



## PANEL FITTING GUIDE

### Introduction

This guide includes information to help with the installation of Verranova glass panels. It is not intended to be a definitive guide to fixing glass Panels. We recommend all our panels are fitted by a professional installer who is experienced with the installation of glass panels.

**This guide is for glass panels only. If you have purchased Verranova glass tiles, please refer to our Verranova Tiling Guide.**

Verranova panels are made of low iron toughened glass. Prior to installation, please ensure the panels purchased are suitable for the application and thoroughly inspected. Ensure your fitter is aware of the expected finish of the panels. If applicable, dry lay an area in suitable light as a final check before installation. For further information or if any doubt exists, please contact us at [verranova@reyco.co.uk](mailto:verranova@reyco.co.uk) for advice prior to commencing any tiling.

We have tested our recommended range of adhesive and grouts to ensure compatibility with all of our glass.

### Disclaimer

The specifications and technical information given in this publication are intended for guidance and although they are to the best of our knowledge correct, they are given without warranty.

We cannot accept any responsibility for reliance placed upon the advice contained herein since practical expertise and site conditions are outside of our control. Neither do we accept liability for the performance of the product arising from such use. This does not affect your statutory rights.

## Suitability

Verranova glass panels are suitable for internal walls in both wet and dry areas.

They are not suitable for:

- use as worktops, as they are susceptible to scratching.
- for floors
- external use
- for installation in submerged conditions such as swimming pools or fish tanks

### Wet areas

When fixing glass panels in wet areas the walls must be fully waterproofed (tanked) prior to fitting. Most adhesive companies supply waterproofing systems that may be purchased from tile dealerships. Mapei and Ardex both supply waterproofing kits – see section below on Tanking.

### Heat sources

Unless heat resistant glass has been specified, always ensure that the panels are a minimum of 3cm from any heat source and if behind a hob do not let hot pans touch the glass surface. This is to avoid cracking.

### Scratching

Glass panels are subject to scratching and only finely sanded or un-sanded grouts should be used. See Grouting section below.

### Weight

Make sure that the wall substrate is able to take the weight of your panels and adhesive. Add 3.5kg/m<sup>2</sup> or 6.4 lb/yd<sup>2</sup> for the weight of the adhesive panel weight in kg/m<sup>2</sup> or lb/yd<sup>2</sup> and compare to the weights that the substrate will support:

Substrate	Weight per m <sup>2</sup>	Weight per yd <sup>2</sup>
Gypsum Plaster	20kg max	37lb max
Gypsum Plaster board direct	32kg max	59lb max
Sand cement render	40kg max	74lb max
Tile backer boards (polystyrene foam with cement base lattice outer)	40kg max	74lb max
Glass reinforced cement sheets	50kg max	92lb max

## **Colour and shade variation**

As panels are individually coloured, there may be distinctive yet subtle variations in shade, especially between batches. This is an inherent feature of our panels. We strongly recommend that you buy all the panels you need for your project at one time. Decorative panels are made individually and therefore unique.

### **Please note**

It is the purchaser responsibility:

to check the panels by laying them out and viewing them prior to installation. Please be advised that installation constitutes acceptance of the quality, colour, texture, shade and size of the panels. This applies even if the home owner is not present during the installation process

To store products in an adequate, clean, dry and secure space that is free from frost and moisture

To ensure that installation is carried out in adequate artificial lighting conditions

To ensure that work is adequately protected during and after fixing

## **Templating**

All required panels should be templated using accurate measuring tools (including laser levels if possible) to allow for a proper fitting of the final glass product.

Standard tolerance gaps between panels would normally be around 3mm..

Tolerance must be included for any panel that fits up to another panel at a 90 degree turn..

A hard template or a digital (DFX) template can be supplied for manufacture, the hard template should be rigid and be made from at least 6mm ply or other hard material (MDF is not suitable due to damage on corners) Templates are to be clearly marked with your name and the invoice reference number.

## Planning

### Surface preparation

Panels can be fixed to most walls. The surface must be properly prepared, suitably level, sound, clean, dry, and free of dust, grease or any loose material.

All surfaces must be completely secure without any obvious deflection and capable of carrying the additional load.

Special care must be taken when tiling areas which may become damp or wet.

### Wet rooms and showers

Glass panels can be used in showers provided you take certain precautions in preparing the surfaces and use the correct adhesive and grout/silicone.

It is vitally important to prepare all substrates in any area subject to frequent water (such as around a bath, basin or shower) carefully to protect them from water reaching the back of the glass panel. The best substrates are normally water resistant boards such as Wedi. The underlying surface must be waterproofed first, using a waterproofing kit known as a tanking system (see below), to prevent the ingress of water into the substrate. There must also be sufficient falls for water to drain away.

## Tanking Systems

We recommend using a tanking system for power showers, shower cubicles, steam rooms and wet rooms in hotels, guest houses, leisure centers, fitness centers and in domestic homes. These normally consist of a primer, a liquid waterproofing membrane that you brush onto the wall and floor, and a tape for reinforcing all internal corners. Please refer to specific manufacturer instructions or, preferably, get a professional to do this job. Tanking a previously painted surface is not recommended. You can usually apply the adhesive 24 hours after the wall is waterproofed.

For steam rooms and saunas use epoxy adhesives and grouts.

**We recommend that all waterproofing processes are carried out by a professional.**

## Fitting

Verranova glass panels are made of low iron toughened glass. Please handle toughened glass with care. Improper lifting of larger panels can cause issues. Careless handling and improper installations will sometimes cause edge damage. Delayed fracturing can occur when edge-damaged toughened glass is subjected to mechanical stress, as in installation.

If cut, knocked or dropped, this material will produce instantaneous total fragmentation. Do not under any circumstances attempt to alter, cut or drill a toughened glass panel as it will cause that panel to break beyond repair and a replacement panel will be required.

The glass panels should be fitted on a clean, level and primed surface using a low modulus, neutral cure silicone adhesive (Such as Dow corning 799). Silicone adhesive should always be applied in accordance with the manufacturer's instructions on the silicone tube.

Panels should NEVER be joined against each other or against another surface as they require expansion gaps.

Install with a 3mm gap minimum between panels and between panel and other hard surfaces .

The gaps may be filled with a low modulus, neutral cure silicone to form an expansion joint. Do not seal around the panels for 24 hours to allow the silicone to fully air cure

Alternatively, for smaller panels, you can use adhesives and grout.

## Adhesives

For fixing smaller glass panels we recommend a thin-set white cement based, latex modified adhesive type such as Mapei Keraquick with Latex Plus (C2 S2) or an epoxy (R2) type in white such as Mapei Kerapoxy or Kerapoxy Design. In the USA Laticrete Platinum 254 in white with the use of a latex additive is a suitable option.

We do not recommend the use of cement based adhesives mixed with water as this forms alkalis which may attack some of the glass panel backings.

For steam rooms and saunas use an epoxy adhesive and grout.

Be careful when selecting modified cement based adhesives for fixing glass panels as they may form very strong alkalis when mixed with water. The alkalis may attack some of the glass panel backings. If you mix appropriate cement based adhesives with latex instead of water alkali formation is limited and the likely hood of attacking the glass backing is minimised.

## Applying the Adhesive

Spread adhesive over as much of the wall as you can work on, within about 15 minutes; approximately one square meter /one square yard is usually about right.

Spread an even layer about 4 to 6 mm thick using a notched trowel to form parallel lines. Work to the lines you have drawn on the walls for center points and level lines and then begin to apply the panels. **Back butter the glass panel with 1 to 2 mm of adhesive before placing into the ribbed adhesive on the wall.**

This will improve adhesion and reduce the possibility of the ribs in the adhesive on the wall showing through the glass panels.

Place the first whole panel into the ribbed adhesive on the wall and press down firmly. Check the first panel is straight and level. Now lay the adjacent tiles in the same way, using spacers to create an even joint between them.

Be careful to keep adhesive off the face of the tiles. Wipe away any surplus with a clean damp sponge as you go.

Spacers that have been used during the fixing process must be removed from the joints before the adhesive setting time is reached.

Where the wall panels meet the floor, a neater finish will be achieved if the wall panels sit over the floor tiles. Fill the gap between the wall and the floor with silicone.

Where there is any chance of movement from the substrate it is important to use a flexible adhesive (C2 S2) type. This will accommodate for tiny movements and will reduce the possibility of the glass panels and grout from cracking. All changes of plane will require expansion joints. In addition, where the glass meets different materials such as shower bases the joint must be also filled with silicone. Always seek professional advice.

Adhesive is available as standard set or rapid set. Standard set can take up to 24 hours to go off, whereas rapid set can take up to two hours depending on the thickness and temperature and humidity conditions.

## Grouts

For grouting our glass panels, we recommend un-sanded or finely sanded grouts such as Mapei Keracolor SF or FF to reduce the possibility of scratching. Whichever grout is chosen always try it on an inconspicuous area before grouting to ensure it does not scratch the tile.

Kerapoxy and Kerapoxy Design are both an adhesive and grout (one step method).

For steam rooms and saunas use an epoxy adhesive and grout.

Mapei grouts such as Keracolor SF or FF are suitable as are most epoxy grouts

### **For wet conditions**

In wet conditions the substrate must be fully water proofed (tanked) prior to fitting. Both Mapei and Ardex supply products for tanking.

Always test a small inconspicuous area before proceeding. Always follow manufacturers' instructions. Use the utmost care when grouting to preserve the beauty of your panels.

Always allow a 2-3mm grout gap to accommodate for the thermal expansion difference between the glass panel and the substrate.

At wall-to-wall and ceiling-to-wall and floor-to-wall interfaces, leave a 6mm gap and fill with a low modulus neutral cure silicone.

Colour matching grouts are available.

### **Cleaning**

Wash down glass panel surfaces with either clean water or a neutral (i.e. not acidic or alkaline) detergent. Dry off and polish with a dry, clean cloth. A neutral (pH7) window cleaning spray is suitable. Do not use anything abrasive such as cleaners or pads as they will scratch the surface of the glass.

Certain acid based cleaning products may cause some of the panels to react and change in character.



## **Photography**

Images of the tiles are for illustrative purpose only. There may be slight variations between the tile colours shown on our and that of the actual tiles due to difference in computer display and variation in studio lighting . Samples of glass tiles may be obtained for viewing before purchase.

## **Limits of Liability**

Before making your choice it is always advisable to order a sample or at least see a tile at one of our representative showroom or in our workshop by appointment.

Reyco LLP. accepts no liability for the faulty installation of its panels.

Panels must be inspected prior to installation and claims cannot be considered after the panels have been installed. Please be advised that installation constitutes acceptance of the quality, colour, texture, shade and size of tiles.

Please refer to our Terms and Conditions for full details.