

# Thorprime HD<sup>™</sup> Epoxy resin priming system

# Thorprime HD<sup>™</sup> is a two-component, solvent-free, low odour moisture tolerant epoxy membrane and residual moisture suppressant.

Once cured, it created a new surface damp proof membrane which enables early access onto the substrates for coatings, screeds and self levellers. With its excellent adhesion properties and backpressure results, it can also be applied in wet conditions and in extreme measures, underwater. The primer is also suitable in situations where oil capping is required.

### **Summary**

- Can be applied to 7-day old concrete.
- Application of resin flooring on cement and concrete substrates with a moisture content >75% RH.
- Protects moisture-sensitive flooring systems from rising damp.
- Excellent for 'wet-on-wet' bonding of polymer reinforced cementitious screeds to concrete.
- Excellent adhesion to concrete under adverse conditions.
- No unpleasant or harmful odours.
- Ease of application using brush, roller and rubber squeegee.

## **Application Areas**

Thorprime<sup>™</sup> is suitable for use for both epoxy and polyurethane resin-based systems onto concrete, timber, steel substrates including Thortech products:

- Thorgrip<sup>™</sup>
- Thorscreed<sup>™</sup>
- Thorset<sup>™</sup>

### **Technical Information**

Adhesion testing to BS ISO 4624:2003 – Conditioned for 14 days

Concrete: Wet	3.7N/mm <sup>2</sup> @ 8°C
Concrete: Wet	2.1N/mm <sup>2</sup> @ 23°C
Concrete: Dry	2.1N/mm <sup>2</sup> @ 23°C

Negative Hydrostatic Pressure Testing

Test pieces achieved a minimum resistance to a water pressure of 4 bar.

The image below shows regular repeat adhesion testing.



#### **Product Information**

Coverage Potlife Tack free 4-5m2/Kg - (18-22m2/4.5Kg) 30 min @ 20°C 7-8 hour @ 20°C

Thortech Ltd, Units 7 & 8, Lamby Way Workshops, Lamby Way, Cardiff, CF3 2EQ, UKwww.thortechnology.co.ukInfo@thortechnology.co.ukTEL: +44 (0)29 2048 9100



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Open to traffic24 hours @ 20°CFull chemical cure7 days @ 20°CPackaging4.5Kg and 10Kg units

# **Surface Preparation**

Concrete Substrates must be clean, sound and free of any laitance and any other surface contamination that could impair adhesion. Existing floor areas will require mechanical abrasion to reveal clean concrete. Enclosed vacuum blasting equipment or vonarx type scabblers should be used.

Any areas, which have been contaminated with oil or grease, should be treated with hot compressed air blasting equipment. This will drive out any deep-seated contamination.

Any areas of damaged concrete should be broken out and reinstated. For small areas of thin section repairs – less than 10mm in depth – an epoxy resin repair mortar should be used. For a larger area, thicker section repairs a polymer reinforced cementitious repair mortar should be used. Any cracks in the substrate in excess of 1mm wide should be chased out to a minimum width and depth of 5mm and repaired with an epoxy resin mortar. Finer cracks do not normally require pre-treatment, as they can be flooded with Thorprime<sup>™</sup>.

Any existing floor coatings that are not soundly bonded to the substrate must be removed prior to the application of Thorprime<sup>™</sup>.

Adhesion tests should be carried out to ensure compatibility with Thorprime<sup>™</sup>. For newly laid concrete substrates a light pass with enclosed vacuum blasting equipment is required to lightly texture the substrate and ensure that all laitance and the remnants of any curing membranes are removed. Any flexible joints within the concrete substrates should be protected with masking tape. The perimeters of the area being treated, along with any grids, drains etc, should also be protected with masking tape.

Immediately prior to the application of the primer coat, the concrete substrate should be thoroughly vacuumed to remove all dust and other deleterious matter.

Whilst the primer can be applied to a damp substrate there should be no standing water.

The primer should be worked thoroughly into damp substrates (with a still brush if there are any suspicions of oil contamination). Damp substrates should be primed twice with the first coat blinded with sand. The second coat should be laid at 90° to the first coat.

When used as a primer for subsequent coating systems or self-levellers, Thorprime<sup>™</sup> must be allowed to cure to a tack-free finish. This will take 7-8 hours at 20°C. In order to optimise inter-coat adhesion, Thorprime<sup>™</sup> must not be allowed to cure longer than 48 hours prior to overcoating. If this time is exceeded, light abrasion and a second primer application will be required. When used as a primer for polymer concrete or epoxy resin screeds, Thorprime<sup>™</sup> should be over coated 'wet-onwet'. Only prime areas that can be over screeded within six hours. If the primer cures tack-free, light abrasion and repriming will be necessary.

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### **Method Statement**

Thorprime<sup>™</sup> is supplied in pre-weighed packages. It is essential that all of the curing agent, component A, is added to all of the resin, component B, and mixed thoroughly for 60 seconds using a mechanical paint stirrer. The fully blended system is immediately applied to the substrate by brush or roller at an average rate of 4-5m<sup>2</sup>/litre ensuring total coverage.

### Cleaning

Safesolve should be used for cleaning tools, etc.

### **Health & Safety**

Gloves, overalls and barrier cream should be used when working with Thorprime<sup>™</sup>. For full details please refer to the appropriate Health and Safety Datasheet.

The information given in this product, technical and application datasheet is given in good faith, based on current knowledge and experience but we have no control over the quality or the condition of the substrate or the many differing factors affecting the use and application of the product. It relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of the company's knowledge and belief, accurate as of the date indicated. It is the user's responsibility to satisfy themselves as to the suitability and application of such information for their own use.

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