

# Pumathane HB

High build flexible  
polyurethane resin coating

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## Description

**Pumathane HB** is a flexible high build polyurethane floor coating with excellent abrasion and impact resistance and provides a medium duty coating for floors.

Two coats of **Pumathane HB** provide a build equivalent to almost 10 coats of conventional solvent containing coatings.

**Pumathane HB** can be applied as a one coat application at a coverage rate of 0.365g per m<sup>2</sup> or over (the aesthetics are dependant on application technique and substrate quality).

## Applications

**Pumathane HB** is suitable for the protection of concrete floors subject to medium duty traffic (regular foot traffic, frequent fork lift truck traffic, occasional hard plastic-wheeled trolleys). **Pumathane HB** can be applied to concrete, polymer modified cementitious screeds, steel, timber and asphalt. Typical uses include areas requiring good wear resistance combined with economical cost such as storage areas, plant rooms, warehousing, toilets etc.

## Appearance

**Pumathane HB** provides a medium gloss surface in a range of colours with a slightly stippled finish.

## Durability

Excellent wear resistance can be expected from a two coat application.

## Thickness

0.25 - 1 mm depending on application rate and number of coats.

## Typical Properties, 7 days at 23 °C

BS 8204-6 type	3
Mixed density (approximately)	1.6 g/cm <sup>3</sup>
Shore D hardness	40
Tensile strength (ASTM D412 die C)	> 6 N/mm <sup>2</sup>
Elongation (ASTM D412 die C)	> 30 %
Tear strength (ASTM D624)	> 8 N/mm

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. Any slip resistance figures given above are 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 time	15 minutes
Cure time to light pedestrian traffic	16 - 24 hours
Inter-coat period	16 - 24 hours
Full cure	7 days

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

## Pack Size

5 kg and 10 kg units

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### Coverage (nominal 0.5 mm thickness)\*

1st coat	approx. 0.500 kg/m <sup>2</sup>
2nd coat	approx. 0.300 kg/m <sup>2</sup>

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

### Application Conditions

The ideal ambient, substrate and material temperature range is 15 - 25 °C. Localised heating or cooling equipment may be required outside this range otherwise the surface finish and application viscosity may be impaired. The maximum substrate and atmospheric relative humidity should be 75%. 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, from before priming to at least 48 hours after application.

### Surface Preparation

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. For concrete substrates, grinding or light vacuum contained shot-blasting is therefore preferred over planing for these systems. Refer to the **Resdev Guide to Surface Preparation**.

### Priming

**Pumathane HB** does not normally require a primer on dry substrates. When treating extremely porous or damp concrete, prime as follows:

Substrate relative humidity <75%: Pumadur Primer  
Substrate relative humidity >75%: Pumaprime DPM

### Application

Prior to mixing, the temperature of both components must be between 15 and 25 °C. Add the hardener component to the coloured resin component and mix using a low speed electric mixer (300 - 400 rpm) for at least 3 minutes until homogeneous. Keep the mixing paddle fully submerged to avoid the entrapment of air and scrape the sides and bottom of the vessel several times. Decant the mixed material to a second mixing vessel and mix as above for a further minute. Apply with a medium roller directly from a paint tray. Push the resin well into the surface making sure the floor is fully wetted and then pull back lightly with the roller to the required thickness. For a 1 coat application we recommend that a rubber lipped squeegee is used followed by a short nap roller. This may produce a slight orange peel effect across the surface.

### Colours Available

**Pumathane HB** is not colour fast and may yellow over time. This will be more pronounced with lighter colours and blue shades and does not compromise the product's performance or chemical resistance characteristics.

### Cleaning

Regular cleaning is essential to enhance and maintain the life expectancy and appearance of the floor. **Pumathane HB** 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).

### 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.

### Limitations

Do not proceed with application if atmospheric relative humidity is, or is anticipated to be, >75% or if the surface temperature is <3 °C above the dew point. The manufacture of **Pumathane HB** 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 RV0074	
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

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