



# PLASTER VENEERS

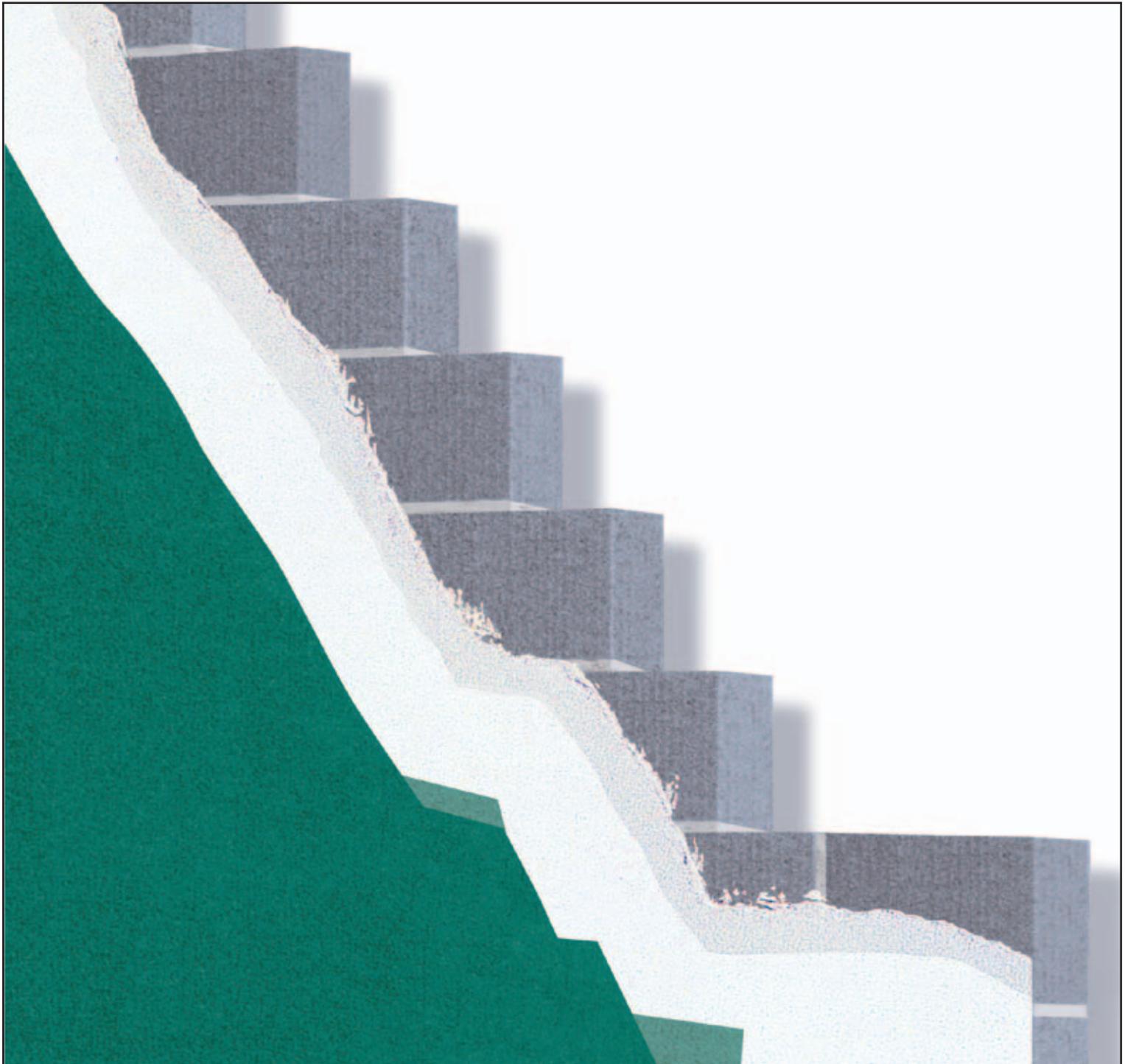


# A MONOLITHIC FINISH, FASTER AND EASIER

A smooth, easily plastered surface is essential if you're going to create an even monolithic finish. Begin with an uneven brick surface and you can waste a lot of extra time in additional preparation before you can plaster. But Firth Plaster Veneers provide you with an easily constructed brick veneer with two highly practical benefits: firstly, because Firth Plaster Veneers are

concrete bricks, they form a flatter, more consistent surface. And secondly, Firth Plaster Veneers have a coarse exterior face that aids plaster adhesion.

What's more size is also an advantage with our Firth Plaster Veneer bricks, with the large format resulting in speed and efficiency.

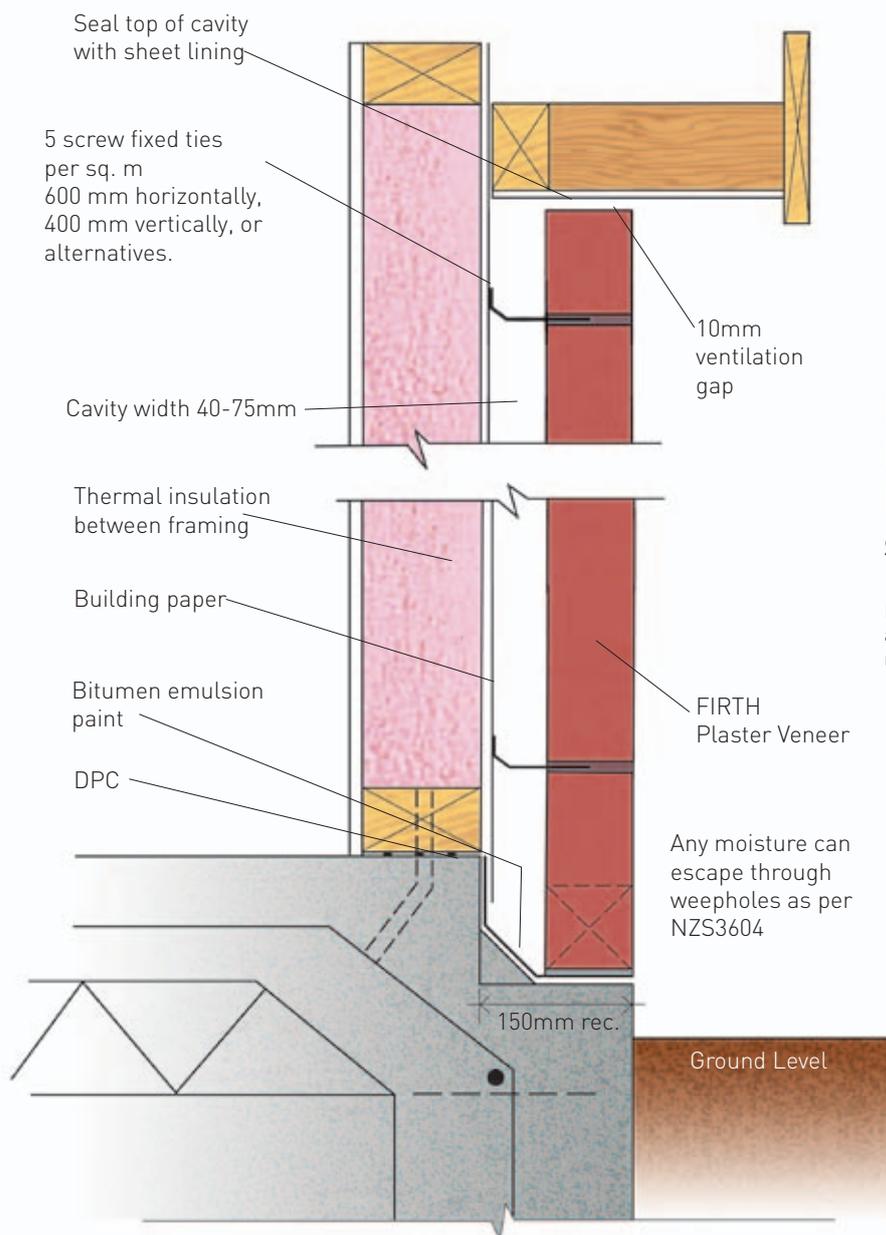


The Firth Plaster Veneer example wall above illustrates the cavity system. It has a painted finish over two layers of plaster.

## PLUS ALL THE ADVANTAGES OF A BRICK VENEER CAVITY SYSTEM

In addition to a more plaster-friendly surface, Firth Plaster Veneers also give you all the proven benefits of brick veneer. These include:

- The protection and security of a veneer cavity system to eliminate rotting timber
- Robust, durable materials and construction
- Low maintenance
- A minimum 40mm wide cavity between bricks and timber framing for drainage and ventilation
- Excellent acoustic (sound barrier) qualities



**Left: Drawing detail illustrates how Firth Plaster Veneer should be applied.**

Note: Required ventilation top and bottom is 1000sq mm per metre length of wall

# GETTING THE BEST RESULTS WITH PLASTER VENEERS

**Storage onsite:** Dry bricks must be covered and kept dry at all times prior to laying. Laying wet bricks increases the chances of efflorescence and shrinkage.

**External coating systems:** The safest and most practical method is to hire an accredited applicator of the paint and plaster system selected for the job.

**Control joints:** Control joints must be used.

## Finishing

There are a number of finishing and coating systems that may be applied and this depends on the desired finish. Possible options include:

- **Plastering**

The quality of the bricklaying is not critical provided it is plumb and conforms to code

requirements. Apply Dricon Mortar Plaster™ in 2-3 coats or layers up to 15-20mm thick, or more if required to achieve a desired special finish. Apply 2 coats of a quality, high build acrylic weatherproof coating.

- **Proprietary Coatings**

There are numerous proprietary plasters and coating systems on the market, which are suitable for applying to Firth Brick Veneers. These include:

Dulux New Zealand – Acra-Tex 0800 433 858

Plastabrick NZ Ltd – 0800 522 533

Wattyl (NZ) Ltd – Granosite (09) 828 4009

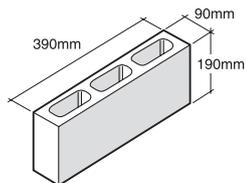
Rockcote Architectural Coatings NZ Ltd – 0800 507 040

Plaster Systems Ltd – (09) 444 6440

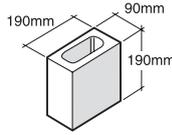
Flexco (NZ) Ltd – (09) 273 5550

Fosroc Ltd – 0800 745 269

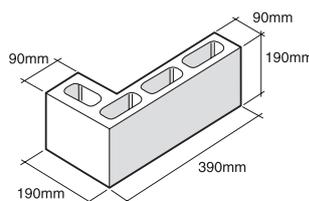
## THE RANGE



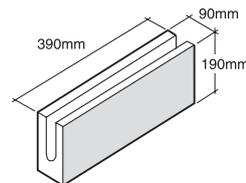
**10.01**  
Standard Whole



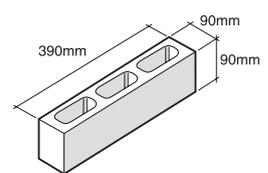
**10.02**  
Half



**10.03**  
Corner



**10.23**  
Lintel



**H10.01**  
Standard Half High

## INSTALLATION

Firth Plaster Veneers are laid generally in accordance with standard brick veneer practice with few special requirements. Particular points to note are:

### Weepholes and Ventilation

It is essential that ventilation gaps at the top of all panels (including under window sills), and weepholes at the bottom, are provided. The more uniform appearance of a plastered veneer can make these gaps and holes more obvious than on a standard brick veneer, creating a temptation to minimise or omit them. The full 1000 mm<sup>2</sup> opening area per metre length of wall required by the Building Code must be provided. A long horizontal gap at the top of panels can be more visually acceptable, but there is no practical substitute for omitting brick end mortar joints at the bottom.

### Surface Finish

It can be tempting to pay less attention to quality of finish when the bricks are going to be plastered over. While it is true that a veneer that is to be plastered can have more acceptable defects than a standard brick veneer, there is a limit to what plaster will hide.

- The finished brick surface must be plumb and flush, not requiring variable plaster thickness to make it flat.
- The mortar joints must be a consistent width, not varying by more than the  $\pm 3$ mm permitted by NZ Standards for brick veneers.
- Mortar joints should be flush pointed and properly compacted by tooling. Care must be taken to ensure that striking off of excess mortar does not drag the mortar to one side of the joint leaving a crevice at the other side. Such crevices can lead to cracking in the plaster. Moving the trowel along the joint when striking off, not across it, is a good way to minimise this concern.

### Control Joints

Control joints are essential. They are a normal part of monolithic masonry construction - attempts should not be made to avoid, minimise, or hide them. They should be "expressed" in the plaster surface. See following section for full details.

# CONSTRUCTION OF CONTROL JOINTS

Because Firth Plaster Veneers consist of a rigid veneer fixed to a relatively flexible timber frame, differential movement is to be expected. To allow for this, joints in the masonry must be included to isolate the potential cracks i.e. ensure that any cracks which would occur in the wall happen only at the joints where they will be less visible. If there are no joints in the brickwork, the differential movement can create unsightly random cracking throughout the wall surface.

## Joint locations

Typical positions of these joints are shown in figure 1. Joints should be located as follows:

- At every window, door, or other opening – above and below at least one jamb.  
If the opening is wider than 1.8m, it is necessary to construct joints at both jambs.  
The joint should be placed between two columns of brick ties near the corner of the opening (see figure 4). Normally there is a double stud at the jamb making it possible to accommodate the two columns of brick ties and the joint in line with the opening reveal.
- For long wall panels without any openings, either:
  - a joint adjacent to the wall panel end (corner) and further joints along the wall at no greater than 6m apart, or
  - a joint within 3m of the wall panel end and further joints at no greater than 6m centres along the rest of the wall.

## Joint construction

All joints should be formed by laying the units with a 10mm gap at the joint. Alternatively, the joints can be formed by cutting the joint with a masonry saw after the wall is constructed to form the required gap. However, it is important to ensure a clean straight cut. This is difficult to achieve in practice, so Firth recommend that the units be laid with a gap.

Essential components of the joints are :

- Complete separation of masonry units either side of the joint with no mortar between them.

- Flexible sealant and backing rod in the joint to prevent accumulation of debris in the gap which would restrict joint movement and effectiveness.
- Plaster must be broken at the joint. (See figures 2 & 3.)

## Follow these steps:

1. Lay bricks with a 10mm gap where control joints are required.
2. Place a 12 or 15mm diameter P.E.F (Polyethylene Foam) rod continuously into the joint 10mm back from the brick face to form a backing strip.
3. Leave the wall un-plastered for as long as possible to allow shrinkage to occur.
4. Install an exterior-grade sealant over the P.E.F rod.
5. With the correct number of control joints, cracking if visible, will be minimised.

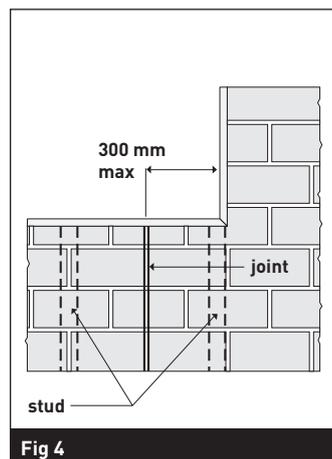
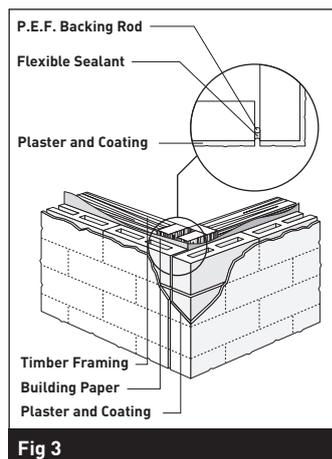
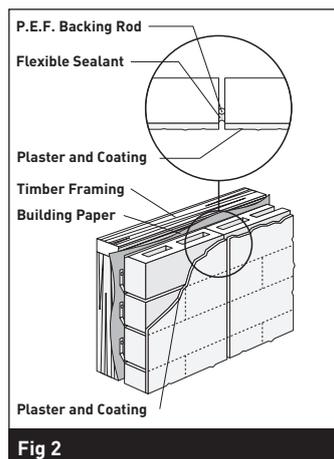
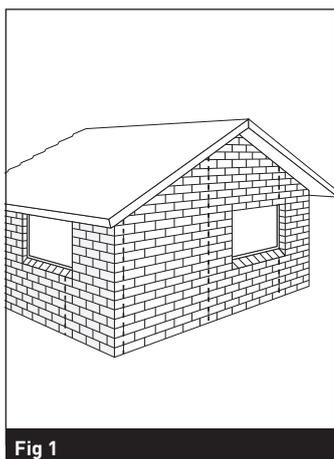
Refer to the relevant NZ Standards or follow the instructions of the client or designer for more information.

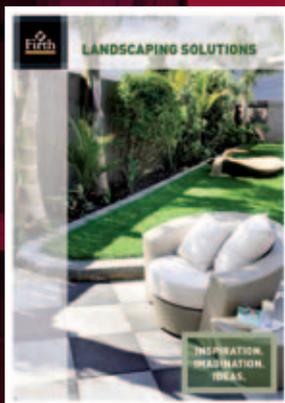
## Additional reinforcement at openings

When joints are installed adjacent to only one jamb of an opening, additional precautions should be considered at the other jamb. The inclusion of “snakewire” within a few courses above and below opening jambs is a time-honoured crack control method for brick veneers that is making a comeback. Firth recommends that snakewire should be considered for extra crack resistance.

## Coating at joints

Some manufacturers of coating systems claim to be able to cover over the joints while still allowing them to function. However, Firth recommends that an architectural feature be made of the joints so that if cracking occurs any remedial work required can easily blend into the existing wall.





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