

## Loxo<sup>®</sup> Coating Specification



To achieve water resistance and vapour permeability on the face of the 50mm Loxo<sup>®</sup> panel an approved coating system is required.

### Generally:

Loxo<sup>®</sup> is coated with a high build polymer-modified, Portland cement-based render, applied as a levelling base coat, either over or encapsulating high quality alkali resistant fibre glass mesh reinforcement. A variety of texture options exist to meet project requirements from colour through texture (wet texture) to polymer enriched cementitious texture (dry texture). Please refer to the coating specification of our preferred coating partners if water resistant elastomeric flexible membrane coating is required over wet texture. Dry texture must be over coated with a minimum of two coats of water resistant elastomeric flexible membrane coating in accordance with the manufacturer's recommendations.

### Approved Manufacturers:

To achieve a warrantable performance system Loxo<sup>®</sup> has worked closely with a number of coating partners to develop a range of warranted performance coating systems for the Loxo<sup>®</sup> Panel System.

### Loxo<sup>®</sup> Performance Requirements:

#### Surface Preparation:

The substrate must be clean, sound and free of loose particles, dust, dirt, oil, wax, or any other contaminating material that may interfere with the intended performance. Surface misalignments and protrusions are to be trimmed back and deep voids should be prefilled using Loxo<sup>®</sup> Adhesive. Any wires, nails, staples or steel on the surface must be completely removed, exposed reinforcement bars must be treated with appropriate Loxo<sup>®</sup> corrosion protection paint in accordance with the Loxo<sup>®</sup> Design and Installation Manual.

#### Weather Proofing:

The primary objective of the coating system is to prevent water ingress through the Loxo<sup>®</sup> panel and allow vapour in and out.

#### Proven water resistance capability: | Transmission: |

<10grams/m<sup>2</sup>/24hr/1kPa.

#### Vapour Permeability:

The coating must be vapour permeable to allow water vapour to escape and should comply with the following performance parameters.

**w. sd ≤ 0.2 kg/(m<sup>2</sup> . h<sup>0.5</sup>) where,**

- Coefficient of Water Absorption  
 $w \leq 0.5 \text{ kg}/(\text{m}^2 \cdot \text{h}^{0.5})$
- Equivalent Air Layer Thickness of Water Vapour Diffusion  $S_d \leq 2\text{m}$

Note: A coefficient of water absorption ( $w \leq 0.5$ ) means that the minimal dampness is absorbed regardless of the time factor. Coating with an ( $s_d \leq 2\text{m}$ ) has less resistance to water vapour diffusion (escape) than a static 2m thick air layer.

#### Compatibility:

Ensure the coating system is compatible with the substrate and construction system components, ie:

- Coatings may not adhere to silicone or other sealants and mastics.
- Excessive joint adhesive smears across the panel face may require removal.

#### Durability:

The coating must be durable and not deteriorate with exposure to light (UV) and water.








#### Elasticity:

- The coating must be able to bridge a 1mm minimum crack width.
- The coating manufacturer can specify the minimum design specification (thickness), so that the coating is serviceable and durable.

**IMPORTANT:** A specific fit-for-purpose coating system must be adopted and a simple paint coating would most likely be an inadequate system. Variation to the coating system must be approved and warranted by the coating system manufacturer or representative.

## Loxo<sup>®</sup> Approved Coating System Specification



Loxo <sup>®</sup> Approved Coating System Components to conform to the following criteria:		
<b>External Angle</b>	External Corner Angles 32mm x 32mm. (Aluminium is preferred).	
<b>Primer Coat (Optional)</b>	A water based primer/sealer to enhance adhesion. (Refer to coating manufacturer's specification).	
<b>Base Coat Render</b>	A high build polymer-modified, Portland cement-based render, it is mixed on site with clean drinking water. It is applied as a base coat, either over or encapsulating a high quality alkali resistant fibre glass mesh reinforcement. Ensure there is a minimum of 2mm thickness over the mesh. The total meshed base coat should have a minimum thickness of 3mm.	
<b>Reinforcing Mesh</b>	A high quality alkali resistant fiberglass mesh of nominal aperture size approx. 5mm square and a weight of 165g/m <sup>2</sup> .	
<b>Dry Texture (Cement based polymer modified dry powder).</b>	A cement based polymer modified coating applied with a trowel or float over the basecoat. The texture must have a minimum thickness of 1.0mm. <b>It is mandatory</b> to overcoat the dry texture with a Loxo <sup>®</sup> approved paint system. (Refer to Paint System page 19-20, of the Design & Installation Manual).	
<b>Wet Texture (A pre-mixed full acrylic texture).</b>	A full acrylic coating applied with a trowel or float over the basecoat. The Wet Texture must have a minimum thickness of 1.0mm. It may be coloured through (tinted) and may not require the application of a paint system (dependent on coating manufacturers recommendations). In the case were a paint system is not required, the application of the Wet Texture forms the primary means of weather resistance and must be capable of bridging a 1mm minimum crack width.	
<b>Paint System Membrane</b>	The paint system (membrane coating) must comprise a minimum of two coats of a 100% acrylic-based exterior paint. The paint / membrane must be applied to a minimum dry film thickness of 150um per coat and must have a crack bridging capability of five (5) times the total dry film thickness. The application of the paint system forms the primary means of weather resistance.	
<b>Approval</b>	Proprietary coating systems must be approved by Loxo <sup>®</sup> prior to their use. The coating manufacturer must confirm that they comply with the Loxo <sup>®</sup> Approved Coating System specifications and that they will provide a minimum 7 year manufacturer's warranty when used with the Loxo <sup>®</sup> Panel System.	
<b>Coating Guarantee and Warranty:</b> Coating Manufacturers and Coating Applicators		
<b>To all the above products</b>	The Coating Manufacturers and Coating Applicators of the <b>Loxo<sup>®</sup> Approved Render Systems</b> guarantee their product and workmanship for a period of <b>7 years</b> (from date of purchase) to perform and meet provisions outlined in the BCA (Structure, Dampness, Weatherproofing). This guarantee applies only where all material components of the Render system have been prepared and installed in accordance with <b>Loxo<sup>®</sup>'s</b> written instructions, technical specifications and detail drawings, where the work is carried out by an approved contractor and where the system has been properly maintained and subjected to normal conditions of exposure.	

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