4.0 mm Low Iron Solar Glass

Glossy, Matte-Matte / Prismatic, Satin & Super Satin Glass

Features

High Light Transmission: Glass with high light transmission allows more solar energy, including visible light and infrared radiation, to pass through, maximizing natural light and heat in a space.

Color Neutrality: Glass without a green tint provides accurate color representation, preserving the true colors of objects and scenes viewed through it.

Reduced Light Reflection: Glass with reduced light reflection minimizes glare, improving visibility and providing clearer views in environments with excessive sunlight or artificial lighting.

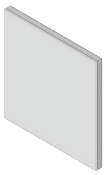
Longer Lasting: Glass with reduced spontaneous breakage from impurities offers enhanced durability, ensuring safety and reducing maintenance costs.

Glass Shapes Capabilities

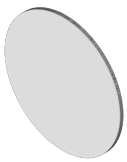
Your building is a mosaic of solar facade panels, each a distinct masterpiece, with options ranging from the elegance of perfect circles to the sharp sophistication of triangles, to hexagons mirroring the precision of nature's honeycombs, and even more shapes that dare to defy convention.

Rectangular

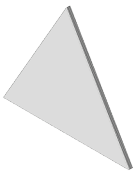
Square



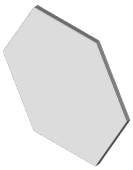
Circular



Triangular



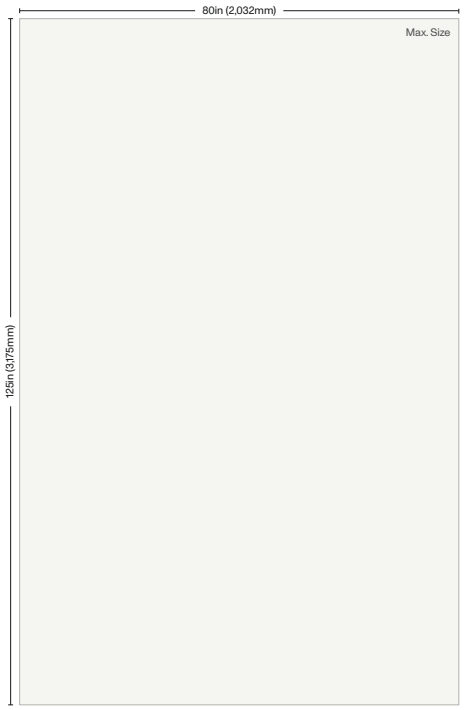
Hexagonal



Parallelogram

Glass Size Capabilities

Mitrex offers Solar panels in virtually any size. Our maximum panel size can be 125 in by 80 in.



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Mechanical Information

	Imperial	Metric
Thickness	0.16 ± 0.008in	4.0 ± 0.2mm
Weight	2.05lb/SQFT	10.05kg/m²
Dimensional Tolerance	±0.04in	±1.0mm
Density	0.09lbs/in³	2.5gm/cm³
Corner	Radius, Chamfer or cut (0.04-0.16in)	Radius, Chamfer or cut (1.0-4.0mm)
Overall Bow / Warp (EN 12150-1:2015)	0.16in / 39.37in	4.0mm / 990mm
Local Warp (EN 12150-1:2015)	0.002in / 11.81in	0.5mm / 300mm
Bending Strength (EN 12150-1:2015)	516.06lb/in	90N/mm
Iron Content (AAS)	<120 ppm	
Scratch Hardness (Mohs)	5	
Fragmented Particles in 50×50mm (If Tempered) (EN 12150-1:2015)	Min 40 pcs	
Edge	At least seamed	

Glass Quality (EN 572-5:2012/5.2.1)

Spherical Bubbles/Core/Solid Inclusions Per 1m²/39.37in

Imperial Diameter	Metric Diameter	Max Allowed
≤ 0.02in	≤ 0.5mm	Unlimited
> 0.02in ≤ 0.06in	> 0.5mm ≤ 1.5mm	6
> 0.06in ≤ 0.12in	> 1.5mm ≤ 3.0mm	2
> 0.12in	> 3.0mm	0

Scratched Per 1m²/39.37in Max Allowed

Width	Length		
	≤ 0.2in / ≤ 5.0mm	> 0.2 ≤ 0.4in / > 5.0 ≤ 10.0mm	> 0.4in / > 10.0mm
< 0.04in / < 1.0mm	4	2	1
> 0.04in / > 1.0mm	0	0	0

Longitudinal Bubbles Per 1m²/39.37in Max Allowed

Width	Length		
	≤ 0.4in / ≤ 10.0mm	> 0.4 ≤ 0.99in / > 10.0 ≤ 25.0mm	> 0.99in / > 25.0mm
< 0.04in / < 1.0mm	4	2	0
> 0.04 ≤ 0.08in / > 1.0 ≤ 2.0mm	2	0	0
> 2.0mm / > 0.08in	0	0	0

Optical Characteristics

Transmittance And Reflectance Values At AM 1.5, 380-1100 nm

Surface Finish	Thickness		Transmittance	Reflectance
	Imperial	Metric		
Glossy	0.16in	4.0mm	92%	8%
Matte-Matte / Prismatic	0.16in	4.0mm	94%	6%
Satin	0.16in	4.0mm	91%	8%
Super Satin	0.16in	4.0mm	92%	8%

Diffusion Properties According To ASTM D1003-13

Surface Finish			Luminous Transmittance*	Diffuse Transmittance**	Haze***	Gloss at 85°
	Imperial	Metric				
Glossy	0.16in	4.0mm	91.8%	1.6%	0.6%	59%
Matte-Matte / Prismatic	0.16in	4.0mm	92.3%	2.4%	1.2%	6%
Satin	0.16in	4.0mm	74.9%	9.8%	13.1%	32%
Super Satin	0.16in	4.0mm	88.4%	79%	89.3%	5%

*Luminous Transmittance: Ratio of transmitted light to the incident light influenced by absorption and reflection. - **Diffuse Transmittance: Portion of light that is scattered/diffused by the glass. - ***Haze: Percentage of transmitted light which deviates more than 2.5° from the incident beam on average.

Notes: All aforementioned glass is monolithic with texture on side 1 (if any). - Sunny side aesthetic coatings are not included in this data and will affect the results.