Pilkington Spacia™ is the brand name for the world’s first commercially available vacuum glazing. This offers similar thermal performance as conventional double glazing in only the same thickness as single glass.

The standard product is 6 mm Pilkington Spacia™ (actual thickness 6.5 mm ± 0.1 mm). There is a sandblasted version available with a reduced maximum size of 1800 × 1200.

Pilkington Spacia™ is supplied as a finished product. No further processing of any kind should be carried out with the exception of the application of an impact safety film which may be added by a third party.

Although it is possible to lead Pilkington Spacia™ this is not a service that NSG Group would undertake, and would be carried out at the customers own risk.

The key elements of the product are shown in Figure 1. The protection cap has a height of 5 mm with a 12 mm diameter, and is positioned 50 mm from any nominated corner of the glass, 50 mm from the edge. The protection cap should be glazed towards the inside of the building. If Pilkington Spacia™ is being used as a secondary glazing application, then the protection cap would be glazed to the cavity. There is a small laser-etched mark on the glass above the protection cap – this is individual to each Pilkington Spacia™ unit which allows for product traceability.

The microspacer grid ensures that the two glass panes are kept a fixed distance apart. When looking through the window from a distance of 2-3 m they become imperceptible.

It is within production tolerances to have a maximum of two missing or misplaced microspacers within a 540 mm × 540 mm square. However, it is not acceptable for a microspacer to be missing from the outer most row.

Optical inspections should be carried out in line with the guidelines set out by the GGF.

Delivery & Storage

When shipped to the customer direct from Japan, the product is packed to arrive on site in excellent condition with each pane separated by packers. Delivery cases are fitted with anti-tilt devices.

Smaller deliveries are routed via NSG Group and then delivered to either a NSG Group branch or customer on a multi drop vehicle.

Please inspect the glass upon delivery and store inside. The storage must protect the glass from direct sunlight or other sources of direct radiant heat and moisture. The area should be ventilated and not subject to major temperature changes which may cause condensation.
The storage area must be free from solvent vapours, chemicals, acids or fuel etc.

Please ensure that any packaging used for further movement is suitable to protect and contain the product.

Handling
This product comes with “as-cut” edges and relevant PPE should be worn when handling. The glass may be lifted using automatic equipment, including suckers provided they are free from contaminants. Lifting devices that clamp the glass should not be used.

As with all other glass, care should be taken to avoid breakage or edge damage, for example, glass should be stored on felt covered boards, not on hard surfaces. Glass should not be tipped onto its corner. It should be stored vertically and evenly in contact with the support surface. Stacked glass should be separated by soft pads, such as cork, which are thick enough to prevent the protection cap touching any other pane.

Washing
Glass should be cleaned before installation. Normal cleaning solutions and procedures may be used as generally recommended for glazing. A mild detergent and water solution is recommended. Do not attempt to remove the protection cap. The use of a squeegee on the surface is not recommended. If a squeegee is used then particular care must be taken to prevent dirt particles from becoming trapped under the blade and dragged across the glass. Surface contact with any metal should also be avoided.

Glazing
The product must be glazed with the protection cap towards the inside of the building, with the exception of secondary glazing when the protection cap goes to the cavity. Pilkington Spacia™ should not be butt jointed or structurally glazed. Do not use in situations where the air temperature may reach in excess of 50°C without prior consultation with your NSG Group representative.

Pilkington Spacia™ should be installed in accordance with the relevant Building Regulations, British and European standards, or, where these do not exist, with GGF standards.

Metallic or sharp tools should not be used, to avoid damage to the glass surface or frame. As with other glass types, the edge seal should be protected from water by use of either a fully bedded or drained system.

Pilkington Spacia™ is compatible with most silicone sealants with the exception of those containing Acetic Acid. Any glazing compound containing Acetic Acid should be avoided. Traditional putty may be used to glaze Pilkington Spacia™. Please discuss your requirements with your local NSG Group contact.

Where glazing pins are used, the sealant should be placed between pin and glass to prevent glass contact. The sealant used should extend to cover the outermost 10 mm of each edge of Pilkington Spacia™. i.e.

Glazing locations
Pilkington Spacia™ can be used in almost any exterior application, such as windows and conservatories. For areas requiring impact resistant characteristics, the product requires professionally installed and tested safety impact film applied before glazing. Pilkington Spacia™ is available from NSG Group with an impact tested classified film applied to both sides. When used as safety glazing for areas requiring barrier performance please contact your local NSG Group representative for further information.

Maintenance
For areas where Pilkington Spacia™ has had impact resistant films applied by a third party, then extra care should be taken when handling and cleaning the glass to avoid damaging the permanent protecting film.
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 and “Spacia” 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

Pilkington Group Limited
European Technical Centre
Hall Lane – Lathom Nr Ormskirk L40 5UF – United Kingdom
marketing.communications@nsg.com
www.pilkington.com