



Pilkington **OptiView**[™] Anti-reflective Glass Range





Pilkington **OptiView**[™] Anti-reflective glass with transparency 2.0

Clear, neutral, transparent – these are the characteristics of glass that make it an essential part of our modern world. Glass offers protection, lets in light and forms a visually unrestricted barrier. Its transparency conveys a sense of immediacy, proximity and participation. Our new anti-reflective glass, Pilkington **OptiView**[™], raises this transparency to a whole new level by minimizing the natural reflectance of the glass. Depending on the type and structure of the glass, Pilkington **OptiView**[™] achieves an outside reflectance as low as just one percent. Its highly developed anti-reflective coating offers views from both inside and out that are clear, unobscured and virtually reflection free.



Whatever the application – shop fronts, display cases, glass extensions or windscreens in specialised transport vehicles – Pilkington **OptiView**[™] anti-reflective glass offers the crucial benefit of both transparency and neutrality.

The Pilkington **OptiView**[™] product range also includes a wide choice of different glass types. The combination of Pilkington **OptiView**[™] with other innovative functional glass types means you will always find the right glass for the intended application. For example, our extra clear low-iron Pilkington **Optiwhite**[™] combined with the antireflective Pilkington **OptiView**[™] produces a high quality glass that meets the highest standards of neutrality, transparency and purity of colour.

The right product at the right place



Pilkington **OptiView**[™] - a comprehensive anti-reflective glass range

Product	Product description			
Monolithic glass				
Pilkington OptiView [™] Protect	anti-reflective coating on both surfaces (#1+#2), on Pilkington Optifloat [™] Clear substrate, laminated			
Pilkington OptiView [™] Protect OW	anti-reflective coating on both surfaces (#1+#2), on extra clear, low-iron Pilkington Optiwhite [™] substrate, laminated			
Pilkington OptiView [™] Ultra DC	anti-reflective coating on both surfaces (#1+#2), toughenable (but does not have to be toughened)			
Pilkington OptiView [™] Ultra Protect	anti-reflective coating on both surfaces (#1+#2), laminated			
Monolithic glass with low-e properties				
Pilkington OptiView [™] Ultra Therm	anti-reflective coating on one surface (#1), a customized low-e coating on the other surface (#2)			
Pilkington OptiView [™] Ultra Therm Protect	anti-reflective coating on one surface (#1), a customized low-e coating on the other surface (#2), laminated			
Pilkington OptiView [™] Ultra Therm Pro T	anti-reflective coating on one surface (#1), a customized low-e coating on the other surface (#2), toughenable			

All Pilkington **OptiView**[™] Ultra types are on extra clear, low-iron Pilkington **Optiwhite**[™] substrate.

Glass		Total solar heat transmit- tance, g-value	Light transmit- tance	Light reflectance outside	Light reflectance inside	
[W/m ² K] (%) Monolithic glass)			
Pilkington Optiwhite [™] 4 mm	5.8	91	92	8	8	
Pilkington OptiView [™] Ultra DC 4 mm		87	98	1	1	
Laminated glass						
Pilkington Optilam [™] OW		85	91	8	8	
Pilkington OptiView [™] Protect 8,8		73	89	2	2	
Pilkington OptiView [™] Protect OW 8,8		83	93	2	2	
Pilkington OptiView [™] Ultra Protect 8,8	5.5	84	98	1	1	
Insulating glass units, DGU						
4 mm Pilkington Optifloat [™] Clear – 16 mm argon – 4 mm Pilkington Optitherm [™] S3	1.1	65	82	11	12	
4 mm Pilkington OptiView [™] Ultra Therm [*] – 16 mm argon – 4 mm Pilkington OptiView [™] Ultra Therm [*]	1.1	62	86	2	2	
Insulating glass units, TGU						
4 mm Pilkington Optitherm [™] S3 – 12 mm argon – 4 mm Pilkington Optifloat [™] Clear – 12 mm argon – 4 mm Pilkington Optitherm [™] S3	0.7	53	74	14	14	
4 mm Pilkington OptiView [™] Ultra Therm – 12 mm argon – 4 mm Pilkington OptiView [™] Ultra Therm* – 12 mm argon – 4 mm Pilkington OptiView [™] Ultra Therm*	0.7	56	80	2	3	
Solar control insulating glass units, DGU						
6 mm Pilkington Suncool [™] 70/40 – 16 mm argon – 4 mm Pilkington Optifloat [™] Clear	1.1	43	73	10	12	
6 mm Pilkington Suncool [™] 70/40 – 16 mm argon – 4 mm Pilkington OptiView [™] Ultra Therm*	1.1	44	75	5	5	
6 mm Pilkington Suncool OptiView [™] Ultra 70/40 – 16 mm argon – 4 mm Pilkington OptiView [™] Ultra Therm*	1.1	47	79	2	2	
Solar control insulating glass units, TGU						
6 mm Pilkington Suncool [™] 70/40 – 12 mm argon – 4 mm Pilkington Optifloat [™] Clear – 12 mm argon – 4 mm Pilkington Optitherm [™] S3	0.7	39	66	12	15	
6 mm Pilkington Suncool [™] 70/40 – 12 mm argon – 4 mm Pilkington OptiView [™] Ultra Therm* – 12 mm argon – 4 mm Pilkington OptiView [™] Ultra Therm*	0.7	41	70	6	5	
6 mm Pilkington Suncool OptiView [™] Ultra 70/40 – 12 mm argon – 4 mm Pilkington OptiView [™] Ultra Therm* – 12 mm argon – 4 mm Pilkington OptiView [™] Ultra Therm*	0.7	43	74	2	3	

Technical data according EN 410 and EN 673. Cavities filled with 90% of argon. DGU – double glazed insulating glass units. TGU – triple glazed insulating glass units. * The product is also available as toughenable version Pilkington **OptiView**^{**} Ultra Therm Pro T.

The right product for every application







Façades & Windows

Façades, Glass Extensions, Panoramic Windows

The feeling of being protected and yet involved is provided by the extensive use of glass. Many homeowners therefore extend their living area with a glass extension or install a panoramic window to enjoy the view.

Natural reflectance, however, is restrictive in certain lighting conditions. As evening approaches, for example, reflections from conventional glass obscure the views. Anti-reflective Pilkington **OptiView**[™] provides a clear solution for panoramic windows and glass extensions enhancing views and comfort. This innovative product also opens up a whole new world of possibilities for room design. Combined with its anti-reflective properties, the laminated safety glass, Pilkington **OptiView**[™] Protect is ideal for internal glass partitions and Pilkington **OptiView**[™] Ultra Therm will impress energy conscious homeowners with its thermal insulation properties. The heat remains inside the house, reducing heating bills while the glass provides a clear view of the outside world.

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Comparison between Pilkington **Optifloat**[™] Clear (left) and Pilkington **OptiView**[™] (right)

Shops

Shop Fronts, Showrooms

Architects and specifiers of shopping centres and commercial premises are highly aware of the importance of an all-round shopping experience that comprises modern, friendly and open architecture. Glazing ensures the maximum amount of natural light for the optimal presentation of goods and services, contributing significantly to a positive, consumer-friendly atmosphere. High-quality functional glazing is therefore an important element in modern sales promotion offering significant added value when interacting with potential customers. An attractive shop front design is the calling card of any retail business. In certain lighting conditions ordinary float glass can restrict the prospective customers' view inside, especially in large-glazed areas such as car showrooms. An anti-reflective glass is the obvious solution where an uninterrupted view of the vehicles on display from outside is essential to encourage and attract passing trade.

Pilkington **OptiView**[™], with its anti-reflective properties, allows the showroom interior to be seen at its best providing the customer with a clear, eye-catching display.

When combined with the almost 'colourless' lowiron Pilkington **Optiwhite**[™], a true representation of the products is provided. The offering is complete with the excellent safety glass – laminated Pilkington **OptiView**[™] Protect.

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Interiors

Partitions, Display Cases, Sports Facilities, Picture Frames

Glass is unique when it comes to combining design, aesthetics and functionality. Façades, panoramic glazing or floor-to-ceiling windows guarantee two-way views and remove the boundaries between inside and out – qualities that are sought after in the worlds of nature and culture. Pilkington **OptiView**[™] plays a key role in structures that demand anti-reflective properties that will enhance emotional experiences. Restaurants, spas, hotels, VIP lounges, zoos and modern sports arenas all benefit from the free, unrestricted views afforded by Pilkington **OptiView**[™] .Museums and exhibition spaces will also benefit from Pilkington **OptiView**[™]. Its transparency and neutrality maximises aesthetics while meeting complex functional requirements. As a glass for display cases or picture frames, it contributes almost unnoticeably to the pure enjoyment of art; especially in combination with the particularly neutral extra clear low-iron Pilkington **Optiwhite**™ and Pilkington **OptiView**[™] Protect, a laminated safety glass that performs under impact, minimizing the risk of injury or damage when being used in these special applications.





Vehicles

Agricultural Machinery, Construction Equipment, Transport Vehicles

Good visibility is an essential safety factor. Pilkington **OptiView**[™] is therefore ideal for windscreens in specialised transport and utility vehicles. Selecting the right type of glass should also be a key factor in the design of security-critical applications. Providing an anti-reflective window front in concierge units or guard houses affords security personnel with an unobstructed view of the outside area. The laminated safety glass Pilkington **OptiView**[™] Protect not only offers excellent safety properties, but also a clear view with no disturbing reflections.Wherever an unrestricted view can help increase safety, anti-reflective glass offers significant added value when compared to conventional glass. Areas of application include commercial spaces with an outdoor aspect that must be clearly visible from inside, for example petrol stations and control towers.









Technical Applications I

Commercial Refrigerators and Freezers

Supermarket refrigerators and freezers have become important sales and product presentation areas. Modern cooling systems with high-quality insulation glass demand energy efficiency, costeffectiveness and a pleasant customer experience. The anti-reflective glazing provided by the versatile Pilkington **OptiView**[™] product range offers the perfect solution. Customers are protected from the cold, are free to browse longer and the business has reduced running costs. Pilkington **OptiView**[™] thus makes an important all-round contribution to the economic success of the business.Antireflective glass can also be used in smaller displays such as counters in bakeries or butchers' shops. The natural ease of cleaning glass combined with an extremely low reflectance meet the very high standards of hygiene in the food sector while still providing an unrestricted view of the products on offer, whatever the lighting conditions.





Technical Applications II

Digital Signage

The fast-growing areas of digital advertising and information systems, such as large screen projections, electronic posters or information terminals (digital signage), not only make the world more colourful, but also provide information and interaction in real time. They are able to target specific consumer groups, as advertising messages can be tailored to the relevant audience depending on the time of day. Anti-reflective glass allows an unrestricted view of displays and digital content on advertising boards or monitors. In the field of digital signage the Pilkington **OptiView**[™] product range offers a comprehensive range of high performance functional glass types to meet the exacting requirements of transparency, neutrality and colour rendition in a wide range of digital applications.



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