



## RENDERED WALL SYSTEM

### **INSULCLAD® EXTERIOR CLADDING SYSTEMS**

#### **INSTALLING INSULCLAD® SYSTEMS OVER BRICKWORK AND OTHER MASONRY SUBSTRATES**

- TO BE READ IN CONJUNCTION WITH THE INSULCLAD® DESIGN & INSTALLATION MANUAL.
- THIS INFORMATION IS ADDITIONAL TO THE INSTALLATION INSTRUCTIONS & GUIDANCE FOUND IN THE DESIGN & INSTALLATION MANUAL, THE CONSTRUCTION DRAWINGS AND BRANZ APPRAISALS No 696 and No 697 WHICH ARE TO BE ADHERED TO WHEN INSTALLING ANY OF THE INSULCLAD® RENDERED WALL SYSTEMS.

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**COMBINING EXTERIOR CLADDING WITH SUPERIOR INSULATION**

## Insulclad® Exterior Insulation Cladding Systems

### Installing Insulclad® over Brickwork and other Masonry Substrates

#### Building Regulations:

Insulclad® systems, when installed, applied and maintained in accordance with the instructions and recommended details from Foamex Polystyrene Pty Ltd will meet the relevant performance provisions of the Building Code of Australia (BCA).

#### Appraisals:

Insulclad® Systems have been subjected to extensive testing and comply with Australian building practices. Insulclad® systems have been appraised by BRANZ Limited. Refer to Appraisal No. 696 (2013) Insulclad® Direct Fixed Cladding System, and Appraisal No. 697 (2013) Insulclad® Cavity System.

#### Substrate:

The frame structure must be built to comply with the Building Code of Australia (BCA) and in accordance with appropriate Australian Standards. The wall structure must be built to comply with the Building Code of Australia (BCA) and in accordance with appropriate Australian Standards relative to brickwork, blockwork & other masonry substrates. Ensure new concrete is allowed to cure for a minimum of 6 weeks in accordance with AS 3958.1-1991.

#### Surface Preparation:

Ensure all surfaces are sound, dry and free from oil, dust, grease, wax and any other contaminating materials.

#### Expansion Joints:

Must be applied in substrate as follows: Between two different substrates abutting (e.g. timber to concrete), around fixed elements (e.g. columns) and at internal vertical corners. Expansion joints must go through the substrate into the structural background, and are not to be rendered, cladded and kept free from dirt. Expansion joints must not be less than 5mm or greater than 100mm in thickness. Expansion joints must be filled with a flexible filler. All expansion joints should be installed in accordance with AS 3958.1-1991.

Control joints in external cladding must be constructed in accordance with the Design & Installation Manual and Construction Drawings and be provided as follows:

Vertical control joints – at maximum 20m centres; aligned with any expansion joint in the structural framing or masonry substrate; where the cladding system abuts different cladding types, where the system covers different substrate materials or where significant structural movement occurs such as changes in roofline, building shape, or structural system.

**Application:****Installation of Polystyrene Core Panel or Pre-Mesh Panel onto Brick Work:**

1. Apply recommended Polyurethane Foam Sealant on rear of polystyrene panel and press onto Brick Work.
2. Mechanically fix polystyrene Core Panels or Pre-Mesh Panels using anchor bolts with 40mm plastic Insulclad® washers, use 8 plugs per m<sup>2</sup>. Depth of penetration of masonry anchors into masonry substrate must comply with specifications recommended by the manufacturer of the selected masonry anchors.
3. The recommended Polyurethane Foam Sealant may be used as an additional chemical anchor to be used in conjunction with masonry anchors, provided that this agrees with the specification recommended by the manufacturer of the selected masonry anchors.
4. Glue and seal abutting edges of every adjoining panel using recommended Polyurethane Foam Sealant as the panels are placed into position.
5. Refer to Design & Installation Manual for Insulclad® exterior cladding system for additional guidance for fixing of panels.

**Render over Insulclad® Polystyrene system:**

1. Glue all uPVC trims into place using the recommended MS Adhesive/Sealant.
2. Seal all wall penetrations using the recommended MS Adhesive/Sealant.
3. Prime all uPVC trims using Insulclad® Joint Patch & Primer Additive mixed with Insulclad Base Render to a slurry consistency.
4. Go to step 7 if installing Pre-Mesh Panels.
5. Apply Insulclad® Base Render to entire surface. Refer to Technical Data sheet for mixing and application instructions.
6. Then immediately apply 1200mm x 50m reinforcing mesh to entire surface. Bed mesh into Base Render by trowelling the entire surface so that the mesh sinks below the surface of the Base Render by approx.1mm. Ensure that render is embedded into and around uPVC trims and Mesh is taken to the corner of bead. Leave Base Render to cure for 24hrs.
7. If using Pre-Mesh Panels set all panel joints with 200mm wide self adhesive mesh bedded-in with a mix of Insulclad® Joint Patch & Primer Additive and Base Render. Refer to Technical Data sheet for mixing and application instructions.

8. Place 200mm wide strips of self adhesive mesh on a 45deg angle over the corners of all wall penetrations and bed in with a mix of Insulclad® Joint Patch & Primer Additive and Base Render. Refer to Technical Data sheet for mixing and application instructions.
9. Apply Insulclad® Finish Render in combinations of build coats as recommended in the Render Finishes Guide to gain adequate cover over all fixings and trims and any other imperfections that may be present. This will depend upon your choice between Pre-Mesh or Core Panel as well as your desired final finish.
10. Apply Insulclad® Finish Render as a finish coat as recommended in the Render Finishes Guide. This will depend upon your choice between Pre-Mesh or Core Panel as well as your desired final finish.
11. Re-seal all wall penetrations after rendering is completed using the recommended MS Adhesive/Sealant.
12. Allow at least 5 days for curing then paint surface using 100% acrylic paint by applying at least 2 coats.

**Clean up:**

Excess adhesive can be removed using a clean damp cloth while still wet. Rake Polyurethane Foam adhesive that has expanded outwards from in-between panel joints using a knife or trowel. Tools and other equipment can be cleaned up using water while the adhesive or render is still wet.

**Health & Safety:**

Render and other masonry dust is an irritant and paper dust-protection masks must be worn while the render is being mixed. The wet render is alkaline and prolonged skin contact must be avoided.

**Maintenance:**

Damaged areas, cracks or sealant details which could allow water to penetrate the cladding, must be repaired to ensure the building remains watertight.

Accidental damage can be repaired using new render and where required additional fibreglass mesh. Finish the repair with the appropriate product. Minor cracks can be sealed with a polyurethane type sealant and be repainted. Suspect sealant joints must be raked out, the joints cleaned and the sealant replaced. Additional guidance relating to maintenance is included in the Technical Literature for Insulclad® Exterior Cladding Systems.

**Technical Advice:**

An advisory service is available to specifiers and users of the Insulclad® Exterior Cladding Systems. Contact Foamex Polystyrene at [nswsales@foamex.com.au](mailto:nswsales@foamex.com.au)

Or go to [www.insulclad.com.au](http://www.insulclad.com.au)

**Technical Information:**

Refer to [www.insulclad.com.au](http://www.insulclad.com.au) for installation manual and all relevant technical data when installing or specifying the Insulclad® Rendered Wall System for both Core Panel and Pre-Mesh polystyrene systems.

**General:**

Foamex Polystyrene Pty Ltd guarantees that its pre-mixed render products and polystyrene products are manufactured to a high specification. Foamex Polystyrene Pty Ltd's liability (in contract, tort, negligence or otherwise) for any loss, damage, expense, cost or liability arising from application of the product is limited to making good any defect solely attributable to the Foamex Polystyrene Pty Ltd manufacturing process. Foamex Polystyrene Pty Ltd shall not be liable for any defective workmanship or application of its products by any contractor, approved or otherwise or any other person.

The long-term durability of the Insulclad® System is dependent on the correct preparation and application of all of its components in strict accordance with the relevant written instructions and detail sheets. On-site application is beyond the control of Foamex Polystyrene Pty Ltd and it cannot guarantee workmanship or the correct preparation and application of its products or systems.

The approved Insulclad® contractor shall take the overall responsibility for on-site supervision, staff training, installation and quality control.

The purchaser of the components of these systems will indemnify Foamex Polystyrene Pty Ltd and its personnel of any damage, loss or expense incurred by Foamex Polystyrene Pty Ltd which is not proved to be the direct consequence of defective manufacture of the product, and the customer will pay the amount of that damage, loss or damages within 10 days of Foamex Polystyrene Pty Ltd or its personnel making a demand in writing to the customer for payment of same.