

Glass Range for Architects and Specifiers

Technical Information Datasheet

Table 1 – Performance Data Pilkington **Insulight™** with 6mm Pilkington **K Glass™** Inner Pane.

Product Description	Light		Solar Radiant Heat				Shading Coefficient			U value (W/m²K)	U value (W/m²K)	Sound Insulation	Mass	Unit Maximum Sizes†		Descriptive Code
	Transmittance	Reflectance	Direct Transmittance	Reflectance	Absorptance	Total Transmittance	Short Wavelength	Long Wavelength	Total	Air-filled	Argon-filled	R _w (C;Ctr)	(kg/m²)	Annealed (mm)	Toughened (mm)	
Pilkington Insulight™ (with 6mm Pilkington K Glass™ inner pane and 16mm cavity - unless otherwise indicated)																
Pilkington Optifloat™ Clear																
*4mm	0.74	0.17	0.60	0.16	0.24	0.72	0.70	0.13	0.83	1.7	1.5	29 (-1;-4)	20	2000 x 1200	2000 x 1500	74/72
6mm	0.73	0.17	0.55	0.14	0.31	0.68	0.64	0.15	0.79	1.7	1.5	31 (-1;-4)	30	3000 x 1600	4500 x 2500	73/68
Pilkington Optiwhite™																
*4mm	0.76	0.18	0.65	0.17	0.18	0.77	0.76	0.14	0.90	1.7	1.5	29 (-1;-4)	20	2000 x 1200	2000 x 1500	76/77
6mm	0.75	0.18	0.61	0.17	0.22	0.76	0.71	0.17	0.88	1.7	1.5	31 (-1;-4)	30	3000 x 1600	4500 x 2500	75/76
Pilkington Optifloat™																
6mm 75/79 Green	0.61	0.14	0.34	0.09	0.57	0.43	0.40	0.11	0.51	1.7	1.5	31 (-1;-4)	30	3000 x 1600	4500 x 2500	61/43
6mm 49/58 Bronze	0.41	0.08	0.33	0.08	0.59	0.44	0.38	0.13	0.51	1.7	1.5	31 (-1;-4)	30	3000 x 1600	4500 x 2500	41/44
6mm 43/58 Grey	0.36	0.08	0.31	0.08	0.61	0.42	0.36	0.13	0.49	1.7	1.5	31 (-1;-4)	30	3000 x 1600	4500 x 2500	36/42
Pilkington Arctic Blue™																
6mm	0.44	0.09	0.27	0.07	0.66	0.36	0.31	0.10	0.41	1.7	1.5	31 (-1;-4)	30	3000 x 1600	4500 x 2500	44/36
Pilkington Activ™																
*4mm	0.70	0.23	0.57	0.21	0.22	0.69	0.67	0.13	0.80	1.7	1.5	29 (-1;-4)	20	2000 x 1200	2000 x 1500	70/69
6mm	0.69	0.22	0.53	0.20	0.27	0.66	0.62	0.15	0.76	1.7	1.5	31 (-1;-4)	30	3000 x 1600	4500 x 2500	69/66
Pilkington Activ™ Blue																
*4mm	0.49	0.19	0.33	0.16	0.51	0.41	0.38	0.10	0.48	1.7	1.5	29 (-1;-4)	20	2000 x 1200	2000 x 1500	49/41
6mm	0.40	0.17	0.24	0.14	0.62	0.32	0.28	0.10	0.38	1.7	1.5	31 (-1;-4)	30	3000 x 1600	4500 x 2500	40/32
Pilkington Eclipse Advantage™																
6mm Clear	0.56	0.31	0.42	0.23	0.35	0.52	0.49	0.12	0.61	1.5	1.3	31 (-1;-4)	30	3000 x 1600	3100 x 2500	56/52
6mm Arctic Blue	0.33	0.14	0.19	0.09	0.72	0.26	0.22	0.09	0.31	1.5	1.3	31 (-1;-4)	30	3000 x 1600	3100 x 2500	33/26
6mm Blue-Green	0.47	0.23	0.28	0.13	0.59	0.36	0.32	0.10	0.42	1.5	1.3	31 (-1;-4)	30	3000 x 1600	3100 x 2500	47/36
6mm Bronze	0.32	0.13	0.25	0.11	0.64	0.34	0.29	0.11	0.40	1.5	1.3	31 (-1;-4)	30	3000 x 1600	3100 x 2500	32/34
6mm Evergreen	0.40	0.18	0.19	0.10	0.71	0.27	0.22	0.08	0.30	1.5	1.3	31 (-1;-4)	30	3000 x 1600	3100 x 2500	40/27
6mm Grey	0.27	0.11	0.20	0.10	0.70	0.30	0.24	0.10	0.34	1.5	1.3	31 (-1;-4)	30	3000 x 1600	3100 x 2500	27/30

Table 2 – Performance Data Pilkington **Insulight™** with 6mm Pilkington **Optitherm™** SN Inner Pane.

Product Description	Light		Solar Radiant Heat				Shading Coefficient			U value (W/m²K)	U value (W/m²K)	Sound Insulation	Mass	Unit Maximum Sizes†		Descriptive Code
	Transmittance	Reflectance	Direct Transmittance	Reflectance	Absorptance	Total Transmittance	Short Wavelength	Long Wavelength	Total	Air-filled	Argon-filled	R _w (C;Ctr)	(kg/m²)	Annealed (mm)	Toughened (mm)	
Pilkington Insulight™ (with 6mm Pilkington Optitherm™ SN inner pane coating to surface 3 and 16mm cavity - unless otherwise indicated)																
Pilkington Optifloat™ Clear																
*4mm	0.78	0.11	0.53	0.23	0.24	0.63	0.59	0.14	0.73	1.4	1.2	29 (-1;-4)	20	2000 x 1200	2000 x 1500	78/63
6mm	0.77	0.11	0.49	0.21	0.30	0.61	0.57	0.14	0.71	1.4	1.2	31 (-1;-4)	30	3000 x 1600	4200 x 2400	77/61
Pilkington Optiwhite™																
*4mm	0.80	0.12	0.55	0.28	0.17	0.69	0.65	0.13	0.78	1.4	1.2	29 (-1;-4)	20	2000 x 1200	2000 x 1500	80/69
6mm	0.79	0.12	0.54	0.26	0.20	0.66	0.62	0.15	0.77	1.4	1.2	31 (-1;-4)	30	3000 x 1600	4200 x 2400	79/66
Pilkington Optifloat™																
6mm 75/79 Green	0.65	0.09	0.32	0.09	0.59	0.41	0.38	0.10	0.48	1.4	1.2	31 (-1;-4)	30	3000 x 1600	4200 x 2400	65/41
6mm 49/58 Bronze	0.43	0.07	0.29	0.11	0.60	0.38	0.33	0.11	0.44	1.4	1.2	31 (-1;-4)	30	3000 x 1600	4200 x 2400	43/38
6mm 43/58 Grey	0.38	0.06	0.27	0.11	0.62	0.37	0.32	0.11	0.43	1.4	1.2	31 (-1;-4)	30	3000 x 1600	4200 x 2400	38/37
Pilkington Arctic Blue™																
6mm	0.47	0.07	0.26	0.07	0.67	0.34	0.30	0.09	0.39	1.4	1.2	31 (-1;-4)	30	3000 x 1600	4200 x 2400	47/34
Pilkington Activ™																
*4mm	0.74	0.17	0.50	0.29	0.21	0.60	0.58	0.11	0.69	1.4	1.2	29 (-1;-4)	20	3000 x 1600	4200 x 2400	74/60
6mm	0.72	0.17	0.46	0.27	0.27	0.58	0.54	0.13	0.67	1.4	1.2	31 (-1;-4)	30	3000 x 1600	4200 x 2400	72/58
Pilkington Activ™ Blue																
*4mm	0.51	0.17	0.30	0.17	0.53	0.38	0.35	0.09	0.44	1.4	1.2	29 (-1;-4)	20	2000 x 1200	2000 x 1500	51/38
6mm	0.43	0.15	0.23	0.14	0.63	0.30	0.27	0.09	0.36	1.4	1.2	31 (-1;-4)	30	3000 x 1600	4200 x 2400	43/30
Pilkington Eclipse Advantage™																
6mm Clear	0.58	0.27	0.38	0.26	0.36	0.47	0.44	0.11	0.55	1.4	1.1	31 (-1;-4)	30	3000 x 1600	3100 x 2500	58/47
6mm Arctic Blue	0.34	0.13	0.18	0.09	0.73	0.25	0.21	0.08	0.29	1.4	1.1	31 (-1;-4)	30	3000 x 1600	3100 x 2500	34/25
6mm Blue-Green	0.49	0.20	0.26	0.14	0.60	0.34	0.30	0.09	0.39	1.4	1.1	31 (-1;-4)	30	3000 x 1600	3100 x 2500	49/34
6mm Bronze	0.33	0.12	0.21	0.13	0.66	0.30	0.25	0.10	0.35	1.4	1.1	31 (-1;-4)	30	3000 x 1600	3100 x 2500	33/30
6mm Evergreen	0.42	0.16	0.19	0.10	0.71	0.26	0.22	0.08	0.30	1.4	1.1	31 (-1;-4)	30	3000 x 1600	3100 x 2500	42/26
6mm Grey	0.28	0.10	0.19	0.10	0.71	0.27	0.22	0.09	0.31	1.4	1.1	31 (-1;-4)	30	3000 x 1600	3100 x 2500	28/27

To be used in conjunction with notes under table 3.

Table 3 – Performance Data Pilkington Insulight™ with 6mm Pilkington Optifloat™ Clear Inner Pane.

Product Description	Light		Solar Radiant Heat				Shading Coefficient			U value (W/m²K)	U value (W/m²K)	Sound Insulation	Mass	Unit Maximum Sizes†		Descriptive Code
	Transmittance	Reflectance	Direct Transmittance	Reflectance	Absorbance	Total Transmittance	Short Wavelength	Long Wavelength	Total	Air-filled	Argon-filled	R _w (C;Ctr)	(kg/m²)	Annealed (mm)	Toughened (mm)	
Pilkington Insulight™ (with 6mm Pilkington Optifloat™ clear inner pane and 16mm cavity – unless otherwise indicated)																
Pilkington Optifloat™ Clear																
*4mm	0.81	0.15	0.69	0.13	0.18	0.76	0.81	0.07	0.88	2.7	2.6	29 (-1;-4)	20	2000 x 1200	2000 x 1500	81/76
6mm	0.79	0.14	0.63	0.12	0.25	0.72	0.74	0.09	0.83	2.7	2.6	31 (-1;-4)	30	3000 x 1600	4500 x 2500	79/72
Pilkington Optiwhite™																
*4mm	0.82	0.15	0.75	0.14	0.11	0.81	0.87	0.07	0.94	2.7	2.6	29 (-1;-4)	20	2000 x 1200	2000 x 1500	82/81
6mm	0.81	0.15	0.71	0.14	0.15	0.79	0.82	0.10	0.92	2.7	2.6	31 (-1;-4)	30	3000 x 1600	4500 x 2500	81/79
Pilkington Optifloat™																
6mm 75/79 Green	0.67	0.12	0.39	0.08	0.53	0.48	0.45	0.10	0.55	2.7	2.6	31 (-1;-4)	30	3000 x 1600	4500 x 2500	67/48
6mm 49/58 Bronze	0.44	0.08	0.38	0.07	0.55	0.48	0.44	0.12	0.56	2.7	2.6	31 (-1;-4)	30	3000 x 1600	4500 x 2500	44/48
6mm 43/58 Grey	0.39	0.07	0.36	0.07	0.57	0.46	0.42	0.12	0.54	2.7	2.6	31 (-1;-4)	30	3000 x 1600	4500 x 2500	39/46
Pilkington Arctic Blue™																
6mm	0.48	0.08	0.31	0.06	0.63	0.40	0.36	0.11	0.47	2.7	2.6	31 (-1;-4)	30	3000 x 1600	4500 x 2500	48/40
Pilkington Suncool™ Brilliant																
6mm 66/33	0.65	0.15	0.31	0.33	0.36	0.36	0.37	0.05	0.42	1.3	1.1	31 (-1;-4)	30	3000 x 1600	4200 x 2400	65/36
6mm 50/25 N	0.49	0.18	0.24	0.33	0.43	0.28	0.27	0.05	0.32	1.3	1.1	31 (-1;-4)	30	3000 x 1600	4200 x 2400	49/28
6mm 30/17	0.30	0.26	0.15	0.37	0.48	0.19	0.18	0.04	0.22	1.3	1.1	31 (-1;-4)	30	3000 x 1600	4200 x 2400	30/19
6mm 50/27 N (Blue)	0.49	0.19	0.25	0.35	0.40	0.29	0.29	0.05	0.34	1.3	1.1	31 (-1;-4)	30	3000 x 1600	4200 x 2400	49/29
Pilkington Suncool™ High Performance																
6mm 70/40 (Neutral)	0.70	0.10	0.38	0.28	0.34	0.43	0.45	0.05	0.50	1.4	1.1	31 (-1;-4)	30	3000 x 1600	4200 x 2400	70/43
6mm 53/40 (Neutral)	0.53	0.08	0.35	0.16	0.49	0.42	0.41	0.08	0.49	1.5	1.3	31 (-1;-4)	30	3000 x 1600	3600 x 2400	53/42
6mm 51/37 (Neutral)	0.51	0.17	0.32	0.21	0.47	0.39	0.38	0.07	0.45	1.5	1.3	31 (-1;-4)	30	3000 x 1600	3600 x 2400	51/39
6mm 65/41 (Clear)	0.64	0.22	0.38	0.32	0.30	0.43	0.44	0.06	0.50	1.4	1.1	31 (-1;-4)	30	3000 x 1600	3600 x 2400	64/43
6mm 50/30 (Silver)	0.49	0.39	0.28	0.42	0.30	0.32	0.32	0.05	0.37	1.3	1.1	31 (-1;-4)	30	3000 x 1600	3600 x 2400	49/32
**6mm 30/23 (Blue)	0.30	0.15	0.12	0.73	0.24	0.17	0.10	0.27	1.3	1.1	31 (-1;-4)	30	3000 x 1600	3600 x 2400	30/24	
**6mm 28/24 (Bronze)	0.27	0.13	0.16	0.18	0.66	0.25	0.18	0.11	0.29	1.3	1.1	31 (-1;-4)	30	3000 x 1600	3600 x 2400	27/25
**6mm 43/29 (Green)	0.42	0.25	0.19	0.17	0.64	0.29	0.22	0.11	0.33	1.3	1.1	31 (-1;-4)	30	3000 x 1600	3600 x 2400	42/29
**6mm 25/24 (Grey)	0.24	0.11	0.15	0.17	0.68	0.24	0.17	0.11	0.28	1.3	1.1	31 (-1;-4)	30	3000 x 1600	3600 x 2400	24/24
6mm 55/31 (Jade Green)	0.54	0.18	0.26	0.13	0.61	0.32	0.31	0.06	0.37	1.4	1.2	31 (-1;-4)	30	N/A	3600 x 2400	54/32
6mm 45/29 (Olive Green)	0.43	0.07	0.22	0.07	0.71	0.29	0.27	0.07	0.34	1.6	1.4	31 (-1;-4)	30	N/A	3600 x 2400	43/29
6mm 43/24 (Emerald Green)	0.42	0.29	0.19	0.18	0.63	0.24	0.22	0.06	0.28	1.3	1.1	31 (-1;-4)	30	N/A	3600 x 2400	42/24
Pilkington Activ Suncool™ HP																
6mm 53/40	0.49	0.14	0.33	0.21	0.46	0.39	0.38	0.07	0.45	1.5	1.3	31 (-1;-4)	30	3000 x 1600	4200 x 2400	49/39
6mm 50/30	0.47	0.42	0.26	0.46	0.28	0.30	0.31	0.04	0.35	1.3	1.1	31 (-1;-4)	30	3000 x 1600	4200 x 2400	47/30
6mm 30/17	0.28	0.30	0.15	0.40	0.45	0.18	0.17	0.04	0.21	1.3	1.1	31 (-1;-4)	30	3000 x 1600	4200 x 2400	28/18
6mm 70/40	0.66	0.15	0.36	0.32	0.32	0.40	0.41	0.05	0.46	1.4	1.1	31 (-1;-4)	30	3000 x 1600	4200 x 2400	66/40
Pilkington Eclipse Advantage™																
6mm Clear	0.60	0.29	0.47	0.22	0.31	0.55	0.55	0.09	0.64	1.8	1.6	31 (-1;-4)	30	3000 x 1600	3100 x 2500	60/55
6mm Arctic Blue	0.35	0.13	0.21	0.09	0.70	0.28	0.25	0.08	0.33	1.8	1.6	31 (-1;-4)	30	3000 x 1600	3100 x 2500	35/28
6mm Blue-Green	0.51	0.21	0.31	0.13	0.56	0.38	0.36	0.08	0.44	1.8	1.6	31 (-1;-4)	30	3000 x 1600	3100 x 2500	51/38
6mm Bronze	0.34	0.13	0.28	0.11	0.61	0.36	0.33	0.09	0.42	1.8	1.6	31 (-1;-4)	30	3000 x 1600	3100 x 2500	34/36
6mm Evergreen	0.43	0.17	0.21	0.10	0.69	0.28	0.25	0.08	0.33	1.8	1.6	31 (-1;-4)	30	3000 x 1600	3100 x 2500	43/28
6mm Grey	0.29	0.11	0.24	0.09	0.67	0.32	0.28	0.09	0.37	1.8	1.6	31 (-1;-4)	30	3000 x 1600	3100 x 2500	29/32

Determined in accordance with BS EN 410 and BS EN 673

U values for argon gas-filled cavities based on 90% gas fill.

Acoustic performance figures taken from prEN12354 - 3:1997 and represent generic conservative figures. Contact Pilkington for additional information.

* with 4mm inner pane

** with 6mm Pilkington **Optifloat™** Tinted outer pane and 6mm Pilkington **Suncool™** HP Silver 50/30 inner pane.

† Maximum sizes are for guidance only, please consult with processor for details. These are **not** recommended glazing sizes.

For performance figures relating to other Pilkington products, for example fire-resistant glass, please refer to our product specific literature.

General Information

Safety

Insulating glass units with Pilkington T glass, Pilkington **Pyroshield™** Safety and Pilkington **Optilam™** can meet the recommendations for the glazing of hazardous areas as given in BS 6262: Part 4: 1994, and comply with Building Regulations (England & Wales) Approved Document N.

Thermal safety

At all stages of design and construction, the possibility of excessive thermal stress being developed in the glass by solar radiation should be considered, the customer or specifier being responsible for ensuring that annealed glass is thermally safe for each application.

Wind loading

Acceptable wind loading may be reduced depending on the glazing method, and this should be taken into account when calculating glass thickness needs relative to wind loads.

Handling and storage

It is important that glass is handled and stored correctly, in accordance with recommendations. It should be kept dry and out of direct sunlight, supported to prevent it from sagging and protected against impact damage. Before glazing, each sheet should be checked and any damaged glass not glazed. It must also be protected against damage caused by water being drawn up between the plates by capillary action, and from any abrasive site contaminants such as weld spatter, concrete, plaster and adhesives.

Please refer to the literature disclaimer at the back of our brochure.



PILKINGTON

Building Products - UK

Prescot Road St Helens WA10 3TT United Kingdom

Telephone 01744 692000 Fax 01744 692880

pilkington@respond.uk.com

www.pilkington.com