

Glass Range for Architects and Specifiers

Technical Information Datasheet

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

Product Description	Light		Solar Radiant Heat					Shading Coefficient			U value (W/m²K)	U value (W/m²K)	Unit Maximum Sizes¹		Descriptive Code
	Transmittance	Reflectance	Direct Transmittance	Reflectance	Absorptance	Total Transmission	Short Wavelength	Long Wavelength	Total	Air-filled	Argon-filled (90%)	Annealed (mm)	Toughened (mm)		
Pilkington Insulight™ (with 6mm Pilkington Optifloat™ inner pane and 16mm 90% argon filled cavity - unless otherwise indicated)															
Pilkington Optifloat™ Tint															
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	3000 x 1600	4500 x 2400	67/48	
6mm 49/58 Bronze	0.44	0.08	0.38	0.07	0.55	0.48	0.44	0.11	0.55	2.7	2.6	3000 x 1600	4500 x 2400	44/48	
6mm 43/58 Grey	0.39	0.07	0.36	0.07	0.57	0.46	0.42	0.11	0.53	2.7	2.6	3000 x 1600	4500 x 2400	39/46	
6mm Pilkington Arctic Blue™	0.48	0.08	0.31	0.06	0.63	0.40	0.36	0.10	0.46	2.7	2.6	3000 x 1600	4500 x 2400	48/40	
Pilkington Suncool™															
6mm 70/40	0.70	0.10	0.38	0.28	0.34	0.43	0.44	0.05	0.49	1.4	1.1	3000 x 1600	4200 x 2400	70/43	
6mm 70/35	0.69	0.16	0.34	0.34	0.32	0.37	0.39	0.04	0.43	1.3	1.1	3000 x 1600	4200 x 2400	69/37	
6mm 66/33	0.65	0.15	0.32	0.32	0.36	0.36	0.37	0.04	0.41	1.3	1.1	3000 x 1600	4200 x 2400	65/36	
6mm Silver 50/30	0.49	0.39	0.28	0.42	0.30	0.31	0.32	0.04	0.36	1.4	1.1	3000 x 1600	4200 x 2400	49/31	
6mm Blue 50/27	0.50	0.19	0.24	0.35	0.41	0.28	0.28	0.05	0.33	1.3	1.1	3000 x 1600	4200 x 2400	50/28	
6mm 50/25	0.49	0.18	0.24	0.32	0.44	0.27	0.27	0.04	0.31	1.3	1.1	3000 x 1600	4200 x 2400	49/27	
6mm 40/22	0.39	0.20	0.19	0.35	0.46	0.23	0.22	0.04	0.26	1.3	1.1	3000 x 1600	4200 x 2400	39/23	
6mm 30/17	0.30	0.26	0.15	0.37	0.48	0.19	0.18	0.03	0.21	1.3	1.1	3000 x 1600	4200 x 2400	30/19	
Pilkington Suncool™ OW															
6mm 70/40	0.71	0.10	0.40	0.39	0.20	0.45	0.46	0.05	0.51	1.4	1.1	3000 x 1600	4200 x 2400	71/45	
6mm 66/33	0.67	0.17	0.34	0.47	0.19	0.37	0.39	0.04	0.43	1.3	1.1	3000 x 1600	4200 x 2400	67/37	
6mm Blue 50/27	0.51	0.20	0.26	0.46	0.28	0.29	0.30	0.04	0.34	1.3	1.1	3000 x 1600	4200 x 2400	51/29	
6mm 50/25	0.51	0.19	0.25	0.44	0.31	0.28	0.29	0.03	0.32	1.3	1.1	3000 x 1600	4200 x 2400	51/28	
6mm 40/22	0.40	0.21	0.21	0.46	0.33	0.24	0.24	0.03	0.27	1.3	1.1	3000 x 1600	4200 x 2400	40/24	
Pilkington Eclipse Advantage™															
6mm Clear	0.60	0.29	0.47	0.22	0.31	0.55	0.54	0.09	0.63	1.8	1.6	3000 x 1600	4500 x 2400	60/55	
6mm Arctic Blue	0.35	0.13	0.21	0.09	0.70	0.28	0.24	0.08	0.32	1.8	1.6	3000 x 1600	4500 x 2400	35/28	
6mm Blue-Green	0.51	0.21	0.31	0.13	0.56	0.38	0.36	0.07	0.43	1.8	1.6	3000 x 1600	4500 x 2400	51/38	
6mm Bronze	0.34	0.13	0.28	0.11	0.61	0.35	0.32	0.09	0.41	1.8	1.6	3000 x 1600	4500 x 2400	34/35	
6mm EverGreen	0.43	0.17	0.22	0.10	0.68	0.28	0.25	0.07	0.32	1.8	1.6	3000 x 1600	4500 x 2400	43/28	
6mm Grey	0.29	0.11	0.24	0.09	0.67	0.31	0.27	0.09	0.36	1.8	1.6	3000 x 1600	4500 x 2400	29/31	

Table 2 – 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)	Unit Maximum Sizes¹		Descriptive Code
	Transmittance	Reflectance	Direct Transmittance	Reflectance	Absorptance	Total Transmission	Short Wavelength	Long Wavelength	Total	Air-filled	Argon-filled (90%)	Annealed (mm)	Toughened (mm)	
Pilkington Insulight™ (with 6mm Pilkington K Glass™ inner pane and 16mm 90% argon filled cavity - unless otherwise indicated)														
Pilkington Optifloat Clear™														
*4mm	0.74	0.17	0.60	0.16	0.24	0.72	0.69	0.14	0.83	1.7	1.5	2000 x 1200	2000 x 1500	74/72
6mm	0.73	0.17	0.55	0.15	0.30	0.69	0.63	0.16	0.79	1.7	1.5	3000 x 1600	4500 x 2400	73/69
Pilkington Optiwhite™														
*4mm	0.76	0.18	0.65	0.17	0.18	0.78	0.75	0.14	0.89	1.7	1.5	2000 x 1200	2000 x 1500	76/78
6mm	0.75	0.18	0.61	0.17	0.22	0.77	0.71	0.17	0.88	1.7	1.5	3000 x 1600	4500 x 2400	75/77
Pilkington Optifloat™ Tint														
6mm 75/79 Green	0.61	0.14	0.34	0.09	0.57	0.43	0.39	0.11	0.50	1.7	1.5	3000 x 1600	4500 x 2400	61/43
6mm 49/58 Bronze	0.41	0.08	0.33	0.08	0.59	0.44	0.37	0.13	0.50	1.7	1.5	3000 x 1600	4500 x 2400	41/44
6mm 43/58 Grey	0.36	0.08	0.31	0.08	0.61	0.42	0.36	0.12	0.48	1.7	1.5	3000 x 1600	4500 x 2400	36/42
6mm Pilkington Arctic Blue™	0.44	0.09	0.27	0.07	0.66	0.36	0.31	0.10	0.41	1.7	1.5	3000 x 1600	4500 x 2400	44/36
Pilkington Eclipse Advantage™														
6mm Clear	0.56	0.31	0.42	0.23	0.35	0.53	0.48	0.12	0.60	1.5	1.3	3000 x 1600	4500 x 2400	56/53
6mm Arctic Blue	0.33	0.14	0.19	0.09	0.72	0.26	0.22	0.08	0.30	1.5	1.3	3000 x 1600	4500 x 2400	33/26
6mm Blue-Green	0.47	0.23	0.28	0.13	0.59	0.36	0.32	0.09	0.41	1.5	1.3	3000 x 1600	4500 x 2400	47/36
6mm Bronze	0.32	0.13	0.25	0.11	0.64	0.34	0.28	0.11	0.39	1.5	1.3	3000 x 1600	4500 x 2400	32/34
6mm EverGreen	0.40	0.18	0.19	0.10	0.71	0.26	0.22	0.08	0.30	1.5	1.3	3000 x 1600	4500 x 2400	40/26
6mm Grey	0.27	0.11	0.21	0.10	0.69	0.29	0.24	0.10	0.34	1.5	1.3	3000 x 1600	4500 x 2400	27/29

Table 3 – Performance Data Pilkington Insulight™ with 6mm Pilkington Optitherm™ S4 Inner Pane.

Product Description	Light		Solar Radiant Heat				Shading Coefficient			U value (W/m²K)	U value (W/m²K)	Unit Maximum Sizes¹		Descriptive Code
	Transmittance	Reflectance	Direct Transmittance	Reflectance	Absorptance	Total Transmission	Short Wavelength	Long Wavelength	Total	Air-filled	Argon-filled (90%)	Annealed (mm)	Toughened (mm)	
Pilkington Insulight™ (with 6mm Pilkington Optitherm™ S4 inner pane and 16mm 90% argon filled cavity - unless otherwise indicated)														
Pilkington Optifloat Clear™														
*4mm	0.79	0.12	0.56	0.21	0.23	0.66	0.65	0.11	0.76	1.4	1.2	2000 x 1200	2000 x 1500	79/66
6mm	0.77	0.12	0.52	0.19	0.29	0.63	0.60	0.13	0.73	1.4	1.2	3000 x 1600	4500 x 2400	77/63
Pilkington Optiwhite™														
*4mm	0.80	0.12	0.60	0.25	0.15	0.71	0.69	0.12	0.81	1.4	1.2	2000 x 1200	2000 x 1500	80/71
6mm	0.79	0.12	0.57	0.24	0.18	0.70	0.65	0.15	0.80	1.4	1.2	3000 x 1600	4500 x 2400	79/70
Pilkington Optifloat™ Tint														
6mm 75/79 Green	0.65	0.10	0.34	0.08	0.58	0.42	0.39	0.09	0.48	1.4	1.2	3000 x 1600	4500 x 2400	65/42
6mm 49/58 Bronze	0.43	0.07	0.30	0.11	0.59	0.39	0.35	0.10	0.45	1.4	1.2	3000 x 1600	4500 x 2400	43/39
6mm 43/58 Grey	0.38	0.06	0.29	0.10	0.61	0.38	0.33	0.10	0.43	1.4	1.2	3000 x 1600	4500 x 2400	38/38
6mm Pilkington Arctic Blue™	0.47	0.07	0.27	0.07	0.66	0.34	0.31	0.08	0.39	1.4	1.2	3000 x 1600	4500 x 2400	47/34
Pilkington Eclipse Advantage™														
6mm Clear	0.58	0.28	0.39	0.25	0.35	0.49	0.45	0.11	0.56	1.4	1.1	3000 x 1600	4500 x 2400	58/49
6mm Arctic Blue	0.34	0.13	0.19	0.09	0.72	0.25	0.21	0.07	0.28	1.4	1.1	3000 x 1600	4500 x 2400	34/25
6mm Blue-Green	0.49	0.20	0.27	0.13	0.60	0.34	0.31	0.08	0.39	1.4	1.1	3000 x 1600	4500 x 2400	49/34
6mm Bronze	0.33	0.12	0.23	0.12	0.65	0.31	0.26	0.09	0.35	1.4	1.1	3000 x 1600	4500 x 2400	33/31
6mm EverGreen	0.42	0.17	0.19	0.10	0.71	0.26	0.22	0.07	0.29	1.4	1.1	3000 x 1600	4500 x 2400	42/26
6mm Grey	0.28	0.10	0.20	0.10	0.70	0.27	0.23	0.08	0.31	1.4	1.1	3000 x 1600	4500 x 2400	28/27

Table 4 – Performance Data Pilkington Insulight™ with 6mm Pilkington Optifloat™ Inner Pane.

Product Description	Light		Solar Radiant Heat					Shading Coefficient			U value (W/m²K)	U value (W/m²K)	Unit Maximum Sizes¹		Descriptive Code
	Transmittance	Reflectance	Direct Transmittance	Reflectance	Absorptance	Total Transmission	Short Wavelength	Long Wavelength	Total	Air-filled	Argon-filled (90%)	Annealed (mm)	Toughened (mm)		
Pilkington Insulight™ (with 6mm Pilkington Optifloat™ inner pane and 16mm 90% argon filled cavity - unless otherwise indicated)															
6mm Activ™ Clear	0.74	0.20	0.61	0.17	0.22	0.69	0.70	0.09	0.79	2.7	2.6	3000 x 1600	4500 x 2400	74/69	
6mm Activ™ Neutral	0.43	0.28	0.36	0.22	0.42	0.44	0.41	0.10	0.51	2.7	2.5	3000 x 1600	4500 x 2400	43/44	
6mm Activ™ Blue	0.44	0.16	0.28	0.13	0.59	0.36	0.32	0.10	0.42	2.7	2.6	3000 x 1600	4500 x 2400	44/36	
10mm Activ™ Blue	0.31	0.14	0.17	0.13	0.70	0.27	0.20	0.10	0.30	2.7	2.6	3000 x 1600	4500 x 2400	31/27	
Pilkington Insulight™ (with 6mm Pilkington K Glass™ inner pane and 16mm 90% argon filled cavity - unless otherwise indicated)															
6mm Activ™ Clear	0.69	0.22	0.53	0.20	0.27	0.66	0.61	0.15	0.76	1.7	1.5	3000 x 1600	4500 x 2400	69/66	
6mm Activ™ Neutral	0.40	0.29	0.31	0.23	0.46	0.41	0.36	0.11	0.47	1.7	1.5	3000 x 1600	4500 x 2400	40/41	
6mm Activ™ Blue	0.40	0.17	0.24	0.14	0.62	0.32	0.28	0.09	0.37	1.7	1.5	3000 x 1600	4500 x 2400	40/32	
10mm Activ™ Blue	0.28	0.15	0.15	0.13	0.72	0.22	0.18	0.08	0.26	1.7	1.5	3000 x 1600	4200 x 2400	28/22	
Pilkington Insulight™ (with 6mm Pilkington Optitherm™ S4 inner pane and 16mm 90% argon filled cavity - unless otherwise indicated)															
6mm Activ™ Clear	0.72	0.18	0.49	0.25	0.26	0.60	0.57	0.12	0.69	1.4	1.2	3000 x 1600	4200 x 2400	72/60	
6mm Activ™ Neutral	0.42	0.27	0.29	0.25	0.46	0.38	0.33	0.11	0.44	1.4	1.2	3000 x 1600	4500 x 2400	42/38	
6mm Activ™ Blue	0.43	0.15	0.24	0.14	0.62	0.30	0.27	0.08	0.35	1.4	1.2	3000 x 1600	4200 x 2400	43/30	
10mm Activ™ Blue	0.30	0.14	0.15	0.13	0.72	0.21	0.18	0.06	0.24	1.4	1.2	3000 x 1600	4200 x 2400	30/21	
Pilkington Insulight™ (with 4mm Pilkington Optifloat™ inner pane and 16mm 90% argon filled cavity - unless otherwise indicated)															
4mm Activ™ Clear	0.76	0.20	0.67	0.18	0.15	0.72	0.77	0.06	0.83	2.7	2.6	2000 x 1200	2000 x 1500	76/72	
4mm Activ™ Neutral	0.45	0.30	0.40	0.24	0.36	0.47	0.47	0.07	0.54	2.7	2.6	2000 x 1200	2000 x 1500	45/47	
4mm Activ™ Blue	0.53	0.18	0.38	0.15	0.47	0.45	0.44	0.08	0.52	2.7	2.6	2000 x 1200	2000 x 1500	53/45	
Pilkington Insulight™ (with 4mm Pilkington K Glass™ inner pane and 16mm 90% argon filled cavity - unless otherwise indicated)															
4mm Activ™ Clear	0.70	0.23	0.58	0.21	0.21	0.69	0.66	0.13	0.79	1.7	1.5	2000 x 1200	2000 x 1500	70/69	
4mm Activ™ Neutral	0.42	0.22	0.35	0.21	0.44	0.44	0.40	0.10	0.50	1.7	1.5	2000 x 1200	2000 x 1500	42/44	
4mm Activ™ Blue	0.49	0.19	0.33	0.16	0.51	0.41	0.38	0.09	0.47	1.7	1.5	2000 x 1200	2000 x 1500	49/41	
Pilkington Insulight™ (with 4mm Pilkington Optitherm™ S4 inner pane and 16mm 90% argon filled cavity - unless otherwise indicated)															
4mm Activ™ Clear	0.74	0.18	0.53	0.27	0.20	0.63	0.61	0.11	0.72	1.4	1.2	2000 x 1200	2000 x 1500	74/63	
4mm Activ™ Neutral	0.44	0.20	0.32	0.23	0.45	0.39	0.36	0.09	0.45	1.4	1.2	2000 x 1200	2000 x 1500	44/39	
4mm Activ™ Blue	0.52	0.17	0.31	0.17	0.52	0.38	0.36	0.08	0.44	1.4	1.2	2000 x 1200	2000 x 1500	52/38	

Table 5 – Performance Data Pilkington Activ Suncool™ with 6mm Pilkington Optifloat™ Inner Pane.

Product Description	Light		Solar Radiant Heat					Shading Coefficient			U value (W/m²K)	U value (W/m²K)	Unit Maximum Sizes¹		Descriptive Code
	Transmittance	Reflectance	Direct Transmittance	Reflectance	Absorptance	Total Transmission	Short Wavelength	Long Wavelength	Total	Air-filled	Argon-filled (90%)	Annealed (mm)	Toughened (mm)		
Pilkington Activ Suncool™ (with 6mm Pilkington Optifloat™ inner pane and 16mm 90% argon filled cavity - unless otherwise indicated)															
6mm 70/40	0.66	0.15	0.35	0.33	0.32	0.40	0.41	0.05	0.46	1.4	1.1	3000 x 1600	4200 x 2400	66/40	
6mm 70/35	0.65	0.21	0.32	0.40	0.28	0.35	0.37	0.03	0.40	1.3	1.1	3000 x 1600	4200 x 2400	65/35	
6mm 66/33	0.61	0.21	0.30	0.40	0.30	0.34	0.34	0.05	0.39	1.3	1.1	3000 x 1600	4200 x 2400	61/34	
6mm Silver 50/30	0.47	0.42	0.26	0.46	0.28	0.30	0.30	0.04	0.34	1.3	1.1	3000 x 1600	4200 x 2400	47/30	
6mm Blue 50/27	0.47	0.24	0.23	0.39	0.38	0.27	0.27	0.04	0.31	1.3	1.1	3000 x 1600	4200 x 2400	47/27	
6mm 50/25	0.46	0.23	0.22	0.38	0.40	0.26	0.25	0.05	0.30	1.3	1.1	3000 x 1600	4200 x 2400	46/26	
6mm 40/22	0.37	0.25	0.18	0.40	0.42	0.22	0.21	0.04	0.25	1.3	1.1	3000 x 1600	4200 x 2400	37/22	
6mm 30/17	0.28	0.30	0.15	0.40	0.45	0.18	0.17	0.03	0.20	1.3	1.1	3000 x 1600	4200 x 2400	28/18	

Determined in accordance with BS EN 410 and BS EN 673

For other glass combinations, cavities, gases and thicknesses use Pilkington Spectrum from the website www.pilkington.com

* with 4mm 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: 2005, 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.



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