

AGC SOLAR MIRROR THIN

Extra clear extra thin mirror
for solar applications



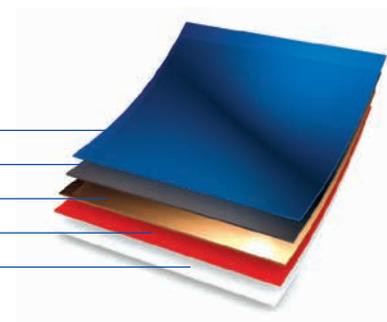
AGC Solar Mirror Thin is an extra clear extra thin high reflectivity mirror perfectly suited for lamination purposes and use in parabolic dish, parabolic trough collector, CSP or CPV. Once laminated with an appropriate adhesive onto a support material, the mirror is perfectly well protected and shows a very high chemical and mechanical durability. AGC Solar Mirror Thin conforms to EN1036. AGC can suggest you a set of qualified adhesives in function of your support structure.

AGC Solar Mirror Thin

Applications

- Parabolic dish
- Parabolic trough collector
- CSP or CPV (laminated)

Glass
Silver
Copper
Prime Coat
Top Coat



Performances

Main Characteristics*

Energy reflectivity (%)	1mm: up to 95.5	ISO 9050 AM1.5
Minimum radius of curvature (m)	1mm: 3.8	Based on 10MPa as design stress
Specific weight (kg/m ²)	1mm: 2.5	
Typical length	From 150mm to 3210mm	
Typical width	From 150mm to 1605mm	

Other dimensions and thicknesses available on request.

AGC Solar Mirror Thin can be cut to shape.

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

Durability tests*

Humid chamber	Passed (not laminated)	EN1036
Neutral salt spray	Passed (not laminated)	ISO 9227
CASS	Passed (not laminated)	ISO 9227
Thermal cycling	Passed (not laminated)	From -20°C to +75°C, up to 100% RH
EMMAQUA	Passed	ASTM D4364
UV resistance	Passed (laminated)	UVA 340 at 60°C, 39W/m ²

Mechanical Characteristics*

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

Thermal characteristics*

Hemispherical emissivity	0.84	Between -18°C and 66°C
Expansion coefficient (10 ⁻⁶ 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 ₂ , %)	69 to 74	EN572
Sodium oxide (NaO, %)	12 to 16	EN572
Calcium oxide (CaO, %)	5 to 12	EN572
Magnesium oxide (MgO, %)	0 to 6	EN572
Aluminium oxide (Al ₂ O ₃ , %)	0 to 3	EN572
Trace elements (FeO, etc., %)	<1	



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.

*The information contained in this datasheet is intended to assist you in designing with AGC materials. It is not intended to and does not create any warranties, express or implied, including any warranty of merchantability or fitness for a particular purpose. The user is responsible for determining the suitability of AGC materials for each applications.

AGC GLASS EUROPE, A LEADER IN FLAT GLASS

Based in Louvain-la-Neuve (Belgium), AGC Glass Europe produces, processes and markets flat glass for the construction industry (external glazing and interior decoration), car manufacture and solar power applications. It is the European branch of AGC, the world's leading producer of flat glass. It has over 100 sites throughout Europe, from Spain to Russia. AGC Glass Europe has representatives worldwide - See www.agc-yourglass.com for further addresses.

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