



Solar Control Low-e
Pilkington **Eclipse Advantage™**



Battle Creek High School
Battle Creek, Michigan

Pilkington **Eclipse Advantage™**
Arctic Blue (coating on #2 surface)
/Pilkington **Energy Advantage™**
(coating on #3 surface)



Pilkington Eclipse Advantage™

Pilkington **Eclipse Advantage™** is a pyrolytic low-emissivity coated solar control glass. It is available in a variety of natural colors to meet individual design and performance requirements.

Pilkington **Eclipse Advantage™** combines solar and thermal control with good visible light transmittance, subtle reflectivity, and glare control. The durable pyrolytic coating is applied to the glass during the manufacturing process. It can be applied to a variety of crisp, consistent colors - Clear, Grey, Bronze, Blue-Green, EverGreen and Arctic Blue.

Pilkington **Eclipse Advantage™** provides a versatile and attractive solution to all applications where a brightly colored glass is needed, with enhanced solar control performance. It is also well suited for the small refurbishment, to the large prestigious commercial development, where a high impact solution is needed.

Features and Benefits

- Low solar heat gain, which can lead to significant savings in utility costs.
- Low-e coatings reduce the emissivity of glass and lower the U-factor.
- Design flexibility with a selection of natural colors.
- Interior glare control, reducing the need for blinds and shades.
- Low UV (ultraviolet) Transmittance, which reduces results in less fading.
- Ideal for new commercial construction and replacement applications.
- High daylight transmittance reduces the need for interior lighting.

Durability of the Coating

Pyrolytic coated glass can be handled, cut, tempered, bent and fabricated into insulating glass units using standard techniques. It has a virtually unlimited shelf-life and can be single glazed, inventoried locally and edge deletion is not required. Also, ceramic frit can be applied or silk screened to the coated surface and it will not oxidize or change color over time.

Mag 214, Dubai
Pilkington **Eclipse Advantage™**
Grey (coating on #2 surface)

Cover: Michigan State Federal
Credit Union
East, Lansing, Michigan
Pilkington **Eclipse Advantage™**
EverGreen (coating on #2
surface)



Single Glass Performance Data^{1, 10}

	Nominal Glass Thickness		Visible Light ²			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* (Btu/hr. sq ft. °F)	U.S. Winter* (W/sq m K)	European**		
	in.	mm		Outside	Inside								
Pilkington Eclipse Advantage ™ (coating on #2 surface)													
Clear	1/4	6	67	25	28	58	19	30	0.53	0.67	3.7	0.62	0.72
	5/16	8	66	25	28	55	17	29	0.53	0.67	3.7	0.60	0.69
Grey	1/4	6	32	10	27	29	8	10	0.53	0.67	3.7	0.42	0.48
	5/16	8	25	8	27	22	7	7	0.53	0.67	3.7	0.37	0.42
Bronze	1/4	6	38	11	27	35	10	11	0.53	0.67	3.7	0.46	0.53
	5/16	8	31	9	26	28	8	8	0.53	0.67	3.7	0.41	0.47
Blue-Green	1/4	6	56	19	27	35	11	16	0.53	0.67	3.7	0.46	0.53
	5/16	8	53	17	27	30	10	13	0.53	0.67	3.7	0.42	0.48
EverGreen	1/4	6	48	15	27	23	8	7	0.53	0.67	3.7	0.37	0.43
	5/16	8	43	13	27	18	7	4	0.53	0.67	3.7	0.34	0.39
Arctic Blue	1/4	6	39	12	27	23	8	10	0.53	0.67	3.7	0.37	0.42
	5/16	8	32	10	27	17	7	7	0.53	0.67	3.7	0.33	0.38

Double Glass Performance Data^{1, 10}

	Nominal Glass Thickness		Visible Light ²			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*		Europe**			
	in.	mm		Outside	Inside				Air	Argon	Air	Argon	Air	Argon		
Pilkington Eclipse Advantage™ Outer Lite (coating on #2 surface) and Pilkington Optifloat™ Clear Inner Lite																
Clear	1/4	6	60	29	31	46	21	24	0.35	0.30	0.35	0.30	1.9	1.6	0.55	0.63
	5/16	8	58	29	30	42	20	21	0.34	0.30	0.34	0.30	1.9	1.6	0.53	0.60
Grey	1/4	6	29	10	29	23	9	8	0.35	0.30	0.35	0.30	1.9	1.6	0.34	0.39
	5/16	8	22	8	29	17	7	6	0.34	0.30	0.34	0.30	1.9	1.6	0.28	0.32
Bronze	1/4	6	34	13	29	28	11	9	0.35	0.30	0.35	0.30	1.9	1.6	0.38	0.44
	5/16	8	28	10	28	21	9	6	0.34	0.30	0.34	0.30	1.9	1.6	0.33	0.38
Blue-Green	1/4	6	51	21	29	29	12	13	0.35	0.30	0.35	0.30	1.9	1.6	0.38	0.44
	5/16	8	47	19	29	24	10	10	0.34	0.30	0.34	0.30	1.9	1.6	0.34	0.39
EverGreen	1/4	6	43	17	30	20	9	6	0.35	0.30	0.35	0.30	1.9	1.6	0.29	0.33
	5/16	8	38	15	29	15	8	4	0.34	0.30	0.34	0.30	1.9	1.6	0.25	0.29
Arctic Blue	1/4	6	35	13	30	19	9	9	0.35	0.30	0.35	0.30	1.9	1.6	0.29	0.33
	5/16	8	29	11	29	14	7	6	0.34	0.30	0.34	0.30	1.9	1.6	0.25	0.28
Pilkington Eclipse Advantage™ Outer Lite (coating on #2 surface) and Pilkington Energy Advantage™ Low-e Inner Lite (Coating on #4 Surface)																
Clear	1/4	6	56	30	30	41	22	19	0.25	0.23	0.27	0.24	1.6	1.4	0.51	0.58
	5/16	8	55	29	30	37	20	17	0.25	0.23	0.27	0.24	1.6	1.4	0.48	0.55
Grey	1/4	6	27	11	29	20	9	7	0.25	0.23	0.27	0.24	1.6	1.4	0.30	0.35
	5/16	8	21	8	29	15	7	5	0.25	0.23	0.27	0.24	1.6	1.4	0.25	0.29
Bronze	1/4	6	32	13	29	24	11	7	0.25	0.23	0.27	0.24	1.6	1.4	0.34	0.39
	5/16	8	26	10	28	19	9	5	0.25	0.23	0.27	0.24	1.6	1.4	0.29	0.33
Blue-Green	1/4	6	48	22	29	26	12	10	0.25	0.23	0.27	0.24	1.6	1.4	0.35	0.40
	5/16	8	44	20	29	21	11	8	0.25	0.23	0.27	0.24	1.6	1.4	0.30	0.35
EverGreen	1/4	6	40	18	30	18	9	5	0.25	0.23	0.27	0.24	1.6	1.4	0.26	0.30
	5/16	8	36	15	29	14	8	3	0.25	0.23	0.27	0.24	1.6	1.4	0.23	0.26
Arctic Blue	1/4	6	33	14	29	17	9	7	0.25	0.23	0.27	0.24	1.6	1.4	0.26	0.30
	5/16	8	27	11	29	13	7	5	0.25	0.23	0.27	0.24	1.6	1.4	0.22	0.25

See Pilkington Architectural Product Guide for explanation of references - ^{1, 10}. An insulating unit consists of two lites of equal glass thickness, containing 1/4 in. lites: 1/2 in. airspace and 1 in. overall thickness. *U.S. U-factor (Btu/hr.sq ft. °F) is based on NFRC/ASTM standards. **European U-factor (W/sq m K) is based on EN 410/673 (CEN) standard.

This publication provides only a general description of the product. 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 this product 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. Pilkington, "Eclipse Advantage," "Optifloat," and "Energy Advantage" are trademarks owned by Nippon Sheet Glass Co. Ltd, or a subsidiary thereof.



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