

Pumadur UNI-PAK TF

Water-based polyurethane high-build coating



Description

Pumadur UNI-PAK TF is a four part presentation of a proven Polyurethane cement chemistry. This range of products are produced from common components with product specific aggregate packs.

Pumadur UNI-PAK TF polyurethane coating designed as a surface finish and sealer for **Pumadur UNI-PAK CG** coving mortar or as a top coat for **Pumadur UNI-PAK HF/RT/SL** and **MD** floor toppings where refinishing is necessary. **Pumadur UNI-PAK TF** may also be applied directly to prepared concrete in areas adjacent to other **Pumadur UNI-PAK** floor toppings to maintain a degree of consistency of finish. The product can also be used as a moisture tolerant primer in conjunction with **Pumadur UNI-PAK HF/RT**.

Pumadur UNI-PAK TF is ideal for use in areas requiring good wear and chemical resistance combined with economical cost. Typical installations include chemical storage areas, warehousing, toilets, laboratories, food preparation areas etc.

Appearance

Mottled matt finish. Shade/gloss level variation may be apparent due to inconsistencies in the applied film thickness.

Thickness

Approximately 300 microns from two coats.

Chemical Resistance

Pumadur UNI-PAK TF is resistant to a wide range of commonly used chemicals in the food, dairy and pharmaceutical industries such as concentrated citric acid (fruits), spirit vinegar (50% acetic acid), lactic acid (food & dairy products) and common alcohols (methanol & ethanol). **Pumadur UNI-PAK TF** is also resistant to a wide range of inorganic acids, fuels, hydraulic oils, mineral oils and solvents. Good housekeeping practices should be employed at all times. 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's service integrity or durability.

Typical Properties, 28 days at 20 °C

BS 8204-6	FeRFA type 3
Abrasion resistance (EN 13892-4)	AR 0.5
Abrasion resistance (BS 8204-2)	Special Class
BRE Screed Test	Category A
Adhesion to concrete (BS EN 1504-2)	> 1.5 MPa
(concrete failure)	

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. The slip resistance figures given above are indicative and will be 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.

Cure Schedule at 20 °C

Working life of full packs * 15 minutes

* Usable working life of material following mixing and immediate spreading as per the application instructions. Decant mixed product into smaller quantities if applying to awkward areas as application time will be shorter if left in bulk.

Finished floor *	
Over-coat time	12 - 48 hours
Cure time to light pedestrian traffic	12 hours
Cure time to light wheeled traffic	24 hours
Cure time to heavy duty traffic	48 hours
Full chemical resistance	7 days

* The above cure times are approximate and given as a guide only. These times can vary due to prevailing site conditions.

Pack Size (4KG & 7.70KG)

Pumadur UNI-PAK Base	0.87 kg
Pumadur UNI-PAK Hardener	1.13 kg
Pumadur UNI-PAK Colour	0.50 kg
Pumadur UNI-PAK TF Filler	1.50 kg

Pumadur UNI-PAK Base	1.95kg
Pumadur UNI-PAK Hardener	2.25kg
Pumadur UNI-PAK Colour	0.50 kg
Pumadur UNI-PAK TF Filler	3.00 kg

Coverage*

5 m²/kg per coat.

* Coverage figures given are theoretical. Practical coverage rates may vary due to wastage factors and the type, condition, profile and porosity of the substrate.

Colours

Pumadur UNI-PAK TF is available in a range of standard colours. Red, Green, Buff, Sahara' Mid Grey Dark grey Charcoal Chelsea Blue

Resdev Limited

Pumafloor House, Ainleys Industrial Estate
Elland, West Yorkshire, HX5 9JP, England
Tel: +44 (0) 1422 379131
fax: +44 (0) 1422 370943
info@resdev.co.uk
www.resdev.co.uk



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Pumadur UNI-PAK TF is not colour fast and may yellow over time. The rate of change will depend on UV light and heat levels and cannot be predicted. This will be more pronounced with lighter colours and blue shades and does not compromise the product's performance or chemical resistance characteristics.

Application Conditions

Ideal ambient and substrate temperature range is 15 - 25 °C. Localised heating or cooling equipment may be required outside this range to achieve ideal temperature conditions. The substrate and uncured floor must be kept at least 3 °C above the dew point to reduce the risk of condensation or blooming on the surface, this should be maintained from before priming to at least 48 hours after application.

The atmospheric relative humidity should be below 70% and good ventilation should be provided to aid the removal of water and maintain curing times.

Surface Preparation

Inadequate preparation will lead to loss of adhesion and failure. In coating systems 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. Percussive scabbling or acid etching is not recommended. Refer to the **Resdev Guide to Surface Preparation** for further information.

Application

Priming

Pumadur UNI-PAK TF does not normally require the use of a primer. When treating extremely weak or porous concrete it is advisable to prime with **Pumadur Primer**. Please refer to technical data sheet. This primer should be allowed to cure for a minimum of 16 hours prior to application of **Pumadur UNI-PAK TF**.

Application of Pumadur UNI-PAK TF

Prior to mixing, the temperature of the four components must be between 15 and 25 °C. Pre-mix the coloured and resin component before use. Add the full contents of the filler bag slowly and mix for a further 1-2 minutes until a lump free consistency is obtained using a low speed electric mixer (300 - 400 rpm). When the aggregate is fully dispersed add the hardener component and mix until homogeneous. This will ensure that the maximum working time is maintained.

Apply using a medium nap roller direct from a paint tray or scuttle. Push the resin well into the surface, make sure it is fully wetted out then pull back to a tight coat with the roller. Inconsistent application thickness will result in an uneven finish and appearance. It is always preferable to apply two thin coats rather than one heavy coat.

The cured product should be protected from other trades using Kraft paper or similar breathable material. Polythene should not be used. Protect the installed floor from damp, condensation and water for at least 4 days.

Cleaning

Regular cleaning is essential to enhance and maintain the life expectancy, slip resistance and appearance of the floor. **Pumadur UNI-PAK TF** can be easily cleaned using industry standard cleaning chemicals and techniques. Consult your cleaning chemical and equipment supplier for more information.

Health and Safety

Refer to product Safety Data Sheet before use.

EU Directive 2004/42/EC

Complies with category j type SB (< 500 g/l). The VOC content of **Pumadur UNI-PAK TF** is approx. 24 g/l (theoretical).

Storage and use of the UNI-PAK product range

Store 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.

Every effort is made to produce consistent materials and colours over time. However some variation between batches may occur. It is therefore important to manage stocks of all components to ensure stock rotation. Materials should be stored and used in batch order, and where possible mixed batches, particularly of colours, should be avoided, Where possible individual batches of materials should be laid in discrete areas to defined edges.

Shelf Life *

Resin and hardener components	12 months
Aggregate component	6 months

* If stored in accordance with the above recommendations

Limitations

Do not proceed with application if atmospheric relative humidity is, or is anticipated to be, >85 % or if the surface temperature is <3 °C above the dew point. Application should not commence when the substrate temperature or the ambient temperature is, or is anticipated to be <5 °C during the application or within the curing period. The design strength of concrete surfaces must be a minimum of 25 MPa compressive strength at 28 days. The manufacture of **Pumadur UNI-PAK TF** is a batch process and despite close manufacturing tolerances, colour variation 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. Touching up should only be attempted using product from the same batch using the same application methods. Product should be reserved specially for this purpose. It is recommended that touching up is carried out up to a break in the floor or surface.

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Technical Advice

For further information on this or any other Resdev product, please contact our office.

Note

The information given in this datasheet is derived from laboratory testing and site experience and is based on the company's current state of knowledge. It is provided to assist the customer in the selection of product(s), and is intended to be read as a complete document. No legal responsibility or liability is implied or accepted by the company. This datasheet does not constitute a warranty or guarantee of performance.

This product is manufactured from materials designed to achieve the required level of performance as safely as possible. Reactive components require appropriate transportation and storage on site and proper handling by competent operatives with suitable safety equipment. This information is given in the product safety data sheets which must be read before use.

Any specification or advice given by the company, its representatives or agents, is based on the information supplied by the purchaser. The company cannot be held accountable for errors or omissions as a result of that information being incorrect or incomplete. Some materials are derived from natural sources, and consequently variation may occur. Site conditions, site control and any labour used in the application process, are outside of the control of the company, and may also contribute to variation in performance, finish and colour.

Resdev Limited, Pumaflor House, Ainleys Industrial Estate Elland, West Yorkshire, HX5 9JP, England			
CE		13	DOP RV0002
EN 13813 SR-B2,0-AR0,5-IR20 Synthetic resin screed material for use internally in buildings not subject to reaction to fire regulations			
Reaction to fire	E _{fl} ⁽¹⁾	Impact resistance	IR10
Release of corrosive substances	SR	Sound insulation	NPD
Water permeability	NPD	Sound absorption	NPD
Wear resistance	AR0,5	Thermal resistance	NPD
Bond strength	B2,0	Chemical resistance	NPD

.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_{fl} without need for further testing.

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