

PROPOSED METHOD STATEMENT
FOR THE INSTALLATION AND QUALITY CONTROL OF
PUMATRACK ROLLABLE ROAD SURFACING SYSTEM

1. General

- 1.1 The installation and composition of PumaTrack Rollable Road Surfacing System shall be as stated in the product specification and this installation method statement.
- 1.2 PumaTrack Rollable Road Surfacing System consists of a Methyl Methacrylate binder, blended fillers, pigment(s), aggregate, and property modifying additives.
- 1.3 A programme of work shall be agreed with the purchaser prior to commencement of installation. Requirements for the provision of sufficient working area, plant, safety and, if required, protection to the system shall be agreed.
- 1.4 The current installation method statement together with all the necessary Health & Safety data sheets and COSHH risk assessment shall be deposited with the purchaser and maintained on-site.

2. Quality Control

- 2.1 Every batch shall be subject to quality control checks to ensure compliance with the system specification.
- 2.2 Each component received on-site shall be logged and stored to prevent contamination or deterioration, in accordance with the manufacturer's instructions.

3. Suitability of the Road Surface

- 3.1 The system is deemed suitable for use on highways with concrete or bituminous surfaces.
- 3.2 The purchaser should ensure that the pavement structure is adequate to support the traffic without undue cracking or deformation during the expected life of the system
- 3.3 New bituminous substrates should be allowed to weather for at least 6-8 weeks prior to the installation of the system. This is because bituminous substrates can contain residues of oils, bitumen and additives which can inhibit adhesion and curing. Depending on the type of substrate, this can take even longer than 8 weeks, and tests should be carried out on a small area before the full application commences to ensure the adhesion is fine.
- 3.4 Concrete surfaces should be a minimum of 28 days old and must be primed using a CM Primer prior to the installation of the system.

4. Traffic Management

Traffic Management shall be in accordance with Department of Transport Traffic Signs Manual Chapter 8 current edition, or as agreed between the Purchaser and Installer.

5. Preparation of the Road Surface

- 5.1 The areas to which the system is to be applied shall be clearly defined and marked by the Purchaser prior to commencement of work on-site.
- 5.2 Any imperfections in the road surface not acceptable to the Installer shall be reinstated with a material approved by the Purchaser in consultation with the Installer.
- 5.3 The road surface shall be clean, dry and free from ice, frost, loose aggregate, oil, grease, road salt and other loose matter that may impair the adhesion of the system.
- 5.4 Where the road surface does not comply with Section 5.3 it shall be cleaned by the Installer or others, by grit blasting, high pressure water jetting, low pressure water/abrasive blast cleaning, scarifying, scabbling or other means approved by the Purchaser. To remove dust and other loose matter the road surface should be vigorously brushed or treated with hot compressed air. Any oil visible on the road surface shall be removed by washing and scrubbing with a suitable detergent solution followed by flushing with clean water or by other suitable means.
- 5.5 Existing road markings, ironwork, road edges of area to be treated and road studs shall be suitably masked.
- 5.6 On concrete substrates, CM primer shall be applied using a short pile paint roller or serrated edge squeegee at a typical coverage rate of 0.4kg/m², depending on the substrate texture and porosity. The road surface temperature shall be between 0 and 40°C. The CM primer needs to be catalysed according to the following table:

Table 1: Catalyst Addition Levels when using CM primer

Substrate temperature (°C)	Primer pack (kg)	BPO powder catalyst required (g)
0 – 5	20	1,200
5 – 15	20	800
15 – 25	20	400
25 – 40	20	200

Primer choice is critical and should be approved by the certificate holder before use.

6. Weather Conditions

- 6.1 Installation of the system shall only be carried out with a road surface temperature of 0°C to 40°C and with a relative humidity of 85%. At temperatures below 5°C, the pails should be warmed to above 5°C
- 6.2 Ambient and road surface temperatures shall be recorded at the start and, if the weather is variable, during the installation process.
- 6.3 Road surfaces shall be dry before and during the installation of the system.
- 6.4 The curing period for the prevailing weather conditions shall be notified to the Purchaser.

7. Installation

7.1 System Installation Procedure:

- 7.1.1 The PumaTrack system is available as a single grade for use at substrate temperatures from 0°C to 40°C.
- 7.1.2 PumaTrack pails should be kept out of direct sunlight during storage and use. Storage at elevated temperatures can lead to degradation of the system. Application of hot PumaTrack material can lead to premature gelling or curing, which can adversely affect product performance.
- 7.1.3 PumaTrack rollable surfacing system is a two-component cold applied chemically curing Methyl Methacrylate compound, consisting of a pre-accelerated base resin, blended fillers, pigment(s), aggregate, trace amounts of property modifying additives and a powder catalyst (BPO), supplied in pre-weighed quantities ready for on-site mixing. For the amount of BPO powder catalyst required for the installation temperature, see the following table:

Table 2: Catalyst Addition Levels when using PumaTrack

Substrate temperature (°C)	PumaTrack pack size (kg)	BPO powder catalyst required (g)
0 – 5	20	500
5 – 15	20	400
15 – 25	20	200
25 – 40	20	100

- 7.1.4 The catalyst level is critical – the minimum catalyst level is 100g per 20kg pail. Using less catalyst will cause partial curing and lead to product failure. Excessive levels of catalyst can lead to premature gelling and curing, which can lead to reduced adhesion to the substrate and product failure.
- 7.1.5 Immediately prior to use, stir the binder thoroughly using a mechanical mixer until the resin is fully homogenised. Add the correct amount of BPO powder catalyst and mix thoroughly for at least 30 seconds. Ensure that the binder at the bottom and sides of the container is completely mixed in. Do not delay once the catalyst has been added, as a chemical reaction is occurring that if left in the pail will ruin the mix.
- 7.1.6 The mixed binder and catalyst shall then be immediately spread onto the dry prepared road surface uniformly with a serrated squeegee at the desired thickness. Typically a 4mm serrated squeegee will be used to give a uniform thickness of 2mm. For higher levels of durability, a thicker squeegee should be used (e.g. 6mm). The binder should then be backrolled to give the desired texture depth. A short pile roller can be used to give a finer texture depth.
- 7.1.7 The applied material should be rolled as soon as possible after being squeegeed to avoid any gelling or partial curing before the texture has been rolled in.
- 7.1.8 If there is any delay to the work, the squeegee must be checked before work restarts to ensure that no cured material is left on the squeegee, which could lead to lower coverage rates, and thus reduced durability.

- 7.1.9 The squeegee should also be regularly inspected to ensure that there is no wear to the teeth, as this can also lead to lower coverage rates and reduced durability.
- 7.1.10 PumaTrack is made to tight quality tolerances. However, for larger areas, use material with the same batch number wherever possible. If different batch numbers are used on a single area, colour comparison checks should be made between each batch of product being used before any application starts.
- 7.1.10 On more open textured surfaces a greater material usage may be required to ensure adequate coverage of the surface.
- 7.1.11 The masking tape shall be removed promptly as the work progresses, before the binder begins to gel.
- 7.2 System Installation Checks by the Installer
 - 7.2.1 A visual check shall be carried out for uniform surface texture, blemishes, and any discernible faults.
 - 7.2.2 A check shall be made on completion of each site to determine the quantities of material used.
- 7.3 Sampling and Testing of Materials used on-site

If required, materials shall be sampled and tested at a frequency as requested and agreed between the Purchaser and Installer.
- 7.4 Maintenance and Repair
 - 7.4.1 In the event that damage occurs during the installation or during service the system shall be repaired as follows:
 - 7.4.1.1 The damaged and or de-bonded system shall be cut back to firmly adhering material, squaring off the area to be reinstated.
 - 7.4.1.2 The area to be repaired shall be cleaned, dried and the perimeter masked, allowing a 50 mm overlap on the existing well adhered system.
 - 7.4.1.3 The system shall then be applied in accordance with Section 7.1.
- 8. Aftercare**
 - 8.1 Any remaining masking shall be removed and the system allowed to fully cure. During the curing period, no disturbance or trafficking of the system shall be permitted.
 - 8.2 The Installer should endeavour to inspect the site after 24 hours and carry out any necessary remedial work.

End of Method Statement