





Pilkington **Optimirror**™ Range

1. Product description

The Pilkington **Optimirror**™ Range provides high specification mirrors that incorporate excellent protection of the silver layer without the need for copper or lead traditionally used in conventional mirror processes. The range consists of a mirror applied to different substrates.

Pilkington **Optimirror**[™] is also available with a special safety backing film to form Pilkington **Optimirror**[™] Protect. This combines the qualities of Pilkington **Optimirror**[™] with the additional benefit of impact resistance.

2. Product Range

Pilkington **Optimirror**™ is available on Pilkington **Optifloat**™ Clear in SSS, LES and jumbo packs in 3 mm, 4 mm and 6 mm thicknesses.

Pilkington **Optimirror**[™] OW is manufactured on Pilkington **Optiwhite**[™] E in 3210×2250 LES packs in 4 mm and 6 mm thickness in 2.5 tonne packs, which equates to 36 and 23 plates per pack respectively.

Pilkington **Optimirror**™ Tint is available on bronze tint in standard LES sizes in 4 mm and 6 mm thicknesses.

Pilkington **Optimirror**™ Protect is available on Pilkington **Optifloat**™ Clear in standard SSS sizes in 4 mm and 6 mm thicknesses.

Pilkington **Optimirror**[™] OW is manufactured on Pilkington **Optiwhite**[™] E in standard SSS sizes in 4 mm and 6 mm thicknesses.

3. Delivery and storage

The Pilkington **Optimirror**™ Range is normally arranged on stillages so that the painted surface of each sheet faces outwards. All sheets are separated with an interleavant powder.

The Pilkington **Optimirror**™ Range must be unloaded, stacked upright and fully supported in a safe manner. They should be stood on edge strips of wood, felt or other relatively soft material.

We recommend that the Pilkington **Optimirror**™ Range is stored in dry and well ventilated conditions and not subjected to large temperature fluctuations which may cause condensation. Glass should not be exposed to heat, aggressive materials or agents such as solvent vapours, chemicals, acids, fuel, etc.

Glass that has been stored in favourable storage conditions, in its original packing should remain in good condition for six months.

For longer storage periods, glass should be inspected and re-packed accordingly.

The Pilkington **Optimirror**™ Range is generally delivered in pack quantities and in a manner consistent with that of clear glass of similar thickness and size. The glass is marked with a printed identifier on the backing and a packing label. The backed side is self evident.

4. Handling

Care should be taken to ensure the glass is properly fastened and secured to prevent it falling and to avoid any damage. Glass should always be handled by staff that have been properly trained and equipped with appropriate handling and safety equipment.

5. Cutting

We recommend cutting and transfer tables are regularly cleaned and covered with felt in order to avoid scratches caused by small shards of glass that can damage the glass surface or backing. The Pilkington **Optimirror** Range should be scored on the glass side and not the rear side. Cutting tools should be used on the glass surface with moderate pressure to prevent the formation of shards. Only a small amount of neutral cutting oil should be used and any excess immediately removed. Care must be taken if straight edges, metal tape measures, cutting bars or cutting sticks are placed on the glass to avoid scratches.

6. Washing

We recommend Pilkington **Optimirror**[™] is washed using warm, demineralised, neutral pH water. Additives such as detergents should not be used in the water. After cleaning, Pilkington **Optimirror**[™] should be dried immediately, especially around the edges. Under no circumstances should the product be stacked whilst still wet.

7. Processing – edge grinding, polishing, mitring, bevelling and drilling (BS 952-2)

Ensure the glass edges are clean cut. When edge working, adjust the speed of the machine according to the number of grinding wheels fitted and the thickness of the glass. Avoid using overly complex shaped grinding wheels and grinding to an edge mitre bevel of less than 45°. In order to reduce the opportunity for corrosion, the quality of finish on the backed side should be smooth and free of chips.

We recommend the use of non-aggressive coolant oils (neutral pH) to prevent damage to the mirror backing. The cooling water circuit should be cleaned regularly to avoid the circulation of glass particles.

After processing, we recommend the glass is cleaned immediately with demineralised water and dry glass is stacked using spacers to protect the glass and aid in ventilation. Clean the glass immediately and preferably with demineralised water. Dry the glass and stack it using spacers for ventilation and protection.

8. Packing

When packing, carefully place the panes vertically on frames, stillages or cases so as to avoid any scratches when stacking. We recommend the use of an interleavant powder and soft spacer, such as wood, powder or paper, is placed between the glass and the use of organic products are avoided as they could streak the backing. When plastic wrapping, perforated plastic films are preferred to avoid trapping moisture. Applied films for packing are intended for short duration use and not left on for extended storage. It is essential that at all stages of packing the glass remains completely

dry. Pilkington delivery packaging is not intended for onward use. Customers must ensure that any packaging reused is fit for purpose.

9. Installing

Great care should be taken when mounting the Pilkington **Optimirror**™ Range. Contact between the mirror and hard materials such as metal, porcelain and other breakable materials should be avoided. Bushes should be used on drilled glass to avoid contact between the glass fixings. During installation and use, we recommend the mirror is only fitted to flat surfaces and avoid bending the glass out of plane.* The Pilkington **Optimirror**™ Range should be installed in compliance with current national regulations and safety standards. For some locations where impact resistant glass is used there may be a requirement to mark the finished cut size to comply with local requirements.

*Pilkington **Optimirror**[™] Protect and Pilkington **Optimirror**[™] Protect OW can be used fully framed where there is no direct support to the glass in suitable locations.

If bonding, it is the customer's responsibility to ensure that the adhesive is compatible with the backing layer on the mirror. If the adhesive supplier cannot confirm the suitability of their products, we advise that a small test area is tried to verify its long-term compatibility. We recommend that the adhesive is applied in vertical stripes and that air can circulate between the back of the mirror and the surface to which it is being applied. Pressure should be applied evenly to the mirror surface and supported on blocks until the adhesive has dried. If using adhesive tapes ensure that the adhesive is compatible with the mirror's protective coating and also apply in vertical stripes. We do not recommend the 'closing off' of the bottom edge of the mirror with sealants etc as this could create an area where moisture or water could not drain away. For further information, please consult the GGF Guide for fixing mirrors, which contains good practice and advice for application.

The Pilkington **Optimirror**™ Range is intended for internal use only. Please note that we do not provide assurance against deterioration of the Pilkington **Optimirror**™ Range when they are mounted in humid areas such as swimming pools, saunas and gyms.

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, "Optimirror", "Optimite" and "Optifloat" are trademarks owned by Nippon Sheet Glass Co. Ltd, or a subsidiary thereof.

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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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