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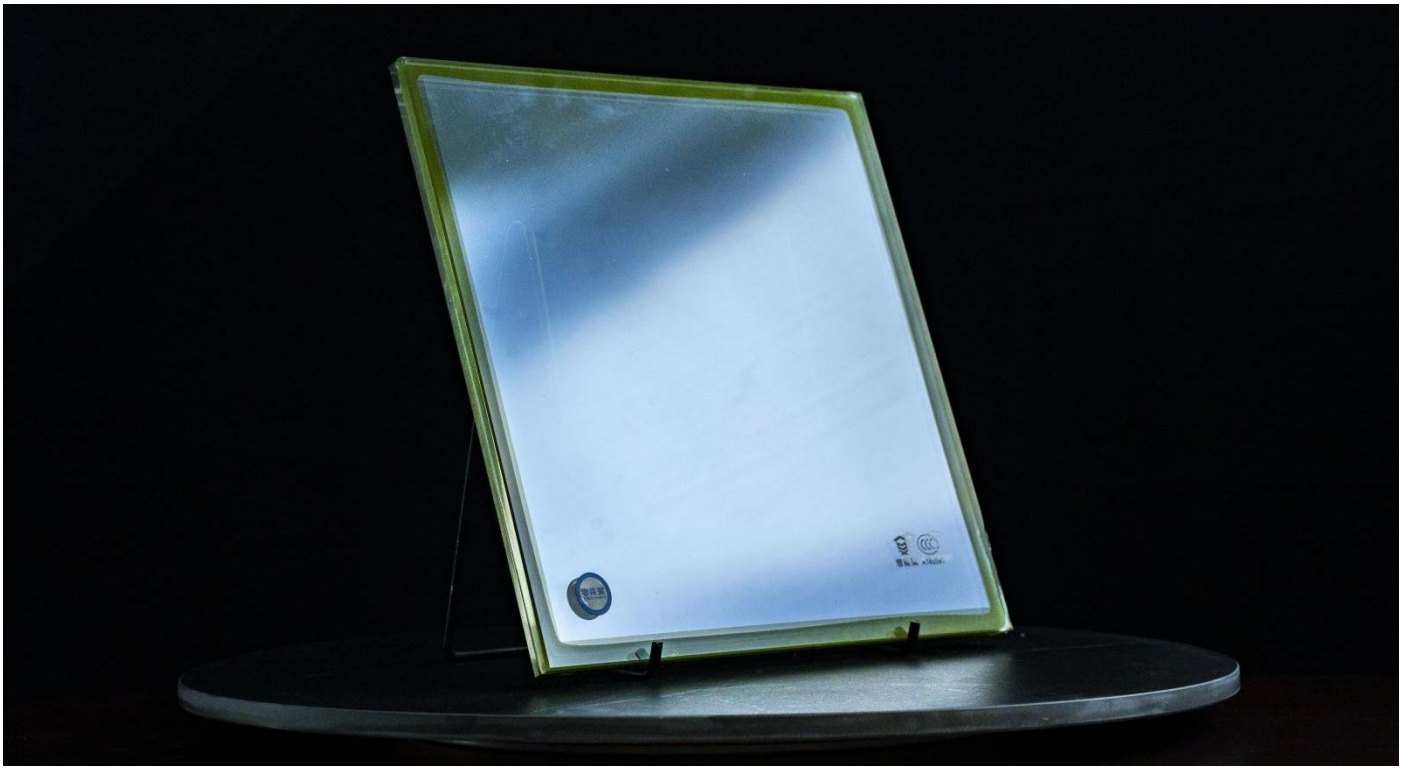
Vacuum Insulated Glass（VIG）
Technical Data Sheet

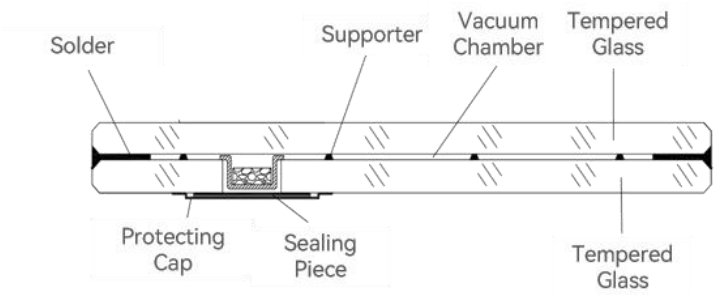


Product Profile

As a new type of energy-saving glass, vacuum insulated glass is composed of two flat glass panels. Between the glass panels, spacers with a diameter of 0.2mm are arranged in a square matrix. The peripheries of the glass panels are sealed with low-melting-point solder. One of the glass panels is reserved with an air extraction port, which is sealed with a sealing sheet and low-temperature solder after vacuum pumping to form a vacuum cavity.

Our company adopts the world-leading "one-step" production process. We mainly produce various vacuum glass products such as tempered vacuum glass, insulating composite vacuum glass and laminated composite vacuum glass. These products are widely used in fields including construction, vehicle and ship doors/windows, home appliances, aerospace and photovoltaic glass applications.

Product Structure



Product Features

- Excellent Thermal Insulation: Its thermal insulation performance is 2-4 times better than that of insulating glass.

- Efficient Sound Insulation: The weighted sound insulation index reaches 37dB, with the sound insulation performance improved by more than 30%.

- Ultra-thin Thermal Insulation: The vacuum layer spacing is only 0.2mm, saving 50% of installation space.

- High Light Transmittance: Under the same thermal insulation performance, vacuum glass can achieve higher light transmittance.

- Anti-condensation: It has high thermal resistance, and no condensation will form even when the temperature difference between indoor and outdoor reaches 50℃.

- Long Service Life: With inorganic material sealing and high-efficiency getter, its service life can reach more than 30 years.

Feature Comparison

Types	Structure	U Value W/(m^2.k)	Visible Light%	Thickness mm	Weight (kg/m^2)
Vacuum Glass	5TL+0.2V+5T	≈0.5	50~70	≈10	25
Triple-Glazed Insulated Glass	**5TL+16Ar+5T+16Ar+5TL**	**≈0.8**	**40~60**	**≈47**	**38**

Configuration and Parameters

Structure Exterior Interior	Thickness mm	Visible Light Transmittance τv	Total Solar Energy Transmittance g	U Value	Weighted Sound Reduction Index Rw
4TL+0.2V+4T	8	0.70	0.43	0.51	37
5TL+0.2V+5T	10	0.70	0.43	0.51	
6TL+0.2V+6T	12	0.70	0.41	0.50	
5T+9A+5TL+0.2V+5T	24	0.63	0.40	0.47	40
5T+12A+5TL+0.2V+5T	27	0.63	0.40	0.47	
6T+12A+6TL+0.2V+6T	30	0.63	0.39	0.47	
5T+9A+5TL+0.2V+5T+1.14EVA+5T	30	0.58	0.38	0.45	42
5T+1.14EVA+5T+9A+6TL+0.2V+6T	32	0.58	0.35	0.45	

Standard Products

Structure Exterior Interior	Low-E Type	Visible Light (%) τ_{vis}	 ρ_{vis}	Solar Radiation (%) τ_e	 ρ_e	U Value W/(m^2.K)	Shading Coefficient SC	Total Solar Energy Transmittance g
5TL+0.2V+5T	Double Silver (high-transmittance)	69.66	10.37	39.80	23.73	< 0.60	0.49	0.43
	Double Silver (sun-shading)	50.34	26.85	27.64	29.21	< 0.50	0.34	0.30
	Single Silver (high-transmittance)	73.31	10.58	51.63	16.64	< 0.80	0.65	0.56
	Single Silver (sun-shading)	52.43	15.81	34.72	18.85	< 0.80	0.44	0.39
5T+15WAr+5TL+0.2V+5T	Double Silver (high-transmittance)	63.25	16.49	35.26	23.52	< 0.50	0.45	0.39
	Double Silver	46.32	30.25	24.88	28.44	< 0.50	0.33	0.29

	(sun-shading)							
	Single Silver (high-transmittance)	66.57	16.65	44.94	18.92	< 0.70	0.59	0.52
	Single Silver (sun-shading)	47.81	20.98	30.46	20.78	< 0.70	0.44	0.38

Dimensions and Tolerances

Length	≤2900mm
Width	≤1900mm
Thickness of Single Pane Glass	4/5/6/8 mm
Length & Width Tolerance	±3mm
Thickness Tolerance	±0.4mm
Package & Delivery	Custom Wooden Case Packaging