

A Complete Guide To EWI – Render onto Phenolic Kingspan K5



EWI Pro's Phenolic Kingspan range is ideal for properties where space is limited. For example, external wall applications with narrow passageways or under windowsills.

We have created a handy complete guide to equip you with all the knowledge you will need to understand the Kingspan system installation process.

1. Priming the Substrate

Much like our other EWI systems, applying primer is a necessary first step when installing a Kingspan system. This ensures your Kingspan insulation system will last.

If installing onto brickwork, use EWI-301 Water Based Primer. Apply this to the substrate using a roller or brush.

If rendering onto a smooth substrate, use the EWI-310 Universal Primer. The formula contains aggregates that create a rough surface for adhesion.



OR



EWI- 310 UNIVERSAL PRIMER
Coverage: 20kg/5m²
Drying Time: 1 Coat – 4 Hours

**EWI-301 WATER BASED
SUBSTRATE PRIMER**
Coverage: 5L/20m²
Drying Time: 1 Coat – 4 Hours

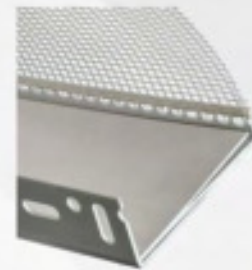
2. Installing the Starter Track

Starter Tracks create a solid base for Kingspan K5 boards to be installed onto. They are drilled into the wall above the DPC. Starter Tracks can accommodate different thicknesses of insulation.

When installing a Starter Track for an Kingspan K5 insulation system, you have the following 2 options:

UPVC STARTER TRACK:

Ensures the thermal bridging is kept to a minimum.
Coverage: 2m



ALUMINIUM STARTER TRACK:

More cost-effective option. Comes with a clip-on stop bead.
Coverage: 2.5m

3. Preparing the Adhesive

At EWI Store, all our systems are held in place using a combination of high-quality adhesives and mechanical fixings. The nature of Kingspan K5 insulation means it requires a very strong adhesive. In this instance, we highly suggest the use of the EWI-225 Premium Basecoat. EWI-225 is our most versatile adhesive and can be used as both 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 a coverage of 4m², and a drying time of 24-48 hours.

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



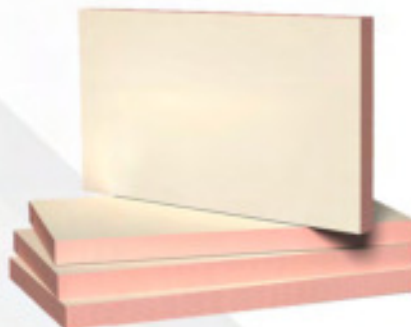
4. Applying the Kingspan K5 Insulation Boards

Our Kingspan Kooltherm K5 Insulation Boards deliver excellent thermal insulating properties to your home or building. Kingspan K5 is often considered a more effective option for thermal insulation than EPS insulation or mineral wool.

At EWI Store, you can purchase Kingspan K5 in thicknesses ranging from 50mm – 70mm. If insulating a brick wall, building regulations typically require a 60mm Kingspan thickness.

When applying adhesive to the boards, apply around the perimeter and 3 dabs in the centre. This ensures any surface imperfections are evened out.

K5 INSULATION BOARDS
Coverage: 0.72m² per board



5. Installing the Fixings

Kingspan K5 external wall board requires one fixing per corner and one in the centre. To securely attach the board to the wall, plastic fixings are required. Our range allows you to choose from a selection of fixing lengths. This ensures all thicknesses of insulation are catered to.

It should be noted that fixings should be at least 40mm longer than the thickness of the insulation. This is so that the Kingspan K5 can be reinforced into the substrate.

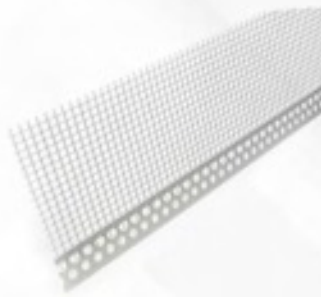


6. Applying the Beading

A key component of the Kooltherm K5 installation process is beading. This works to reinforce certain external wall areas that are more prone to damage than others.

The beads that will be required will depend on the areas that need reinforcement. For example, corners, doors and windows.

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

**Corner Bead****Stop Bead****Reveal Bead**

7. Applying the Basecoat and Embedding the Mesh

When creating a reinforced basecoat layer with Kingspan K5, we highly recommend the use of EWI Pro's EWI-225 Premium Basecoat. When applied at a thickness of 6mm, the fibreglass mesh can be successfully embedded in the layer. This layer reinforces the system with a strong, flexible and waterproof base.

Once dry, the reinforcement basecoat layer provides a strong, flexible and waterproof layer.

- **Coverage rates (basecoat):** 1 x 25kg bag covers 4m²
- **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.



8. 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.



Coverage Rates:

7Kg = 20m²

20kg = 60m²

9. Applying Render

The final step in the Kingspan K5 installation process is to apply render once the topcoat primer has fully dried.

Since most of our renders are thin coat renders, the thickness of the topcoat depends on the grain size of the render. For example, the available grain sizes for EWI-075 Silicone Render 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 to achieve your desired finish.

Coverage Rates:

1.0mm = 12m² - 13m²

1.5mm = 9m² - 10m²

2.0mm = 7m² - 8m²

3.0mm = 5m² - 6m²



FEATURES	Nano Drex Silicone Render EWI-077	Premium Bio Silicone Render EWI-076	Silicone Render EWI-075	Silicone Silicate Render EWI-040
Breathability	★★★★	★★★★	★★★★	★★★★
Self-Cleaning Ability	★★★★	★★★★	★★★★	★★★★
Flexibility	★★★★	★★★★	★★★★	★★★★
Durability	★★★★	★★★★	★★★★	★★★★
Bio Protection	★★★★	★★★★	★★★★	★★★★
Colour Retention	★★★★	★★★★	★★★★	★★★★

