

# Installation Guidance note: Onyx FR

## Section 1 – General Guidance

### General information

#### **Description**

Onyx FR is a calendared PVC wall covering designed for use in sanitary facilities and individual or collective shower areas.

#### **Installation Options**

Onyx can be installed vertically or horizontally, depending on pattern selection and site conditions/requirements.

*Note: pattern references 23556 Nordic Grass and 23555 Nordic Forest Winter must be installed horizontally only.*

*A plain white Frieze, pattern number 23557 (20m x 49cm wide), is available for use with these designs.*

The installation guidance for Onyx FR is formed of four sections: section 2 covers Horizontal installation, section 3 - vertical installation and section 4 - adhesives, tools and installation accessories.

Before starting work, check which type of installation is most suitable or has been specified and refer to the applicable guidance section.

The information in this section and section 4 applies to both horizontal and vertical installation.

#### **Site conditions and works**

The product must be installed at room temperature, between 18 and 27°C. The relative humidity in the room should be between 30% and 60%.

All substrates must be smooth, sound, clean, permanently dry and free of cracks and contaminants. The substrate must also be free of any obstructions which could hamper installation of the wall covering.

It is important to check that walls are suitably even and corners plumb and square. Where corners do not meet these conditions it will be necessary to form a seam near the corner – see sections 2 and 3.

Pipe work projecting from walls must be at least 60mm from walls and/or corners. The distance between adjacent pipes must be at least 400mm. Projecting pipes must be properly fixed in place so that the required seal can be made between pipes and wall covering.

Where there are holes for pipes/fittings, there must be no gaps between the hole and pipe/fitting. This is essential for an effective, lasting seal after the wall covering has been installed. Any gaps must be filled and sealed.

#### **Suspended ceiling detail**

If the wall covering is being installed in rooms with suspended ceilings, it should be installed prior to the ceiling. Any supporting details such as ceiling edge frames should be installed after and fixed through the wall covering. The wall covering should extend at least 100mm past the height of the ceiling and the top edge sealed with a suitable water proof sanitary sealant.

### Acclimatisation

Remove the outer packaging and loosen the outer layers of the sheet.

Store the rolls vertically and allow to acclimatise in the laying area for at least 24 hours.

This should be extended to 48 hours if materials have been stored or transported at temperatures less than 10°C immediately prior to delivery.

### Wall Surface Preparation

If the substrate has been painted or has other strong pigments on its surface these must be removed.

If the surface of the substrate requires filling, use suitable wall grade filler.

*Note: two-component fillers may cause discoloration if mixed incorrectly or insufficiently.*

Remove all dust and loose particles.

Absorbent substrates must be primed in accordance with the adhesive manufacturer's recommendations.

Use only a lead pencil for marking.

*Note: any markings made by marker pens, marker dyes or paints, ballpoints etc. may cause discoloration of the wall covering through migration.*

### Internal corners

Forbo recommend that pre-formed PVC cove formers (Quantum Profile ECF4) are used on all internal corners.

This will provide the optimum hygienic installation and facilitate a smooth transition of the wall covering through the corner.



ECF4 Cove Former

### External Corners

Fitting of the wall covering around sharp external corners will be made easier with the use of an external PVC corner profile (Quantum Profile EFA75).

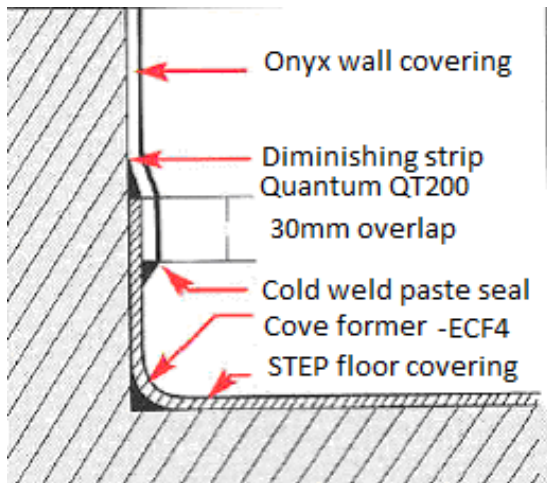


ECF4 Cove Former

EFA 75 Corner Profile

### Wall to floor covering detail

If the wall covering is to be installed to meet a floor covering with a site formed coved skirting a PVC 2mm diminishing strip (Quantum Profiles QT200) must be fitted directly above the top edge of the skirting as below:



### Material batching

If using material from more than one roll of wall covering, check carefully that they all have the same batch/serial number. Rolls should be used in numerical order.

### Working temperature

Before installing the product, you must ensure that the wall covering, the adhesive and the substrate are all at room temperature, i.e. at least 18°C.

The relative humidity should be between 30% and 60%.

### Adhesives

The recommended adhesive type for Onyx FR is a plasticizer-resistant, acrylic based dispersion or pressure sensitive adhesive. This adhesive is to be used for all bonded areas, including, overlaps and internal corners where cove former is used.

External corners and internal corners without cove former must be adhered using a solvent free contact adhesive.

See section 4 for specific adhesive recommendations.

*Note: solvent based contact adhesives must not be used due to the risk of discolouration.*

### Adhesive application

Follow the adhesive manufacturer's recommendations. The waiting time before placing the wall covering into the adhesive will depend on factors such as the type of substrate, its absorbency, and the temperature and relative humidity in the room.

Apply the adhesive to the wall with the appropriate notched trowel.

If the adhesive type allows, rolling the applied adhesive with a **pre-wetted** roller after application will help to eliminate trowel marks.

Apply the adhesive with a brush to areas that cannot be accessed with a notched trowel ensuring sufficient adhesive application.

*Note: all adhesives must be applied at the correct spread rate in accordance with manufacturer's recommendations.*

### **Seam welding**

When cutting material for seams, be careful not to damage the substrate. Extra care is needed for plasterboard substrates.

Seams in Onyx must always be hot-welded using a PVC welding rod. The edges of the two sheets must be butt jointed, flush, and grooved before welding, to a depth of three-quarters of the thickness of the material. Use a 'P' Type groover, not a shave hook.

Use a speed welding nozzle for wall coverings to reduce the risk of affecting the product gloss near the weld.

When the weld has cooled, trim it in two stages: first with a spatula and slide, and then using the spatula only. Grooving and welding should not be carried out until the adhesive has set.

The time needed for the adhesive to set will depend on ventilation, temperature and substrate absorbency.

For absorbent surfaces, wait at least 24 hours. For non-absorbent surfaces, wait at least 48 hours after installation of the wall covering.

### **Please Note**

Before the room can be used it is very important that the adhesive is given adequate time to dry before a wet wall covering is exposed to water spray.

### **Drying Time**

If the substrate is non-absorbent (all or parts of a wall), allow approximately 7 days drying time.

If the substrate is absorbent, e.g. plasterboard, and the wall covering overlaps the floor covering on the wall, approximately 2 days drying time is sufficient.

### **Cleaning and General Care**

Use any of the conventional cleaning methods suitable for vinyl wall coverings.

Onyx has good stain resistance. However, all staining materials should be removed immediately. Certain materials (ballpoint ink, lipstick, asphalt etc.) may otherwise migrate into the vinyl and cause permanent staining. Marking on the substrate or on the backing of the product with marker pens, marker dyes or paints, ballpoint ink etc. may cause discoloration.

Unacceptable levels of dampness in the substrate, mould, central heating pipes with temperatures in excess of 27°C and impurities in the substrate such as oils, impregnating agents, asphalt, paint or other alien substances, may cause discoloration. Certain drainage hoses and rubber cables used on washing machines, printed plastic bags and squeegees may cause discoloration when in contact with wall covering.

### Horizontal Installation

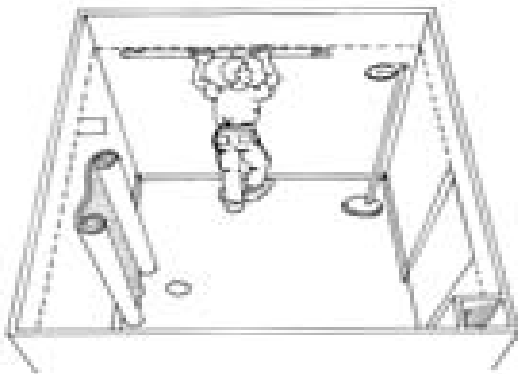
#### **Main wall area**

On the wall mark out a horizontal maximum height line at 207cm. The wall covering must not be installed higher than this line. If it is, the overlap onto the floor covering coved skirting will be too short (7cm from the floor)

Measure the circumference of the room, and make a guide mark on the maximum height line half way around the circumference (or at some other suitable starting place).

Cut the wall covering to length, and roll the cut length of wall covering onto a section of plastic pipe or similar support (purpose made roll supports are available) with its wall side outermost. Roll up to halfway along the cut piece.

Roll the remaining length of wall covering onto another support as above, right up to the guide mark. The wall covering rolled on the supports will now resemble a scroll.



Make a guide mark on what will be the uppermost edge of wall covering (corresponding to the midpoint of the roll length or at the suitable starting place, as appropriate).

Check that the adjacent walls are acceptably plumb and flat. If they are not the wall covering will need to be trimmed and a vertical seam formed and hot welded with matching weld rod. See hot weld section for instructions.

Vertical seams should be planned ahead so that they are not within a metre of the wet zone (see below).



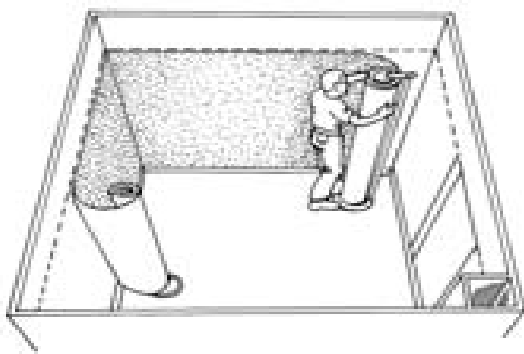
Seams should be overlapped and cut to form a close butt seam.



Apply adhesive right up to the horizontal line. See guidance above and the adhesive manufacturer's instructions for application, use and drying times.

Line up the rolls of wall covering close to the wall, so that they are correctly aligned with both the horizontal top line and the starting point guide marks.

Apply the rolls of wall covering, one at a time, to the adhesive on the wall, ending at the door. Use a suitable tool, such as a rubbing board, to press the wall covering into the adhesive, to expel all the air.



Starting from the centre of the cut length, work upwards and downwards. Make sure that the tool you choose for smoothing out the wall covering does not damage it. Heat should not be used when working with the wall covering except for external corners.

### External corners

Apply a solvent free contact adhesive to the back of the wall covering as well as the wall, to 10cm either side of the corner. Follow the adhesive manufacturer's instructions for application, use and drying times.

When working around external corners, make sure any seams are at least 100mm from the corner. Fit the wall covering to one face of the corner at a time. **Gently** warm the wall covering with hot air just before and while it is being pressed into the adhesive. This allows it to be formed into a "sharp" (straight) edge. Fit the wall covering to first face of the external corner and roll with a suitable wall roller as above. Wrap the wall covering around the second face of the corner and roll well with a suitable wall roller.

Fitting of the wall covering around sharp external corners will be made easier with the use of an external PVC corner profile (Quantum profiles reference EFA75) Note: if the edge of the corner profile does not finish flush with the wall surface use a suitable filler or 1mm diminishing strip to feather out the transition.

Starting from the centre of the cut length, work upwards and downwards. Make sure that the tool you choose for smoothing out the wall covering does not damage it.

**N.B.** Always press the wall covering into the adhesive working upwards and downwards, pressing the material along its length can cause stretching of the wall covering.

### **Wall to floor covering overlap**

Where the floor covering extends up the wall, the bottom of the wall covering needs to overlap it by about 30mm. This portion of wall covering should be adhered as before. It is important to apply sufficient adhesive, and to press and smooth the wall covering thoroughly.

### **Rolling**

After pressing and expelling any air pockets, roll the entire surface of the wall covering thoroughly with a suitable wall roller.



Trim the wall covering if necessary where it overlaps the flooring coved skirting taking care not to damage the floor covering. Roll overlaps and seams with a seam roller.



Clean off any residues of adhesive immediately. Use clean water.

Seal the bottom edge of the wall covering overlap with a cold weld paste.

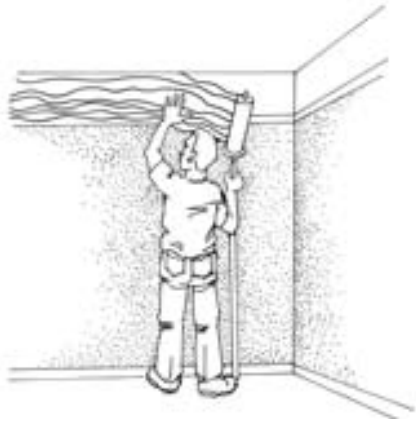
### **Wall frieze**

Where the ceiling height exceeds that of the wall covering width, a filler piece of material (frieze) will be required. When measuring/cutting the piece, ensure that a 30mm overlap onto the main wall covering is allowed for. On the main wall covering, mark out a line 30mm from the top edge of the wall covering.

Either use a suitable wall grade filler to form a smooth transition between the exposed top edge of the main wall covering and the wall surface or fit a 1mm PVC diminishing strip.

Apply adhesive to the wall. Make sure that the adhesive extends over the filler or diminishing strip to the line which denotes the 30mm overlap onto the main wall covering.

Install the filler piece as before, observing the marked lines.



Starting from the centre, use a suitable tool to press the wall covering into the adhesive to expel all the air. Make sure that the tool you choose for smoothing out the wall covering does not damage it

**N.B.** Always press the wall covering into the adhesive working upwards and downwards, pressing the material along its length can cause stretching of the wall covering.

Roll the frieze with a wall roller and a seam roller for the overlap. Check the application of the adhesive between the filler piece and the main wall covering.

Clean off any residues of adhesive immediately. Use clean water.

Seal the bottom edge of the frieze overlap with a cold weld paste.

### **Finishing & Inspection**

Finish by inspecting the work carefully. Make sure the wall covering is free of adhesive residues and that there are no air bubbles or blisters

Clean off any residues of adhesive immediately. Use clean water.

Any holes made for pipes must be sealed with a suitable sanitary sealant that is resistant to fungus and mould.

Abutments to features such as architraves, sanitary fixings or furniture should also be sealed with a suitable sanitary sealant that is resistance to fungus and mould.



#### **Vertical Installation**

Measure the perimeter walls and plan the starting point of the wallcovering installation so that any seams are not nearer the 100mm to a corner.

Cut the first sheet to length. Where the floor covering extends up the wall, the bottom of the wall covering needs to overlap it by about 3cm.

Mark a vertical plumb line on the wall at the chosen starting point and fit the first length of wall covering to this line.

Use a suitable tool, such as a rubbing board, to press the wall covering into the adhesive, to expel all the air. Starting from the centre of the cut length, work upwards and downwards. Make sure that the tool you choose for smoothing out the wall covering does not damage it.

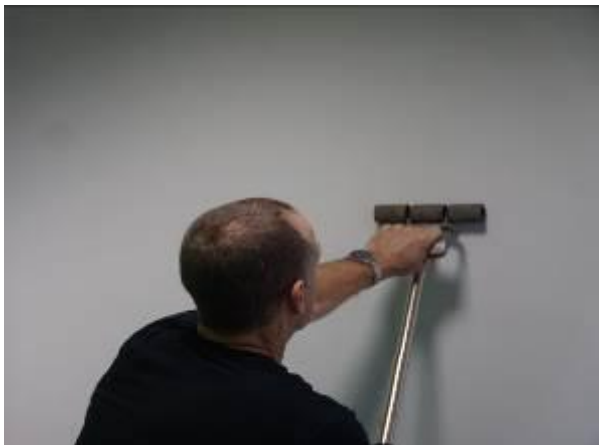
Trim the wall covering where it meets the ceiling and other abutments in the room such as architraves.

#### **Wall to floor covering overlap**

Where the floor covering extends up the wall, the bottom of the wall covering needs to overlap it by about 30mm. This portion of wall covering should be adhered as before. It is important to apply sufficient adhesive, and to press and smooth the wall covering thoroughly - see section one for overlap detail.

#### **Rolling**

After pressing and expelling any air pockets, roll the entire surface of the wall covering thoroughly with a suitable wall roller.



Trim the wall covering if necessary where it overlaps the flooring covered skirting taking care not to damage the floor covering. Roll overlaps and seams with a seam roller.



Clean off any residues of adhesive immediately. Use clean water.

### Forming Seams

Repeat the above process for each subsequent length of wall covering. Each sheet should be overlapped and cut to form a close butt seam.



### External Corners

Check that adjacent walls are acceptably vertical and flat. If they are not, any misalignment can be corrected by cutting and welding the product near the corner.

**N.B.** Wherever possible, any joints should be positioned away from the wet zone.

Apply a solvent free contact adhesive to the back of the wall covering as well as the wall, to 100mm either side of the corner. Follow the adhesive manufacturer's instructions for application, use and drying times.

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Wrap the wall covering around the second face of the corner and roll well with a suitable wall roller.

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When the weld has cooled, trim it in two stages: first with a spatula and slide, and then using the spatula only.

Grooving and welding should not be carried out until the adhesive has set. The time needed for it to set will depend on ventilation, temperature and substrate absorbency. For absorbent surfaces, wait at least 24 hours and for non-absorbent surfaces, wait at least 48 hours after installation of the wall covering.

**Sealing of wall covering to floor covering overlap**

When the wallcovering installation is complete seal the bottom edge of the wall covering where it meets the floor covering with a cold weld paste.

**Finishing & Inspection**

Finish by inspecting the work carefully. Make sure the wall covering is free of adhesive residues and that there are no air bubbles or blisters

Clean off any residues of adhesive immediately. Use clean water.

Any holes made for pipes must be sealed with a suitable sanitary sealant that is resistant to fungus and mould.

Abutments to features such as architraves, sanitary fixings or furniture should also be sealed with a suitable sanitary sealant that is resistance to fungus and mould.

## Installation Guidance note: Onyx FR Section 4 – Tools, adhesives & accessories (Part 4 of 4)

**Recommended Adhesives:** F Ball & Co: Email: [mail@f-ball.co.uk](mailto:mail@f-ball.co.uk) ; Website: <http://www.f-ball.co.uk>



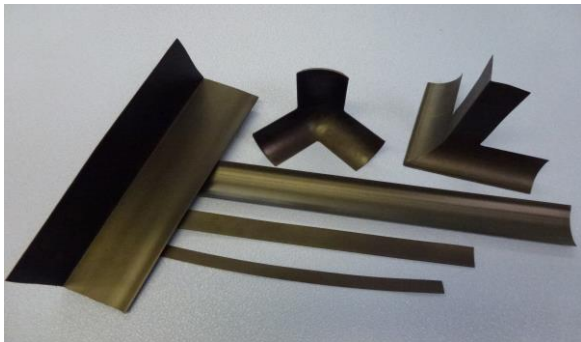
Wall covering adhesive: **F47**



Solvent Free contact adhesive: **F66**

**Cold weld paste** (Werner Muller Type C) - Janser UK - Tel 0121 5615888; Web: [www.janser-uk.co.uk](http://www.janser-uk.co.uk)

**PVC Accessories:** Quantum Profiles Ltd: Tel:0161 627 4333; Email: [info@quantumflooring.co.uk](mailto:info@quantumflooring.co.uk);  
Web: [www.quantumflooring.co.uk](http://www.quantumflooring.co.uk)



Internal Corner - CCTM1; External corner – CCFM2  
Cove Former – QCF35; 1mm Diminishing strip – QT100;  
2mm diminishing strip – QT200; Corner Profile EFA75

**Tools:** Janser UK - Tel 0121 5615888; Web: [www.janser-uk.co.uk](http://www.janser-uk.co.uk)



Speed Weld Nozzle for wall coverings



Corner Roller