MATACRYL® WPM
High Technology Seamless Liquid Waterproofing and Corrosion Inhibition for Bridges under asphalt

REDUCE POSSESSION UNDER EXTREME CONDITIONS!
A Flexible Seamless Liquid Waterproofing System for Highway bridges under asphalt

Superior Waterproofing Essential

Concrete not always in compliance with Specifications viz Absorption, Porosity & Permeability

Bottom of the barrel Systems selected on Price only, often fail to deliver in terms of Performance Damage often occurs to cheap membranes by third parties and other trades during Construction Similarly, damage may also occur to the Waterproofing when the Protection Boards are being installed Chloride ion ingress may compromise Structural integrity of Concrete or Steel Decks

Superior Performance Criteria

Very few limitations for installation at varying temperatures
Rapid Setting and Curing minimises costly Possession & facilitates almost immediate use
Non absorbent and Impermeable
Tenacious Bond to Concrete and Steel surfaces
Crack Bridging even at below sub zero temperatures
Chemical (fusion) bonding between subsequent Coatings minimises chances of any debonding
Seamless Protection
Lower densities on flexural members
High technology primer
Easily repaired where applicable
High resistance of tackcoat to work traffic
Installation Benefits

Cold applied and does not require heating or conditioning
Available in Spray applied grade (MATACRYL® Waterproofing Membrane only)
Applied in both Horizontal and Vertical Grades
VOC compliant and contains no solvent
Reduced application times between Coats and layers
Rapid installation and handover to Client / User
Membrane only requires 2 mm dry film thickness (d.f.t) applied in one coat
Universal primer to suit concrete or metal bridge
Chemically inert and not requiring Hazmat precautions when disposing of
Rain resistant within 30 minutes of application
Setting and Curing times may be adjusted to suit ambient and site conditions
No Protection Boards or additional Alternative Protective Layers (APL) required
Limited manpower required
Insignificant amount of equipment and plant required
High resistance of tackcoat to work traffic

System Build Up Bridge Decks under Asphalt

Membrane under asphalt

1. Matacryl® Primer + natural quartz
2. Matacryl® Membrane Layer
   (1 or 2 coat system)
3. Matacryl® STC broadcasted with quartz sand
4. Asphalt
## MATACRYL® Membrane

### Engineering Properties

<table>
<thead>
<tr>
<th>Physical Properties</th>
<th>Test Method</th>
<th>Test Institute</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chloride ion ingress</td>
<td>BBA Method</td>
<td>BBA (British Board of Agrément)</td>
<td>Maximum increase in chloride ion concentration not more than 0.04%</td>
</tr>
<tr>
<td>Crack cycling at -10°C, 23°C, 40°C</td>
<td>BBA Method</td>
<td>BBA (British Board of Agrément)</td>
<td>No cracks in the membrane</td>
</tr>
<tr>
<td>Dynamic puncture resistance under railway ballast</td>
<td>SNCF Method</td>
<td>SNCF (French Railways) Laboratoire, Vitry-sur-Seine</td>
<td>Meets specification of no rupture of the membrane after 2 million loading cycles</td>
</tr>
<tr>
<td>Adhesion to concrete</td>
<td>NFP 98 282</td>
<td>CETE Laboratoire, France</td>
<td>9.4 MPa - rupture in concrete</td>
</tr>
<tr>
<td>Crack-bridging capacity</td>
<td>BPG für Beschichtungen</td>
<td>Techn. Unversity Munich, Germany</td>
<td>At 23°C: 2.4 mm thickness - 8 mm At 0°C: 2.1 mm thickness - 8.5 mm At -20°C: 2.7 mm thickness - 8.8 mm</td>
</tr>
<tr>
<td>Dynamic puncture resistance</td>
<td>ETAG 005 Part 1 No. 5, 3, 3, 2, 2 TR 000</td>
<td>Polymer Institute, Germany</td>
<td>At 0.5 mm L3 At 1.5 mm L4</td>
</tr>
<tr>
<td>Static puncture resistance</td>
<td>ETAG 005 Part 1 No. 5, 3, 3, 2, 2 TR 007</td>
<td>Polymer Institute, Germany</td>
<td>At 0.5 mm L3 At 1.5 mm L4</td>
</tr>
<tr>
<td>Rebound elasticity</td>
<td>DIN 53512</td>
<td>Polymer Institute, Germany</td>
<td>23.3 %</td>
</tr>
<tr>
<td>Shore A-Hardness</td>
<td>NFP 98 285</td>
<td>CETE Laboratoire, France</td>
<td>60 IFHD (1 hour after application) 85 IFHD (3 hours after application)</td>
</tr>
<tr>
<td>Taber abrasion, load 1000 gr. Roll CS 10</td>
<td>ISO 7764-2</td>
<td>Polymer Institute, Germany</td>
<td>55.7 mg after 500 turns 63.9 mg after 1000 turns</td>
</tr>
<tr>
<td>Tensile strength at -30°C</td>
<td>ISO 527</td>
<td>Polymer Institute, Germany</td>
<td>24 MPa / 107% elongation</td>
</tr>
<tr>
<td>Negative side hydrostatic pressure test</td>
<td>Taylor Woodrow no. 7166</td>
<td>Taylor Woodrow, England</td>
<td>0 blisters at 2.5 BAR</td>
</tr>
<tr>
<td>Crack bridging capability Shear strength</td>
<td>VTT 2632</td>
<td>VTT, Finland</td>
<td>Average of 5.68 at -30°C &gt; 0.65 N/mm²</td>
</tr>
</tbody>
</table>

*This brochure is not intended to establish product recommendations for any installation. To the best of our knowledge, the information contained herein is true and accurate at the time of issue, but is subject to change without prior notice.*

For any additional information on the products please contact the Company [info@gpintech.com](mailto:info@gpintech.com) or consult the web site: [www.english.gpintech.com](http://www.english.gpintech.com).