

Pumadur TF

Water-based polyurethane high-build coating



Description

Pumadur TF is a three-part polyurethane coating designed as a surface finish and sealer for **Pumadur WR** and **Pumadur CG** coving mortar or as a top coat for **Pumadur HF/RT/SL** and **MD** floor toppings where refinishing is necessary. **Pumadur TF** may also be applied to grouted **Pumadur SC** and directly to prepared concrete in areas adjacent to other **Pumadur** 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 HF/RT**.

Pumadur 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 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 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) (concrete failure)	> 1.5 MPa

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

3.2 kg and 8.25 kg units

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 TF is available in a range of standard colours. **Pumadur 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.

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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 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 TF**.

Application of Pumadur TF

Prior to mixing, the temperature of the three components must be between 15 and 25 °C. Pre-mix the coloured 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 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 TF** is approx. 24 g/l (theoretical).

Storage

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.

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 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.

Technical Advice

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

Note

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.

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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

⁽¹⁾ 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.