**2022 RESIDENTIAL LIGHTING STANDARDS**

Effective on Jan 1, 2023, the new 2022 Energy Standards requires that ALL lighting in residential buildings including single-family residential, duplex, residential garage, townhouse, multi-family dwelling units, high-rise residential dwelling units be high efficacy. The following is summary for residential buildings mandatory lighting requirements from 2022 California Energy Code Sections 150.0(k) & 160.5 (for more details see <https://www.energy.ca.gov/sites/default/files/2022-08/CEC-400-2022-010_CMF.pdf>).

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| **RESIDENTIAL APPLICATION** | **LUMINAIRE REQUIREMENTS** |
| **HABITABLE SPACES****(Living rooms, dining rooms, kitchens, and bedrooms)** | Shall be high efficacy AND shall have readily accessible wall-mounted dimming controls. Exceptions: * Ceiling fans may provide control of integrated lighting via remote control.
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| **BATHROOMS, GARAGES, LAUNDRY ROOMS, UTILITY ROOMS AND WALK-IN CLOSETS** | All lighting shall be high efficacy. Each room must have at least 1 luminaire is controlled by either an occupancy OR vacancy sensor providing automatic-off functionality. Exhaust fans shall be controlled separately from lighting systems or utilize a device where lighting can be turn OFF while the fan is running.  |
| **NAVIGATION LIGHTING (Night lights, step lights, and path lights)** | Shall be high efficacy except if less than 5 watts.  |
| **CABINET LIGHTING****(Drawers, cabinets, and linen closets)** | All lighting shall be high efficacy except lighting internal to drawers, cabinetry and linen closets with an efficacy of ≥ 45 lumens per watt. Lighting internal to drawers and cabinetry with opaque fronts or doors shall have controls that turn the lights off when the drawer or door is closed. |
| **INTEGRATED DEVICE LIGHTING** | Lighting integral to exhaust fans, kitchen range hoods, bath vanity mirrors and garage door opener are exempt from high efficacy requirements.  |
| **RECESSED DOWNLIGHT LUMINAIRES IN CEILINGS** | * Shall be high efficacy, listed for zero clearance insulation contact (IC), labeled as airtight (AT), sealed with a gasket or caulk between the housing and ceiling, allow ballast or driver maintenance and replacement to be readily accessible to building occupants from below the ceiling without requiring the cutting of holes in the ceiling, shall not contain screw base sockets (E26), comply with JA8 elevated temperature requirements for enclosed or recessed luminaires.
* For alterations of existing ceiling-recessed luminaire with screw-based socket must use new JA8-compliance trim kits or lamps designed for use with recessed down-lights or luminaires.
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| **BLANK ELECTRICAL BOXES** | The number of electrical boxes that are more than 5 feet above the finish floor and do not contain a luminaire or other device shall be no greater than the number of bedrooms. These electrical boxes must be served by a dimmer, vacancy sensor control, low voltage wiring or fan speed control.  |
| **INDEPENDENT CONTROLS** | * Integrated lighting of exhaust fans shall be controlled independently from the fans.
* The following shall be controlled separately from ceiling-installed lighting: under cabinet lighting, undershelf lighting, interior lighting of display cabinets, and switched outlets.
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| **OUTDOOR LIGHTING** | All permanently installed outdoor lighting shall be high efficacy AND must be controlled by a manual on and off switch AND use one of these automatic control types: * Photocell and motion sensor, OR
* Photocell and automatic time switch control, OR
* Astronomical time clock that automatically turn outdoor lighting off during daylight hours, OR
* Energy Management Control System (EMCS) that provides the functionality of an astronomical time clock. EMCS does not have an override or bypass that allows the luminaries to be always on and is programmed to automatically turn the outdoor lighting off during daylight hours.
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