

## PRODUCT BRIEFING

# Renew™

### Product Description

Renew™ is a durable, coated, self-cleaning glass that requires less frequent cleaning and provides clearer vision during and after rainfall compared to ordinary float glass. It has good scratch resistance and durability and in most circumstances can be treated the same as ordinary glass.

Under normal external conditions, exposed to natural UV light and rain, the unique coating interacts with organic contaminants on the surface and increases the water sheeting action on the coated surface. This allows dirt to be washed easily from the surface and should greatly reduce the need for manual cleaning.

The coating has two important properties which, when combined, make the glass 'self-cleaning'.

- Photocatalytic - Breaking down organic dirt.  
Ultra violet radiation – always abundant during daylight hours – causes it to react chemically with unwanted dirt and organic deposits, loosening their bond with the surface of the glass. There is no need for detergents or chemicals in cleaning, except where additional cleaning may be required in unusual circumstances. The coating performs as a catalyst which means that it facilitates the cleaning action but is not consumed. Consequently, it has a considerable service life.
- Hydrophilic - Washing dirt away.  
Water spreads evenly across the surface, producing a consistent cover over the glass, preventing the formation of separate droplets and ensuring that loose particles of dust and dirt can be washed naturally from all areas of the surface during normal rainy weather.

Renew can be single glazed or incorporated into an insulating glass unit if required, with the self-cleaning coating positioned on surface #1, (the outside of the building). In applications, where required, the product may be laminated, toughened or heat strengthened.

However, it should be borne in mind that Renew is a high value product, and therefore, it is important that its handling and processing are carried out in accordance with good practice. It must be glazed following Oceania Glass' recommendations in order to obtain maximum benefit from its unique self-cleaning properties.

### Delivery and Storage

The product is a coated glass and care should, therefore, be taken whilst offloading as well as during storage to avoid damaging the surface.

### Handling

Suction cups can be used on the coated surface but these must be clean, dry and in good condition and must not slide on the surface.

Whenever the glass is being manually handled, clean cotton or cloth gloves must be used. If the glass requires some form of identification it must be placed on the non-coated surface. The coated surface must not be marked with adhesive labels, wax crayons or paint marker pens, as subsequent removal may be difficult.

## Coating Detection

Renew can be identified using a hand-held detector on the coated surface. It should be noted that a standard low E or solar control coating detector will not detect the Renew coating.

Once cut to size and processed, Renew can be identified by a hologram sticker, which is placed on the non-coated side. When glazed, the coated surface must be to the outside and the hologram to the inside.

## Washing and Cleaning

Once Renew is installed on site, care must be taken during any further construction work to avoid staining or damaging the coating. The coating must be protected from site contamination such as welding, rusty deposits, cement, plaster products or adhesives.

After building work is completed the glass should be cleaned as soon as possible to remove all traces of dust, abrasives, etc., which may have accumulated during construction.

Renew is a hard, durable coating applied to the surface during float glass manufacture, however, as with any coated glass product, care should be taken while washing to prevent damage to the coating. It is essential to ensure that no metal, e.g. cleaning equipment, comes into contact with the coated surface.

## Hand Cleaning

Refer to Oceania Glass's Cleaning instructions for Renew™.

## Repeat Orders, Colour Deviation

Production tolerances can cause colour deviations between different batches. These are minimal within a production run. In the case where glass for a project will have to be supplied over a longer period, please contact your Oceania Glass representative to ensure that the colour deviations are minimised.

## Surface Treatment

Lead, colour overlay and/or Georgian bars can generally be applied to the Renew surface. However, Renew will only retain its self-cleaning behaviour on the surface not covered by the lead, coloured overlay or Georgian bars. The recommendations in the Glazing advice above need to be followed concerning the use of silicones.

## Glazing

Where possible, a clean, dry gasket glazing system or an approved wet glazing compound must be used. The gasket should be of high quality that will minimise the leaching out of silicones from its surface.

Silicone sealants can exude oil or plasticisers containing silicones during curing, and long afterwards. These materials are very difficult to remove from the glass and coating. The presence of these materials on the Renew surface will smother the self-cleaning action, so careful consideration should be given before silicone sealant is used. There is a wet sealant available which will not leach these materials. This sealant is Soudal SMX506. The use of silicone-containing lubricants during manufacture or installation of gaskets should be avoided. Nevertheless, the Renew coating can be expected to break down the organic components of these oils and lubricants over time but it will not break down the silicone components. When glazing into frames, do not use glazing tapes that contain oil (eg. silicone and/or paraffin wax). Under no circumstances should linseed oil putty be used with Renew.

It is the fabricator's responsibility to ensure that the glazing recommendations are adhered too for each installation.

Where the glass is adjacent to new lead flashings, white carbonate run-off from the lead can stain Renew as it would ordinary glass. This should be minimised by applying Patination oil. Other flashing materials should be checked for run-off and potential subsequent staining. As with all glass, care should be taken to ensure that alkaline leach-out from concrete, etc. does not occur.

## Sealant

Silicone is the most popular wet sealant used in the glazing industry. However, the use of silicone sealants presents a problem when used with Renew™ self-cleaning glass because silicone sealants leach material onto the surface of the glass. For normal glass this will manifest a gradual build-up of dirt adjacent to the sealant, but for Renew this has undesirable consequences. This leached material coats the surface and smothers the cleaning action of Renew. This means that an area around the edge of the glass does not self-clean.

Considerable resources has been used to find sealants which are suitable to use with Renew. The process has involved extensive testing to ensure that the sealant does not interfere with the cleaning action of Renew. This process has identified several sealants, one of which is available in Australia.

Oceania Glass advises the preferred sealant for Renew™ is Soudal SMX506. Soudal SMX506 is a high quality, neutral, elastic, 1-component glazing sealant based on SMX-Polymer. Please visit their website for more information on their technical data sheets

The sealant is **Soudal SMX506** and is distributed nationally by Soudal.

Website: [www.soudal.com.au](http://www.soudal.com.au)  
Address: 1 Tollis Pl, Seven Hills, NSW 2147  
Phone number: 1300 50 70 11  
Email: [soudalinfo@soudal.com.au](mailto:soudalinfo@soudal.com.au)

## Gaskets

Gaskets are slightly more difficult to quantify as it is not only the material that needs to be considered but also the manufacturing and installation processes. Gaskets are formed by extrusion and this process requires a lubricant. A lubricant is also used sometimes during installation of the gasket to the frame. If the manufacturing or installation process for the gasket uses a lubricant which contains silicone, then the gasket will not be compatible with Renew.

EDPM or Vinyl are the most common materials used for gaskets and are materials that are compatible with Renew. However, this compatibility will be compromised by the use of any lubricants which contain silicone.

## Glazing Tapes

Compatible products are:

- Tremco Butyl Tape
- Tremco Polyshim Tape

## Further information

For more information about technical information call **1800 810 403**.  
Visit our website for more information at [www.oceaniaglass.com.au](http://www.oceaniaglass.com.au).