

Your products deserve the best glass available –
It is your product performance that counts!

f | solarfloat

1. Product

f solarfloat	Extra low iron and transmissive solar float glass for solar application such as photovoltaic, concentrator photovoltaic (CPV), concentrating solar power (CSP) and solar heat. Available from 2 mm to 6 mm.
f solarfloat T	By thermally toughened or heat strengthened option. Available from 2 mm to 6 mm.
f solarfloat HT	The top-quality product of our solar glass family, thermally toughened or heat strengthened and performed with up to 2 additional antireflection coatings, which enhance the energy transmission considerably. Available from 2 mm to 6 mm.

2. Conformity

The products referred to 1. are according to DIN EN 572-2 latest version - Glass in building - Basic soda lime silicate glass products - Part 2: Float glass.

Thermally toughened products referred to 1. are according to DIN EN 12150 et. seqq. latest version - Glass in building - Thermally toughened soda lime silicate safety glass.

Heat strengthened products referred to 1. are according to DIN EN 1863 et. seqq. latest version - Glass in building - Heat strengthened soda lime silicate glass.

Products with coating referred to 1. are according to DIN EN 1096 et. seqq. latest version - Glass in building - Coated glass.

3. Photometric and solar radiation characteristics

Energy transmission TE_{PV} in reference to ISO 9050, table 2 AM 1.5 restricted to wave length range 300 to 1200 nm	91,6 % ± 0,5 %	f solarfloat at 2 mm
	91,3 % ± 0,5 %	f solarfloat at 3 mm
	91,1 % ± 0,5 %	f solarfloat at 4 mm
Substrate related comparative Hub TE_{PVri} at single sided anti reflexive coating, measured after a purification- and tempering process (TE _{PV test} -TE _{PV substrate}) / (TE _{PV substrate})	2,5 % ± 0,5 %	f solarfloat HT

4. Mechanical Characteristics (Product tolerance according to DIN EN 572-1 latest version)

Density (at 18°C)	2500 kg/m ³						
Hardness (Knoop)	6 Gpa						
Flexural modulus	7 * 10 ¹⁰						
Poisson ratio	0,2						
Mechanical strength	<table border="0"> <tr> <td>45 x 10⁶ Pa</td> <td>f solarfloat</td> </tr> <tr> <td>70 x 10⁶ Pa</td> <td>f solarfloat T (heat strengthened)</td> </tr> <tr> <td>120 x 10⁶ Pa</td> <td>f solarfloat T (thermally toughened)</td> </tr> </table>	45 x 10 ⁶ Pa	f solarfloat	70 x 10 ⁶ Pa	f solarfloat T (heat strengthened)	120 x 10 ⁶ Pa	f solarfloat T (thermally toughened)
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5. Thermal Characteristics (Product tolerance according to DIN EN 572-1 latest version)

Expansion coefficient (20°C – 300°C)	9 x 10 ⁻⁶ / K
Specific heat	0,72 x 10 ³ J / (kg x K)
Thermal conductivity	1 W / (m x K)
Softening point (°C)	722
Annealing point (°C)	552
Emissivity (rectified)	0,837

6. Chemical composition (Product tolerance according to DIN EN 572-1 latest version)

Silicon dioxide (SiO ₂)	72,2	[Ma.%]
Sodium oxide (Na ₂ O)	13,3	[Ma.%]
Calcium oxide (CaO)	8,9	[Ma.%]
Magnesium oxide (MgO)	4,4	[Ma.%]
Aluminium oxide (Al ₂ O ₃)	0,5	[Ma.%]
Ferric(III)-oxide (Fe ₂ O ₃)	0,01	[Ma.%]
Potassium oxide (K ₂ O)	0,3	[Ma.%]
Sulfur trioxide (SO ₃)	0,23	[Ma.%]

We declare that our products and supplied raw materials do not contain heavy metals.