

DATA CONDITIONS

Condition by ASHRAE

	*1 Winter	*2 Summer
Outdoor Temperature	18 C (0 F)	32 C (89 F)
Room Temperature	21 C (70 F)	24 C (75 F)
Outdoor Wind Velocity	6.7 m/s (15mph)	3.3 m/s (7.5mph)
Indoor Air Velocity	0 m/s (0mph)	0 m/s (0mph)
Solar Intensity	0 Kcal/m ² hr	672 Kca/m ² hr

(ASHRAE: American Society of Heating Refrigerating and Air-Conditioning Engineers, inc)

Shading Coefficient

Shading Coefficient is the ratio of heat gain through a glass to the heat gain through 3mm clear sheet glass under the same set of condition. The SC of 3mm clear sheet glass is equivalent to 1.0. A lower SC indicates better solar control glass performance.

RHG

RHG is based on ASHRAE Standard solar intensity of 542 kcal/m²hr (200Btu/ft²hr) and an outdoor temperature of 7.8°C (14°F) higher than indoor.
 $RHG = (\text{Summer U-Value} \times 7.8^\circ\text{C}) + (\text{SC} \times 542 \text{ Kcal/m}^2\text{hr})$

U-Value

U-Value is the heat gain or loss conducted through the glass due to the temperature different between the indoor and the outdoor environment. A lower U-Value indicates a better glass insulation.

Visible Light

The visible radiation wavelength falls between the range of 380 to 780 nanometer (nm).

Solar Radiation

The solar radiation includes the Ultra-Violet, Visible and near Infrared wavelength measured between the range of 290 to 2140 nm of the sun radiation.

The values of Visible Light and Solar Radiation Data are computed following JIS R 3106 guidelines.

Solar Radiation

The values in the column "OUT" indicates reflection toward outdoor, and column "IN" for the reflection indoor.

Total Solar Transmittance

Total Solar Transmittance is the total sum of direct solar energy transmittance and the interior admission portion of solar absorbed in the glass.

The Figures in the table above are average value only. Variations may occur in actual individual products.

Abbreviations:

- Trn : Transmittance
- Ref : Reflectance
- Abs : Absorption
- SC : Shading Coefficient
- RHG : Relative Heat Gain

Conversion Units:

- 1 Kcal/m²h°C = 1.163 W/m² K
- 1 Kcal/m²h°C = 0.205 BTU/hr.ft² F

REFSHINE Product Code:

Coating Material	First No.	Second No.	Last Two Numbers
S-Series (Stainless Steel)	1:Clear	2: Earth Bronze (TE)	Visible Light Transmittance (%)
	2:Blue	3: Silver (SS)	
	4:Bronze	5: Silver Blue (TS)	
T-Series (Titanium)	5:Light Green	6: Silver Grey (SGY)	
	6:Dark Green		

Example: Refshine 2-312 mean Blue with Silver (SS) coating and the Visible Light Transmittance is 12%

