Pumaflow

Pumaflor®

Product Description:

Pumaflow is a medium duty, flow applied, epoxy floor topping for use on concrete and polymer modified cementitious screeds. **Pumaflow** is highly durable, with very good impact, abrasion, and chemical resistance.

Its easy to clean, smooth, gloss finish makes the product ideal for environments such as the food, beverage, engineering, and chemical industries. **Pumaflow** is ideal for clean rooms, retail showrooms, schools, hospitals, warehousing, light industrial, hotels, and aircraft hangars (See Technical Department for Skydrol Resistance information).

Appearance:

A seamless, smooth, gloss finish. Synthetic resin flooring will generally follow the profile of the underlying substrate because of their method of application and their relatively low thickness. This should be discussed with the end user at the time of specification.

Features & Benefits:

- Flow applied by trowel - rapid installation.
- Resistant to general chemical spillages.
- Seamless.
- High wear & abrasion resistance.
- Easy to clean.

Thickness & Coverage:

2.0 – 3.0 mm.

3.8 kg/m^2 at 2.0 mm or 5.7 kg/m^2 at 3.0 mm.

Surface Preparation:

Please refer to the: **Resdev Guide To Surface Preparation** for full details. All surfaces must be properly prepared, clean, dry and free from dust or other contaminants.

Substrates in contact with the ground must incorporate a functional damp proof membrane in accordance with CP 102 or in the case of basement floors, BS 8102. The base should have a relative humidity at the surface of no more than 75% when measured according to BS 8203.

After surface preparation, substrates must exhibit readings of 25 N/mm^2 or above when tested using a rebound hammer in accordance with BS EN 12504-2 type N and pull-off strengths in excess of 1.5 N/mm^2 when tested in accordance with BS EN 13892-8. Fine concrete screeds should be designed and constructed in accordance with BS 8204-1 and should not contain water repellent admixtures. Unmodified sand cement screeds or those based on calcium sulphate are unsuitable.

Application Conditions:

Do not apply outside of the range 15 °C to 25 °C. Localised heating (electric powered warm air blower) 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.

Priming:

Priming should be carried out using **Pumaprime SF** at 5.0 m^2/kg depending on substrate porosity. Apply using a medium nap roller ensuring complete coverage and avoiding pooling. If, when cured, there are dry patches, a further primer coat is required. Allow to cure completely before proceeding. If the primer has been left to cure for >48 hours then the primer surface should be lightly mechanically abraded and the area re-primed. Failure to seal the surface may result in pin-holing of the surface topping.

Mixing:

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 hardener component to the coloured resin component and mix using a low speed electric mixer (200 - 500 rpm) for 1 - 2 minutes until homogeneous. Decant the mixture into a suitable mixing vessel and gradually add the aggregate component whilst continuing the mixing action. When all the aggregate has been added, mix for a minimum of 3 minutes until a uniform coloured, lump-free mix is obtained. Care should be taken to ensure that any material adhering to the sides, bottom and corners of the mixer is thoroughly blended in. Unduly extended or vigorous mixing should be avoided in order to minimize air entrainment.

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Application:

Apply the mixture immediately onto pre-primed areas, spread to the required thickness using a steel float then de-aerate thoroughly using a spiked roller. Continue to spike roll until air is released, finishing well before the material begins to gel. 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 dust, traffic, damp, condensation and water for at least 7 days at 20 ºC or longer at colder temperatures.

Cleaning:

Tools and equipment should be cleaned whilst the resin is still wet with a suitable solvent.

EU Directive 2004/42/EC:

Complies with category j type SB (< 500 g/l). The VOC content of **Pumaflow** is approx. 85 g/l.

Available Colours:

Please see price list for available colours.

Health & Safety:

Refer to product Safety Data Sheet before use.

Technical Advice:

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

Limitations:

Do not proceed with application if atmospheric relative humidity is, or is anticipated to be >75% or if the surface temperature is <3 ºC above the dew point. Application should not commence when the substrate temperature or the ambient temperature is, or is anticipated to be <10 ºC during the application or within the curing period. The manufacture of **Pumaflow** 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. **Pumaflow** 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 does not compromise the product's performance or chemical resistance characteristics. **Do not add solvent/thinners to the product.**

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PRODUCT INFORMATION		
Chemical Type	Epoxy Floor Topping	
Packaging	31.00kg Unit:	Resin: 7.66kg Hardener: 3.34kg Aggregate: 20.00kg
Shelf life	Resin & Hardener: Aggregate:	12 Months 12 Months
Storage conditions	**Pumaflow** must be stored off the ground in original packaging, unopened and undamaged. The ambient conditions must be dry and between 10°C and 30°C with no direct sunlight. Protect from frost.	

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APPLICATION INFORMATION	
Mixing Ratio	MIX FULL UNITS
Consumption	3.8 kg/m^2 at 2.0 mm or 5.7 kg/m^2 at 3.0 mm.
Environmental Conditions	Air Temp +15°C to 25°C Relative air humidity <75% Dew Point >3°C above
Substrate Temperature	+15°C to 25°C
Substrate Moisture Content	Substrate relative humidity (RH): <75% Concrete must have a tensile strength: >1.5 N/mm^2
Pot life (approx.)	+10°C 45 minutes +/- 5 minutes +20°C 30 minutes +/- 5 minutes +30°C 20 minutes +/- 5 minutes
Curing Schedule 20°C	Light Pedestrian Traffic 24 hours Light Wheeled Traffic 4 days Full Chemical Resistance 7 days
Service Conditions	Once fully cured the product can be cleaned up to 60°C.

TECHNICAL INFORMATION *		
Adhesive strength to concrete	BS EN 13892-8	>2.0 N/mm^2
Shore D Hardness		72
Slip Resistance	Pendulum Test BS 7976-2	>40 (dry)
Impact Resistance	BS EN ISO 6272-1	14.0 Nm
Abrasion Resistance	BS EN 13892-4	AR 0.5
FeRFA Floor Type	BS 8204-6	Type 5

*The typical physical properties given above are derived from testing in a controlled laboratory environment. In the field results may vary due to site conditions.

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APPROVALS & STANDARDS

Synthetic Resin Screed material according to EN 13813:2002

Note: The information contained in this document, and all further technical advice is given 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 is beyond our control. Properties listed are for guidance purposed only. We reserve the right to make any changes according to technological progress or further developments.

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CE	13	DOP RV0038
EN 13813 SR-B2,0-AR0,5-IR14 **Synthetic resin screed material for use internally in buildings not subject to reaction to fire regulations**		

Reaction to fire:	NPD		Impact resistance:	IR14
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