



PU/HPU Primer

Polyurethane/High Build Polyurethane

THREE-COMPONENT POLYURETHANE PRIMER, CHEMICALLY RESISTANT, SOLVENT FREE

DESCRIPTION

PU/HPU primer is a three-component, cement modified polyurethane primer specifically designed for use with **abe.®screed PU** and in combination with **abe.®flo HPU**. The primer forms a watertight moisture barrier that reduces pin and blow hole formation in subsequent polyurethane applications. The primer is a pore sealer that provides an excellent bonding surface.

USES

A primer that provides an excellent bond and pore sealer for **abe.®screed PU**, **abe.®flo HPU** and **abe.®screed PU CG**.

ADVANTAGES

- Excellent chemical resistance
- Excellent adhesion
- Effective pore sealing
- Solvent free
- Low odour during use
- High impact, abrasion and thermal shock resistance
- Antimicrobial silver ion technology
- Low VOC
- Moisture barrier
- Ideal for food processing areas

COLOUR

Light amber.

SURFACE PREPARATION

Substrate must be concrete or polymer modified screed that provides a minimum of 25 MPa compressive strength and 1.5 MPa tensile adhesion strength.

Remove all previous coatings, unbonded concrete and laitance mechanically through diamond grinding, abrasive blasting or scarifying to obtain a sound and porous surface (sandpaper texture). Sweep dust and loose debris followed by vacuuming, to obtain a dry and dust-free surface. It is standard practice to ensure grooves 5 mm by 5 mm, run parallel to and 150 mm from all walls, plinths, finished edges, expansion joints, columns.

BONDING/PRIMING

PU/HPU primer is recommended as a primer/pore sealer and must be allowed to cure. Priming must be undertaken in the late afternoon (i.e. declining substrate temperature).

TYPICAL PROPERTIES

Compressive Strength	>50 MPa	BS6319
Tensile Strength	>12 MPa	
Flexural Strength	>20 MPa	
Concrete Adhesion (Concrete Failure)	>1.5 MPa	ASTM D7234
Impact Resistance	1 kg > 1.8 m	ISO6272-1:2011
	2 kg > 1.5 m	
Hardness	80	Shore D
Slip Resistance	Dry > 70	TRRL Pendulum Slip Test
	Wet > 25	
Water Uptake (Permeability)	Nil	Karsten Test
Chemical Resistance	Refer to chemical Chart	
Overcoat Time	Min 12 hours	
	Max 48 hours	
Foot Traffic	12 to 16 hours	
Heavy Traffic	24 hours	
Colour	Amber / Cream	

Ensure application conditions of 15 to 28 °C. Ensure adequate lighting to achieve an even and level spread. Installation should not be attempted unless application team is fully trained.

MIXING

Open both aggregate bag (Part 3) before the mixing starts to ensure no time is wasted between mixes/kits. Shake Part 1 and Part 2 vigorously prior to opening.

Set up the mixing machine as close to the floor as possible (Use two mixing vessels to ensure time between mixes/kits are minimized).

Start timer when adding Part 2 and mix for 30 seconds. Once 30 seconds is complete, pour Part 3 into the mix and mix for a further 2 minutes until uniformly wetted out.

APPLICATION

Pour out the mix onto the demarcated area and trowel or squeegee out into place. On porous surfaces, apply further resin until surface is completely wetted out. Trowel out as thinly as possible, leaving just enough to give a wet look. Leave for minimum of 16 hours and 36 hours in cold winter months before screeding over. Do not allow the cured primer to cure longer than 48 hours before screeding over. (If more than 48 hours have passed, perform a light grind and apply a new layer of primer).

Note: Certain subsequent screeds to be applied require the primed surface to be broadcast with scatter sand. In such cases broadcast the relevant scatter sand at 0.5 to 1.0 kg/m² into wet primer coat.

Difficult substrates

Porous substrates generally consume 30% more primer than usual. Re-priming is necessary when the first coat of primer penetrates leaving

a patchy appearance. Re-priming may be done immediately (<30 min.) into wet primer to save time and no longer than 48 hours later.

COVINGS & WALLS

Broadcast silica sand into the wet primer for assistance with bonding on vertical applications.

COVERAGE

6.40 litre kit yields approximately 25.5 m² at 0.25 mm thick, depending on surface roughness.

MAINTENANCE

Regular cleaning extends the service life of the Polyscreed system. Maintenance is to be carried out using Liquid Action which complies with SANS 1344 Medium Duty Solvent Detergent (2112/P3325/10/ID).

CLEANING

Roller should be discarded, but other equipment may be cleaned with **abe® super brush cleaner** before dried/cured.

PROTECTION ON COMPLETION

Protect surface against traffic and spillage until subsequent screeds have been applied and cured.

MODEL SPECIFICATIONS

The primer will be a three component polyurethane **PU/HPU primer**. The floor topping will be either **abe.®screed PU** or **abe.®flo HPU** in accordance with **a.b.e.® Construction Chemicals'** recommendations.

ANTIMICROBIAL RESISTANCE

An important advantage of the Polyscreed range is its silver ion technology which inhibits the growth of bacteria and fungi ensuring a more hygienic surface.

PACKAGING

PU/HPU primer is supplied in packs, as per table below:

PU/HPU Primer		
		CODE
Part 1	2,5 kg	B52200B0 026
Part 2	2,5 kg	A49501B0 025
Aggregate	5 kg	C52200B0 005
Total Yield 6,4 litre		

HANDLING & STORAGE

All **PU/HPU primer** related products have a shelf life of 12 months if kept in a dry, cool store in the original, unopened packs. If stored at high temperatures and/or high humidity conditions, the shelf life may be reduced.

HEALTH & SAFETY

When wet, PU/HPU primer is toxic. Ensure working area is well ventilated during application and drying. Avoid inhalation of dust and contact with skin and eyes. Suitable protective clothing, gloves, eye protection and respiratory protective equipment should be worn. The use of barrier creams provides additional skin protection. If contact with skin occurs, wash with water and soap. Splashes into eyes should be washed immediately with plenty of clean water and medical advice sought. When cured PU/HPU primer is inert and harmless.

NB: When transporting liquids and semi-liquids by aircraft, ask for material safety data sheet.

IMPORTANT NOTE

This data sheet is issued as a guide to the use of the product(s) concerned.

Whilst **a.b.e.® Construction Chemicals** endeavours to ensure that any advice, recommendation, specification or information is accurate and correct, the company cannot – because **a.b.e.®** has no direct or continuous control over where and how **a.b.e.®** products are applied.

FURTHER INFORMATION

- Where other products are to be used in conjunction with this material, the relevant technical data sheets should be consulted to determine total requirements.
- a.b.e.® Construction Chemicals** has a wealth of technical and practical experience built up over the years in the company's pursuit of excellence in building and construction technology.
- Please consult our website for our latest datasheets.

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