

# Glass Range for Architects and Specifiers

## Technical Information Datasheet

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

Product Description	Light		Solar Radiant Heat				Shading Coefficient			U-value (W/m <sup>2</sup> K)	Unit Maximum Sizes <sup>†</sup>		Descriptive Code
	Transmittance	Reflectance	Direct Transmittance	Reflectance	Absorptance	Total Transmittance (g-value)	Short Wavelength	Long Wavelength	Total	Argon (90%)	Annealed (mm)	Toughened (mm)	
Pilkington <b>Insulight™</b> Sun (with 6 mm Pilkington <b>Optifloat™</b> Clear inner pane and 16 mm 90% argon filled cavity – unless otherwise indicated)													
Pilkington <b>Suncool™</b>													
6 mm 70/40	0.70	0.10	0.38	0.28	0.34	0.43	0.44	0.05	0.49	1.1	2500 x 1500	4000 x 2000	70/43
6 mm 70/35	0.69	0.16	0.34	0.35	0.31	0.37	0.39	0.04	0.43	1.0	2500 x 1500	4000 x 2000	69/37
6 mm 66/33	0.65	0.16	0.32	0.35	0.33	0.36	0.37	0.04	0.41	1.0	2500 x 1500	4000 x 2000	65/36
6 mm Silver 50/30	0.49	0.39	0.28	0.43	0.29	0.31	0.32	0.04	0.36	1.0	2500 x 1500	4000 x 2000	49/31
6 mm Blue 50/27	0.49	0.19	0.25	0.35	0.40	0.28	0.28	0.04	0.32	1.1	2500 x 1500	4000 x 2000	49/28
6 mm 50/25	0.49	0.18	0.24	0.33	0.43	0.27	0.27	0.04	0.31	1.0	2500 x 1500	4000 x 2000	49/27
6 mm 40/22	0.39	0.20	0.19	0.35	0.46	0.23	0.22	0.04	0.26	1.1	2500 x 1500	4000 x 2000	39/23
6 mm 30/17	0.30	0.25	0.15	0.37	0.48	0.19	0.17	0.05	0.22	1.1	2500 x 1500	4000 x 2000	30/19
Pilkington <b>Suncool™</b> OW													
6 mm 70/40	0.71	0.10	0.40	0.39	0.21	0.45	0.46	0.06	0.52	1.1	2500 x 1500	4000 x 2000	71/45
6 mm 70/35	0.71	0.16	0.35	0.47	0.18	0.39	0.41	0.04	0.45	1.0	2500 x 1500	4000 x 2000	71/39
6 mm 66/33	0.67	0.17	0.34	0.47	0.19	0.37	0.39	0.04	0.43	1.0	2500 x 1500	4000 x 2000	67/37
6 mm Blue 50/27	0.51	0.20	0.26	0.46	0.28	0.29	0.30	0.03	0.33	1.1	2500 x 1500	4000 x 2000	51/29
6 mm 50/25	0.51	0.19	0.25	0.44	0.31	0.28	0.29	0.03	0.32	1.0	2500 x 1500	4000 x 2000	51/28
6 mm 40/22	0.40	0.21	0.20	0.46	0.34	0.24	0.23	0.05	0.28	1.1	2500 x 1500	4000 x 2000	40/24
Pilkington <b>Eclipse Advantage™</b>													
6 mm Clear	0.60	0.29	0.47	0.22	0.31	0.55	0.54	0.09	0.63	1.6	2500 x 1500	4000 x 2000	60/55
6 mm Blue-Green	0.51	0.21	0.31	0.13	0.56	0.37	0.36	0.07	0.43	1.6	2500 x 1500	4000 x 2000	51/37
6 mm Bronze	0.34	0.13	0.28	0.11	0.61	0.35	0.32	0.08	0.40	1.6	2500 x 1500	4000 x 2000	34/35
6 mm Grey	0.29	0.10	0.24	0.09	0.67	0.31	0.28	0.08	0.36	1.6	2500 x 1500	4000 x 2000	29/31
6 mm EverGreen	0.43	0.17	0.22	0.10	0.68	0.27	0.24	0.07	0.31	1.6	2500 x 1500	4000 x 2000	43/27
6 mm Arctic Blue	0.35	0.13	0.21	0.09	0.70	0.27	0.24	0.08	0.32	1.6	2500 x 1500	4000 x 2000	35/27
6 mm Pilkington <b>Solar-E™</b>	0.53	0.11	0.38	0.10	0.52	0.45	0.44	0.08	0.52	1.5	2500 x 1500	4000 x 2000	53/45

The above performance data has been determined in accordance with BS EN 410 and BS EN 673.

† Maximum unit sizes are for guidance only. These are not recommended for glazing sizes. For further information please consult with the processor.

For other glass combinations, cavities, gases and thicknesses please visit Pilkington Spectrum at [www.pilkington.com/spectrum](http://www.pilkington.com/spectrum)

For performance data relating to other Pilkington products please refer to our product specific literature.

**Table 2 – Performance Data Pilkington Insulight™ with 6 mm Pilkington K Glass™ Inner Pane.**

Product Description	Light		Solar Radiant Heat				Shading Coefficient			U-value (W/m²K)	Unit Maximum Sizes¹		Descriptive Code
	Transmittance	Reflectance	Direct Transmittance	Reflectance	Absorptance	Total Transmittance (g-value)	Short Wavelength	Long Wavelength	Total	Argon (90%)	Annealed (mm)	Toughened (mm)	
Pilkington <b>Insulight™</b> (with 6 mm Pilkington <b>K Glass™</b> inner pane and 16 mm 90% argon filled cavity – unless otherwise indicated)													
Pilkington <b>Optifloat™</b> Clear													
6 mm	0.73	0.17	0.55	0.15	0.30	0.68	0.63	0.15	0.78	1.5	2500 x 1500	4000 x 2000	73/68
Pilkington <b>Optiwhite™</b>													
6 mm	0.75	0.18	0.62	0.17	0.21	0.77	0.71	0.18	0.89	1.5	2500 x 1500	4000 x 2000	75/77
Pilkington <b>Optifloat™</b> Tint													
6 mm Green	0.61	0.14	0.34	0.09	0.57	0.43	0.39	0.10	0.49	1.5	2500 x 1500	4000 x 2000	61/43
6 mm Bronze	0.41	0.08	0.33	0.08	0.59	0.43	0.38	0.11	0.49	1.5	2500 x 1500	4000 x 2000	41/43
6 mm Grey	0.36	0.08	0.31	0.08	0.61	0.41	0.36	0.11	0.47	1.5	2500 x 1500	4000 x 2000	36/41
6 mm Pilkington <b>Arctic Blue™</b>	0.44	0.09	0.27	0.07	0.66	0.35	0.31	0.09	0.40	1.5	2500 x 1500	4000 x 2000	44/35
Pilkington <b>Eclipse Advantage™</b>													
6 mm Clear	0.56	0.31	0.42	0.23	0.35	0.52	0.48	0.12	0.60	1.3	2500 x 1500	4000 x 2000	56/52
6 mm Blue-Green	0.47	0.23	0.28	0.14	0.58	0.35	0.32	0.08	0.40	1.3	2500 x 1500	4000 x 2000	47/35
6 mm Bronze	0.32	0.13	0.25	0.11	0.64	0.33	0.29	0.09	0.38	1.3	2500 x 1500	4000 x 2000	32/33
6 mm Grey	0.27	0.11	0.21	0.10	0.69	0.29	0.24	0.09	0.33	1.3	2500 x 1500	4000 x 2000	27/29
6 mm EverGreen	0.40	0.18	0.19	0.10	0.71	0.26	0.22	0.08	0.30	1.3	2500 x 1500	4000 x 2000	40/26
6 mm Arctic Blue	0.33	0.14	0.19	0.09	0.72	0.25	0.22	0.07	0.29	1.3	2500 x 1500	4000 x 2000	33/25
6 mm Pilkington <b>Solar-E™</b>	0.49	0.12	0.34	0.10	0.56	0.42	0.39	0.09	0.48	1.3	2500 x 1500	4000 x 2000	49/42

The above performance data has been determined in accordance with BS EN 410 and BS EN 673.

† Maximum unit sizes are for guidance only. These are not recommended for glazing sizes. For further information please consult with the processor.

For other glass combinations, cavities, gases and thicknesses please visit Pilkington Spectrum at [www.pilkington.com/spectrum](http://www.pilkington.com/spectrum)

For performance data relating to other Pilkington products please refer to our product specific literature.

**Table 3 – Performance Data Pilkington Insulight™ Therm with Pilkington K Glass™ OW Inner Pane.**

Product Description	Light		Solar Radiant Heat				Shading Coefficient			U-value (W/m²K)	Unit Maximum Sizes¹		Descriptive Code
	Transmittance	Reflectance	Direct Transmittance	Reflectance	Absorptance	Total Transmittance (g-value)	Short Wavelength	Long Wavelength	Total	Argon (90%)	Annealed (mm)	Toughened (mm)	
Pilkington <b>Insulight™</b> Therm (with 4 mm Pilkington <b>K Glass™</b> OW inner pane and 16 mm 90% argon filled cavity)													
4 mm Pilkington <b>Optiwhite™</b>	0.78	0.18	0.72	0.18	0.10	0.79	0.83	0.08	0.91	1.5	2500 x 1500	4000 x 2000	78/79
Pilkington <b>Insulight™</b> Therm (with 6 mm Pilkington <b>K Glass™</b> OW inner pane and 16 mm 90% argon filled cavity)													
6 mm Pilkington <b>Optiwhite™</b>	0.78	0.18	0.70	0.18	0.12	0.78	0.80	0.10	0.90	1.5	2500 x 1500	4000 x 2000	78/78

The above performance data has been determined in accordance with BS EN 410 and BS EN 673.

† Maximum unit sizes are for guidance only. These are not recommended for glazing sizes. For further information please consult with the processor.

For other glass combinations, cavities, gases and thicknesses please visit Pilkington Spectrum at [www.pilkington.com/spectrum](http://www.pilkington.com/spectrum)

For performance data relating to other Pilkington products please refer to our product specific literature.

**Table 4 – Performance Data Pilkington Insulight™ with 4 mm Pilkington K Glass™ S Inner Pane.**

Pilkington K Glass™ S is the soft coat addition to the Pilkington K Glass™ range.

Product Description	Light		Solar Radiant Heat				Shading Coefficient			U-value (W/m²K)	Unit Maximum Sizes†		Descriptive Code
	Transmittance	Reflectance	Direct Transmittance	Reflectance	Absorptance	Total Transmittance (g-value)	Short Wavelength	Long Wavelength	Total		Argon (90%)	Annealed (mm)	
Pilkington Insulight™ (with 4 mm Pilkington K Glass™ S inner pane and 16 mm 90% argon filled cavity)													
Pilkington Optifloat™ Clear													
4 mm	0.80	0.12	0.60	0.20	0.20	0.71	0.70	0.12	0.82	1.2	2000 x 1200	2000 x 1500	80/71
Pilkington Optiwhite™													
4 mm	0.81	0.12	0.64	0.22	0.14	0.75	0.74	0.12	0.86	1.2	2000 x 1200	2000 x 1500	81/75
Pilkington Optifloat™ Tint													
4 mm Green	0.71	0.10	0.42	0.10	0.48	0.50	0.49	0.09	0.58	1.2	2000 x 1200	2000 x 1500	71/50
4 mm Bronze	0.54	0.08	0.41	0.12	0.47	0.50	0.47	0.10	0.57	1.2	2000 x 1200	2000 x 1500	54/50
4 mm Grey	0.50	0.07	0.40	0.12	0.48	0.48	0.47	0.09	0.55	1.2	2000 x 1200	2000 x 1500	50/48
4 mm Pilkington Arctic Blue™	0.57	0.08	0.36	0.09	0.55	0.44	0.42	0.09	0.51	1.2	2000 x 1200	2000 x 1500	57/44
Pilkington Eclipse Advantage™													
4 mm Clear	0.60	0.28	0.45	0.26	0.29	0.53	0.52	0.09	0.61	1.2	2000 x 1200	2000 x 1500	60/53
4 mm Blue-Green	0.54	0.22	0.34	0.16	0.50	0.40	0.38	0.08	0.46	1.2	2000 x 1200	2000 x 1500	54/40
4 mm Bronze	0.41	0.16	0.31	0.16	0.53	0.38	0.36	0.08	0.44	1.2	2000 x 1200	2000 x 1500	41/38
4 mm Grey	0.37	0.14	0.28	0.14	0.58	0.35	0.32	0.08	0.40	1.2	2000 x 1200	2000 x 1500	37/35
4 mm EverGreen	0.48	0.20	0.26	0.12	0.62	0.32	0.30	0.07	0.37	1.2	2000 x 1200	2000 x 1500	48/32
4 mm Arctic Blue	0.42	0.16	0.26	0.12	0.62	0.32	0.30	0.07	0.37	1.2	2000 x 1200	2000 x 1500	42/32

The above performance data has been determined in accordance with BS EN 410 and BS EN 673.

† Maximum unit sizes are for guidance only. These are not recommended for glazing sizes. For further information please consult with the processor.

For other glass combinations, cavities, gases and thicknesses please visit Pilkington Spectrum at [www.pilkington.com/spectrum](http://www.pilkington.com/spectrum)

For performance data relating to other Pilkington products please refer to our product specific literature.

**Table 5 – Performance Data Pilkington Insulight Activ™ with 6 mm Pilkington Optifloat™ Clear Inner Pane unless otherwise stated.**

Product Description	Light		Solar Radiant Heat				Shading Coefficient			U-value (W/m²K)	Unit Maximum Sizes†		Descriptive Code
	Transmittance	Reflectance	Direct Transmittance	Reflectance	Absorptance	Total Transmittance (g-value)	Short Wavelength	Long Wavelength	Total		Argon (90%)	Annealed (mm)	
Pilkington Insulight Activ™ (with 4 mm Pilkington Optifloat™ Clear inner pane and 16 mm 90% argon filled cavity)													
4 mm Pilkington Activ™ Clear	0.77	0.20	0.70	0.19	0.11	0.74	0.80	0.05	0.85	2.6	2000 x 1200	2000 x 1500	77/74
4 mm Pilkington Activ™ Neutral	0.45	0.30	0.41	0.24	0.35	0.47	0.47	0.07	0.54	2.6	2000 x 1200	2000 x 1500	45/47
4 mm Pilkington Activ™ Blue	0.53	0.18	0.39	0.15	0.46	0.45	0.45	0.07	0.52	2.6	2000 x 1200	2000 x 1500	53/45
Pilkington Insulight Activ™ (with 4 mm Pilkington K Glass™ inner pane and 16 mm 90% argon filled cavity)													
4 mm Pilkington Activ™ Clear	0.71	0.23	0.59	0.21	0.19	0.70	0.68	0.12	0.80	1.5	2000 x 1200	2000 x 1500	71/70
4 mm Pilkington Activ™ Neutral	0.42	0.31	0.35	0.25	0.40	0.43	0.40	0.09	0.49	1.5	2000 x 1200	2000 x 1500	42/43
4 mm Pilkington Activ™ Blue	0.49	0.19	0.33	0.16	0.51	0.41	0.38	0.09	0.47	1.5	2000 x 1200	2000 x 1500	49/41
Pilkington Insulight Activ™ (with 4 mm Pilkington K Glass™ S inner pane and 16 mm 90% argon filled cavity)													
4 mm Pilkington Activ™ Clear	0.75	0.17	0.57	0.25	0.17	0.67	0.66	0.11	0.77	1.2	2000 x 1200	2000 x 1500	75/67
4 mm Pilkington Activ™ Neutral	0.44	0.29	0.34	0.26	0.40	0.41	0.39	0.08	0.47	1.2	2000 x 1200	2000 x 1500	44/41
4 mm Pilkington Activ™ Blue	0.52	0.17	0.33	0.16	0.51	0.39	0.38	0.07	0.45	1.2	2000 x 1200	2000 x 1500	52/39
Pilkington Insulight Activ™ (with 6 mm Pilkington Optifloat™ Clear inner pane and 16 mm 90% argon filled cavity)													
6 mm Pilkington Activ™ Clear	0.75	0.20	0.63	0.18	0.19	0.71	0.72	0.10	0.82	2.6	2500 x 1500	4000 x 2000	75/71
6 mm Pilkington Activ™ Neutral	0.44	0.29	0.36	0.22	0.42	0.44	0.41	0.10	0.51	2.5	2500 x 1500	4000 x 2000	44/44
6 mm Pilkington Activ™ Blue	0.44	0.16	0.28	0.14	0.58	0.36	0.32	0.09	0.41	2.6	2500 x 1500	4000 x 2000	44/36
10 mm Pilkington Activ™ Blue	0.31	0.14	0.18	0.12	0.70	0.26	0.21	0.09	0.30	2.6	2500 x 1500	4000 x 2000	31/26
Pilkington Insulight Activ™ (with 6 mm Pilkington K Glass™ inner pane and 16 mm 90% argon filled cavity)													
6 mm Pilkington Activ™ Clear	0.69	0.22	0.55	0.21	0.24	0.68	0.63	0.15	0.78	1.5	2500 x 1500	4000 x 2000	69/68
6 mm Pilkington Activ™ Neutral	0.40	0.30	0.31	0.23	0.46	0.41	0.36	0.11	0.47	1.5	2500 x 1500	4000 x 2000	40/41
6 mm Pilkington Activ™ Blue	0.40	0.17	0.24	0.14	0.62	0.32	0.28	0.09	0.37	1.5	2500 x 1500	4000 x 2000	40/32
10 mm Pilkington Activ™ Blue	0.28	0.15	0.15	0.13	0.72	0.22	0.17	0.08	0.25	1.5	2500 x 1500	4000 x 2000	28/22
Pilkington Insulight Activ™ (with 6 mm Pilkington K Glass™ S inner pane and 16 mm 90% argon filled cavity)													
6 mm Pilkington Activ™ Clear	0.72	0.17	0.52	0.34	0.24	0.65	0.60	0.15	0.75	1.2	2500 x 1500	4000 x 2000	72/65
6 mm Pilkington Activ™ Neutral	0.42	0.28	0.30	0.24	0.46	0.39	0.34	0.11	0.45	1.2	2500 x 1500	4000 x 2000	42/39
6 mm Pilkington Activ™ Blue	0.42	0.15	0.24	0.14	0.62	0.31	0.28	0.08	0.36	1.2	2500 x 1500	4000 x 2000	42/31
10 mm Pilkington Activ™ Blue	0.30	0.14	0.16	0.13	0.71	0.21	0.18	0.06	0.24	1.2	2500 x 1500	4000 x 2000	30/21

The above performance data has been determined in accordance with BS EN 410 and BS EN 673.

† Maximum unit sizes are for guidance only. These are not recommended for glazing sizes. For further information please consult with the processor.

For other glass combinations, cavities, gases and thicknesses please visit Pilkington Spectrum at [www.pilkington.com/spectrum](http://www.pilkington.com/spectrum)

For performance data relating to other Pilkington products please refer to our product specific literature.

**Table 6** – Performance Data Pilkington **Insulight Activ™** incorporating Pilkington **Activ Suncool™** with 6 mm Pilkington **Optifloat™** Clear Inner Pane.

Product Description	Light		Solar Radiant Heat				Shading Coefficient			U-value (W/m <sup>2</sup> K)	Unit Maximum Sizes <sup>†</sup>		Descriptive Code
	Transmittance	Reflectance	Direct Transmittance	Reflectance	Absorptance	Total Transmittance (g-value)	Short Wavelength	Long Wavelength	Total	Argon (90%)	Annealed (mm)	Toughened (mm)	
Pilkington <b>Activ Suncool™</b>													
6 mm 70/40	0.65	0.16	0.36	0.38	0.26	0.40	0.41	0.05	0.46	1.1	2500 x 1500	4000 x 2000	65/40
6 mm 70/35	0.65	0.21	0.32	0.44	0.24	0.35	0.37	0.03	0.40	1.0	2500 x 1500	4000 x 2000	65/35
6 mm 66/33	0.61	0.21	0.31	0.44	0.25	0.34	0.36	0.03	0.39	1.0	2500 x 1500	4000 x 2000	61/34
6 mm Silver 50/30	0.47	0.42	0.27	0.52	0.21	0.30	0.31	0.03	0.34	1.0	2500 x 1500	4000 x 2000	47/30
6 mm Blue 50/27	0.47	0.24	0.23	0.39	0.38	0.27	0.27	0.04	0.31	1.1	2500 x 1500	4000 x 2000	47/27
6 mm 50/25	0.47	0.23	0.23	0.42	0.35	0.26	0.26	0.04	0.30	1.0	2500 x 1500	4000 x 2000	47/26
6 mm 40/22	0.37	0.25	0.19	0.44	0.37	0.21	0.22	0.02	0.24	1.1	2500 x 1500	4000 x 2000	37/21
6 mm 30/17	0.28	0.30	0.15	0.46	0.39	0.17	0.17	0.03	0.20	1.1	2500 x 1500	4000 x 2000	28/17

The above performance data has been determined in accordance with BS EN 410 and BS EN 673.

† Maximum unit sizes are for guidance only. These are not recommended for glazing sizes. For further information please consult with the processor.

For other glass combinations, cavities, gases and thicknesses please visit Pilkington Spectrum at [www.pilkington.com/spectrum](http://www.pilkington.com/spectrum)

For performance data relating to other Pilkington products please refer to our product specific literature.

#### General Information

##### Safety

Insulating Glass Units with Pilkington toughened glass, Pilkington **Pyroshield™** 2 Safety and Pilkington **Optilam™** laminated glass range, 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. It is the responsibility of the customer or specifier to ensure that annealed glass is thermally safe for each application.

##### Wind loading

The method of support for a glazed unit may affect its ability to resist wind loads and/or increase deflection over and above allowable limits. We recommend that this is considered when calculating glass thicknesses.

##### 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.

This publication provides only a general description of the products. Further, more detailed, information may be obtained from your local supplier of Pilkington products. It is the responsibility of the user to ensure that the use of these products is appropriate for any particular application and that such use complies with all relevant legislation, standards, codes of practice and other requirements. To the fullest extent permitted by applicable laws, Nippon Sheet Glass Co. Ltd. and its subsidiary companies disclaim all liability for any error in or omission from this publication and for all consequences of relying on it.



CE marking confirms that a product complies with its relevant harmonised European Norm.

The CE marking label for each product, including declared values, can be found at [www.pilkington.com/CE](http://www.pilkington.com/CE)



#### Pilkington United Kingdom Ltd

Prescot Road St Helens WA10 3TT United Kingdom

Telephone 01744 692000 Fax 01744 692880

[pilkington@respond.uk.com](mailto:pilkington@respond.uk.com)

[www.pilkington.co.uk](http://www.pilkington.co.uk)