

## Moulding installation Guide

### Site Preparation

Ensure all power tools are tagged by a licenced electrician, and that all safety aspects are adhered to.

Current safety cards (white cards) must be carried at all times.

### Surface preparation.

Ensure the surface is dry, clean and free of any dust, oils or foreign matter.

Ensure that all walls that have been recently plastered are cured and dry enough for the acceptance of oil based glues. (24 hrs.)

### Moulding preparation/installation.

Consider your “Set out” before you begin cutting moulds. Generally in the estimating and production of Build Technologies Pty Ltd mouldings the required length is considered thus reducing waste and helping to reduce flushing of joints on site.

Mark out where moulds are going using chalk line or desired method i.e. pencil line and level or straight edge.

Plan your set out to ensure you don't “paint yourself into a corner” for example: a “U” shaped wall would have the back section installed first to enable easy continuation from your internal mitres rather than trying to wedge a mould between two internals thus creating a gluey mess.

Cut mould to desired length using standard timber tools, leaving cut a few millimetres short. (Remember to measure twice and cut once)

Where possible, it is recommended to dry test the cut length before gluing to ensure the correct measurement is achieved.

The gaps and holes will be filled with expanding foam later.

The gap in the joints enables the urethane foam gun access to the completely fill and glue the joint void. This creates a secure glued and airless joint.

### Glue only fixing.

A lot of the smaller mouldings such as architraves, keystones and some stringer moulds only require glue as there fixing. In some instances a small nail or pin is used to secure the moulding until the glue sets. Larger mouldings will require mechanical fixing.

### Mechanical fixing.

Slide the correct metal fixing plate into the fixing track which is located at the back of the moulds that will require mechanical fixing. Glue the plates into position using expanding foam. The fixing plates should be approx. 1m to 1.5m apart and there must be fixing plates used as a biscuit jointer on every butt join. Mark the front of the mould where the fixing plate is located for easy drilling later.

Build Technologies Pty Ltd only recommends the use of polyurethane flexible and paintable adhesives such as Bostic seal & flex F/C (fast cure.)

For pre painted or acrylic surfaces ensure the use of Simpson ISR urethane. This is more expensive glue but it is designed to bond to Acrylic surfaces therefore eliminating future delamination of mouldings.

When gluing it's best to make one continuous bead of glue all around the back edge of the mould approx. 20mm from the edge. The bead of glue should be approx. 8mm in size.

Using the continuous bead of glue method creates a seal behind the mould known as a "secret seal"

The "secret seal" method is very useful when mouldings have to be adhered to a pre finished surface such as a trowel textured wall where glues and alike must be kept off the textured finish to avoid having to re texture the entire wall due to marks on the pre finished surface.

After placing the glued mould into the desired location, slightly set the moulding to ensure correct contact and adhesion, drill where the fixing plates are located (previously marked on the face) using a drill bit long enough to drill through the face of the moulding, through the fixing plate and into the sub straight.

Position mechanical fixing and then drive the fixing pin in using desired method. There will be enough play in the mould at this point to adjust height, levels and straightness if required.

## Joint Preparation.

Once all the moulds are installed and slight adjustments have been made, fill all joints, imperfections and fixing holes with expanding foam ensuring the complete void is filled with the expanding foam. This helps prevent any air pockets forming in the joints. Air pockets will contribute to thermal movement in the joint and joint cracking may occur if this procedure is not followed.

It is suggested that a complete run or section of mouldings is installed before foaming of joints, imperfections and fixing holes commences. This enables the installer to sight the line of moulds without obstruction and thus enabling further adjustments if required.

Once the expanding foam has cured (approx. 2hrs depending on ambient temperature and amount used) further prepare all joints by removing the cured excess of foam. This is best achieved by cutting or sanding back the expanding foam to create a 2mm to 3mm recess on the joints, imperfections and fixing holes.

Note: A recess or rebate of 2mm to 3mm must be achieved to detail to ensure correct bridging of the joints when using the flushing compound.

## Flushing of Joints.

Flushing of joints, imperfections and fixing holes is achieved using a specifically designed epoxy resin with thickening fillers to create a flushing mix of blading consistency similar to Vaseline. Ensure to read the MSDS and safe handling / usage procedures thoroughly before use.

Flush and fill all joints, imperfections and fixing holes with the resin mixture using paint scrapers, spatulas, trowel's or desired tool's. Ensure resin is pushed completely into the voids to eliminate any air pockets. Blade off the resined area to create a neat, flushed finish. Once the first flush is complete allow 24 hours for it to harden and after lightly sanding the areas, they are ready for a second flush.

When second flushing a slightly thinner mix can be used as the thinner the resin mix, the stronger the bond. It is also slightly easier to work with.

Note: It is much easier to blade the excess resin off whilst first flushing and then second flushing the areas rather than building up the joints in hope of sanding the epoxy resin back to create the desired Finish.

Whilst working with the resin mix it is advised to spread the mixture thinly over a flat pallet like some tin or hard board. This prevents the material from going off too fast as it is heat reactive and sets much faster in a clumped form.

## Sealing moulds.

Different wall finishes require different sealing procedures:

### Face brick.

Seal mouldings to face brick using Mortarfill. Follow the product handling directions. This product comes colour matched to the existing mortar colour and can be applied using several methods. One of which is a “chefs pipping bag” half filled with Mortarfill and applied in a continual line and feathered off using a small, moist paint brush.

### Rendered walls to be textured.

Seal moulds to the wall with paintable polyurethane mastic top and bottom. Finger or trowel the bead of mastic to create a sharp edged finish ready for the following trades. Use the correct mastic for the situation at hand i.e. Simpsons ISR on acrylic surfaces.

### Sand finished render.

Use Mortarfill on any visible areas and use Mortarfill or Mastic whichever is easiest for any other areas? Mortarfill will blend and feather into a sand finished wall’s much neater than mastics due to its slight texture appearance. This means when the wall is painted the sealed line will not be as visible as a very smooth finish created by mastic sealants.

Note; do not wipe excess glues and mastics onto any surface that may obstruct or interfere with any following trade i.e. walls, timbers, guttering, downpipes and scaffolding. Back charges may apply if this practice is deemed deliberate or thoughtless.

## Finishes.

It is recommended by Build Technologies Pty Ltd that all mouldings are finished with 3 coats of Dulux Acra Sand to the colour of choice.

Alternatively any flat faced moulding can be trowel textured. A key coat of Dulux Acra Sand is recommended to prevent textures from sliding when troweled.

Build Technologies Pty Ltd recommends Dulux textures.

## Further information.

For any further advice please contact the support team at Build Technologies Pty Ltd on the phone numbers or web site above.

## Instructions for usage of resin kit

Use 2 parts resin (2 cups max)

To 1 part hardener (1 cup max)

Mix very well in a plastic container.

Gradually mix in cotton flox filler 1 handful at a time until the resin mix resembles Vaseline. This is the desired consistency for the first flush.

The second flush mix should be a little thinner as it will blade the joints a little easier and the thinner the mix, the stronger the resin.

If you have made too much mix then spread it out on a tray as in one clump it will go off very quick.

The product works well on joins with easy tape (CSR) and is able to be sanded after 24 hrs.

Please contact Build Technologies Pty Ltd on the above numbers for any further information.