



Hard coated low e VS Soft coated low e

Low-E glass, short for Low Emissivity Glass, It is a coating on glass surface. This glass not only has high visible light transmittance, but also has a strong ability to block infrared rays. It can play the dual functions of natural lighting and heat insulation.

Low-E glass is divided into **offline Low-E glass**(soft coated low e) and online Low-E glass(hard coated low e) according to the manufacturing process.

On-line Low-E glass is a functional film with low radiation performance on the surface of the glass ribbon on the float line by chemical vapor deposition and special materials on the float glass production line.

In China, only AGC and SYP provide limited hard coated low e options: Planibel G, Sunergy, SY-48, Energy Advantage, the glass performance is shown in the table below.

AGC: Planibel G, Sunergy, SY-48 Single glazing performance

结构 Structure		光学性能 Light Properties		热学性能 Thermal Properties				U-值 U Value	
膜层在第二面 Coating on Pos.2		厚度 Thickness	透过率 LT%	反射(外) LR(Ext)%	热直射率 DET(%)	热反射率 ER(%)	阳光得热系数 SF(%)	遮阳系数 SC	W/m²·K
<单片>	Planibel™ G	6mm	81	11	67	10	71	0.82	3.7
	Sunergy® A Clear	6mm	71	9	52	9	60	0.69	3.9
	Sunergy® 48	6mm	52	7	38	8	50	0.58	4.4
	Stopsol® Supersilver Clear	6mm	62	34	64	23	68	0.78	5.8
	Stopsol® Silverlight Clear	5mm	69	29	73	21	74	0.86	5.8

AGC: Planibel G, Sunergy, SY-48 Double glazing performance

结构 Structure			光学性能 Light Properties		热学性能 Thermal Properties				U-值 U Value	
膜层在第二面 Coating on Pos.2		厚度 Thickness	透过率 LT%	反射(外) LR(Ext)%	热直射率 DET(%)	热反射率 ER(%)	阳光得热系数 SF(%)	遮阳系数 SC	W/m²·K Air	W/m²·K Ar
<中空配置>	Planibel™ G	6-12-6mm	73	16	55	14	63	0.73	1.9	1.6
	Sunergy® A Clear	6-12-6mm	63	13	43	12	52	0.60	2.0	1.7
	Sunergy® 48	6-12-6mm	47	9	31	9	41	0.48	2.2	2.0
	Stopsol® Supersilver Clear	6-12-6mm	57	38	53	26	60	0.69	2.7	2.5
	Stopsol® Silverlight Clear	5-12-5mm	63	33	61	25	67	0.77	2.7	2.5

AGC: Planibel G, Sunergy, SY-48 laminated glass performance



QINGDAO MORN BUILDING MATERIALS CO.,LTD

Your turnkey China tempered glass/laminated glass/insulated glass supplier

结构 Structure		光学性能 Light Properties		热学性能 Thermal Properties				U-值 U Value
膜层在第二面 Coating on Pos.2		厚度 Thickness	透过率 LT%	反射(外) LR(Ext)%	热直射率 DET(%)	热反射率 ER(%)	阳光得热系数 SF(%)	遮阳系数 SC
<夹胶配置>	Planibel™ G	6-1.52-6mm	78	10	56	8	63	0.73
	Sunergy® A Clear	6-1.52-6mm	68	8	45	7	55	0.63
	Sunergy® 48	6-1.52-6mm	50	7	32	6	47	0.55
	Stopsol® Supersilver Clear	6-1.52-6mm	60	32	51	18	61	0.70
	Stopsol® Silverlight Clear	5-1.52-5mm	67	27	59	17	67	0.77

Pilkington Energy Advantage-insulated glass performance-double glazed units

Product	Nominal Glass Thickness		Visible Light ²			Solar Energy ²			U-Factor ⁵			Solar Heat Gain Coefficient ⁷	Shading Coefficient ⁸
			Transmittance ³ %	Reflectance ⁴ %		Transmittance ³ %	Reflectance ⁴ %	UV Transmittance ² %	U.S. Summer	U.S. Winter	European ⁶		
	in.	mm		Outside	Inside								

Pilkington Energy Advantage™ Low-E Glass (#2 Surface)⁹

Energy Advantage Low-E	3/32	2.5	83	11	11	71	11	60	0.50	0.65	3.7	0.74	0.85
	1/8	3	82	11	12	69	11	57	0.50	0.65	3.7	0.72	0.83
	5/32	4	82	10	11	68	10	55	0.49	0.65	3.7	0.71	0.82
	3/16	5	83	11	12	68	10	53	0.49	0.65	3.7	0.71	0.82
	1/4	6	82	10	11	66	10	49	0.49	0.64	3.6	0.70	0.81
	5/16	8	81	10	11	62	9	45	0.49	0.64	3.6	0.67	0.77
	3/8	10	80	10	11	59	9	42	0.49	0.63	3.6	0.64	0.75

Off-line Low-E glass is generally vacuum-magnetized sputter coating process, and a multi-layer composite film is coated on the surface of the glass to realize Low-E function. The main functional film layer in the film layer is generally silver (Ag) film, which can be subdivided into single silver low e, double silver low e and triple silver low e.

Click here to check :[Morn soft coated low-E glass performance data.](#)

The online Low-E glass can be directly tempered, heat-strengthened, and hot-bending, and can be used in single glazing. For offline low e glass, it is necessary to remove the coating at the edge of the glass before insulating.

The off-line low e can be applied on any float glass, tinted glass, low iron glass, The thickness of the online Low-E glass is usually only 4, 5, and 6 mm. The color is only cyan and clear. The variety is simple and the selectivity is limited.

Morn is your turnkey China architectural glass supplier, we offer hard coated low-E: AGC Planibel G, Sunergy, SY-48, Pilkington Energy Advantage, and all kinds of soft coated low-E glass.

Tags: [China architectural glass supplier](#), [double glazed units](#), [double glazing](#), [double silver low e](#), [Energy Advantage](#), [FLOAT GLASS](#), [insulated glass](#), [laminated glass](#), [low e glass](#), [low emissivity glass](#), [low iron glass](#), [offline Low-E](#), [online Low-E](#), [Pilkington Energy Advantage](#), [Planibel G](#), [single glazing](#), [Single silver Low-E](#), [Sunergy](#), [SY-48](#), [tinted glass](#), [triple silver low e](#)

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About Morn Building Materials:

Morn Building Materials Co.,Ltd is trading company offering the right facade materials for a wide range of applications for architectural,design and system requirements.Cooperating with China premium glass fabricators,Morn is able to supply whatever glass products applied in facade,Spandrel ,roof ,handrail,partition,balustrade,canopy,greenhouse,sun room ,interior exterior application.

Other facade materials:Aluminium alloy profiles,aluminium plates,aluminium windows&doors,Assa Abloy hardware,spider fitting,railing systems,shower rooms,polyurethane panels,machines&tools,steel structure, are also available since 2019.

From aesthetics, to strict environmental and energy specifications, to critical budget and delivery requirements, our input can make a difference.

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