



Pilkington Activ™ Self-Cleaning Glass



PILKINGTON  
*First in Glass™*

# Pilkington Activ™ Self-Cleaning Glass

Now there's a revolutionary new kind of glass that actually uses the power of the sun to clean itself ... Pilkington Activ™ Self-Cleaning Glass.

Pilkington Activ™ is manufactured with the same advanced pyrolytic technology used to produce glass panels for electronic and photovoltaic solar cell applications. Applied to clear float glass via on-line chemical vapor deposition, it is an integral part of one surface of the glass, and lasts the entire life of the glass. As a result, Pilkington Activ™ uses daylight which is abundant even on cloudy days to keep windows clean with a two-step process:

1. Pilkington Activ™ actively loosens dirt, and gradually breaks down organic residue with a special PhotoActiv™ surface that uses energy from daylight.
2. When it rains, the water sheets off the Pilkington Activ™ surface, removing dust particles and inorganic dirt so windows dry without spots and streaks.

Under most conditions, natural rain is sufficient to keep the window clean. And in dry weather, a quick spray with the hose will achieve the same results. Pilkington Activ™ dramatically reduces window cleaning, providing crisp, clear views.

The proper application of Pilkington Activ™ is with the Pilkington Activ™ surface glazed to the exterior of a building (#1 surface) in either a monolithic or Insulating Glass Unit (IGU). The Pilkington Activ™ surface requires several days exposure to daylight to be activated.

When combined in an IGU with an inboard lite of Pilkington Energy Advantage™ Low-E Glass or Pilkington Solar-E™ Solar Control Low-E Glass (#3 surface); it provides the ultimate energy efficient/low maintenance package in one window.

## Product Features & Benefits

- Self Cleaning Properties
- Breaks down organic dirt
- Sheets water away
- Never needs re-treating
- Environmentally Friendly
- Color Neutral
- UV Control Properties
- Easily Fabricated
- Saves cleaning time and costs



The photocatalytic action of Pilkington Activ™ glass (upper) gradually breaks down and loosens organic dirt, while the hydrophilic surface (lower) causes rain to sheet on the glass, leaving a clean exterior with minimal spotting or streaking.



The hydrophilic action of Pilkington Activ™ glass (left) causes water to sheet rather than spot, as it does on ordinary glass (right).

Nominal Glass Thickness	Visible Light				Total Solar Energy			U-Factor						Solar Heat Gain Coefficient	Shading Coefficient
	Transmittance %	Reflectance %		Transmittance %	Reflectance %	UV Transmittance %	U.S. Summer		U.S. Winter		European				
		Outside	Inside				Air	Argon	Air	Argon	Air	Argon			
in. mm	%			%	%	%									

### Single Glazed

Pilkington Activ™ Self-Cleaning Glass (#1 Surface)

3/32	2.5	84	15	15	82	12	50	0.95	1.05	5.9	0.83	0.96
1/8	3.0	83	15	15	80	13	49	0.94	1.04	5.8	0.82	0.94
5/32	4.0	83	15	15	79	12	47	0.94	1.04	5.8	0.81	0.93
3/16	5.0	83	15	14	77	12	46	0.93	1.03	5.8	0.80	0.92
1/4	6.0	82	15	15	75	12	44	0.93	1.02	5.8	0.78	0.90

### Insulating Glass Performance Data

Pilkington Activ™ Self-Cleaning Glass Outer Lite (#1 Surface) and Optifloat™ Clear Glass Inner Lite

3/32	2.5	77	21	21	71	18	42	0.51	-	0.48	-	2.8	-	0.75	0.86
1/8	3.0	76	21	21	68	17	40	0.51	-	0.48	-	2.8	-	0.73	0.84
5/32	4.0	75	21	20	65	17	38	0.50	-	0.48	-	2.8	-	0.72	0.82
3/16	5.0	75	20	20	62	16	36	0.50	-	0.48	-	2.8	-	0.70	0.81
1/4	6.0	74	21	20	59	16	34	0.50	-	0.47	-	2.8	-	0.68	0.78

Pilkington Activ™ Self-Cleaning Glass Outer Lite (#1 Surface) and Solar-E™ Solar Control Low-E Glass Inner Lite (#3 Surface)

1/8	3.0	51	22	13	37	20	27	0.33	0.28	0.34	0.29	1.9	1.6	0.64	0.73
5/32	4.0	51	21	13	36	20	26	0.33	0.28	0.34	0.29	1.9	1.6	0.63	0.73
3/16	5.0	50	21	13	35	19	25	0.33	0.28	0.33	0.29	1.9	1.6	0.62	0.71
1/4	6.0	50	21	13	34	19	24	0.33	0.28	0.33	0.29	1.9	1.6	0.60	0.69

Pilkington Activ™ Self-Cleaning Glass Outer Lite (#1 Surface) and Energy Advantage™ Low-E Glass Inner Lite (#3 Surface)

3/32	2.5	71	23	21	59	21	34	0.33	0.28	0.34	0.29	1.9	1.6	0.70	0.81
1/8	3.0	70	24	22	56	21	31	0.33	0.28	0.33	0.29	1.9	1.6	0.68	0.78
5/32	4.0	70	23	20	54	20	31	0.33	0.28	0.33	0.29	1.9	1.6	0.67	0.77
3/16	5.0	70	23	21	53	19	30	0.33	0.28	0.33	0.29	1.9	1.6	0.66	0.76
1/4	6.0	69	23	20	51	19	27	0.33	0.28	0.33	0.29	1.9	1.6	0.64	0.74



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