

Technical Information Sheet Article No. 9001

PU Black

1 component, solvent based elastomeric polyurethane high solids coating. Low tar content, moisture curing and can be applied to a wide range of substrates to form a waterproof membrane.

Description

PU Black is a liquid applied coating based on urethane prepolymers extended with tar, which cures by reaction with atmospheric moisture to give a continuous film that is rubbery and elastic.

PU Black is a very high solid coating designed to give a high-build film. It can be brush or spray applied (with airless spray equipment) but it has a higher viscosity than a conventional paint and should not be diluted.

PU Black cures to a permanently flexible seamless membrane that, by virtue of its chemical reactivity in the wet state, has good adhesion to a wide range of substrates. Unlike more traditional bitumen based products, PU Black does not readily embrittle with age, exposure to ultra violet radiation or weathering, and hence it does not crack or craze.

Since it is elastomeric PU Black is not adversely affected by extremes of temperature consequently it is resistant to cracking at low temperatures and does not suffer thermal flow at elevated temperatures.

PU Black can be applied by brush, airless spray or roller without the

Characteristic data of the product

S.G.:	1.2
Solids:	92 %
Abel closed cup flashpoint:	69 °C
Application limits:	5 – 70 °C
Approx. Dry Time (20°C, 50% RH)	12 – 24 hrs touch dry, 7 days fully cure
Elongation:	500 %
Tensile Strength:	2.0 MN/m ²
Accelerated Weathering:	12000 hrs (No appreciable deterioration)
UV Resistance:	Excellent
Hydrolysis Resistance:	Excellent
Mechanical damage:	Good
Storage Stability:	6 months

need to mix, stir or heat before application.

Range of Use

PU Black is designed to bond to many types of substrate particularly those commonly used as roofing, such as felt, asphalt, slate, tiles, asbestos, concrete, brick, wood, glass and metals.

They can also be applied to sprayed polyurethane (PU) foam insulation. However, it is essential that the substrate and structures are properly prepared, and stable.

Surfaces previously treated with silicone-based materials will inevitably be difficult to overcoat and this should not be attempted with Remmers products.

Substrates with poor adhesion to the underlying structure (e.g.

blistered roofing felt) may also cause problems in providing sound over-coating.

Preferential vapour drive in buildings must also be borne in mind when over-coating the roof and it may be judged expedient to employ ventilation to cope with transmission of high levels of moisture vapour.

Directions

The dry film thickness (DFT) of PU Black should not be less than 0.5mm or more than 1.0mm for each coat. Rough or textured surfaces will reduce the coverage rate and consequently more material must be allowed to achieve the minimum DFT.

PU Black is a membrane coating, not a paint and as such protection

is only achieved with a high film build, i.e. 1 mm on flat surfaces minimum. It is therefore essential that this is achieved. The membrane can be applied in one 1 mm or two 0.5mm coats. Two coats are recommended on uneven and jointed surfaces to minimise the possibility of thin patches, missed areas and pinholing. In the case of two coat application, it is important to re-coat within 24 hours of the first coat becoming sufficiently cured to allow operator access.

Coverage

Coverage rates may vary with surface texture and porosity. The information given is based on average usage. A site trial is recommended.

PU Black: 1 litre / m² on a smooth flat surface will provide an adequate film thickness of approx. 1mm. Any surface texture will increase the surface area which must be allowed for when calculating usage e.g. on a chipping embedded surface the actual area will be approximately doubled.

Method

1. Remove all loose material by vigorous brushing, wire brush if necessary.
2. Treat any fungal growth with proprietary fungicide as recommended.
3. Allow surface to dry thoroughly

and any moisture contained in the structure to evaporate. PU Primer and PU Black should not be applied to damp substrates.

4. Fill cracks and voids with a polyurethane mastic sealant.
5. Prime PU Primer (6-10 m² / ltr depending on substrate texture and porosity) which cures to a slightly tacky film within 2 - 4 hours. Overcoat with PU Black as soon as possible after this time and certainly within 48 hours. If delay exceeds this, re-priming is advised.
6. Apply PU Black at a maximum film thickness of 0.5 mm for two-coat applications and 1 mm for one coat.
7. In the case of two coat application, the first coat should be touch dry 12-48 hours (in some conditions this might be delayed) and the second coat should be applied within 24 hours of this stage to ensure good adhesion.
8. Second coat delay: - if more than 24 hours elapse after touch dry stage of the first coat, prime the entire surface with PU Primer and allow to dry before recoating within 4-8 hours.
9. Day-work joints – where application extends over more than a working day, an overlap of 150mm should be used.
10. Thinner V 101 should be used to clean equipment etc.

Application rate

PU Black is easily and quickly applied manually at a rate of 40m² per man or up to 600m² per day by spray application.

Repairs

Minor damage to PU Black can be repaired by removing loose membrane; cleaning the surrounding area with Thinners V101; overlapping by 150mm; priming the area with PU Primer, and finishing with two coats of PU Black.

Storage, Handling and Personal Protection

The recommendations in our Safety Data Sheet for this product must be followed at all times.

Safety, ecology, disposal

Further information on safety when transporting, storing and handling as well as disposal and ecology are found in the latest Safety Data Sheet.

The statements above are compiled from our field of production and according to the latest technological developments and application techniques.

Since application and working are beyond our control, no liability of the producer can be derived from the contents of this information sheet. Any statements made beyond the contents of this information must be confirmed in writing by the producer.

In all cases, our general conditions of sale are valid. With the publication of this Technical Information Sheet all previous editions are no longer valid.



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