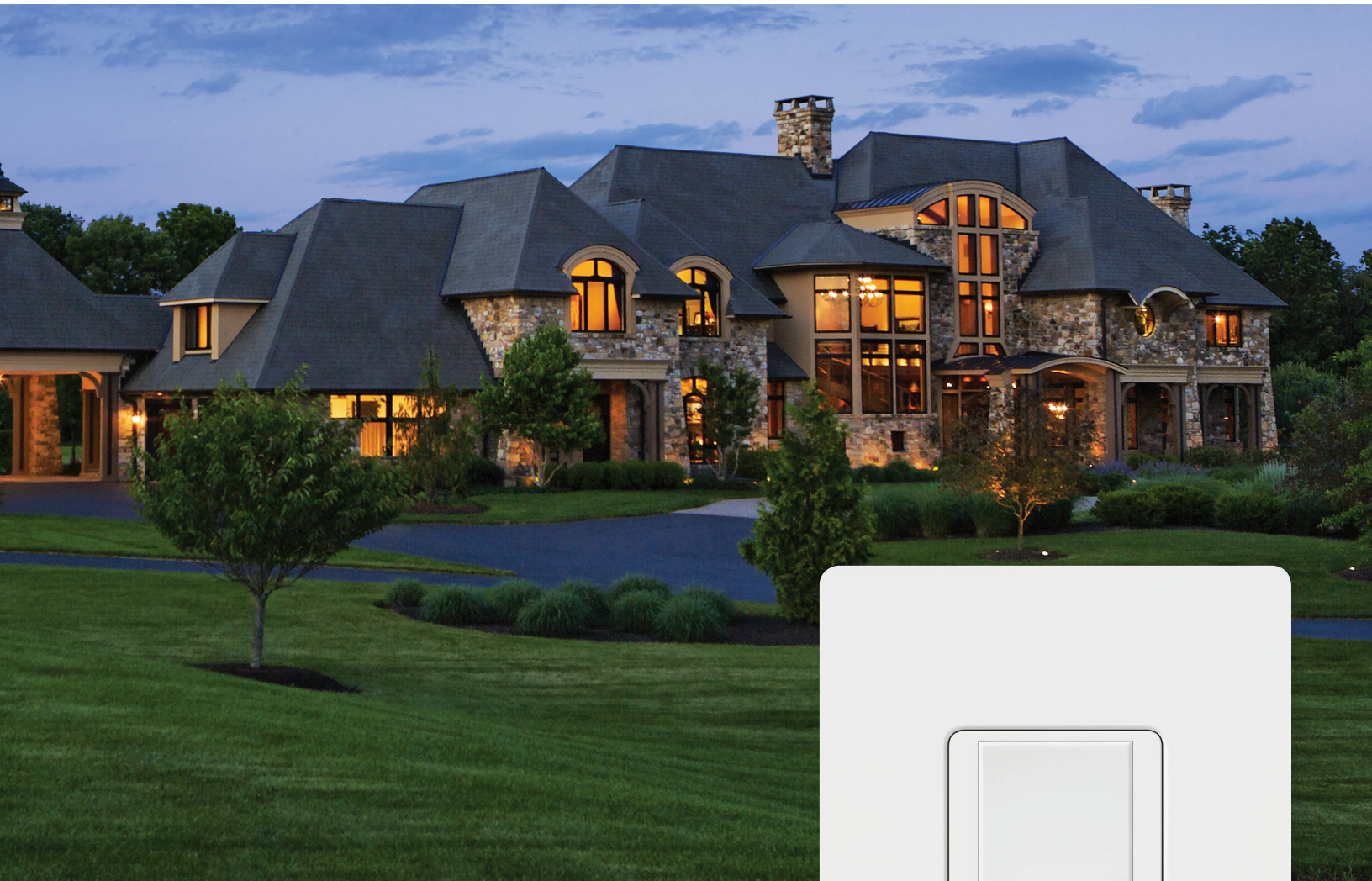


Meeting the New CA Title 24 Residential Requirements

Effective January 2017



Requirements and Solutions
for Every Room in the Home



Maestro vacancy sensor switch



Title 24 Requirements

Starting January 1, 2017, California's latest version of Title 24 will require the following in all new residential construction and major renovations:

- All lighting must be high-efficacy.¹ Most lighting will need to be Joint Appendix 8 (JA8) compliant and marked accordingly. Screw-based high-efficacy lighting is now allowed, except in recessed ceiling downlights.²
- A vacancy sensor must be installed to control lights in bathrooms, garages, laundry rooms, and utility rooms.
- A dimmer or vacancy sensor must be used to control all permanently installed indoor recessed ceiling downlights, screw-based light fixtures, and LED light fixtures.³
- Outdoor lighting connected to a building must be controlled with a manual on/off switch plus an astronomical timeclock, or photocell and motion sensor, or photocell and time switch.
- Builders are required to provide new homeowners with a list of installed lamps and luminaires.



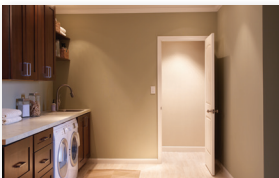
Kitchen, page 1

Kitchen lighting must be high-efficacy. JA8 lights (non-colored LEDs, screw-based bulbs, and recessed ceiling downlights) must be controlled by vacancy sensors or dimmers.^{1,2,4}



Living Room, Bedroom, and Family Room, page 2

Lighting installed in these rooms must be high-efficacy. JA8 lights (non-colored LEDs, screw-based bulbs, and recessed ceiling downlights) must be controlled by either dimmers or vacancy sensors.^{1,2}



Garage, Laundry Room, and Utility Room, page 3

Lighting installed in attached and detached garages, laundry rooms, and utility rooms must be high-efficacy. At least one light fixture in each of these spaces must be controlled by vacancy sensors.^{1,2,5}



Bathroom, page 4

Lighting installed in bathrooms must be high-efficacy. At least one light fixture in this room must be controlled by vacancy sensors.^{1,2,5}



Outdoor Lights, page 5

Single-family residences must have high-efficacy outdoor lighting. Lighting permanently mounted to a building must be controlled with a manual on/off switch, plus an astronomical timeclock, or photocell and motion sensor, or photocell and time switch.

Recommended Room Solutions



Kitchen

Kitchen lighting must be high-efficacy. JA8 lights (non-colored LEDs, screw-based bulbs, and recessed ceiling downlights) must be controlled by vacancy sensors or dimmers.^{1,2,4}

Recommended Solutions

Lighting: JA8-compliant Finiré and Lumaris by Ivalo LED lighting

Controls (small, medium, large sized home):

- Caséta Wireless dimmers with Pico remote
- RadioRA 2 seeTouch keypad with raise/lower
- HomeWorks QS Palladiom keypad with raise/lower



Caséta Wireless dimmer with Pico remote



RadioRA 2 seeTouch keypad with raise/lower



HomeWorks QS Palladiom keypad with raise/lower

Recommended Room Solutions



Living Room, Bedroom, and Family Room

Lighting installed in these rooms must be high-efficacy. JA8 lights (non-colored LEDs, screw-based bulbs, and recessed ceiling downlights) must be controlled by either dimmers or vacancy sensors.^{1,2}

Recommended Solutions

Lighting: JA8-compliant Finiré and Lumaris by Ivalo LED lighting

Controls (small, medium, large sized home):

- Caséta Wireless dimmers with Pico remote
- RadioRA 2 seeTouch keypad with raise/lower
- HomeWorks QS seeTouch keypad with raise/lower



Caséta Wireless dimmer with Pico remote



RadioRA 2 seeTouch keypad with raiser/lower



HomeWorks QS seeTouch keypad with raise/lower



Garage, Laundry Room, and Utility Room

Lighting installed in attached and detached garages, laundry rooms, and utility rooms must be high-efficacy. At least one light fixture in each of these spaces must be controlled by vacancy sensors.^{1,2,5}

Recommended Solutions

Lighting: JA8-compliant Finiré and Lumaris by Ivalo LED lighting

Controls (small, medium, large sized home):

- Maestro vacancy sensor switch or dimmer
- RadioRA 2 ceiling RF vacancy sensor with RadioRA 2 Maestro or GRAFIK T dimmer
- HomeWorks QS ceiling RF vacancy sensor with HomeWorks QS, Maestro, or GRAFIK T dimmer



Maestro vacancy sensor dimmer



RadioRA 2 and HomeWorks QS ceiling vacancy sensor, Maestro dimmer, and GRAFIK T dimmer

Recommended Room Solutions



Bathroom

Lighting installed in bathrooms must be high-efficacy. At least one light fixture in this room must be controlled by vacancy sensors.^{1,2,5}

Recommended Solutions

Lighting: JA8-compliant Finiré and Lumaris by Ivalo LED lighting

Controls (small, medium, large sized home):

- Maestro vacancy sensor switch or dimmer
- RadioRA 2 keypad and RF ceiling vacancy sensor with RadioRA 2 Maestro or GRAFIK T dimmer
- HomeWorks QS keypad and RF vacancy sensor with HomeWorks QS Maestro or GRAFIK T dimmer



Maestro vacancy sensor switch or dimmer



RadioRA 2 and HomeWorks QS ceiling vacancy sensor, Maestro dimmer, and GRAFIK T dimmer



Outdoor Lights

Single-family residences must have high-efficacy outdoor lighting. Lighting permanently mounted to a building must be controlled with a manual on/off switch plus one of the following:

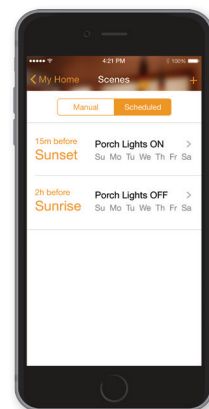
- Photocell and motion sensor
- Photocell and time switch
- Astronomical timeclock
- Energy Management Control System with an astronomical timeclock

Recommended Solutions

Lighting: High-efficacy lighting by others

Controls (small, medium, large sized home):

- Caséta Wireless astronomical timeclock
- RadioRA 2 astronomical timeclock
- HomeWorks QS astronomical timeclock



Lutron App for
Caséta Wireless

Notes

- 1 This applies to permanently installed lighting and does not include portable lighting such as plug-in table or floor lamps.
- 2 The JA8 requirement ensures lighting has high-efficiency, nice color rendering, long life, 10% dimming, and low levels of audible noise and flicker. All indoor non-colored LEDs, screw-based bulbs, and recessed ceiling downlights must meet JA8 to help a home comply with the Title 24 2016 Standard. Exceptions to JA8 lighting that qualify as high-efficacy are linear fluorescent, pin-based compact fluorescent, GU-24 compact fluorescent, pulse-start metal halide, high pressure sodium, and induction lamps.
- 3 Exceptions: closets smaller than 70 ft², hallways, and decorative colored LED light fixtures containing non-replaceable LEDs.
- 4 The 50/50 rule of the previous 2013 Title 24 standard has been eliminated.
- 5 At least one light fixture in the space must be controlled by a vacancy sensor. All other light fixtures in the space need to be controlled with a vacancy sensor or dimmer if the light fixtures are JA8 compliant.

For more information visit, lutron.com/title24.

This brochure summarizes the CA Title 24 2016 lighting control requirements for residential buildings. It is for information purposes only. For complete and precise details refer to Section 150.0 (k) of the California Title 24 2016 Building Energy Efficacy Standards.

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