

Changes for Title 24 Energy Efficiency Standards

Non-Residential Indoor - Lighting Controls

- There are significant changes to Automatic Daylighting Control Devices used in daylit areas. The additional requirements are very specific and explained in Section 119.
- Multi-level Astronomical Time-switch Controls, Automatic Multi-level Daylighting Controls, and Outdoor Astronomical Time-switch Controls have been added to Section 119 for Mandatory Requirements For Lighting Control Devices. Manufacturers are required to certify to the Commission that their control product meets mandatory requirements for lighting control devices. (Section 119)
- For Non-residential, High-rise Residential, and Hotel/Motel Occupancies, UL 1598 and UL 1574 specifications shall be followed on lamp wattages for incandescent or tungsten-halogen luminaires, line-voltage track lighting, low-voltage track lighting, other low-voltage lighting, and miscellaneous lighting equipment. Continue to follow recommendations listed on product by manufacturer. (Section 130)
- "Controls to Reduce Lighting" sub-section has been revised and now defined as "Multi-level Lighting Controls". It is defined as having continuous dimming, stepped dimming, or stepped switching. It is to have one control step of 50-70% light output and at least one step 35% of full light output. It is achieved by dimming all lamps or luminaires, or by switching luminaires/luminaire groups. (Section 131)
- There are new requirements for controlling luminaires in daylit areas. For daylit areas greater than 250sq/ft, at least one control is required to either control 50% of the power, control luminaires in vertically daylit area separately from horizontal daylit areas, or maintain uniform level by means of dimming or alternating lamp/fixture switching. For daylit areas over 2,500sq/ft, general lighting has to be controlled separately with either automatic multi-level daylighting control or multi-level astronomical time switch, both having to meet requirements of Section 119 (Section 131, 143).

Luminaires for bathroom, garage, laundry room, utility room must be high efficacy. Exception is provided if they are controlled by occupant sensor that is not manually or overridingly switched (Section 150)