the MAEDbS. Each party should independently determine applicable regulations for certain product types by referring to the Title 20 standards document.

Do out-of-state retailers have to meet the Title 20 requirements if they sell lighting products to someone in California via an internet or mail order sale?

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

Do lighting showrooms or other retailers have to mark the products in some way to show that they meet the Title 20 requirements?

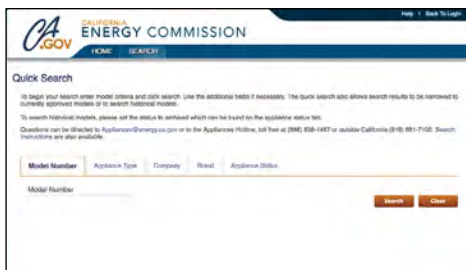
Currently, neither showrooms nor retailers are required to mark the products to indicate compliance with Title 20 requirements. However, they must ensure that regulated products are compliant by verifying that the model numbers of regulated products are listed in the MAEDbS prior to offering the products for sale in California.

How about the product manufacturers – do they have labeling or marking requirements that have to be followed?

Title 20 specifies marking requirements for manufacturers in Section 1607(b), which states that the following must be “permanently, legibly, and conspicuously displayed on an accessible place on each unit” of the regulated appliance:

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

Sections 1607(d)(5), 1607(d)(6), and 1607(d)(11) contain additional requirements for illuminated exit signs, luminaires (torchieres) and emergency lighting, respectively.



Search for certified products using the MAEDbS Public Search function.

Regulation and Enforcement

Who determines the regulations and why?

The Energy Commission determines and establishes all aspects of the Title 20 regulations. The Energy Commission invites stakeholders to participate by submitting data, comments, and recommendations throughout various stages of the rulemaking process. The regulations aim to cost-effectively regulate certain appliances and equipment sold within the state to reduce the energy demand of California and provide benefits to consumers.

Who enforces the requirements?

The Energy Commission maintains the authority to enforce Title 20 requirements and assess administrative civil penalties for noncompliance. Title 20 Section 1609 outlines enforcement procedures for violations with Title 20 standards. More information can be found on the [Energy Commission's California Appliance Efficiency Program site](#).

How often are the Title 20 lighting product requirements updated – and when is the next update?

Title 20 standards are not updated according to a regular cycle. Although the Title 20 document is updated roughly every year to ensure that changes to the Federal standards are incorporated, most individual lighting standards are not changed this often. The frequency of updates for lighting products depends, in part, on how rapidly technologies are changing, but most specific lighting product standards can remain in effect for 3 to 10 years before they are updated.



Compliance Resources

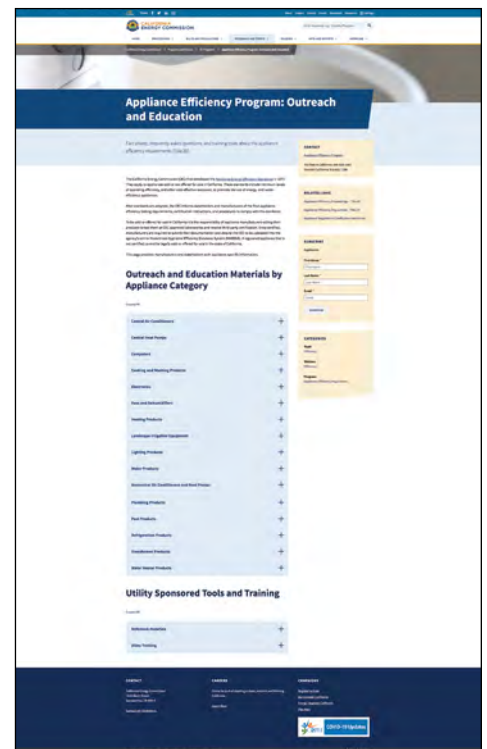
Where can I find specific requirements for each product? Is there a listing or website where these requirements are listed by type of product?

Currently, the standards can be found in the Energy Commission's Appliance Efficiency Regulations (Title 20) document. Specifically, lighting standards are located in Title 20 sections 1605.1 (j) through (n) and 1605.3 (j) through (n). Sections 1601 and 1602 define the scope and definitions of appliances and equipment listed in Title 20. The Title 20 regulations and more related information can be found on the Energy Commission's California Appliance Efficiency Program site.

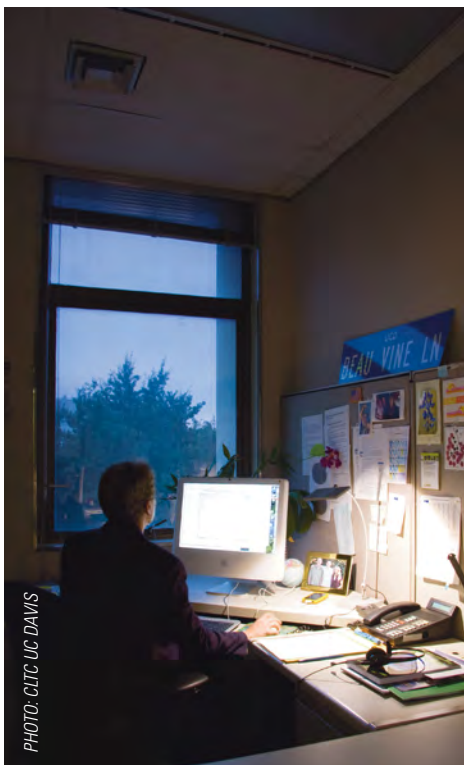
If a particular product is not marked or labeled as Title 20 compliant, how can I find out if that product can be sold in my showroom?

Verifying compliance with Title 20 involves confirming that the model number of the appliance is listed in the MAEDbS. Depending on the date of manufacture of the product, it will be certified to the Energy Commission as compliant with the applicable standard.

If approved, the model number, along with manufacturer, brand, and other product metrics will be listed in the appropriate product listing in the MAEDbS. You can search for products from the MAEDbS landing page.



The Energy Commission Appliance Efficiency Program site offers numerous Title 20 resources, including information on enforcement and product requirements.



For More Information

Title 20 Primary Documents

- Title 20 Appliance Efficiency Regulations:
tinyurl.com/Title20

California Energy Commission Information & Services

- Appliances Hotline – (888) 838-1467 or outside California (916) 651-7100
- Questions may also be emailed to Appliances@energy.ca.gov
- California Appliance Efficiency Standards Site: www.energy.ca.gov/appliances
- Modernized Appliance Efficiency Database (MAEDbS):
<https://cacertappliances.energy.ca.gov/Login.aspx>

U.S. Department of Energy (DOE) Information & Services

- Appliance and Equipment Standards Program:
www.energy.gov/eere/buildings/appliance-and-equipment-standards-program
- Compliance Certification Management System (CCMS):
www.regulations.doe.gov/ccms

Additional Resources

- California Lighting Technology Center (CLTC) Guide:
 - Lighting Appliance Efficiency Regulations: What's New in the Title 20 Code?
cltc.ucdavis.edu/publication/title-20-lighting-appliance-efficiency
- Energy Code Ace:
EnergyCodeAce.com
 - An online “one-stop-shop” providing free resources and training to help appliance and building industry professionals decode and comply with Title 24, Part 6 and Title 20. The site is administered by California’s investor-owned utilities.

Of special interest:

- Reference Ace™
energycodeace.com/content/tools-ace/tool=reference-ace
 - Easily navigate the Title 20 and Title 24, Part 6 documents using search and hyperlinks
- Fact Sheets
energycodeace.com/content/resources-fact-sheets/
 - Title 20 Certification Overview, Process and FAQs
 - Title 20 State Regulated Lamps
 - High Efficacy Lighting for Manufacturers
 - Residential High-Efficacy Lighting - Title 20 and Title 24, Part 6 JA8: Key Differences and Overlap
 - Residential High-Efficacy Lighting – JA10 Flicker – Fourier Transform
 - Nonresidential Mandatory Lighting Measures 2019 (Title 24, Part 6)
 - Residential Lighting 2019 (Title 24, Part 6)
- Title 20 On-Demand Video Training
energycodeace.com/content/title-20-training/

Please register with the site and select an industry role for your profile in order to receive messages about all our free offerings! You can also email us at Title20@energycodeace.com.



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