



Pilkington Solar-E™



PILKINGTON
NSG Group Flat Glass Business



Pilkington Solar-E™ Glass

Pilkington, the world leader in pyrolytic coatings, has now created a family of these products with low solar heat gain coefficients (SHGC) and low reflectivity.

Experience the benefits of this hybrid coating that packages lower solar heat gain, with low reflectivity, glare control, good daylight transmittance, thermal performance, and ultraviolet control.

Pilkington Solar-E offers natural light, energy conservation, and sustainability. Solar-E can help achieve Leed or Green Certification and assist with Life Cycle Assessment.

Solar Solutions.

Introducing Pilkington Solar-E™ Glass... the world's first color-neutral pyrolytic solar control Low-E. In the world of design it is about aesthetics and choices. In the world of glass it is about delivering better performing durable and sustainable coatings faster to the market. Pilkington brings the two worlds together with Solar-E glass on clear and tinted substrates.

Pilkington introduces another breakthrough in pyrolytic solar control technology with a new Solar-E family of products. This is in response to the demand for lower solar heat gain, lower reflectivity and glare control. Pilkington has added Solar-E on a palette of natural colors - Arctic Blue, Blue-Green and Grey, to accompany Pilkington Solar-E on clear and our other lines of pyrolytic Low-E products.

The Pilkington Solar-E family provides different aesthetics and performance values with the same benefits of the hard coat technology. Pilkington Solar-E can be laminated or tempered, and needs no edge deletion for insulating glass manufacture. It has an unlimited shelf life to allow inventory for immediate fabrication. It can also have a ceramic frit and silk screen applied to the coated surface. It will not oxidize or change color over time.



View in
Reflection from
Pilkington
Solar-E™ Clear

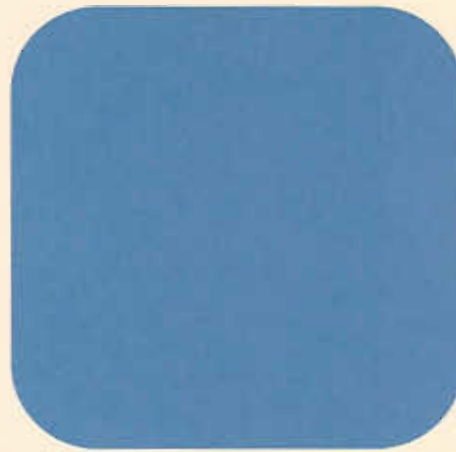
View in
Reflection from
Pilkington
Solar-E™ Arctic Blue

Performance Benefits

- A hybrid product combining solar control and Low-E in one coating
- Lowest SHGC of any pyrolytic (hard coat) family of products
- Unique aesthetics of Arctic Blue, Blue-Green, Grey and Clear
- Neutral coating
- Good daylight transmittance
- Helps control glare
- Balances low exterior and interior reflectance for better visibility
- Performance with minimal reflection
- Low UV (ultraviolet) transmittance means less fading
- Better match between vision and spandrel
- Enhanced performance when combined with Pilkington Energy Advantage™ #3 surface
- Design flexibility by using Pilkington Eclipse Advantage™ Low-E or a tint for a different shade or look on the same building.

Pyrolytic Benefits

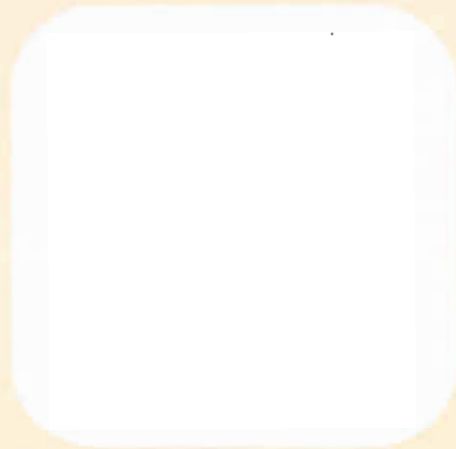
- Can be single glazed
- Handled, cut, insulated, laminated, heat-strengthened, tempered and bent using standard techniques
- Heat treatable without color shift
- Compatible with ceramic frits for spandrel & silk-screening
- Unlimited shelf life
- No edge deletion
- Inventoried locally
- Tints available in 6mm - Clear available in 3.2mm, 6mm, & 8mm
- Reducing lead times for new construction and replacements



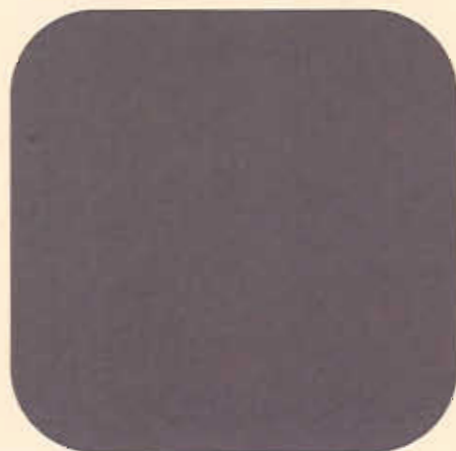
Pilkington Solar-E™ Arctic Blue



Pilkington Solar-E™ Blue-Green



Pilkington Solar-E™ Clear



Pilkington Solar-E™ Grey

Product	Nominal Glass Thickness		Visible Light ²			Total 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		
	in	mm		Outside	Inside				%	%	%		

Monolithic Glass

Pilkington Solar-E™ Solar Control Low-E Glass (#2 Surface)

Solar-E Clear	1/4	6	60	8	9	44	7	44	0.50	0.65	3.7	0.52	0.61
	5/16	8	59	8	9	42	7	41	0.50	0.64	3.7	0.51	0.59
Solar-E Grey	1/4	6	30	5	8	23	6	13	0.50	0.65	3.7	0.36	0.42
Solar-E Blue-Green	1/4	6	51	7	8	29	6	21	0.50	0.65	3.7	0.41	0.48
Solar-E Arctic Blue	1/4	6	36	6	8	20	5	13	0.50	0.65	3.7	0.33	0.39

Product	Nominal Glass Thickness		Visible Light ²			Total 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		
	in	mm		Outside	Inside				%	%	%		

Insulated Glass (Units constructed with equal glass thickness and 1/2" (12.7 mm) airspace)

Pilkington Solar-E™ Solar Control Low-E Glass Outer Lite (#2 Surface) and Optifloat™ Clear Inner Lite

Solar-E Clear	1/4	6	55	11	15	35	9	33	0.33	0.28	0.33	0.29	1.9	1.6	0.45	0.51
	5/16	8	52	10	15	32	8	29	0.33	0.28	0.33	0.29	1.8	1.5	0.43	0.49
Solar-E Grey	1/4	6	27	6	14	19	6	10	0.33	0.28	0.33	0.29	1.9	1.6	0.28	0.33
Solar-E Blue-Green	1/4	6	46	9	15	24	7	17	0.33	0.28	0.33	0.29	1.9	1.6	0.33	0.38
Solar-E Arctic Blue	1/4	6	32	7	14	17	6	10	0.33	0.28	0.33	0.29	1.9	1.6	0.26	0.30

Pilkington Solar-E™ Solar Control Low-E Glass Outer Lite (#2 Surface) and Energy Advantage™ Low-E (#3 Surface)

Solar-E Clear	1/4	6	50	12	16	32	9	26	0.30	0.24	0.31	0.26	1.7	1.4	0.43	0.49
	5/16	8	48	11	16	29	9	23	0.30	0.24	0.31	0.26	1.7	1.4	0.41	0.47
Solar-E Grey	1/4	6	25	6	15	17	7	8	0.30	0.24	0.31	0.26	1.7	1.4	0.27	0.31
Solar-E Blue-Green	1/4	6	42	9	16	22	7	13	0.30	0.24	0.31	0.26	1.7	1.4	0.31	0.36
Solar-E Arctic Blue	1/4	6	30	7	15	15	6	8	0.30	0.24	0.31	0.26	1.7	1.4	0.24	0.28

Note: Due to reproduction and printing limitations, photos may vary from actual glass colors. Please refer to glass samples from Pilkington. See Pilkington Architectural Product Guide for explanation of footnotes.



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