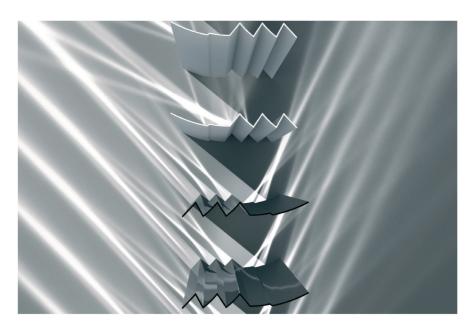
## **ECO**

# Light Redirecting Glass SSG® RetroLux Therm





SSG® RetroLux Therm Micro 12mm is a double glazed glass with a specially formulated light redirecting property. Its intuitive design has enabled it to be one of the most advanced blind system using retro technology and dichotomous bifocal louvre shaping. The former aids in mirroring solar radiation back into the sky whilst the latter contributes to the angle selectivity of light reflection and redirection. Together, it prevents overheating of the interior while optimizing daylight illumination.

Retro reflection and light redirection is made possible by using louvres each with two parts, of different focal lengths. Two types of louvres are used for the assembly of SSG® RetroLux Therm Micro 12mm - Types O and U. Type O is used from 1.8m

and above (upper window area) and Type U is used below 1.8m (lower window area). The direction of louvre installation for Type O is opposite to that of Type U. Each type has its different functions which constitute to the overall mechanism of SSG® RetroLux Therm Micro 12mm.

For Type O, the first half of louvre is responsible to collect and horizontally redirect the light into the room at a wide angle. This design increases daylighting even during an overcast day. Simultaneously, the complementary half of the louvre retro reflects sun rays outside to reduce solar irradiance. For Type U, the first half of louvre prevents the interior from overheating by reflecting incident light radiation back to the outside. Concurrently, complementary half of the louvre guides the light and reflects it in steep angles onto the ceiling which brightens up the room which in turn creates a glare-free environment.

To achieve the desired result, this intrinsic design would require a lighting designer to consider several factors such as the orientation of the building, direction of sunlight and landscape.

### **PRODUCT FEATURES**

#### **ULTRAVIOLET SCREENING**

The usage of Type U louvre causes a larger amount of solar irradiance to be reflected back into the sky which prevents overheating of the interior. It also reduces harmful ultraviolet light from entering the room.

#### **DAYLIGHT ILLUMINATION**

The usage of Type O louvre ensures illumination of the room by redirecting the light horizontally across the room.

#### **HEAT INSULATION**

The feature of the double glazed glass allows the internal environment to be well insulated from any external weather conditions, thus occupants will not be greatly affected by temperature changes.

#### **VIEWING FREEDOM**

The installation and usage of SSG® RetroLux Therm Micro 12mm does not compromise any viewing pleasure at eye level as the louvres are horizontally assembled. This provides a win-win situation for all areas of maximum light illumination, reduction of solar irradiance and the ability to indulge in the pleasure of scenic viewing.

## **USES AND APPLICATIONS**

- Classrooms
- Offices/ Commercial Buildings
- Art Galleries
- Libraries
- Gymnasiums

## **APPLICABILITY**

SSG® RetroLux Therm Micro 12mm can be used with tempered or tempered heat-soaked glass for additional strength to withstand mechanical stress.

## **SPECIFICATIONS: Production Sizes**

Minimum Size (W/mm x H/mm)	Maximum Size (W/mm x H/mm)
300 x 300	*Approx. 2,500 x 5,700

<sup>\*</sup>Maximum size varies depending on width