

CHAPTER 4
COMMERCIAL ENERGY EFFICIENCY

SECTION C402.3.2.1
2012 Edition
IECC Interpretation 62-14
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C402.3.2.1 Lighting controls in daylight zones under skylights. All lighting in the daylight zone shall be controlled by multilevel lighting controls that comply with Section C405.2.2.3.3.

Exception: Skylights above daylight zones of enclosed spaces are not required in:

1. Buildings in Climate Zones 6 through 8.
2. Spaces where the designed *general lighting* power densities are less than 0.5 W/ft² (5.4 W/m²).
3. Areas where it is documented that existing structures or natural objects block direct beam sunlight on at least half of the roof over the enclosed area for more than 1,500 daytime hours per year between 8 am and 4 pm.
4. Spaces where the daylight zone under rooftop monitors is greater than 50 percent of the enclosed space floor area.

REFERNCED SECTIONS:

C405.2.2.3.3 Multi-level lighting controls. Where multi-level lighting controls are required by this code, the general lighting in the daylight zone shall be separately controlled by at least one multi-level lighting control that reduces the lighting power in response to daylight available in the space. Where the daylit illuminance in the space is greater than the rated illuminance of the general lighting of daylight zones, the general lighting shall be automatically controlled so that its power draw is no greater than 35 percent of its rated power. The multi-level lighting control shall be located so that calibration and set point adjustment controls are readily accessible and separate from the light sensor.



Q: Are manual day lighting controls permitted in daylight zones under skylights when the minimum skylight fenestration area is used for an enclosed space greater than 10,000 square feet directly under a roof with a ceiling height greater than 15 feet?

A: No, manual daylighting controls are not permitted.

Section C402.3.2.1 requires all lighting in the daylight zone to be controlled by multilevel lighting controls that comply with Section C405.2.2.3.3.

Section C405.2.2.3.3 describes two methods of multi-level light controls. Both methods are actually “automatic daylighting controls”.

Method #1: The general lighting in the daylight zone is separately controlled by at least one multi-level lighting control that “reduces the lighting power in response to daylight” available in the space.

Method #2: Where the daylit illuminance in the space is greater than the rated illuminance of the general lighting of daylight zones, the general lighting shall be automatically controlled so that its power draw is no greater than 35 percent of its rated power.

So multi-level light controls (automatic daylighting controls) complying with Section C405.2.2.3.3 are required and manual daylighting controls are not permitted.