**Lightlouver Concept**

Using a patented, passive optical design, the Lightlouver Daylighting System redirects daylight deep into the space while eliminating glare and all direct sunlight penetration onto work surfaces. With Lightlouver units integrated into the building fenestration design, uniform ambient lighting is provided, so that electric lights can be turned off or dimmed and energy saved.

The unique, patented Lightlouver slat design redirects daylight deep into the daylit space while providing complete solar control. For all solar altitude angles, as shown in the diagram (left), the Lightlouver slat redirects daylight up and back onto the ceiling to provide uniform, glare-free daylight.
LightLouver Unit Location (refer to Figure 1):
- Located in “daylight” windows on east, west and south facing facades
- Bottom of the unit should not be lower than 7’ (AFF)
- Preferred use in long and continuous windows

Daylit Space Type:
- Optimal performance in large open spaces with minimal interior obstructions above 7’ (AFF).
- Good eastern, southern or western exposure to sun with minimal shading from neighboring objects (trees, buildings, etc.).

LightLouver Sizing (refer to Figure 2):
- One vertical foot of LightLouver reflective slats provides uniform ambient light for a 12’–14’ daylit zone.
- Minimum “daylight” window opening height = 12”.
- Window opening heights should ideally be divisible by 1”. Fractional heights will be rounded down to the next inch increment and the gap between the unit and the window frame will increase.
- Interior window frame width > 1.5”.
- Maximum LightLouver unit area = 18 sf. However, larger window areas can incorporate multiple LightLouver units.

Electric Lighting System Integration:
- LightLouver units integrate best with indirect lighting, both of which work best with a smooth and reflective ceiling surface. Lensed lighting fixtures are acceptable; louvered troffer lighting fixtures do not provide a good reflective surface.
- LightLouver units provide an ambient (20–30fc) level of illuminance and integrate best with an ambient/task electric lighting design scheme providing the same ambient illuminance level.

Window Treatment
- Select “view” window treatment that effectively blocks direct sunlight. Fabric shade system preferred with 3–5% openness factor.

![Figure 2: Schematic Section of LightLouver Unit Installation](image-url)