Rapid Cure Primer
PAR 1 PRIMER

DESCRIPTION
PAR1 Primer is a two-component, solvent free, rapid curing reactive primer based on Methyl Methacrylate (MMA) resins. A major advantage of PAR1 Primer is its fast cure across the application temperature range. To facilitate this PAR1 Primer is also available in a low temperature grade, PAR1 LT.

USES
PAR1 Primer is used to seal the surface of a variety of substrates and improve the adhesion of subsequent Stirling Lloyd coatings. It can be applied to concrete, cement screeds and asphalt and achieves rapid drying even at low temperatures.

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Application Temperature Range (°C)</th>
<th>-10 to 30°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Working Life</td>
<td>10 minutes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grade / Temperature °C</th>
<th>Bags of BPO</th>
<th>Typical Cure (minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAR1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 to 30°C</td>
<td>1</td>
<td>15 - 35</td>
</tr>
<tr>
<td>5 to 15°C</td>
<td>2</td>
<td>18 - 40</td>
</tr>
<tr>
<td>0 to 5°C</td>
<td>3</td>
<td>30 - 45</td>
</tr>
<tr>
<td>PAR1 LT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 to 15°C</td>
<td>1</td>
<td>30 - 45</td>
</tr>
<tr>
<td>0 to 10°C</td>
<td>2</td>
<td>25 - 50</td>
</tr>
<tr>
<td>-10 to 0°C</td>
<td>3</td>
<td>35 - 80</td>
</tr>
</tbody>
</table>

SURFACE PREPARATION
It should be stressed that the success of any coating or repair system is dependent on the thoroughness of the surface preparation. All substrates must be clean, dry and structurally sound. They must be free from laitance, dust, oils, fats and other surface contaminants.

All concrete decks must be prepared by suitable mechanical means such as vacuum blasting to provide a sound surface, prior to priming.

Solid ground floors must have an effective moisture/vapour barrier.

Repairs to damaged concrete can be made using Metaset® Rapid Repair Mortar. If additives, cement replacement or curing agents have been used or other repair materials are to be used their compatibility must be checked with our Customer Services Department.

APPLICATION
PAR1 Primer consists of a clear resin base and powder catalyst (BPO) all supplied in pre-weighed quantities ready for on-site mixing.

Immediately before use stir the primer resin thoroughly using a mechanical mixer, such as an air-driven drill (400 – 800 rpm) and mixing paddle. Care should be taken not to entrain excessive air in the mix. Whilst continuing to stir, gradually start to add the required amount of BPO and continue stirring until it is all added and completely dispersed (approx. 45 seconds). The lower the temperature the longer the hardener powder will take to dissolve.

Note: If PAR1 Primer is to be decanted from a large drum into smaller pails for on-site mixing ensure that the supply drum is stirred thoroughly or turned over from end to end to ensure the contents are thoroughly mixed before decanting.

Once the BPO is added it initiates the ‘working life’ of the material during which time it should be applied. The ‘working life’ of the material will vary depending upon the quantity mixed, the ambient and material temperature and the level of BPO addition.

PAR1 Primer should be applied evenly to the substrate by brush, roller or airless spray. For spray application the recommended equipment is a Graco 23:1 Monark airless spray pump with a ¼” spray line and a spray tip size between 0.025” (25 thou) and 0.035” (35 thou).

The substrate should be completely wetted ensuring maximum penetration so as to prevent pin holing and ensure good adhesion, however ‘ponding’ must be avoided. Do not try to apply the PAR1 Primer once it starts to gel.

One application of PAR1 Primer is normally sufficient. When dry an adequately sealed area will display a glass like sheen finish. If it doesn’t then a second coat must be applied. The primed surface should also be visually inspected for defects e.g. pinholes. If there are any visible defects then a second coat must be applied to ensure the substrate is adequately sealed.

The primer should be dry to the touch and fully cured before the next application stage starts. Once the primer has been applied vehicular trafficking should be avoided to prevent unnecessary contamination.

LIMITATIONS
When applied in an enclosed space or an area with restricted air circulation adequate ventilation must be provided. In many cases it may be adequate just to leave a door open and allow a through draft. Alternatively the use of mechanical ventilation such as industrial fans may be required. An air exchange of 5 to 6 times an hour is normally sufficient.

COVERAGE
PAR1 Primer (Typical) - 0.25kg/m² Coverage rate will vary with surface texture and porosity.

CLEANING
All tools and equipment should be cleaned with Stirling Lloyd Solvent No.1 (Acetone) before the material is allowed to cure.

PACKAGING & STORAGE
PAR1 Primer (Resin) - 5kg, 20kg & 164kg kits as standard. BPO Powder Catalyst - 100g & 400g bags for the 5kg & 20kg kits respectively. All components of the system should be stored in cool, dry, protected conditions, out of direct sunlight and in accordance with the relevant Health & Safety regulations. Storage temperatures must not exceed 25°C. Do not store near naked flames or foodstuffs.

Stored in unopened containers, under the correct conditions, the components have a minimum shelf life of six months. If your product is more than six months old you must contact Stirling Lloyd before use.

HEALTH & SAFETY
Please refer to our Safety Data Sheet for further information.

GENERAL INFORMATION
PAR1 Primer is part of a wide range of specialist waterproofing, surfacing and repair materials manufactured and supplied by Stirling Lloyd. If you require any further information on this or any other of our products, please contact our Customer Services Department or visit www.stirlinglloyd.com.