

SOLAR CONTROL  
LOW-E GLAS



ASAHIMAS  
AGC Group

SUNERGY

# SUNERGY®

Solar Control Low E-Glass



PT.Asahimas Flat Glass Tbk awarded Architects' Choice  
Award for Facade, Paneling & Cladding  
Category by BCI Asia

Sunergy is a coated glass that offers excellent combination of solar control with thermal insulation and aesthetic. It offers maximum comfort in term of visual and thermal comfort.

The coating combination of Solar Control with low Emissivity on Sunergy will reduce significantly heat transfer due to direct sunshine temperature different.

## What Sunergy offers?

- ▶ Superb solar control
- ▶ Brilliant aesthetics
- ▶ Low emissivity (Low-E) properties (Low U-value)
- ▶ Easy processing (hard coat)

## Energy saving illustration:

|   |  |
|---|--|
| <b>Ordinary Clear Glass 8mm</b><br><b>7,292 KwH</b> | <b>SUNERGY Clear 8mm</b><br><b>5,747 KwH</b> |
|---|--|

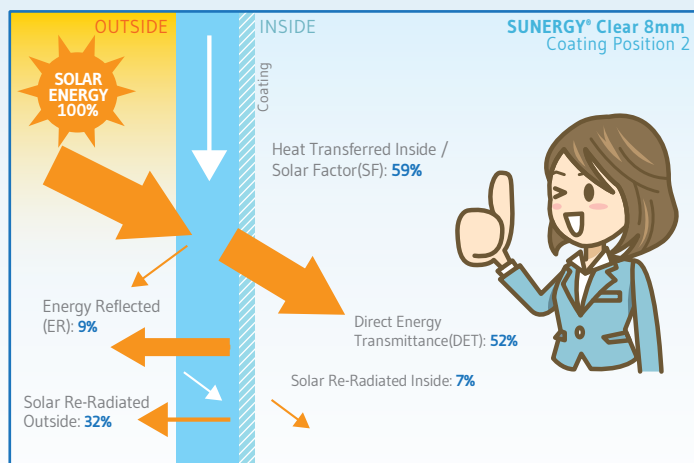
### Remarks :

- ▶ Illustration is based on a mid-size 5 storey building and glazing area of 4,000 sqmt in Jakarta,
- ▶ Above calculation is intended for illustration only
- ▶ Conditions may vary, to get illustration for your building please contact Asahimas.

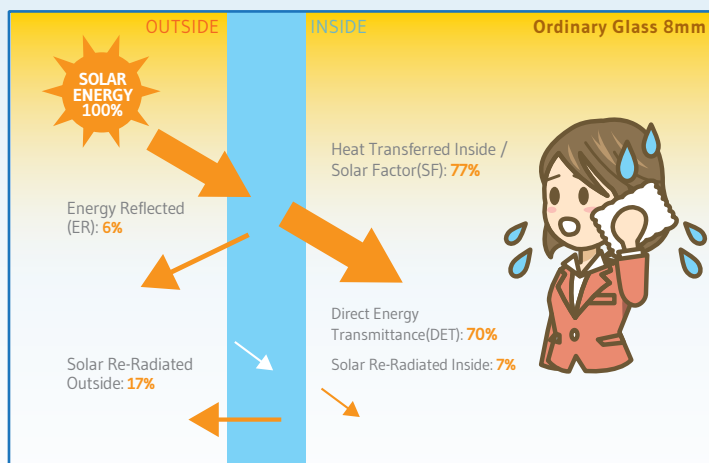
### Applications

- ▶ Windows of high grade and high performance buildings
- ▶ For all types of glass walls

## Comparison of SUNERGY® Clear 8mm VS Ordinary Clear Glass 8mm



Outside Temp. **35°C** Inside Temp. **25°C** U-Value: 4.1W/m<sup>2</sup>k  
Indirect Energy Transfer: 4.1W/m<sup>2</sup>k x 10 K = 41 W/m<sup>2</sup>



Outside Temp. **35°C** Inside Temp. **25°C** U-Value: 5.8W/m<sup>2</sup>k  
Indirect Energy Transfer: 5.8W/m<sup>2</sup>k x 10 K = 58 W/m<sup>2</sup>

## Technical Characteristic

| Type of Glass           | Standard Thickness (mm) | Coating Position | Energy Characteristic |                 |                |                               | Light Characteristic |                 | Solar Factor (%) | Shading Coefficient *3*4 | U Value W/m <sup>2</sup> k |
|-------------------------|-------------------------|------------------|-----------------------|-----------------|----------------|-------------------------------|----------------------|-----------------|------------------|--------------------------|----------------------------|
|                         |                         |                  | Transmittance (%)     | Reflectance (%) | Absorption (%) | Ultra Violet Transmission (%) | Transmittance (%)    | Reflectance (%) |                  |                          |                            |
| Sunergy Clear SNFL      | 3                       | #2               | 53                    | 10              | 37             | 50                            | 70                   | 7               | 60               | 0.70                     | 4.2                        |
|                         | 4                       | #2               | 52                    | 10              | 38             | 47                            | 70                   | 7               | 59               | 0.68                     | 4.2                        |
|                         | 5                       | #2               | 52                    | 10              | 38             | 46                            | 69                   | 7               | 59               | 0.67                     | 4.1                        |
|                         | 6                       | #2               | 51                    | 9               | 40             | 44                            | 69                   | 7               | 59               | 0.67                     | 4.1                        |
|                         | 8                       | #2               | 49                    | 9               | 42             | 42                            | 68                   | 7               | 57               | 0.65                     | 4.1                        |
| Sunergy Green SNGN      | 6                       | #2               | 47                    | 8               | 45             | 38                            | 67                   | 6               | 56               | 0.64                     | 4.1                        |
|                         | 8                       | #2               | 27                    | 6               | 67             | 16                            | 56                   | 6               | 41               | 0.47                     | 4.1                        |
| Sunergy Blue Green SNBN | 6                       | #2               | 23                    | 6               | 71             | 12                            | 52                   | 6               | 37               | 0.43                     | 4.1                        |
|                         | 8                       | #2               | 25                    | 6               | 69             | 17                            | 48                   | 6               | 39               | 0.45                     | 4.1                        |
| SunergyEuro Grey SNGE   | 6                       | #2               | 21                    | 5               | 74             | 13                            | 42                   | 5               | 35               | 0.41                     | 4.1                        |
|                         | 8                       | #2               | 28                    | 6               | 66             | 15                            | 33                   | 5               | 41               | 0.47                     | 4.1                        |
|                         |                         |                  | 22                    | 6               | 72             | 11                            | 25                   | 5               | 36               | 0.41                     | 4.1                        |

## Size & Thickness Availability

| Type of Glass      | Standard Thickness (mm) | Standard Size (mm) |           |           |           |
|--------------------|-------------------------|--------------------|-----------|-----------|-----------|
|                    |                         | 3210x2134          | 3210x2250 | 5100x3210 | 3210x2440 |
| Sunergy Clear      | 3                       |                    |           |           | ✓         |
|                    | 4, 5, 6, 8, 10          | ✓                  | ✓         | ✓         |           |
| Sunergy Green      | SNGN 6, 8               | ✓                  | ✓         | ✓         |           |
| Sunergy Blue Green | SNBN 6, 8               | ✓                  | ✓         | ✓         |           |
| Sunergy Euro Grey  | SNGE 6, 8               | ✓                  | ✓         | ✓         |           |

### Remarks :

- ▶ Coating position #2: inside coating position
- ▶ The data are calculated using spectral measurements that are conform to standards EN 410, ISO 9050 (1990) and WIS/WINDAT
- ▶ The Ug-Value (formerly k-value) is calculated according to standard EN673. The emissivity measurement complies with standards EN 673 (Annex A and EN 12898
- ▶ Specifications, technical and other data are based on information available at the time of preparation of this document and are subject to change without notice. Asahimas can not be held responsible for any deviation between the data introduced and the conditions on site. This document is only informative, in no way it implies an acceptance of the order by Asahimas



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