

Pumacoat WD

Water dispersed epoxy floor coating



Description

Pumacoat WD is a two-component water dispersed epoxy floor coating for use on concrete and polymer modified cementitious screeds. **Pumacoat WD** is designed to provide a tough, hard wearing protective floor finish in a range of colours. Being water-based, **Pumacoat WD** may also be applied to 7 day old 'green' concrete. Its easy to clean, silk finish makes the product ideal for garages, food and beverage industries, light industrial units, warehouse floors and other areas subject to pedestrian and light vehicular traffic.

Appearance

Semi-gloss / silk finish available in a wide range of colours and clear.

Features & Benefits

- Water based technology
- Resistant to general chemical spillages
- Durable and non-dusting
- Economical and easy to apply

Thickness

Approximately 250 microns wet film thickness from two coats (approximately 125 microns dry film thickness).

Typical Properties, 28 days at 20 °C

BS 8204-6	Type 1/2
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.

Cure Schedule at 20 °C

Working life of full packs * 1 hour

* Usable working life of material following mixing and immediate spreading as per the application instructions.

Pumacoat WD does not have a visible end of pot-life. After the pot life has expired the material will not be hardened or have increased in viscosity but the characteristics of the product will have changed and the final properties of the coating will be affected. Discard excess material after this period.

Finished floor *

Over coating period	8 - 24 hours
Cure time to light pedestrian traffic	24 hours
Cure time to medium duty traffic	48 - 72 hours
Full cure	7 days

The material should be protected from contact with water for 7 days.

* The above cure times are approximate and given as a guide only. These times can vary due to prevailing site conditions. At lower temperatures curing times will be extended.

Pack Size

5 kg and 10 kg units

Coverage*

A minimum of two coats are required. Some substrates may require additional coats depending on profile and porosity. Light or bright colours such as safety yellow or safety red may require additional coats to achieve full opacity. As a guide, a medium quality substrate may achieve 4 m²/kg from 2 coats and a more porous substrate may achieve 3 m²/kg from 2 coats.

* 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

Pumacoat WD is not 100% 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

Resin products should not be mixed and laid outside of the range 10 °C to 25 °C. Localised heating or cooling equipment may be required outside this range to achieve ideal temperature conditions. 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. The atmospheric relative humidity should be below 80% and good ventilation should be provided to aid the removal of water and maintain curing times. The substrate should be surface dry with a maximum relative humidity of 80% and free from rising damp and ground water pressure.

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Resin Development

Pumacoat WD

Water dispersed epoxy floor coating
Page 1 of 2
17/07/13

Surface Preparation

The concrete substrate must be sound with a minimum compressive strength of 25 N/mm² and a minimum pull off strength of 1.5 N/mm². The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc. 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. Percussive scabbling or acid etching is not recommended. Refer to the **Resdev Guide to Surface Preparation** for further information.

The substrate should be smooth as surface irregularities will show through the coating and excess wear will occur on high spots.

Application Instructions

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) fitted with a mixing paddle designed to minimize air entrainment for 1 - 2 minutes until homogeneous. Care should be taken to ensure that any material adhering to the sides and bottom of the mixing vessel is thoroughly mixed in otherwise uncured patches may result.

Apply by brush, roller or airless spray. Depending on the substrate porosity, the first coat may be diluted with up to 10% water to aid penetration. The water should be added after mixing of the resin and hardener components is complete. Avoid ponding of the coating as trapped water will lead to incomplete cure. Do not apply subsequent coats until the previous coat is completely dry. This will depend on temperature, atmospheric humidity and degree of ventilation. Adequate ventilation and air movement is necessary. Each coat should be applied at right angles to the previous coat in order to minimize imperfections and unevenness overall. Uneven application may lead to differences in gloss level across the cured floor.

Health and Safety

Refer to product Safety Data Sheet before use.

EU Directive 2004/42/EC

Complies with category j type WB (< 140 g/l VOC content).

Storage

Materials should be 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.

Shelf Life *

12 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 <10°C during the application or within the curing period. The manufacture of **Pumacoat WD** 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.

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. Wear in heavy concentrated foot traffic areas is reduced such as around work stations, vending machines etc. In these areas it is advisable to either specify additional coats or specify a higher build system from the Resdev range.

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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	13	DOP RV0054	
EN 13813 SR-B2,0-AR0,5-IR5 Synthetic resin screed material for use internally in buildings not subject to reaction to fire regulations			
Reaction to fire	NPD	Impact resistance	IR5
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

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Page 2 of 2
17/07/13