

# Deckmaster Membrane

<b>Product Description</b>	<b>Deckmaster Membrane</b> is a two-part elastomeric polyurethane membrane.
<b>Uses</b>	<ul style="list-style-type: none"> <li>Imparts seamless leak protection to exposed car park decks, balconies and roofs.</li> <li>As a component of crack-bridging, trafficable and slip-resistant membranes.</li> </ul>
<b>Advantages</b>	<ul style="list-style-type: none"> <li>Seamless and waterproof</li> <li>Durable – high abrasion and wear resistance</li> <li>Resistant to dynamic stress</li> <li>High bond strength</li> <li>Highly flexible and crack resistant</li> </ul>

## Standards compliance

**Deckmaster Membrane** has been tested as part of a system in accordance with BS EN 1504-2: Surface protection products as a coating for use as Ingress Protection (1.3) and Physical Resistance (5.1). See system datasheet(s) for further information. Products and systems should be installed by competent persons in accordance with EN 1504-10 and other relevant standards.

## Properties

Appearance	Black thixotropic liquid			
Unit Sizes	5 kg, 10 kg & 20 kg units comprising resin and hardener			
Useable working life *	Temperature		Time	
	10 °C		30 minutes	
	20 °C		15 minutes	
	30 °C		< 10 minutes	
Over-coat time *	Temperature	Minimum	Maximum	
	10 °C	24	36	
	20 °C	12	36	
	30 °C	6	24	
Traffic time *	Temperature	Foot traffic	Light traffic	Full cure
	10 °C	24 hours	5 days	14 days
	20 °C	12 hours	3 days	7 days
	30 °C	8 hours	2 days	5 days

\* Times are approximate and can vary depending on site conditions including temperature and relative humidity.

## Preparation of substrate

Inadequate preparation will lead to loss of adhesion and failure. Weak, damaged and deteriorated concrete should be removed where necessary and repaired. The laitance and any surface sealer or curing membrane should be entirely removed by vacuum contained shot-blasting to expose the aggregate cleanly. High spots should be removed by grinding. The prepared substrate should be protected from further contamination prior to application.

## Treatment of cracks and joints

Consideration should be given to the treatment of cracks etc. using appropriate methods such as surface bandaging of cracks, filling of cracks or transferring cracks into joints as specified in EN 1504-10.

## Substrate quality

The surface strength of the base concrete should be tested after preparation, when the surface laitance has been removed. The concrete substrate should have a rebound hammer reading in accordance with BS EN 12504-2:2001, Type N of not less than 25 and a surface tensile strength of according to EN 1542 exceeding 1.5 N/mm<sup>2</sup>. Once prepared, the substrate should be free from dust, loose material, surface contamination and materials which reduce bond or prevent suction or wetting by the product i.e. concrete curing agents. This should be carried out by vacuum. To avoid doubt, a test area should be applied and the bond strength measured according to EN 1542.

## Application conditions

<b>General guidance</b>	Application should not be carried out if precipitation is expected. Products should be stored before use so that their properties are not impaired.
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<b>Substrate &amp; ambient temperature</b>	10 – 30 °C
<b>Substrate moisture content</b>	The base should have a relative humidity at the surface of no more than 75% when measured by the test method described in BS 8203.
<b>Ambient relative humidity (maximum)</b>	80%
<b>Dew point</b>	The substrate and uncured floor must be at least 3 °C above the dew point to avoid condensation/blooming.

### Coverage rate

	First coat	Second coat
<b>EN 1504-2 Deckmaster System R</b>	1.5 kg/m <sup>2</sup>	1.0 kg/m <sup>2</sup>
	Fully blind the second coat with 0.7 – 1.2 mm washed, dried and graded quartz	
<b>Other uses</b>	Approximately 1 kg/m <sup>2</sup> /mm thickness	

### Application methods

<b>Mixing</b>	Add the hardener component to the resin component and mix using a low speed electric mixer (300 - 400 rpm) for at least 2 minutes until homogeneous. Keep the mixing paddle fully submerged to avoid the entrapment of air and scrape the sides and bottom of the vessel several times. Decant the mixed material to a second mixing vessel and mix as above for a further minute.
<b>Application</b>	Apply immediately using a trowel, spattle or rubber lipped squeegee to the specified coverage rate. The use of a spiked roller will reduce the appearance of trowel/squeegee marks.
<b>Cleaning of tools</b>	Clean all tools with <b>Deckmaster Cleaning Solvent</b> immediately after use. Cured material can only be removed mechanically. Do not add solvent to the product to aid application.
<b>Over-coating</b>	If the over-coating window is exceeded, non-aggregate dressed surfaces should be mechanically abraded and/or solvent wiped. Allow the solvent to fully evaporate before proceeding. If fully aggregate blinded, ensure that the surface is completely dry before proceeding.

### Additional guidance

Do not apply on substrates with rising moisture. Protect cured material from moisture for at least 24 hours. Uncured material reacts with moisture causing foaming and blistering. Wear head and wrist bands during application to avoid sweat dropping into uncured material. For heating, use only electric powered systems. Fossil fuel powered heaters emit undesirable amounts of water vapour.

### Care & maintenance

Good housekeeping will extend the service life of the car park deck. Cleaning should be carried out using a rotary scrubbing machine with a suitable cleaning agent using temperatures up to 50°C or by use of a medium pressure water jet. Frozen surfaces should be treated with a non-abrasive de-icing medium.

### Storage & shelf life


12 months when stored off the ground in un-opened packs in a dry store, under cover between 10 °C and 30 °C out of direct sunlight. Protect from frost.

### Limitations


The manufacture of **Deckmaster Membrane** is a batch process and despite close manufacturing tolerances, colour variation may occur between batches.

### Legal notes

The information contained in this document, and all further technical advice given is based on our present knowledge and experience. However, it implies no liability or legal responsibility on our part. In particular, no warranty or guarantee of product performance in the legal sense is intended or implied as the conditions of use and the competence of any labour involved in the application are beyond our control. Properties listed are for guidance purposes only. We reserve the right to make any changes according to technological progress or further developments. Declared values, levels and classes given under “CE marking” are the result of testing under controlled laboratory conditions. Actual properties on site may vary due to site conditions, application methods and general wear and tear.

	
DOP DR0008	
Deckmaster (Yorkshire) Ltd, Pumaflor House, Ainleys Industrial Estate, Elland, West Yorkshire, HX5 9JP, England	
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EN 13813 SR-B1,5	
Synthetic resin screed material for use internally in buildings not subject to reaction to fire regulations	
Reaction to fire	E <sup>(2)</sup>
Release of corrosive substances	SR
Water permeability	NPD
Wear resistance	NPD
Bond strength	1,5
Impact resistance	NPD
Sound insulation	NPD
Sound absorption	NPD
Thermal resistance	NPD
Chemical resistance	NPD

<sup>(2)</sup> According to Commission Decision 2010/85/EU of 9 February 2010, the product satisfies all the requirements of the performance characteristic 'reaction-to-fire' class E without need for further testing.

	
0086	
DOP DR0011 (Deckmaster System R)	
Deckmaster (Yorkshire) Ltd, Pumaflor House, Ainleys Industrial Estate, Elland, West Yorkshire, HX5 9JP, England	
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0086-CPR-601605 EN 1504-2	
Surface protection product Coating	
Abrasion resistance	weight loss < 3000 mg
Permeability to CO <sub>2</sub>	S <sub>D</sub> > 50 m
Permeability to water vapour	class III
Capillary absorption and permeability to water	w < 0,1 kg/m <sup>2</sup> x h <sup>0,5</sup>
Adhesion after thermal compatibility	≥ 1.5 (1,0) <sup>(1)</sup> N/mm <sup>2</sup>
Resistance to thermal shock	≥ 1.5 (1,0) <sup>(1)</sup> N/mm <sup>2</sup>
Chemical resistance	pass
Crack bridging ability	B 4.2 (-10 °C)
Impact resistance	class III
Adhesion strength by pull-off test	≥ 1.5 (1,0) <sup>(1)</sup> N/mm <sup>2</sup>
Reaction to fire	class B <sub>FL</sub> – s1
Slip/skid resistance	class III
Behaviour after artificial weathering	Pass

<sup>(1)</sup>The value in brackets is the lowest accepted value of any reading.

Revision date 13<sup>th</sup> May 2014