# Deckmaster HFS UVR

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| **Product description** | **Deckmaster HFS UVR** is a three component elastic polyurethane system for high friction surfacing applications such as car park decks, ramps and warehouses. Suitable substrates include concrete, polymer modified sand/cement screeds, wood and some bituminous surfaces. **Deckmaster HFS UVR** flexible, has excellent resistance to yellowing and is designed with the highest order of durability, impact, abrasion and chemical resistance. |
| **Advantages** | • UV resistant<br>• Rapid installation<br>• Anti-slip<br>• Chemical resistant<br>• Seamless<br>• Abrasion resistant |
| **Chemical resistance** | **Deckmaster HFS UVR** is also resistant to a wide range of fuels, hydraulic oils, mineral oils and solvents. Good housekeeping practices should be employed. Please consult our Technical Department for further advice. Some staining or discolouration may occur with some chemicals, depending on dwell time, temperature, type of chemical and degree of housekeeping employed. This does not affect the product service integrity or durability. |
| **Colours available** | **Deckmaster HFS UVR** is available in a range of standard colours. |

## Typical Properties *

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| **Appearance** | Seamless, textured, gloss/silk finish. |
| **Typical Thickness** | Approximately 1.4 mm depending on substrate profile |
| **Adhesion to concrete (BS EN 1504-2)** | > 1.5 MPa (concrete failure) |
| **Unit Sizes** | 18 kg units comprising pre-proportioned resin, hardener and aggregate components |

**Working time**

| Temperature | Time |
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| 10 °C | 25 minutes |
| 20 °C | 15 minutes |
| 30 °C | < 10 minutes |

**Over-coat time**

| Temperature | Minimum | Maximum |
|---|---|---|
| 10 °C | 32 | 48 |
| 20 °C | 16 | 36 |
| 30 °C | 8 | 24 |

**Traffic time**

| Temperature | Foot traffic | Light wheeled traffic | Full cure |
|---|---|---|---|
| 10 °C | 32 hours | 4 days | 14 days |
| 20 °C | 16 hours | 48 hours | 7 days |
| 30 °C | 8 hours | 24 hours | 5 days |

* The above cure times are approximate and given as a guide only. These times may vary due to prevailing site conditions. At lower temperatures curing times will be extended. If the over-coating interval of is extended, the first coat should be abraded to improve inter-coat adhesion. The typical physical properties given above are derived from testing in a controlled laboratory environment. Results derived from testing field-applied samples may vary dependent upon site conditions.

## Substrate quality

Concrete substrates should be a minimum of grade RC30 of BS 8500-2 using clean aggregates with low soluble salt content. Synthetic resin floorings should not be laid on unmodified sand/cement screeds. Polymer modified sand/cement screed or fine concrete screed should be used. Substrates must be dry, clean and free of surface laitance and contaminants such as dirt, oil, grease, poorly bonded coatings, surface treatments or water repellent admixtures. After preparation, the base should have minimum rebound hammer values in accordance with BS EN 12504-2, Type N of 25 and a surface tensile strength exceeding 1.5 $N/mm^2$ when measured in accordance with BS EN 13892-8. If in doubt, apply a test area. Concrete bases in contact with the ground should include a functional damp-proof membrane in accordance with the requirements of CP 102 in order to prevent ground moisture adversely affecting the resin flooring. In the case of basement floors in contact with the ground, the provisions of BS 8102 should be followed. Bituminous surfaces should have a PEN number of less than 125 and a minimum age of 14 days. Bituminous surfaces exhibit a degree of movement which can result in visible cracks in the surface of **Deckmaster HFS UVR**. Suitable precautions should be taken to minimise movement and ensure proper compaction.

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## Substrate preparation

Inadequate preparation will lead to loss of adhesion and failure. In coatings, there is a tendency for the finish to mirror imperfections in the substrate. Grinding or light vacuum-contained shot-blasting is therefore preferred over planing for these systems. Weak substrate must be removed, surface defects such as blowholes and voids fully repaired and high spots removed by grinding. All dust and loose material must be completely removed before application by vacuum equipment. **Deckmaster HFS UVR** does not normally require the use of a primer. When treating extremely weak or porous concrete it is advisable to prime with **Deckmaster DPM**. Please refer to technical data sheet. This primer should be allowed to cure for a minimum of 16 hours prior to application of **Deckmaster HFS UVR**.

## Treatment of joints

All movement joints in the substrate should be reflected through the resin flooring as a continuous coating will crack due to differential movement in the substrate. Joints should be filled with a suitable sealant.

## Application conditions

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| **General guidance** | Products should be stored before use so that their properties are not impaired. |
| **Substrate & ambient temperature** | 10 – 30 °C. Localised heating or cooling equipment may be required outside this range. Low temperatures will impair workability and visual appearance of the floor. High temperatures will shorten the working time and impair the appearance of the floor. |
| **Substrate moisture content** | The base should have a moisture content of ≤ 4% when measured using a Tramex CME and a relative humidity at the surface of no more than 75% when measured by the test method described in BS 8203. **Deckmaster HFS UVR** should not be applied on to surfaces known to, or likely to suffer from, rising dampness or potential osmosis problems. |
| **Maximum ambient relative humidity** | 80% |
| **Dew point** | To reduce the risk of "blooming" caused by condensation, the climate above the uncured floor should be maintained at least 3 °C above the dew point for at least 48 hours after application. |

## Coverage rate

Coverage figures given are theoretical at 15 °C (materials, ambient and substrate). Practical coverage rates may vary due to wastage factors and the type, temperature, condition, profile and porosity of the substrate. Coverage will be significantly reduced at lower temperatures. As a guide: 9 $m^2$/unit dependant on substrate profile and porosity.

## Application methods

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| **Mixing** | Materials should be stored at 15 $^{o}$C to 25 $^{o}$C for a minimum of 8 hours prior to use. Pre-mix the coloured resin component before use. Add the hardener component to the coloured resin component and mix using a low speed electric mixer (200 - 500 rpm) for at least 1 to 2 minutes until homogeneous. Add the full contents of the filler bag slowly and mix for a further 1-2 minutes until a lump free consistency is obtained. |
| **Working time** | Mixed material must be used immediately. When mixed, a chemical chain reaction takes place which creates heat and further reduces working time. High ambient temperatures will reduce working time. |
| **Application** | Apply using a steel float or non-serrated spattle pushing the resin well into the surface, make sure it is fully wetted out then pull back at right angles to the desired profiled finish with a medium nap roller. |
| **Slip resistance (BS 7976 slider #96)** | ≥ 50 (wet or dry)<br><br>* The typical physical properties given above are derived from testing in a controlled laboratory environment. Results derived from testing field-applied samples may vary dependent upon site conditions. Slip resistance figures are affected by application techniques and prevailing site conditions. Slip resistance can reduce over time due to poor maintenance, general wear or surface contaminants. Good housekeeping practices should be observed. |
| **Cleaning of tools** | Clean all tools with **Deckmaster Cleaning Solvent** immediately after use. Cured material can only be removed mechanically. Do not add solvent to the product to aid application. |

## Additional guidance

Protect cured material from water, damp and condensation for at least 48 hours to prevent 'blooming'. For heating, use only electric powered systems. Fossil fuel powered heaters emit undesirable amounts of water vapour. During application and cure, remove foodstuffs from the work area and take particular care to ensure extracted air from the work area is directed away from areas where foodstuffs are stored.

## Care & maintenance

Good housekeeping will extend the service life of the floor. **Deckmaster HFS UVR** can be easily cleaned with a mechanical scrubber fitted with clean water rinsing and wet vacuum using standard cleaning chemicals and techniques designed for synthetic resin flooring. Test cleaning agents prior to use. Do not steam clean or subject to temperatures in excess of 50 $^{o}$C. The use of an acrylic polish can help maintain the floor in good condition.

## Storage & shelf life

12 months 9resin & hardener), 6 month (aggregate) from date of production when stored in original, unopened and undamaged packaging, kept dry and stored in a weatherproof building maintained at 15 °C to 20 °C on pallets and away from walls. Consignments should be used in order of batch number. Protect from frost.

## Limitations

The manufacture of **Deckmaster HFS UVR** is a batch process and, despite close manufacturing tolerances, minor variations in shade may occur between batches. Products from different batches should not be used on the same surface or surfaces close together. If mixed batches are unavoidable, it is best practice to use the different batches only in areas where the colour cannot be directly compared. It is recommended that touching up is carried out up to a break in the floor or surface.

## EU Directive 2004/42/EC

Complies with category j type SB (< 500 g/l).

## Health and safety

Before using this product, please ensure that you have received and read the product Safety Data Sheet. Refer to hazard labelling on the product. Wear gloves and avoid contact with skin and eyes.

## 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. The customer is not released from their obligation of inspection and testing of incoming goods under an effective quality management system.

## CE marking

CE

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| DOP DR0001 | |
| Deckmaster (Yorkshire) Ltd, Pumaflor House, Ainleys Industrial Estate, Elland, West Yorkshire, HX5 9JP, England | |
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| EN 13813 SR-AR0,5-B2,0-IR6 | |
| Synthetic resin screed material for use internally in buildings not subject to reaction to fire regulations | |
| Reaction to fire | NPD |
| Release of corrosive substances | SR |
| Water permeability | NPD |
| Wear resistance | AR0,5 |
| Bond strength | B2,0 |
| Impact resistance | IR6 |
| Sound insulation | NPD |
| Sound absorption | NPD |
| Thermal resistance | NPD |
| Chemical resistance | NPD |

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