



Pilkington **Optifloat™** Opal
Handling and Processing Guide



PILKINGTON
NSG Group Flat Glass Business

1. Product Description

Pilkington **Optifloat™** Opal is a high quality, translucent float glass that offers high transmission together with excellent privacy.

It should be borne in mind that Pilkington **Optifloat™** Opal is a comparatively high-value product and therefore, it is all the more important that its handling and processing is carried out in accordance with good glass and glazing practices.

2. Product Range

Pilkington **Optifloat™** Opal is readily available in 4mm and 6mm thicknesses and a stock size of 3210 x 2250mm. Thicknesses of 8mm, 10mm and other stock sizes are available on request.

3. Delivery & Storage

Glass should always be stored inside, in clean, dry, well-ventilated areas and away from conditions which may lead to the formation of condensation. You are advised to store the glass at temperatures above 15°C and at a maximum of 60% relative humidity. Under good storage conditions the glass can be stocked for up to four months. If the glass is stored longer than four months it should be unpacked and stored with an air gap between each pane. It should be stacked upright and fully supported in a manner which prevents the glass from sagging. It should be stood on edge strips of wood, felt or other relatively soft materials.

Like other similar processed glass products, Pilkington **Optifloat™** Opal is particularly sensitive to water marking so the avoidance of condensation is especially desirable.

As with other Pilkington glass products, the surfaces of Pilkington **Optifloat™** Opal are protected with an interleaving material that resists moisture staining and abrasions between the individual panes. In some instances paper interleaving might be used when it is more appropriate to do so.

Pilkington **Optifloat™** Opal is delivered end-capped in pack quantities and in a manner consistent with that of clear glass float in similar thickness and size.

4. Handling

Although general care should be taken when unloading, no particular precautions are necessary. It should be noted however that Pilkington **Optifloat™** Opal is more sensitive to marking than ordinary float glass, so extra care should be taken. As the processed surface is microscopically textured, it should not be marked with adhesive labels or wax crayons, nor should suction cups or metal objects be dragged across the surface. (Suction cups can be used on the processed surface, but these must be in good condition.) Protective suction cup 'boots' have been shown to minimise such marking. If the surface is to be touched then handlers should wear clean dry appropriate glass handling gloves.

5. Merchenting/Redistribution

When packing Pilkington **Optifloat™** Opal for transport stack with the processed surface outermost and protect the treated surface. A protective interleaving should be used between panes.

When securing to pallets or transit frames, ensure that strapping or other means of retention do not come into direct contact with the processed surface.

It is recommended that the product is not carried on exterior frames of delivery vehicles.

6. Cutting

Cutting tables and transfer tables must be covered with felt and cleaned regularly so as to avoid scratching caused by small shards of glass. The glass should be cut with the processed surface facing up. Care must be taken to avoid rough contact with the processed surface from metal objects or marking may result. Cutting wheel pressures and break-out settings on automatic cutting machines will be very similar for uncoated glass. If a lubricant is used, it should be of a water-soluble type and of minimal quantity.

As the glass should be processed surface up, special attention should be paid to any parts of the process which involve contact with the upper surface (e.g. rulers, templates and cutting guides) to ensure that they do not mark the glass.

It is recommended that operators wear clean dry gloves to reduce the possibility of surface contaminants.

Gloves should be clean and checked to ensure that they do not leave prints on the processed surface. It is essential that contamination of the processed surface by non-soluble cutting oil, which may be present on gloves, be avoided.

To avoid causing scratches while stacking or storing the cut product it is advisable to use spacers.

The glass should be washed immediately after cutting/processing and prior to further fabrication such as toughening or laminating.

7. Washing

The following recommendations are for washing of Pilkington **Optifloat™** Opal which apply to machine washing, hand cleaning, and spot cleaning. Under no circumstances should abrasive cleaners or strong alkalis be used on the processed surface.

Machine Washing

Standard multi-stage automatic washing machines, using hot water and detergents, are suitable for the washing of Pilkington **Optifloat™** Opal provided they are cleaned and maintained in accordance with the manufacturer's recommendations.

De-mineralised water is strongly recommended. Cleaning can be further improved by pre spraying the processed glass surface with a glass cleaning fluid. The glass should be passed through the washing machine so that the processed surface is not in contact with the rollers.

Hand Washing/Spot Cleaning

When hand cleaning, it is recommended that standard glass cleaners are used (excepting those containing solids in suspension), together with a lint-free towel, either paper or cloth. Abrasive cleaners should not be used as they may leave marks, which may only be seen under certain lighting conditions.

Using a standard glass cleaner will remove marks made by plastics and acrylics. For organic deposits, which may have been abraded onto the processed surface, use an appropriate solvent prior to normal cleaning.

Do not use a razor blade, wire wool or any other metal item to remove stubborn marks, as scratching will result.

After Pilkington **Optifloat™** Opal has been cleaned it may be considered a reasonable precaution for operatives to wear clean appropriate glass handling gloves during further handling.

8. Edge working and Beveling

Care must be taken to avoid marking the Pilkington **Optifloat™** Opal surface with the clamping pads in the presence of abrasive slurries from grinding and bevelling. Such abrasives include cerium oxide and other polishing compounds, as well as the residual slurry created during the process. Marking of the surface may be avoided by regular cleaning and maintenance of the equipment in accordance with manufacturers' recommendations. If surface marking is a risk, then it may be necessary to use a temporary protective film or masking tape to protect the Pilkington **Optifloat™** Opal surface.

Any such film or tape must be removed immediately after processing to avoid leaving a hard-to-remove adhesive residue.

9. Laminating

Pilkington **Optifloat™** Opal is suitable for lamination by either PVB or cast-in-place processes. In either case it is advisable to laminate with the processed surface outward away from the interlayer. The processed surface of Pilkington **Optifloat™** Opal will not normally be damaged by either laminating process. However, care should be taken to avoid excess interlayer material adhering to the processed surface, as this may be difficult to remove completely.

Glass pane separators used in laminating should be checked for compatibility to ensure they do not mark or otherwise leave a residue or cause scratching.

10. Toughening

Pilkington **Optifloat™** Opal should always be toughened with its processed surface uppermost and with its short edge leading into the furnace. It is imperative that all marks, traces of cutting oil and other contaminants be removed prior to toughening. Failure to do so may result in such marks being 'burnt' into the glass.

Toughening furnaces of different manufacture and different furnace models from the same manufacturer will have differing heating/quenching regimes. Therefore, as with any 'new' product, it is recommended that processors consult their furnace manufacturers to establish for Pilkington **Optifloat™** Opal which conditions for toughening are best suited to their particular plant. In general, a cycle similar to that for Pilkington Texture Glass of the same substance would be expected to produce satisfactory results.

11. Insulating Glass Units (IGU)

In an IGU, Pilkington **Optifloat™** Opal can be combined with other products from the Pilkington range to provide additional benefits such as solar control, thermal insulation, noise control, etc.

To minimise possible marking and for ease of cleaning once installed, it is recommended that the processed surface should always face the cavity (surface two or three from the outside) of an insulating glazing unit. It should also be borne in mind that the positioning of the processed surface should be consistent in each unit, especially when units are to be glazed side by side to avoid differences in appearance.

There is no requirement for edge-stripping. However, it is important to confirm that the glass is effectively cleaned and that the full sealant adhesion is developed to the processed surface. The responsibility for this rests wholly with the unit manufacturer. In any case, do not allow metal spacers to drag across the processed surface when assembling the units, otherwise scratching may result.

12. Appearance

It is the responsibility of the fabricator to carefully inspect Pilkington **Optifloat™** Opal both before and after fabrication. Glass not rejected by the fabricator during inspection prior to fabrication will be considered acceptable by Pilkington.

13. Glazing

It is the responsibility of the user to ensure that Pilkington **Optifloat™** Opal is appropriate for any application and that such application complies with all relevant local and national legislation, standards, codes of practice and other requirements. Our technical advice centre is always pleased to help.

This publication provides only a general description of the product. Further, more detailed information may be obtained from your local Pilkington Building Products supplier. 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, code 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 and "Optifloat" are trademarks of Nippon Sheet Glass Co. Ltd.

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