

CONCRETE PANEL INSTALLATION GUIDE

VTEC



PANEL INSTALLATION

In this Installation Guide, we take you through step-by-step the simple process of fitting the Texture Panels and other information you need to be aware of when installing.

UNLOADING

When unloading the panels from the pallet (which requires 2 persons) you may notice small 'cracking' noises – this is perfectly normal as the panels flex and is of no concern.

Normally panels are easier to handle when carried vertically, but if they are carried flat, try to ensure the persons carrying them hold them either side of the corners, on vertical corners.

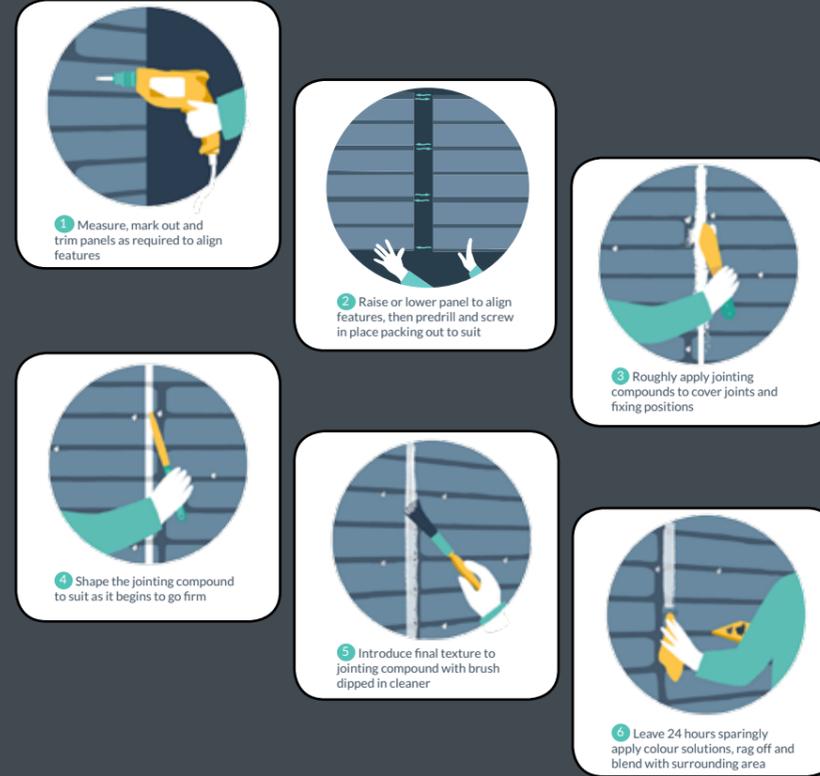
STORAGE

Store panels horizontally and unwrap, ideally 48 hours prior to installation.

SAFETY

Always wear the correct protective clothing such as gloves, goggles, dust mask etc appropriate to your task and the general situation.

It is the installer's responsibility to check the location of all items such as cables, pipes, conduits or ducts prior to installation of the panels or supporting structure, and to ensure any fixing positions miss these locations.



Please note these details are indicative of many common situations, and you need to read these in conjunction with your detailed drawings and site specific conditions.

HINTS & TIPS:

FEATURES

The panels are exact replications of the original wall and pick up every feature due to the special moulding process. There is a possibility that air can be retained during manufacture which can sometimes appear during transport, as shown:

Should this occur it is very easily rectified by applying a small quantity of the filler compound while you make the joints and cover the screw heads.

Once the filler has been applied, wait for it to dry properly (at least overnight) and then lightly apply the colour solution with a rag to blend in to suit the surrounding tones, where necessary blending more than one colour to get the required tone, as described in the installation instructions.

STAND BACK OCCASIONALLY

It is a good idea to stand back a bit throughout the process to view it from a short distance away.



STEP 1:

POSITIONING OF THE PANELS

CONSIDER OVERALL LAYOUT

Measure the dimensions of the wall to be covered and decide the best overall layout of panels to suit. (If convenient we suggest avoiding horizontal joints at eye level).

Most **Concrete** panels are designed to “tile” generally by matching features for best visual effect. They are moulded from an original wall which provides perfect reproduction of the original wall so to match with adjacent panels it may require some adjustment to match local features. For models that do not tile, create linking features between panels.

Hints

If wall to be covered is slightly higher than exact panel heights, use off-cuts for thin strips required to infill at top or bottom of whole panels. (Try to avoid thin horizontal strips at eye level.)

Consider how other elements of the surroundings can work to your advantage. e.g. start with a vertical joint against a doorway, line up edges of panel with another feature.

CUTTING

Where cutting is required cut the panel on the reverse face using an angle grinder with diamond (or abrasive wheel) or else a jigsaw with TCT blade.

Observe all necessary Safety Precautions.



STEP 2:

LOCATING AND FASTENING PANELS

LOCATE THE INITIAL PANEL

1. Decide on the panel position
2. Lift the first panel into place bearing in mind how the next panel will relate.
3. Cut the panel to size if required
4. Line/level through as required. You may need to trim top/ bottom mortar line to match the other courses.
5. When satisfied with panel location, fasten as per previous details.

LOCATING FURTHER PANELS

1. Lift into approximate position, leaving a gap of approx. 6 - 8mm between neighbouring panels.
2. Adjust for best alignment of features on the adjacent panels both vertically and horizontally, maintaining correct mortar joint spacing.
3. Trim panel to adjust if necessary.
4. When satisfied with panel location, fasten as per previous details.

Hint

For horizontal joints, ensure the mortar line created will be a similar height to the general appearance – you may need to trim the top/bottom of the panel to reduce it or increase the gap to achieve this. This is then concealed with the jointing process outlined later.



See Page11 for how to finish Corners

THE JOINTING PROCESS

Completing the Joints

Alignment

Concrete panels are designed to “tile” generally by matching features for best visual effect. They are moulded from an original wall which provides perfect reproduction of the original wall so to match with adjacent panels it may require some further application of filler to match local features. To merge off-cuts or non-matching features you can also blend elements together as you wish.

Start by standing back and deciding which individual features you want to link, spanning the joint between panels. You can also cut away or adapt any features if it “doesn’t look right”, and also create new features.

Mixing

When the panels are fastened prepare the polyester compound. Fastener locations will be covered at the same time. Mix in Hardener to a ratio of approximately 20cc Hardener to each kilogram of polyester compound (this equates to 1-part Hardener to 50 parts of Compound) and stir well.

Filling

Disguise the joints between panels and cover the fixings by applying the compound using a spatula as outlined in Step 3.

Fastener locations should be covered at the same time.



See Page11 for how to finish Corners

STEP 3:

Initial Filling

1. Apply initial application of polyester compound to the panels to create the approximate shape of intended features, following the contours of the panel and blending the features of immediate area.
2. Link features across panel joints, stepping back to ensure they are in keeping with the general style of the panel.

Shaping

1. As the compound starts to harden, shape it to blend with the panels’ texture quickly to the approximate appearance you want to suit the local features of the wall.
2. Work this as it cures with a spatula, brush or rag well wetted in the cleaner.



STEP 4:

Shape the jointing compound to suit as it begins to go firm

Detailing

Create fine details and blemishes as the compound hardens with spatula or knife to match in with the surrounding detail.

STEP 5:

Introduce final texture to jointing compound with brush dipped in cleaner

Texturing

1. Using a spatula or flat paintbrush (keep it wetted with the cleaner), stipple and refine the texture using short, light stabbing motions, until a good blend is achieved.
2. Create fine detail etc
3. Wipe the cloth
4. Add further detail etc



STEP 6:

Leave for 24 hours, sparingly apply colour solutions, rag off and blend with surrounding area

COLOURING

Timing

Ideally allow the mixture to harden for 24 hours or overnight at least.

Colouring the Compound

Tinting of the filler compound at fastener locations and joints is carried out at the same time. It is best to allow the jointing material to harden fully, sometimes over night, before colouring begins. Avoid bold application of colours.

Mixing

1. Prepare the colouring mixtures by stirring well to distribute the pigments and particles.
2. Pour a small quantity into a separate container, stirring frequently to maintain suspension.

Applying

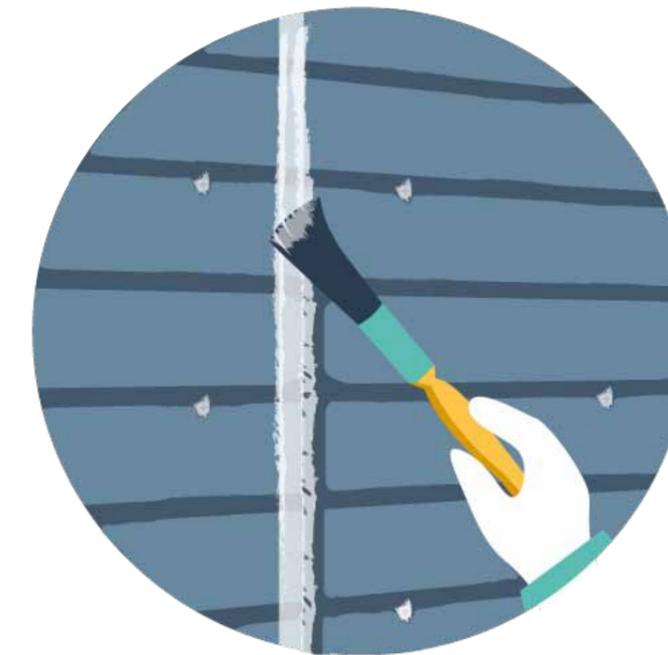
Consider the immediate area of the panel requiring colouring and apply the appropriate colours to suit this lightly.

NB: Bold application of the colour must be avoided.

1. Start with raised features first
2. Allow to dry before treating joints (if they are a different colour.)
3. Dip brush in and dry excess on a cloth.
4. Using the “dry” brush add colour to the polyester compound and any other blemishes with gentle strokes, blending in colour to suit the adjacent area.

Blending Colours

1. Apply colour lightly and then blur with a cloth or sponge to blend and graduate or blend colours to suit the area you are working on.
2. Remove any surplus and soften any strongly – coloured areas gently with a cloth until satisfied.
3. Use a blend of colours to provide variety and subtlety.
4. Clean brushes after use with appropriate cleaner.



*Please speak to
Technical if you
need Colouring
Guides.*

FIXING AND FASTENERS

FASTENERS

Fasteners must be 5mm diameter, in A2/304 grade stainless steel, with countersunk head.

FIXING

Install fixings in a grid of approximately 600mm x 600mm but adjust the local position of the fixing to suit the contours in the area. Locate the fixing in a low spot of the texture.

1. Predrill the panel with a 6mm Ø hole.
2. Fix panel with countersunk fastener (see above for details) until the panel is lightly restrained.
3. Don't over-tighten fixings. Adjust the fixings (packing out if necessary) to line up the edges and features "in-&-out" as well as "up-&-down", also considering the gap between panels.
4. When satisfied with positioning, tighten fasteners to firmly hold the panel, taking care not to overtighten the fixings.



NB: Safety Note
It is the installer's responsibility to check the location of all items such as cables, pipes, conduits or ducts prior to installation of the panels or supporting structure, and to ensure any fixing positions miss these locations.

CORNERS

1. Lift panel to approximate position required to align features. Raise/lower as required, mark location of corner. .
2. Trim panel to size as required
3. Cut to form a mitre, leave approx. 5mm gap between panels (run grinder down joints after fixing, if necessary).
4. Align features of the panels either side of the corner, raising or lowering as required.
5. Fasten panels as normal, apply joining compound to joints as described later.



How to Finish Exposed Edges:

If panel end is exposed, use jointing compound to fill panel edge and shape as required using the usual filling and colouring techniques.

See Page 6-9 for further details

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VTEC GROUP LTD

London Showroom The Design Hub Clerkenwell
47 Gee Street, London, EC1V 3RS

Head Office and Manufacturing Vtec Group Ltd
Unit 3, Cooksland Ind. Estate, Bodmin, PL31 2QB