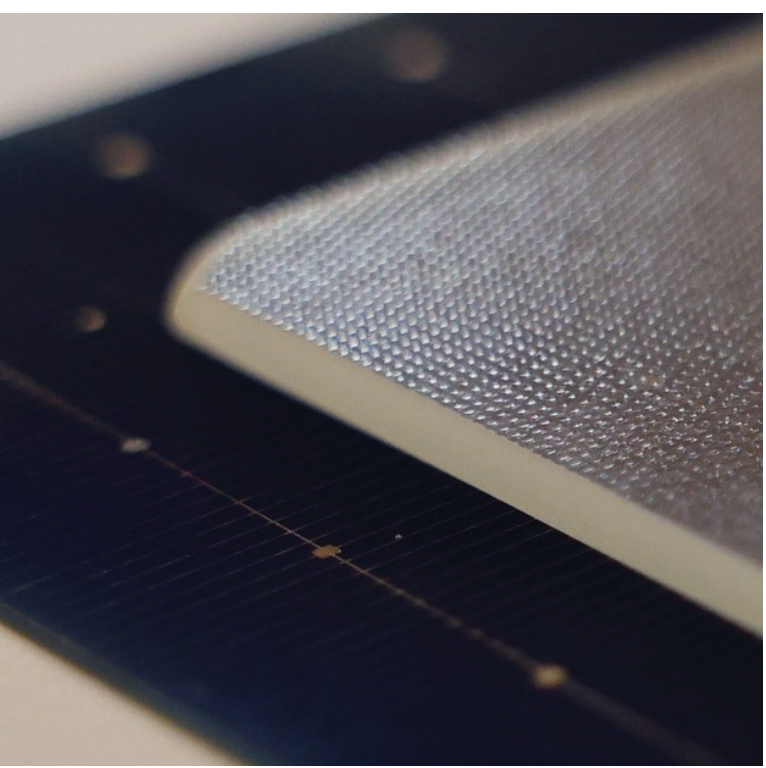
EXTRA CLEAR PATTERNED GLASS FOR SOLAR APPLICATIONS

SOLITE

THE PERFECT SOLAR GLASS

SOLITE is extra clear patterned glass featuring a pyramidal texture on one side and a smooth surface on the other. This design maximizes energy transmission across the solar spectrum. With the inherent durability of glass, SOLITE is an ideal choice for photovoltaic modules and thermal collectors, where its patterned surface facilitates seamless lamination. Additionally, the pattern reduces glare and enhances the aesthetic appeal of solar modules. SOLITE complies with ASTM C1036 standards and is fully tempered in accordance with ANSI Z97.1. It is also available with Stewart's Anti Reflective Coating (ARC) for enhanced performance.

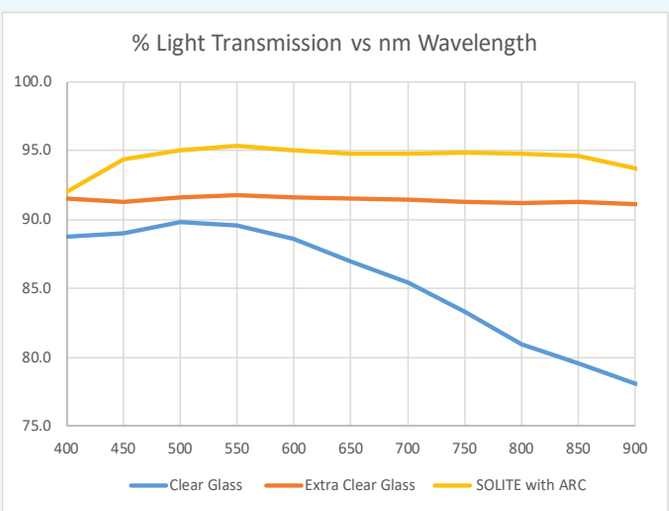


PRODUCT DESCRIPTION

Leveraging cutting-edge glass technologies, this solution plays a vital role in advancing renewable energy initiatives. By offering advanced options for photovoltaic modules, it ensures adherence to the highest standards, enhancing both performance and energy efficiency. This innovative approach supports the global transition toward sustainable energy systems while contributing to the long-term success of renewable power generation.

KEY FEATURES

Type	Extra Clear Patterned Glass
Pattern	Pyramidal/Smooth
Coating	Anti Reflective
Applications	Cover Glass for Solar Modules



Technical Specifications of SOLITE Glass

Main Characteristics		
SOLITE Visible Transmission (%)	3.2mm - 1/8": >91	Illuminant D65 at 2° (acc. +/- 0.2%)
	4mm - 5/32: >91	Illuminant D65 at 2° (acc. +/- 0.2%)
SOLITE ARC Visible Transmission (%)	3.2mm - 1/8": 94.0	ASTM C1376 Illuminant D65 at 2° (acc. +/- 0.2%)
	4mm - 5/32": 93.8	ASTM C1376 Illuminant D65 at 2° (acc. +/- 0.2%)
Length	Per Customer Specifications	
Width	Per Customer Specifications	
Specific weight (kg/m^2)	3.2mm - 1/8": 7.87	
	4mm - 5/32: 9.62	
Process conditions	Tempered, Diamond Ground Pencil Edge	ANSI Z97.1
Stewart can help evaluate these properties according to other standards and/or to the specificities of the final application		

Mechanical Characteristics			
Mechanical Strength (Mpa)		90	ANSI Z97.1
Young's Modulus (GPa)		70	
Poisson's Ratio		0.2	
Hardness	Mohs (Scratch Hardness)	6	
	Knoop (Indentation Hardness)	470	Indenter load 500g
Density (kg/m^3)		2500	at 18°C

Thermal Characteristics		
Hemispherical Emissivity	<0.84	Between -18°C and 66°C
Expansion Coefficient (10-6 1/K)	9	Between 20°C and 300°C
Specific Heat (J/kg•K)	720	
Thermal Conductivity (W/m•K)	1	
Softening Point (°C)	722	
Annealing Point (°C)	552	
Strain Point (°C)	500	

Chemical Composition	
Silicon Dioxide (SiO_2, %)	69 to 74
Sodium Oxide (NaO, %)	12 to 16
Calcium Oxide (CaO, %)	5 to 12
Magnesium Oxide (MgO, %)	0 to 6
Aluminum Oxide (Al_2O_3, %)	0 to 3
Trace Elements (FeO, etc., %)	<1

DISCOVER THE STEWART DIFFERENCE

Boost the efficiency and durability of your solar panels while also increasing Made in USA content with SOLITE. Featuring a precisely engineered diamond knurl pattern and world-leading Anti Reflective Coating, SOLITE is more than just glass – it's the future of renewable energy.

Whether you are powering the next breakthrough in photovoltaic modules or enhancing the elegance of thermal collectors, SOLITE delivers unmatched performance suited for your needs. At Stewart, we don't just make glass, we craft a vision for a sustainable tomorrow.

STEWART GLASS

MADE IN USA

WWW.STEWARTGLASS.US