Pumagrip HD 2

Two pack polyurethane binder for anti-slip aggregates

Description

Pumagrip HD 2 is a two-component flexible binder which when scattered with natural or synthetic aggregates creates a slip resistant profiled surface suitable for car parks, ramps and pedestrian areas.

Suitable aggregates are washed and dried bauxites, granites or basalts (natural or coloured) in sizes 1 - 3 mm for vehicular or 0.5 - 1.5 mm for pedestrian use.

Applications

Pumagrip HD 2 is suitable for use on concrete, polymer modified sand/cement screeds, suitable asphalt, wood and steel surfaces. With the wide choice of natural and synthetic aggregates available, patterns and logos can be easily created.

Features & Benefits

- Two pack - easy to use
- Hardwearing, tough and slightly flexible
- Seamless
- Rapid installation / minimal downtime

Appearance

Naturally buff in colour.

Cure Schedule at 20 ºC*

Working time	10 minutes
Cure time to light pedestrian traffic	6 hours
Cure time to heavy duty traffic	24 hours

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

Pack Size

15.5 kg and 31 kg

Coverage*

1.4 kg/m^2 per mm thickness

The applied thickness should be approximately half the nominal particle size of the broadcast aggregate.

* 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

Pumagrip HD 2 can be applied at temperatures between 5 - 30 ºC. At low temperatures the material will exhibit less flow than at warmer temperatures and may be more difficult to apply at low thicknesses. The maximum atmospheric relative humidity should be 75%.

The substrate and uncured floor must be kept at least 3 ºC above the dew point to reduce the risk of condensation or blooming on the surface, from before priming to at least 24 hours after application. Surfaces must be completely dry before installation otherwise the material may blister and/or de-bond.

Surface Preparation

Inadequate preparation will lead to loss of adhesion and failure. In flow applied 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 on concrete unless a highly textured finish is desired Percussive scabbling or acid etching is not recommended.

Asphalt is a flexible material and will flow, flex and move and often suffer surface cracking. It should therefore be anticipated that cracks will also appear in the resin bonded surfacing. New asphalt should have a PEN number below 100 and should be at least one month old to ensure that any volatiles have escaped before applying the resin. The asphalt should be free of any oils and/or greases and washed down with a proprietary degreaser if necessary and thoroughly dried. A higher PEN number indicates a softer, weaker, more flexible material which is more likely to result in cracking and potential failure of the installation. It is not uncommon for asphaltic surfaces to be badly formed, especially on domestic driveway and paths, and for this reason resin bonded surfacing is best applied to structurally sound concrete or screed. When applying to asphalt, it is better to apply to surfaces containing a larger aggregate, 6-10 mm or larger. Any open textured surface should be filled with a scratch coat to minimise the amount of resin lost within the pores of the surface. Refer to the **Resdev Guide to Surface Preparation** for further information.

Priming

A primer is not always necessary as **Pumagrip HD 2** has excellent bond strength to well prepared concrete, sand/cement screeds, suitable asphalt, timber and steel. Bond strength testing to BS EN 13892-8 should be carried out where doubt exists.

Where there is a risk of excessive resin absorption into the substrate due to high surface porosity **Pumadur Primer** should be used where the substrate humidity is < 75%. Where the substrate relative humidity is >75%: **Pumaprime DPM** should be used.

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Application
Prior to mixing, the temperature of both components should be between 15 and 25 °C. Add the hardener component to the beige 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.

Distribute the mixture immediately onto the surface using a steel float, pin rake or squeegee and spike roller thoroughly within 5 minutes to remove trapped air. Plan the work area to ensure a constant wet edge and work within the working time of the material. Broadcast the aggregate into the binder within 15 minutes of mixing in thin layers until a stone-rich surface has been achieved. Monitor the broadcast area to ensure that any bare areas which may appear are re-broadcast promptly. The excess aggregate can be swept off as soon as the binder is hard enough to accept foot traffic.

Cleaning
Regular cleaning is essential to enhance and maintain the life expectancy and appearance of the floor. Resin bonded aggregate systems can be easily cleaned using a low pressure hose, rotary scrubber drier or wet vacuum. Do not use high pressure hoses as the high pressure could lead to de-bonding of the aggregate.

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 Pumathane SLT is approx. 0 g/l (theoretical).

Storage
Store off the ground in un-opened packs in a dry store, under cover between 10 ºC and 30 ºC 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 ºC above the dew point. Application should not commence when the substrate temperature or the ambient temperature is, or is anticipated to be, <5 ºC during the application or within the curing period.

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 RV0044
EN 13813 SR-B2,0 Synthetic resin screed material for use internally in buildings not subject to reaction to fire regulations		

Reaction to fire	NPD	Impact resistance	NPD
Release of corrosive substances	SR	Sound insulation	NPD
Water permeability	NPD	Sound absorption	NPD
Wear resistance	NPD	Thermal resistance	NPD
Bond strength	B2,0	Chemical resistance	NPD

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