

Rendering Blockwork

STEP 1

Cleaning the Substrate

As with any construction project, preparation is extremely important. Before applying any products to the substrate, it needs to be examined and checked. The substrate must be clean, dry and dust-free. One of the best ways to achieve a clean and ready surface is to use a high-pressure waterjet or prepare the wall manually using a wire brush.

STEP 2

Priming the Substrate

Once the substrate has been cleaned it needs to be primed before starting any other works. We recommend priming the substrate with EWI-302 Deep Penetrating Primer, ideal for newbuild blockwork. It works in a similar manner to PVA primer, by helping to seal porous surfaces prior to carrying out any works.

If the existing substrate is painted or requires increased adhesion (for example on very smooth or painted surfaces) then we recommend using our EWI-310 Universal Primer. This contains silicate, which provides a mechanical key to aid adhesion of the basecoat adhesive.

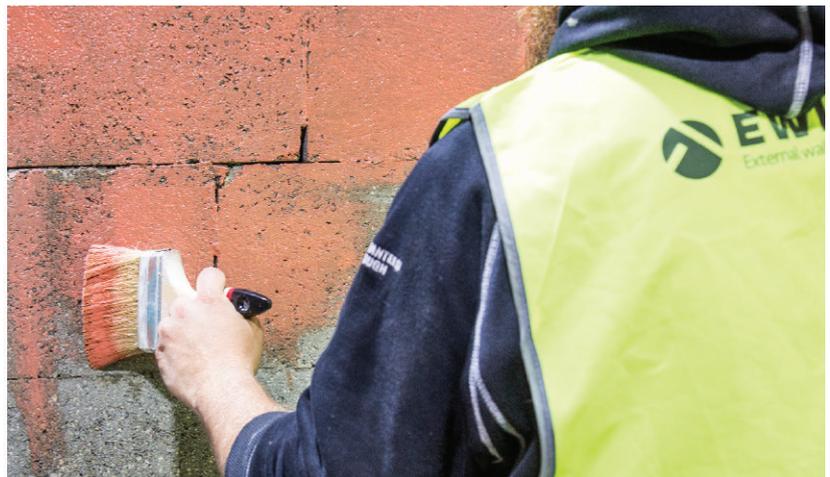
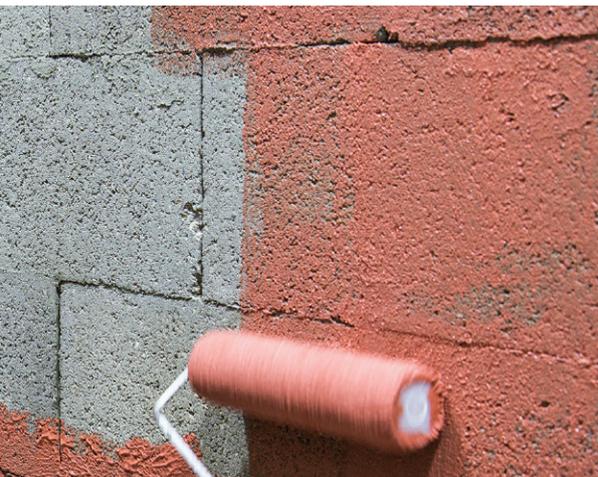
The amount of priming (and therefore volume of primer required) will depend upon how absorptive the underlying substrate is, but typically this can be anywhere from 50-300ml per m².

Both EWI-302 and EWI-310 can be applied by brush or roller.

The primers will take approximately 4 hours to dry. However, additional coats may be required depending upon how absorbent the substrate is. 24 hours should be left between primer coats.

MATERIALS REQUIRED

EWI-302 - Deep Penetrating Primer
EWI-310 - Universal Primer (20 litres)



STEP 3

Applying a Parge Coat

We recommend always adding a parge coat, especially if the substrate is uneven, as this will provide a strong, stable surface on which to apply the new basecoat. There are some circumstances in which a parge coat is not required – namely when the wall is completely level, or the vertical height of the mortar joints are less than 10mm.

The addition of a parge coat creates what is known as a 'three coat render system.' The parge coat simply consists of a thin layer of the EWI-269 Lightweight Basecoat.

EWI-269 Lightweight Basecoat comes as a dry mix in 25kg bags. The product needs to be mixed with 6.3 litres of clean cool water using a paddle mix to create a smooth mortar. The Lightweight Basecoat is then applied to the brick substrate at a minimum thickness of 8mm.

At 8mm thick, each 25kg bag will cover approximately 3m² of substrate.

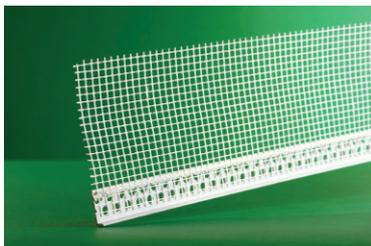
STEP 4 Applying Beading

Beading is used in the EWI Pro thin coat render systems to reinforce areas that are likely to experience impact (e.g. external corners) and to try to direct water away from the surface of the render by providing a drip. All of our beading is uPVC and therefore will not rust. Cut beads to the required length and embed them into the basecoat layer.



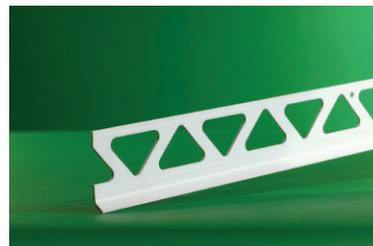
CORNER BEADS

Corner Bead should be used on every external corner to help reinforce this area. The corner bead also helps achieve a consistent 90 degree angle at the corner.



STOP BEADS

Stop Bead is used to achieve a defined termination point where the render comes to an end, for example between mid-terrace properties.



BELLCAST BEADS

Bellcast Beads are used to provide a drip at either the bottom of the render system or above openings to help mechanically drive water away from the surface of the render system.



FLEXIBLE UPVC ARCH BEAD

Flexible uPVC Arch Bead is used to form perfect arches by matching the contours of the arch. The bead sits within the basecoat layer and provides sharp clean edges as well supporting the angles against accidental impacts.



MOVEMENT BEADS

Movement Beads are installed within the basecoat directly above expansion joints within the masonry to achieve a neat and consistent enclosing detail. They can also be used where there is a particularly long run of render to try and help reduce the risk of cracking (typically every 7 linear metres of render a movement bead should be installed).

STEP 5

Preparing the Basecoat Layer

Once the beading is in position, the basecoat reinforcement layer is installed (remember the beads are completely embedded within the basecoat so are not visible).

For this stage you need to use the EWI-225 Premium Basecoat which is trowelled onto the substrate before strips of Fibreglass Mesh are embedded within it. Our Fibreglass Mesh is available in 50m² rolls in either 165g/m² (EWI-66645) or 150g/m² (EWI-66640).

Correct preparation of the EWI-225 Premium Basecoat is very important. EWI-225 Premium Basecoat should be mixed with clean, potable water at a ratio of 6.5 litres per 25kg bag. The Premium Basecoat should be mixed using a heavy-duty power plaster mixer on a slow rotating setting.

Freshly mixed compound should be left for approximately 5 minutes and then re-mixed for a short period of time before use. Bucket life is approximately 1 hour, although this is dependent upon the weather conditions.



STEP 6

Applying the Basecoat Layer

The basecoat can be applied as either a one pass or two pass application with Fibreglass Mesh embedded within it.

One Pass Application

The one pass system should be applied with a notched trowel to the substrate at a thickness of 6-8mm. The mesh is then embedded within the basecoat in vertical strips using the flat edge of a notched trowel. Each strip of Fibreglass Mesh should overlap its neighbouring strip by approximately 10-15cm. The EWI-225 Premium Basecoat can be ruled off with a speed skim or sponge floated for a completely flat finish.

Two Pass Application

The two-pass system should be applied with a notched trowel to the substrate - this layer needs to be between 3-4mm. The mesh is then placed onto the basecoat in vertical strips and embedded using the flat edge of a notched trowel. Another coat of basecoat should be applied onto the mesh at a thickness of 3-4mm before the first coat has gone off. The EWI-225 Premium Basecoat can be ruled off with a speed skim or sponge floated for a completely flat finish.



STEP 7 Priming before Rendering

Once the basecoat reinforcement layer has dried for a period of 24-48 hours (depending upon the weather conditions), it needs to be primed prior to applying the render. The Topcoat Primer (EWI-333) is simply painted on top of the basecoat reinforcement layer using either a paintbrush or a roller.

It will need to be left to dry for 12-24 hours prior to rendering. The primer is also through-coloured with the same tint as the topcoat. This is to avoid staining on the topcoat and to ensure the final colour fully comes through on the rendering finish.

MATERIALS REQUIRED

EWI-333- Top Coat Primer



STEP 8

Rendering the Walls

We recommend using one of our silicone renders when rendering blockwork. We offer four types of silicone render – please speak to your supplier for more details about the differences.



EWI-040 Silicone Silicate Render



EWI-075 Silicone Render



EWI-076 Premium Bio Silicone Render



EWI-077 Nano Drex Silicone Render

Each of these renders comes in different grain sizes – 1mm, 1.5mm, 2mm and 3mm.

Using a trowel, apply a thin layer of the render to the primed surface. With granulated thin coat renders, remember to match the thickness of the render application to the grain size - so with a grain size of 1mm the render will need to be applied at a 1mm thickness.

Once the render has been applied, smooth it out using a trowel, removing any excess off the wall to ensure an extremely thin layer (one grain thick). Using a PVC float, work the render in circular movements - this will provide a textured finish. Remember to have enough tradesmen on-site to ensure that whole sections of the walls can be done at the same time. If you attempt to do 'half a wall' at a time, you will notice scarring where the two render sections meet.

If the render is tinted, then please check the bucket to ensure that it is the colour you are expecting (ideally compare this back to a sample pot). It is also recommended to mix 3 buckets of render into one large bucket at a time, topping up and re-mixing regularly. This will ensure consistency in colour and any minor discrepancies will be blended out across the façade.

Note: please do not water down the render.



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