











# Pilkington **Activ**™ provides continuous transparency



Pilkington **Activ**<sup>™</sup> has been keeping facades and buildings clean for over 15 years.

In 2017, the self-cleaning effect of the innovative functional glass was officially confirmed by the Fraunhofer Institute: Glazing with Pilkington **Activ**<sup>™</sup> stays cleaner for longer. And this pays off – for private individuals and operators of commercial buildings. The latter benefit due to the improved efficiency and aesthetics of their object, while private individuals are spared the trouble of having to clean their conservatory or skylight, and consequently have more time.







Pilkington **Activ**" has proven itself in a wide variety of applications, e.g. in the CCOI office building in Hamburg and in the Copa Ca Backum swimming pool in Herten.

# Still sparklingly clean – and now also certified by the Fraunhofer Institute according to DIN EN 1096-5:2016!

Glazing with Pilkington **Activ**™ requires significantly less cleaning. This has been evident since the self-cleaning glass was launched in 2002. The self-cleaning glass saves a lot of time and effort and thus reduces the risk of accidents, especially in roof areas that are difficult to access.

Since then, Pilkington **Activ**™ has proven itself in many different applications, including large facade projects such as the MSV Arena in Duisburg and the headquarters of the energy supplier ELE in Gelsenkirchen. But the self-cleaning glass also offers a decisive plus in comfort and safety when used in private homes, e.g. in conservatories and roofs.





Use of Pilkington **Activ**" reduces the amount of cleaning work required on the facade of the MSV Arena and the ELE administration building in Gelsenkirchen to a minimum.



#### A clean result!

The countless positive reports from satisfied users speak for themselves, with Pilkington **Activ**™, even after several years of use, reliably ensuring streakfree cleanliness. Its efficiency was confirmed in 2017 following certification according to DIN EN 1096-5:2016 by the Fraunhofer Institute. Pilkington **Activ**™ is consequently the self-cleaning glass!



#### How it works

And this is how it works: The special titanium dioxide coating on the outside of the glass reacts with the UV component in daylight and decomposes organic soiling on the glass. Due to the water-attracting property of the coating, rainwater spreads as a film on the glass surface, removing the previously dissolved dirt particles. Pilkington Activ<sup>™</sup> and alternating rain and sunshine create ideal conditions for streak-free glass cleanliness. But the self-cleaning glass also makes otherwise cumbersome window-cleaning easier during longer periods of sunshine. If dirt sticks, a simple rinse with water is usually sufficient to release it. In short:

Pilkington **Activ**™ makes cleaning roof windows and conservatories easier.

### A clean combination

Pilkington **Activ**<sup>™</sup> can be combined with other high-performance functional glass to meet increasing construction requirements in terms of thermal insulation, solar protection, safety and sound insulation. In this way, the highest

standards of design, safety, economy and comfort can be neatly implemented – both in commercial buildings and facade projects as well as in private residential construction.



# Pilkington **Activ**™

#### Make a clean choice!

#### Pilkington **Activ**™

- works around the clock even on cloudy days.
- lasts for the entire service life of a window.
- can be kept easily clean even during prolonged dry periods. Simply spraying the glass with a water hose is enough! Pilkington Activ™, in combination with other functional glass, provides heat insulation, solar protection, safety and sound insulation.
- is easy to store and can be pre-tensioned.
- is available in raw glass thicknesses of 4, 6, 8 and 10 mm.





# **Technical specifications**

| Glass structure  | Light (%)    |            | Energy (%)   |            |            |         |                                  |  |
|--|--------------|------------|--------------|------------|------------|---------|----------------------------------|--|
|  | Transmission | Reflection | Transmission | Reflection | Absorption | g-value | U <sub>g</sub> -value<br>(W/m²K) |  |
| Single Pane  |              |            |              |            |            |         |                                  |  |
| 4 mm Pilkington <b>Activ</b> ™ Clear   | 84           | 14         | 81           | 13         | 6          | 83      | 5.8                              |  |
| 5 mm Pilkington <b>Activ</b> ™ Clear   | 84           | 14         | 80           | 13         | 7          | 82      | 5.7                              |  |
| 6 mm Pilkington <b>Activ</b> ™ Clear   | 83           | 14         | 79           | 13         | 8          | 81      | 5.7                              |  |
| 8 mm Pilkington <b>Activ</b> ™ Clear   | 82           | 14         | 76           | 13         | 10         | 79      | 5.6                              |  |
| 10 mm Pilkington <b>Activ</b> ™ Clear  | 82           | 14         | 75           | 13         | 13         | 77      | 5.6                              |  |
| Insulating glass: outer pane – 16 mm Ar – 4 mm Pilkington <b>Optitherm</b> ™ S3  |              |            |              |            |            |         |                                  |  |
| 4 mm Pilkington <b>Activ</b> ™   | 76           | 17         | 54           | 31         | 16         | 61      | 1.1                              |  |
| Insulating glass: outer pane – 16 mm Ar – 4 mm Pilkington <b>Optifloat</b> ™ Clear   |              |            |              |            |            |         |                                  |  |
| 6 mm Pilkington <b>Activ Suncool</b> ™ 70/40   | 67           | 16         | 38           | 38         | 24         | 40      | 1.1                              |  |
| 6 mm Pilkington <b>Activ Suncool</b> ™ 70/35   | 67           | 21         | 34           | 44         | 22         | 35      | 1.0                              |  |
| 6 mm Pilkington <b>Activ Suncool</b> ™ 66/33   | 63           | 21         | 32           | 40         | 28         | 33      | 1.0                              |  |
| 6 mm Pilkington <b>Activ Suncool</b> ™ 50/25   | 48           | 23         | 24           | 42         | 35         | 26      | 1.0                              |  |
| Triple insulating glass: outer pane – 12 mm Ar – 4 mm Pilkington <b>Optifloat</b> ™ Clear – 12 mm Ar – 4 mm Pilkington <b>Optitherm</b> ™ S3 |              |            |              |            |            |         |                                  |  |
| 4 mm Pilkington <b>Activ Optitherm</b> ™ S3  | 68           | 22         | 41           | 35         | 24         | 47      | 0.7                              |  |
| 6 mm Pilkington <b>Activ Suncool</b> ™ 70/40   | 61           | 17         | 32           | 40         | 28         | 37      | 0.7                              |  |
| 6 mm Pilkington <b>Activ Suncool</b> ™ 70/35   | 61           | 23         | 29           | 45         | 26         | 33      | 0.7                              |  |
| 6 mm Pilkington <b>Activ Suncool</b> ™ 66/33   | 57           | 23         | 27           | 41         | 32         | 31      | 0.7                              |  |
| 6 mm Pilkington <b>Activ Suncool</b> ™ 50/25   | 43           | 24         | 20           | 42         | 37         | 24      | 0.7                              |  |

Lighting and energy values according to EN 410,  $\rm U_{g}$  values according to EN 673.

# The product range at a glance

| Function                | Product and combination   |  |  |
|-------------------------|---|--|--|
| Self-cleaning           | Pilkington <b>Activ</b> ™ monolithic, coated on one side                                |  |  |
| plus solar protection   | Pilkington <b>Activ Suncool</b> ™ monolithic, coated on both sides                      |  |  |
| plus safety             | Pilkington <b>Activ Optilam</b> ™ coated safety glass coated on the outside             |  |  |
| plus sound insulation   | Pilkington <b>Activ Optiphon</b> ™ coated soundproof safety glass coated on the outside |  |  |
| plus thermal insulation | Pilkington <b>Activ Optitherm</b> ™ monolithic, coated on both sides                    |  |  |

In addition to the combinations shown here, other multiple combinations are possible (e.g. Pilkington **Activ Optilam**™ with Pilkington **Suncool**™ coating).

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. Pilkington, "Activ", "Suncool", "Optilam", "Optiphon", "Optitherm" and "Optifloat" are trademarks owned by Nippon Sheet Glass Co. Ltd, or a subsidiary thereof.



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



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