



| v3 - LEED 2009

# Daylight and views - daylight

EQc8.1 | Possible 2 points

Glossary

## Intent

To provide occupants with a connection between indoor spaces and the outdoors through the introduction of daylight and views into the regularly occupied areas<sup>1</sup> of the tenant space.

## Requirements

Through 1 of the 4 options, achieve daylighting in at least the following spaces<sup>2</sup>:

Regularly Occupied Spaces	Points
75%	1
90%	2

### Option 1. Simulation

Demonstrate through computer simulation that the applicable spaces achieve daylight illuminance levels of a minimum of 10 footcandles (fc) (108 lux) and a maximum of 500 fc (5,400 lux) in a clear sky condition on September 21 at 9 a.m. and 3 p.m.

Provide glare control devices to avoid high-contrast situations that could impede visual tasks. However, designs that incorporate view-preserving automated shades for glare control may demonstrate compliance for only the minimum 10 fc (108 lux) illuminance level.

### Option 2. Prescriptive

For sidelighting zones:

- ° Achieve a value, calculated as the product of the visible light transmittance (VLT) and window-to-floor area ratio (WFR) between 0.150 and 0.180.

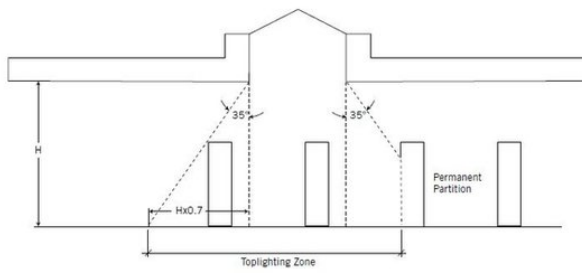
0.150	<	VLT	x	WFR	<	0.180
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- ° The window area included in the calculation must be at least 30 inches (0.8 meters) above the floor.
- ° In section, the ceiling must not obstruct a line that extends from the window-head to a point on the floor that is located twice the height of the window-head from the exterior wall as measured perpendicular to the glass (see diagram on the next page).

- ° Provide glare control devices to avoid high-contrast situations that could impede visual tasks. However, designs that incorporate view-preserving automated shades for glare control may demonstrate compliance for only the minimum 0.150 value.

For toplighting zones:

- ° The toplighting zone under a skylight is the outline of the opening beneath the skylight, plus in each direction the lesser of (see diagram below):
  - ° 70% of the ceiling height
  - ° 1/2 the distance to the edge of the nearest skylight
  - ° The distance to any permanent partition that is closer than 70% of the distance between the top of the partition and the ceiling.



- Achieve skylight coverage for the applicable space (containing the toplighting zone) between 3% and 6% of the total floor area.
- The skylight must have a minimum 0.5 VLT.
- A skylight diffuser, if used, must have a measured haze value of greater than 90% when tested according to ASTM D1003.

**Option 3. Measurement**

Demonstrate through records of indoor light measurements that a minimum daylight illumination level of 10 fc (108 lux) and a maximum of 500 fc (5,400 lux) has been achieved in the applicable spaces. Measurements must be taken on a 10-foot (3-meter) grid and shall be recorded on building floor plans.

Provide glare control devices to avoid high-contrast situations that could impede visual tasks. However, designs that incorporate view-preserving automated shades for glare control may demonstrate compliance for only the minimum 10 fc (108 lux) illuminance level.

**Option 4. Combination**

Any of the above calculation methods may be combined to document the minimum daylight illumination in the applicable spaces.