

A Complete Guide To EWI – Insulation onto Pebbledash

Pebbledash is a style of external wall covering. It is made by applying a layer of mortar to a wall and then blasting hundreds of tiny pebbles against the wall. Pebbledash is a distinct style and, in the UK, can be seen in many post-WW1 houses. This is because it is cheap, relatively durable, and a quick way to cover houses.

That said, pebbledash can cause problems later down the line. It is common for the pebbles to drop over time, leaving your external walls exposed to the elements. Pebbledash is also prone to cracking, which can lead to water ingress. In time, this can cause the pebbledash to fall away from the wall. It can also be extremely costly to remove Pebbledash. This is especially true if, at a later date, you decide to revert back to the original brick finish of the house.

Therefore, a great way to avoid this costly and painstaking task, and to improve the structure, is to simply install insulation boards over the pebbledash. This method has the added benefit of improving the thermal efficiency of your property, whilst creating a smooth and modern finish. We have created a handy complete guide to equip you with all the knowledge you will need to understand the process.



1. Priming the Pebbledash

When covering Pebbledash, it must be correctly primed. This ensures your insulation system will last.

For the primer, we recommend using EWI-310 Universal Primer to create an abrasive surface for the EWI-225 adhere to.

Prior to priming, you should be sure to remove loose elements from the surface and check for structural stability if painted.

EWI- 310 UNIVERSAL PRIMER
Coverage: 20kg/50m²
Drying Time: 1 Coat = 4 Hours



2. Preparing the Adhesive for Pebbledash

At EWI Store, all our systems are held in place using a combination of high-quality adhesives and mechanical fixings. The insulation boards require a very strong adhesive. In this instance, we highly suggest the use of the EWI-225 Premium Basecoat (although EWI-220 can also be used). EWI-225 is our most versatile adhesive that can be used as an adhesive and a basecoat.

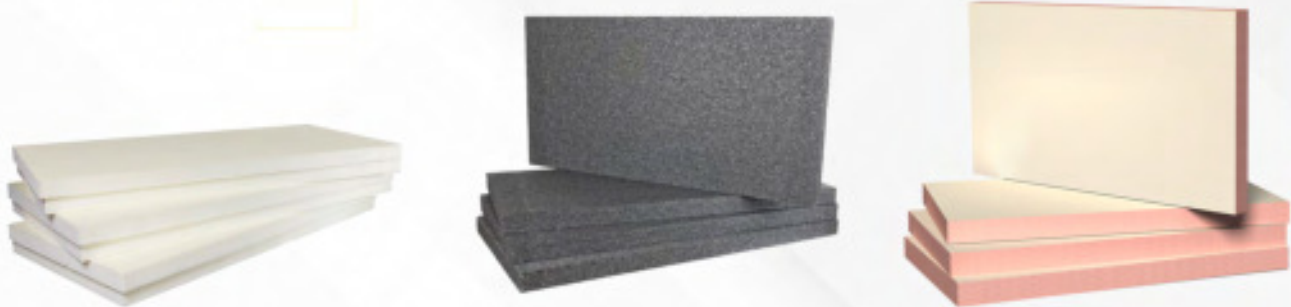
Simply use a paddle mix to mix the dry mix bag with 5.9L of water. Each bag of EWI-225 has coverage of 4m² when used as an adhesive, and a drying time of 24-48 hours.

Coverage: 1 Bag = 4m²
Drying Time: 24 - 48 Hours



3. Installing Insulation Board over Pebbledash

As mentioned, when covering pebbledash, you can install insulation boards directly over it. When installing the insulation board, we recommend applying adhesive to the perimeter of the insulation board with 3 dabs across the middle.



4. Installing Mechanical Fixings

Having adhered the insulation board to the pebbledash, we recommend using a metal mechanical fixing to fully secure the board to the property.

You can purchase our mechanical fixings in a variety of lengths. Our range allows you to choose from a selection of fixing lengths to ensure all thicknesses of insulation are catered to.

It should be noted that fixings should be at least 65mm longer than the thickness of the insulation. This is to ensure the fixing can go through the insulation, through the pebbledash and into the brick or block below to provide a really strong anchor.



Metal Pin Hammer



Metal Screw Fixing



Plastic Hammer Fixing

5. Applying Beading

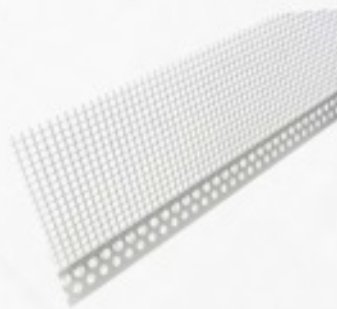
A further key component of the pebbledash covering process is beading. Beading works to reinforce certain areas on the external wall that are more prone to damage.

The beads you will require will depend on the areas that need reinforcing. For example, windows, doors and corners.

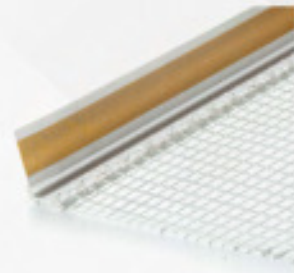
Our selection of available render beads allows you to choose the perfect beading for your property. They are uPVC and designed to be embedded in the basecoat layer.



Corner Bead



Stop Bead



Reveal Bead

6. Applying Basecoat and Embedding the Mesh

When creating a reinforced basecoat layer on top of pebbledash, we highly recommend the use of EWI Pro's EWI-225 Premium Basecoat. When applied with a 10mm notched trowel, the fibreglass mesh can be successfully embedded in the layer. This layer reinforces the system with a strong, flexible and waterproof base.

1 x 25kg Basecoat bag has a coverage of 3.5m²

At EWI store, we offer two high strength meshes to suit your individual project. Both meshes are coated with acrylic acid copolymer liquid for a long-lasting effect. Below is a breakdown of each mesh's capabilities:

1) **Orange Fibreglass Mesh:** For guaranteed strength and flexibility. This mesh is water resistant and protects against alkali damage and aging. 1 x 50m² roll covers 42.5m² when overlapped.

2) **Panzer Fibreglass Mesh:** Our strongest mesh available guarantees a premium level of impact and crack resistance. Provides excellent protection against the elements. One 25m² roll covers 22.5m² when overlapped.

• **Coverage rates (basecoat):** 1 x 25kg bag covers 2.5m²

• **Coverage rates (mesh):** 1 x 50m² roll covers 42.5m² when overlapped. Our standard mesh is sold either by the m² or in rolls of 50m².



7. Priming the Basecoat

Following application of the mesh, and before rendering, your next port of call should be to prime the basecoat. Priming the basecoat aids adhesion between the basecoat and render and also helps limit absorption to the basecoat, allowing the render to cure correctly. Our EWI-333 Topcoat Primer is designed specifically for this purpose and can be tinted to match the colour of your silicone render.

EWI-333 has a drying time of 12-24 hours, depending on the coverage. Its coverage rates are listed below:

Coverage Rates:

7Kg = 20m²

20kg = 60m²

Drying times: 12-24 hours



8. Applying the Render

Once the Topcoat Primer has dried, the final step in the process is to apply render over the pebbledash.

Since most of our renders are thin coat renders, the thickness of the topcoat depends on the grain size of the render. Our EWI-075 silicone masonry paint provides excellent coverage for pebbledash and the available grain sizes are 1mm, 1.5mm, 2mm and 3mm. If you were to purchase the 2mm Silicone Render, your topcoat should be applied no thicker than 2mm. Render should be applied using a trowel. Any excess render should always be removed. Use a plastic float to apply the render in a circular motion for your desired finish.

Below are the coverage rates you can expect from each grain size:

Coverage Rates:

1.0mm = 12m² - 13m²

1.5mm = 9m² - 10m²

2.0mm = 7m² - 8m²

3.0mm = 5m² - 6m²

