

## Installation Guide

Fixing STONINI panels can be easily achieved with either Megapoxy [A two-part epoxy adhesive may also be suitable], tile adhesive, or Akfix Polyurethane Adhesive [P636 Fire rated]. Other fire rated polyurethanes may also be suitable.

STONINI panels can be adhered to;

- Concrete
- Brick
- Cement render
- Aerated Autoclaved Concrete [AAC, Hebel]
- Fibre cement
- Construction grade plywood [without knots]
- Plasterboard
- Medium Density Fibre board [MDF]

For internal use, STONINI panels can also be adhered direct to timber or metal studwork, only with Megapoxy and at a maximum of 300mm centres.

All substrate surfaces should be flat and free of any loose particles, grease or oil and defects. If the surface you are adhering STONINI panel to is smooth, then a primer will have to be used prior to adhesion. A nonporous primer is suitable.

### Application

When using either Megapoxy or tile adhesive, there are two methods for applying adhesive:

1. Indoor Use:
  - a. Utilising the dab method, apply a series of 10 - 12 dabs of adhesive along panel, 80mm in diameter [see fig. 1]. *It should be noted, this method is only suitable for internal or indoor use. and not for areas exposed to moisture.*

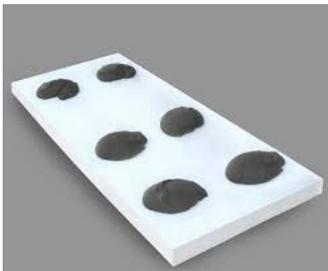


Fig 1.

- b. Utilising Akfix P636 Polyurethane adhesive [*Other fire rated polyurethanes may also be suitable*] will require approximately 24 small dabs as well as a perimeter bead as shown in figure 1b below. [*Beads can be applied to wall or panel*]



Fig 1b.

## 2. Exterior Use:

- a. For exterior applications a full embedment method should always be utilised. In this instance the surface of panel is coated with Megapoxy or another two-part epoxy adhesive and then screeded with a 3-6mm notched trowel [see fig. 2]. [*Tile adhesive or polyurethane adhesive should not be used in exterior application*]



Fig 2.



## *Panel Layout*

STONINI panels can be installed horizontally or vertically. Panels depending on the design will not appear seamless. Joins are noticeable, more so on some profiles.

Panels can be installed in a Stacked Bond or Stretcher Bond. Which style to utilise for each profile is entirely up to the designer.

## *Joints*

### **Butt:**

These textural, hand-made panels can be butt joined horizontally and vertically provided inconsistencies are accepted to design requirements. Panels can be butt joined if they are being installed vertically with lines on a vertical plane. No need to express these, it'll only be the horizontal joints that will be noticeable, and therefore you can choose to express these, but you don't have to, these can be butt joined as well.

Additionally, where panels are painted, the butt joins can also be filled with a fire rated acrylic "no more gaps", [*Akfix607 or similar*] then touched up with the touch up paint we supply with all our orders.

Typically, profiles installed vertically with vertical lines will hide joints more effectively, and similarly when they are installed in a horizontal pattern with lines running in the same direction.

Another factor affecting the noticeability of joints is the care taken to install them. When fixing panels together, there may be instances where the panel thickness between the two are slightly different. In this case, it's advisable to utilise a plastic spacer to the back of panel to make up the differences between panels.

### **Expressed:**

For some panels where precise pattern continuation is required like the "Rhythm" profile, it is advisable that an expressed gap of 3mm be placed between each panel. [*This will make up for non-precise matching between panels*]

### **Grout Joints:**

As with ceramic or porcelain tile installation, Stonini panels can be installed in a similar way. In this instance refer to tiling professional for further information.

## High Wall Installation

Where STONINI panels are used in an external or internal environment, and where wall height exceeds 3.0 metres, it is advisable to utilise an additional mechanical fixing method in conjunction with only Epoxy adhesive for *External Applications* and tile adhesive or polyurethane for *Internal applications*.

For walls in excess height of 3.0 metres, we would recommend one of two options to be used in conjunction appropriate adhesive as a redundancy measure:

- A. RAI-FIX 6mm concealed safety bracket:  
<https://www.raimondispa.com/en/prodotti/rai-fix-gb/>

OR

B. An aluminium angle every two courses to support the weight of the panels. The aluminium angle must be fixed into the wall through its 20mm length with a stainless steel or galvanised screws no shorter than 50mm, thereby revealing a 12mm shelf angle for panel to sit on.

Refer to Table Below:

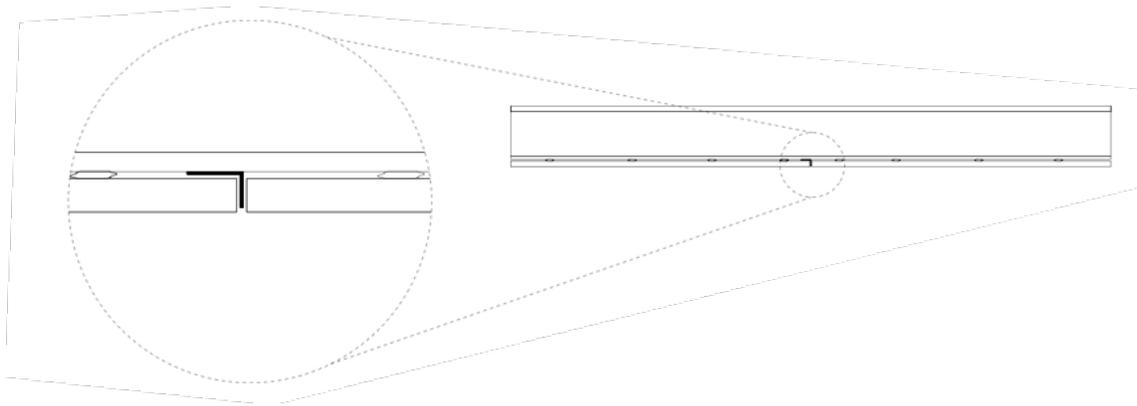
Fixings Methodology			
Application		Adhesive type	Additional Mechanical Fixing Required
Height of Wall Below 3.0 Metres	External	Megabond Epoxy Adhesive	No
	Internal	Polyurathane	No
		Tile Adhesive	
		Megabond Epoxy Adhesive	
Application		Adhesive type	Additional Mechanical Fixing Required
Height of Wall Above 3.0 Metres	External	Megabond Epoxy Adhesive	Yes
	Internal	Polyurathane	Yes
		Tile Adhesive	
		Megabond Epoxy Adhesive	

## Control Joint for Long Run Walls

If STONINI panels are to be used on a wall horizontally longer than 6 metres, then a vertical control joint must be expressed beyond that point. This can be done with either;

1. A flat aluminium bar or an aluminium angle used vertically [see fig. 4]. This is to allow for movement on large wall runs.

Fig. 4



2. An expressed joint at least 5mm wide but not wider than 10mm.

*It should be noted: An expressed gap of at least 5mm but not more than 10mm can be allowed for around the perimeter where Stonini panels are to be installed between hard walls and ceilings.*

## External & Internal Corners External Corner Detail

External corners can be detailed several ways.

Either with a birds mouth profile, available from a tile supplier, or a mitred profile express flat bar or external butt joint.

1. Birds-mouth joint [see Fig. 5]
2. Mitred with express flat bar [see Fig. 6], or
3. External corner butt joint [see Fig. 7a]
4. Tiling Angle [see Fig. 7b]

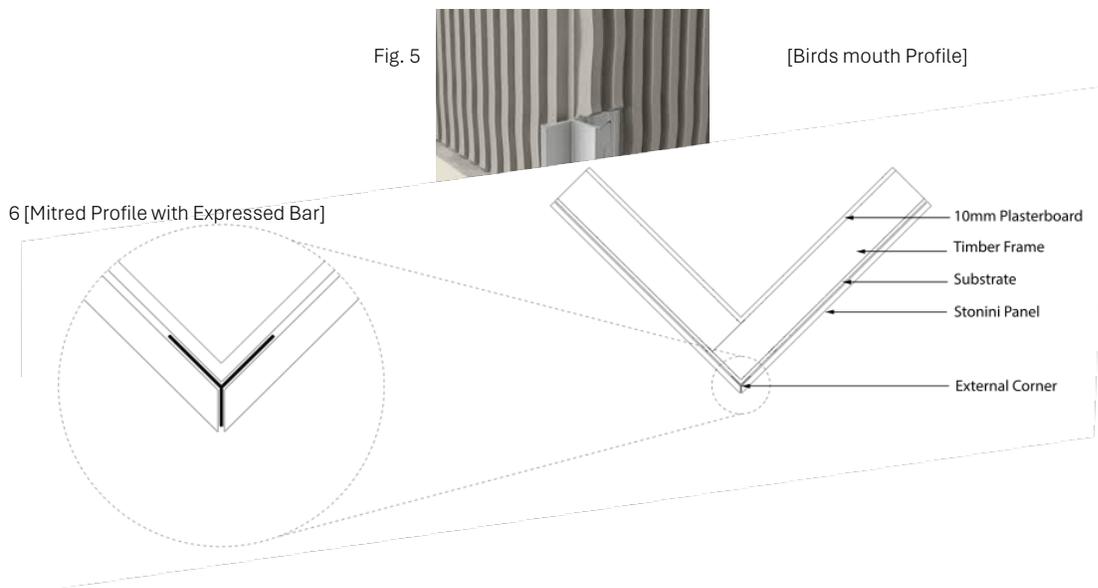


Fig. 7a [External Corner Butt Join]



Fig. 7b [Tiling Angle]



## Internal Corner Detail

With internal corners, there are two basic options; expresses shadow line, and expressed aluminium angle.

1. Shadow line at joint, expressed [see Fig. 8]
2. Expressed aluminium angle [see Fig. 9]

Fig. 8 [Shadow line Expressed]

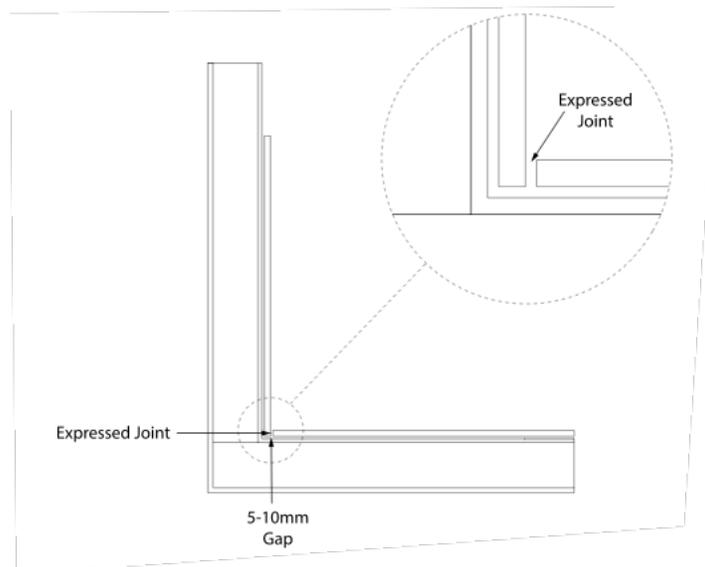
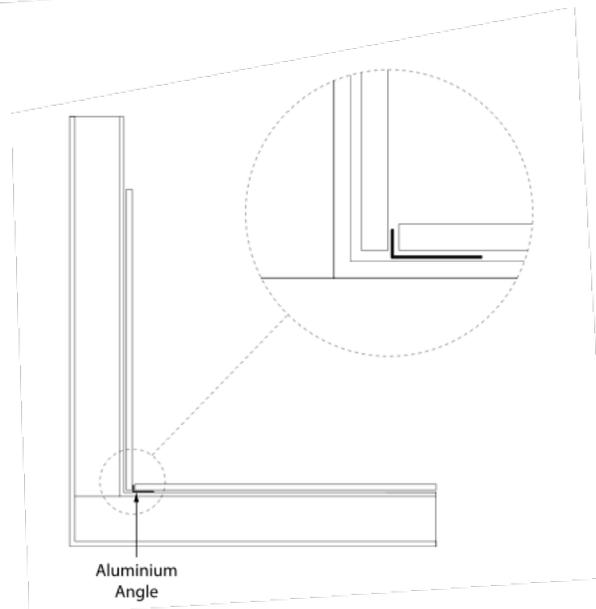


Fig. 9 [Expressed Aluminium Angle]



## Handling & Storage

To Unload panels from the crate, follow these steps:

- Lift only one side of the panel slowly with the other edge of the panel resting on the crate/flat surface.
- Lift it off the crate/flat surface, put a hand underneath and carry with the profile placed vertically (Fig.10).
- To put the panel on the ground let it rest on the long edge first and slowly put it on the ground.
- Always keep the panel upright or on its edge when carrying to avoid breakage.
- Never carry the panel flat, it will snap in the middle.

Fig. 10 [Put hand underneath a panel and carry with as shown in picture below



### Storage:

Stonini panels need to be stored on a flat surface in the dry area. Stacking is allowed however no more than 8-10 panels at the time should be stored (profile dependant).

Sheets of polystyrene or protective foam should be placed between panels.

### Cleaning:

For general care and maintenance most spills or marks can be cleaned using a white damp cloth water or mild detergents. Do not use coloured rags or solvent-based cleaners.

*Note: STONINI panels are a handmade custom product. Variations and slight imperfections are part of the inherent nature of the product and may occur slightly in thickness and or size. Large panels have some degrees of flexibility. Where walls are not plumb or where panel thickness variations occur, packing may be necessary.*

*The installation of STONINI and final effect depends significantly on the preparation and standard of the substrate, and the professionalism and experience of the installer. The manufacturer accepts no responsibility for the workmanship of contract installers or results stemming from the same.*

*The above are manufacturers recommendations only.*