Pumadur HF

Product Description:

Pumadur HF is a heavy duty, trowel applied polyurethane floor screed for use on concrete and polymer modified cementitious screeds. **Pumadur HF** is designed with the highest order of durability, impact, abrasion and chemical resistance. Its lightly textured finish makes the product ideal for both wet and dry processing environments such as the food, beverage and chemical industries.

Appearance:

Seamless, matt surface with a light slip resistant texture. **Pumadur HF** contains a white aggregate which imparts a slip resistant profile to the finished floor.

Features & Benefits:

Stable to steam cleaning and hot water exposure at a thickness of 9.0 mm.
Very high chemical resistance.
Non-tainting.
Seamless.
High abrasion resistance.
Slip resistant.

Thickness:

6.0 mm - 9.0 mm.

Non-Tainting:

Pumadur HF is water based and non-tainting (Campden & Chorleywood Food Research Association test method TES-S-002).

Chemical Resistance:

Pumadur HF 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).

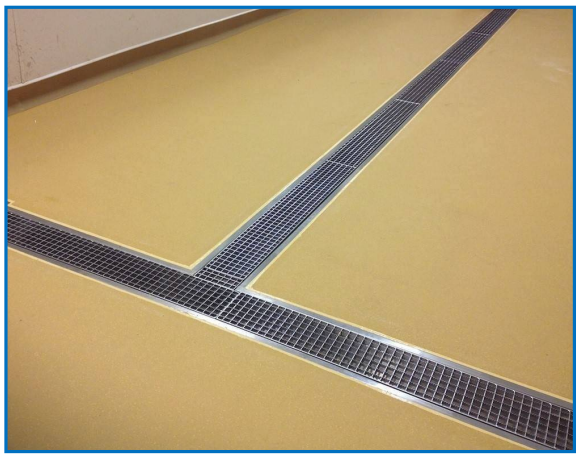
Pumadur HF is also resistant to a wide range of inorganic acids, fuels, hydraulic oils, mineral oils and solvents. Good housekeeping practices should be employed. Please consult our Technical Department for further advice.

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.



Surface Preparation:

The surface must be clean, dry and free of all contamination. The concrete substrate must have a minimum tensile strength of 1.5 N/mm^2. Inadequate preparation will lead to loss of adhesion and failure. Grinding, light vacuum-contained shot-blasting or planing is recommended. Percussive scabbling or acid etching is not recommended.

Anchorage grooves should be cut to a width and depth of twice the thickness of the floor finish at the edges, bay joints, up-stands, drains, doorways and at regular points across the floor, and all debris removed. Refer to the Resdev Guide to Surface Preparation for further information.

Priming may be required depending on the substrate etc for information on priming contact your Technical representative. Please note Pumaprime DPM cannot be used in conjunction with any Pumadur Installation where 100°C service or cleaning temperatures may exist.

Application Conditions:

Optimum substrate temperature range is 15 - 25 °C. Localised heating (electric powered warm air blower) or cooling equipment may be required outside this range to achieve ideal temperature conditions. The aggregate can be stored in a cool area (or warm area in the case of low ambient temperature) in order to control product temperature and working life. The substrate and uncured floor must be kept at least 3ºC above the dew point to reduce the risk of condensation or blooming on the surface, from before priming, to at least 48 hours after application.

Application:

Pumadur HF can be applied to 7-day old concrete which is visibly dry and having a minimum tensile strength (pull-off) of 1.5 MPa. All the usual stringent surface preparation techniques should be employed. For concrete bases in contact with the ground, a damp-proof membrane should have been incorporated into the slab design, in accordance with the requirements of CP102 (Code of Practice for Protection of Buildings Against Water from the Ground).

Pumadur HF

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 (300 - 400 rpm) for 1 - 2 minutes until homogeneous. Decant the mixture into a rotary drum mixer and add the aggregate component in stages, mixing for a minimum of 3 minutes until a uniform coloured, lump-free mix is obtained. Apply to the required thickness using a steel float. Ensure that anchor grooves are fully wetted out with material. 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 HF** can be easily cleaned using industry standard cleaning chemicals and techniques. Consult your cleaning chemical and equipment supplier for more information. When applied at 9.0 mm thickness, **Pumadur HF** is fully steam cleanable.

Available Colours:

Please see price list for available colours.

EU Directive 2004/42/EC:

Complies with category j type SB (< 500 g/l). The VOC content of **Pumadur HF** is approx. 9 g/l (theoretical).

Limitations:

Do not proceed with application if atmospheric relative humidity is, or is anticipated to be, >85% 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 design strength of concrete surfaces must be a minimum of 25 N/mm^2 compressive strength at 28 days.

The manufacture of **Pumadur HF** 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.

Pumadur systems are 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 on lighter colours but does not affect the performance of the product.

PRODUCT INFORMATION		
Chemical Type	Water Based Cementitious Polyurethane	
Packaging	29.64kg Unit:	Resin: 2.53kg Hardener: 2.11kg Aggregate: 25.00kg
Shelf life	Resin & Hardener: Aggregate:	12 Months 6 Months
Storage conditions	**Pumadur HF** must be stored off the ground in original packaging, unopened and un-damaged. The ambient conditions must be dry and between 10°C and 30°C with no direct sunlight. Protect from frost.	

Pumadur HF

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APPLICATION INFORMATION		
Mixing Ratio	MIX FULL UNITS	
Consumption	Approx. 2.00 kg/m^2 per mm.	12 kg/m^2 at 6.0 mm. 18 kg/m^2 at 9.0 mm.
Environmental Conditions	Air Temp Relative air humidity Dew Point	+15°C to 25°C <85% >3°C above
Substrate Temperature		+15°C to 25°C
Substrate Moisture Content	No ponding water Substrate relative humidity (RH): <75% Concrete must have a tensile strength: >1.5 N/mm^2	
Pot life (approx.)	+10°C +20°C +30°C	20 to 30 minutes 15 to 20 minutes 10 to 13 minutes
Curing Schedule 20°C	Light Pedestrian Traffic Light Wheeled Traffic Heavy Duty Traffic Full Chemical Resistance	Above 12 hours Above 24 hours Above 48 hours 7 days

SERVICE CONDITIONS*		
Temperature Extremes:	**Temperature**	**Conditions**
	+70°C	Spillages when applied at 6.0 mm
	+120°C	Spillages when applied at 9.0 mm including steam cleaning
	-25°C	When applied at 6.0 mm
	-40°C	When applied at 9.0 mm

* Where thermal shock is likely it is essential that the substrate is of good quality concrete of the correct specification. For cold temperature the product must be fully cured before the freezer is activated and the temperature must not be reduced at a blast chill rate; preferably over a minimum of 12 hours.

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TECHNICAL INFORMATION *		
Water Absorption	CP-BM-2/67-2	0 litre/m^2
Adhesive strength to concrete	BS EN 13892-8	>2.0 N/mm^2
Slip Resistance	Pendulum Test BS 7976-2	>55 dry & >40 wet
Compressive Strength	BS EN 13892-2	>50 N/mm^2
Flexural Strength	BS EN 13892-2	>12 N/mm^2
Shore D Hardness		75
Abrasion Resistance	BS EN 13892-4	AR 0.5
Impact Resistance	BS EN ISO 6272-1	20.0 Nm
FeRFA Floor Type	BS 8204-6	Type 8

*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.

APPROVALS & STANDARDS

Synthetic Resin Screed material according to EN 13813:2002

Pumadur HF is a non-tainting product in accordance with test method TES-S-002 performed by Camden Food Research

Eurofins Indoor Air Quality GOLD certified

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.

Resdev Limited, Pumaflor House, Ainleys Industrial Estate
Elland, West Yorkshire, HX5 9JP, England

CE | 13 | DOP RV0059

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:	NPD	Impact resistance:	IR20
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