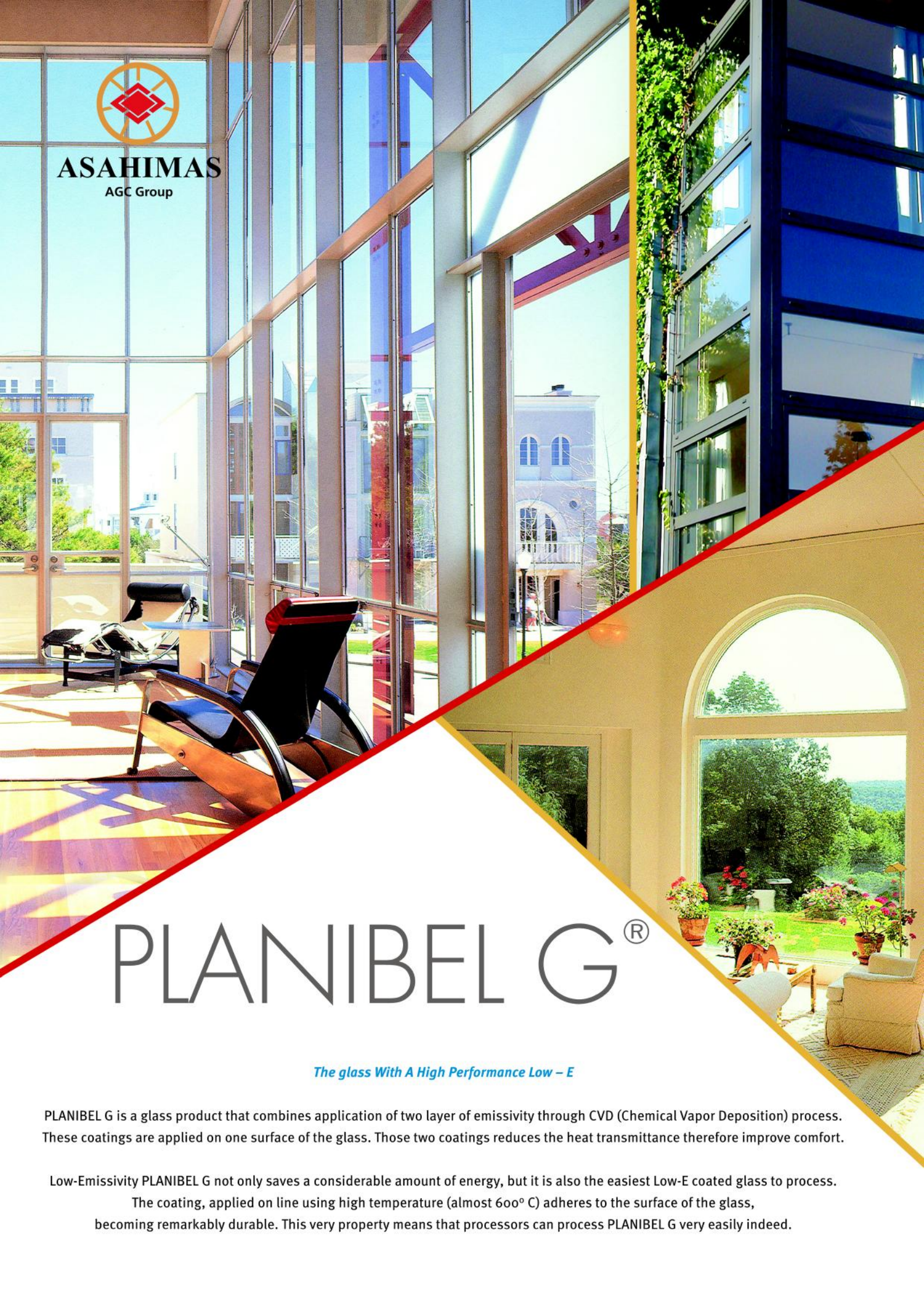




ASAHIMAS
AGC Group



PLANIBEL G[®]

The glass With A High Performance Low – E

PLANIBEL G is a glass product that combines application of two layer of emissivity through CVD (Chemical Vapor Deposition) process. These coatings are applied on one surface of the glass. Those two coatings reduces the heat transmittance therefore improve comfort.

Low-Emissivity PLANIBEL G not only saves a considerable amount of energy, but it is also the easiest Low-E coated glass to process.

The coating, applied on line using high temperature (almost 600° C) adheres to the surface of the glass, becoming remarkably durable. This very property means that processors can process PLANIBEL G very easily indeed.

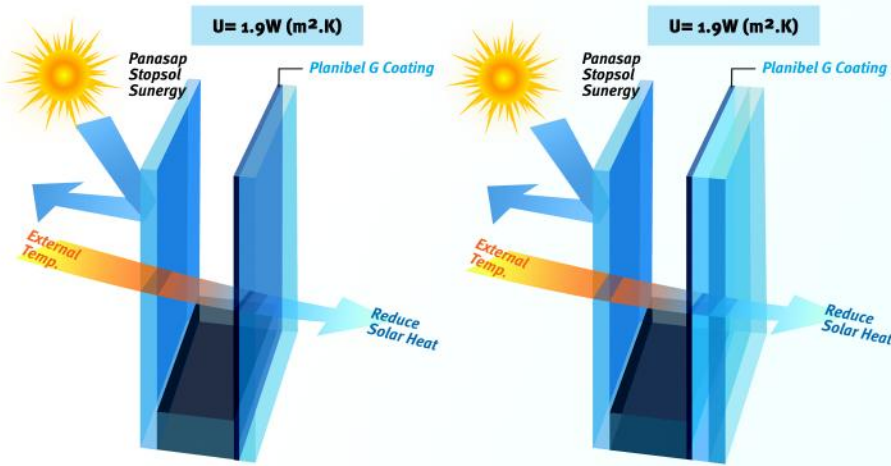


Fig.1 - Double glazing with Solar Control Glass and Planibel G

Fig.2 - Double Glazing with Solar Control Glass and Planibel G with laminated Glass

PLANIBEL G is a low-emissivity glass consisting of a sheet of clear float glass hot-coated with a metal oxide coating, aiming to insulate the building against heat from outside to reduce energy usage, because the insulation of heat from outside, it is much easier to maintain the Indoor temperature thus save energy.

ADVANTAGES FOR THE PROCESSOR

With its super-hard coating PLANIBEL G boasts several features, making it the ideal low-emissivity glass for processors

● ENHANCED PERFORMANCE

Its hard and stable coating makes PLANIBEL G suitable for any processing operation.

In particular, it is not necessary to erase the coating on the edges for assembly in double glazing.

● EASE FOR USE

PLANIBEL G may be stored, manipulated, cut and assembled like ordinary glass, provided the normal precautions for hard coated glass are followed.

Shelf life is similar to clear float, although we do recommend taking steps to protect the coating from dirt.

We recommend placing the coated side up when cutting PLANIBEL G. Avoid any contact with sharp metal or plastic objects.

● MULTIFUNCTIONAL GLASS

The primary characteristic of the low-emissivity coating is to insulate heat from penetrating into the building, in other words, to maintain indoor temperature. That means lower cooling bills.

To improve its thermal insulation performance PLANIBEL G is assembled in double glazing units. Double Glazing units can also provide acoustic insulation, depending on the composition used.

PLANIBEL G prevents energy loss; combined with Panasap, Stopsol, Sunergy or similar type of glass, it can also provide solar control. (Fig. 1)

In order to boost its impact strength and resistance to thermal stress, PLANIBEL G can be either heat strengthened or toughened.

Moreover, in order to comply with legislation increasingly requiring the use of safety glass in the construction industry PLANIBEL G may be assembled in a laminated glass unit integrated into insulating glazing (Fig.2)

Combining the various processing options produces a multifunctional glass which cumulates many protection

● VALUE FOR MONEY

With its many characteristics, PLANIBEL G presents an excellent ratio performance/price

SPECIFICATIONS

Transparent and neutral coloured. PLANIBEL G has real good light transmission.

It is also highly resistant to chemicals and mechanical stress,

But its real strength lies in its remarkable thermal properties. Featuring a coating designed to insulate heat into the building (i.e. U-Value 3.7). PLANIBEL G can result in a substantial reduction in cooling costs.

PLANIBEL G	Light Transmittance (%)	Light Reflectance (%)	Solar Factor (%)	Shading Coefficient *3*4	U Value W/m²k
SINGLE GLAZING					
3.2 mm #2	82	11	74	0.85	3.7
4 mm #2	82	11	73	0.84	3.7
5 mm #2	81	11	72	0.83	3.7
6 mm #2	81	11	71	0.82	3.7
SMART COMBINATION - DOUBLE GLAZING UNIT GLASS					
6mm Stopsol Supersilver Clear #2 + A12 + 6mm Planibel G #3	53	39	56	0.64	1.9
6mm Stopsol Supersilver Green #2 + A12 + 6mm Planibel G #3	43	28	33	0.38	1.9
6mm Stopsol Supersilver Blue Green #2 + A12 + 6mm Planibel G #3	37	22	31	0.36	1.9
6mm Stopsol Supersilver Euro Grey #2 + A12 + 6mm Planibel G #3	25	12	33	0.38	1.9
6mm Stopsol Supersilver Dark Blue #2 + A12 + 6mm Planibel G #3	34	19	31	0.36	1.9
6mm Stopsol Classic Green #2 + A12 + 6mm Planibel G #3	26	21	24	0.28	1.9
6mm Stopsol Classic Dark Blue #2 + A12 + 6mm Planibel G #3	21	15	25	0.29	1.9
6mm Sunergy Clear #2 + A12 + 6mm Planibel G #3	55	14	50	0.57	1.8
6mm Sunergy Green #2 + A12 + 6mm Planibel G #3	45	11	32	0.37	1.8
6mm Sunergy Blue Green #2 + A12 + 6mm Planibel G #3	39	9	30	0.34	1.8
6mm Sunergy Euro Grey #2 + A12 + 6mm Planibel G #3	27	7	31	0.36	1.8
SMART COMBINATION - LAMINATED GLASS					
6mm Stopsol Supersilver Clear #2 + 0.38 Clear PVB + 6mm Planibel G #4	66	23	56	0.64	3.6
6mm Stopsol Supersilver Green #2 + 0.38 Clear PVB + 6mm Planibel G #4	54	17	38	0.44	3.6
6mm Stopsol Supersilver Blue Green #2 + 0.38 Clear PVB + 6mm Planibel G #4	46	14	37	0.43	3.6
6mm Stopsol Supersilver Euro Grey #2 + 0.38 Clear PVB + 6mm Planibel G #4	31	9	37	0.43	3.6
6mm Stopsol Supersilver Dark Blue #2 + 0.38 Clear PVB + 6mm Planibel G #4	42	13	36	0.41	3.6
6mm Stopsol Classic Green #2 + 0.38 Clear PVB + 6mm Planibel G #4	31	17	29	0.33	3.6
6mm Stopsol Classic Dark Blue #2 + 0.38 Clear PVB + 6mm Planibel G #4	24	13	29	0.33	3.6
6mm Sunergy Clear #2 + 0.38 Clear PVB + 6mm Planibel G #4	61	9	49	0.56	3.6
6mm Sunergy Green #2 + 0.38 Clear PVB + 6mm Planibel G #4	50	8	36	0.41	3.6
6mm Sunergy Blue Green #2 + 0.38 Clear PVB + 6mm Planibel G #4	44	7	34	0.39	3.6
6mm Sunergy Euro Grey #2 + 0.38 Clear PVB + 6mm Planibel G #4	30	5	34	0.39	3.6

REMARKS

- Coating position #2 : inside coating position
- The data are calculated using spectral measurements that are conform to standards EN 410 , ISO 9050 (1990) and WIS / WINDAT
- The Ug-value (formerly k-value) is calculated according to standard EN 673. The emissivity measurement complies with standards EN 673 (Annex A) and EN 12898
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