

# SUNMAX



## Extra clear float glass for solar applications



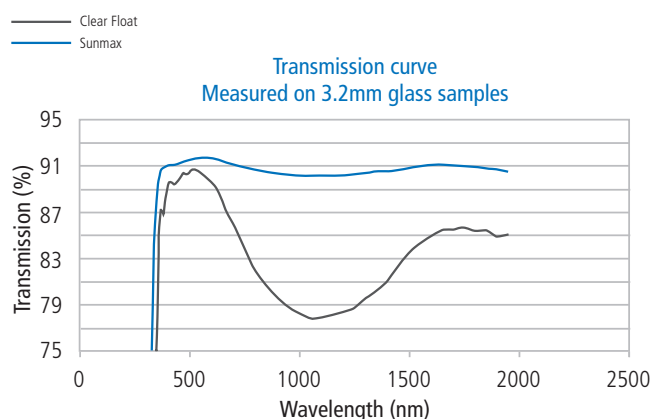
Sunmax is an extra clear float glass especially optimized for solar applications. Combined with the excellent durability of glass, Sunmax is the product of choice for photovoltaic modules, thermal collectors and solar mirrors.

Sunmax conforms to EN572 and can be delivered fully tempered as per EN12150.

## Sunmax

### Applications

- Cover glass for photovoltaic modules (crystalline, CIGS)
- Cover glass for thermal collector
- Front glass for thin film Si and CdTe
- Substrate for solar mirrors



### Performances

#### Main Characteristics\*

Light Transmission (%)	1mm - 1/25": 91.7	Illuminant D65 at 2° (acc. +/- 0.2%)
	4mm - 5/32": 91.5	Illuminant D65 at 2° (acc. +/- 0.2%)
Energy Transmission (%)	1mm - 1/25": from 91.6 to 91.7	ISO9050
	4mm - 5/32": from 90.4 to 90.7	ISO9050
Certification	4mm - 5/32"	SPF measurement, labelled U2
Specific weight (kg/m <sup>2</sup> )	1mm - 1/25": 2.5	
	4mm - 5/32": 10	

Processing conditions and dimensions depending on the applications.

AGC can help evaluating these values according to other standards and/or to the specificities of the final application.

## Mechanical Characteristics\*

Mechanical strength (MPa)	45	Annealed
	70	Toughened
	120	Tempered, EN12150
Young modulus (GPa)	70	EN572
Poisson ratio	0.2	EN572
Hardness	Mohs (scratch hardness)	6
	Knoop (indentation hardness)	470
Density (kg/m <sup>3</sup> )	2500	Indenter load 500g EN572, at 18°C

## Thermal characteristics\*

Hemispherical emissivity (corrected)	0.84	Between -18°C and 66°C
Expansion coefficient (10 <sup>-6</sup> 1/K)	9	EN572, between 20°C and 300°C
Specific heat (J/kg/K)	720	EN572
Thermal conductivity (W/m/K)	1	EN572
Softening point (°C)	722	
Annealing point (°C)	552	
Strain point (°C)	500	

## Chemical composition\*

Silicon dioxide (SiO <sub>2</sub> , %)	69 to 74	EN572
Sodium oxide (Na <sub>2</sub> O, %)	10 to 16	EN572
Calcium oxide (CaO, %)	5 to 14	EN572
Magnesium oxide (MgO, %)	0 to 6	EN572
Aluminum oxide (Al <sub>2</sub> O <sub>3</sub> , %)	0 to 3	EN572
Trace elements (FeO, etc., %)	< 5	



AGC is committed to environmental stewardship through the use of recyclable materials and sustainable process in the manufacturing and distribution of our state-of-the-art, energy efficient flat glass products.

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