TECHNICAL DATA SHEET

P.HB POLY SCREED

◆ FAST DRYING POLYASPARTIC HYBRID SCREED SYSTEM ◆

HIGH STRENGTH · CHEMICAL RESISTANT · FAST DRYING · SEAMLESS FINISH

DEVELOPED BY INFINITY EFFECTS MATERIALS SCIENCE DIVISION

Infinity Effects introduces **P.HB Poly Screed**, a next-generation polyaspartic hybrid screed system representing a significant breakthrough in modern flooring chemistry. Developed by our team, P.HB Poly Screed redefines what a high-performance resin screed can achieve. It is a fully engineered system, designed from the molecular level to deliver a level of performance, durability, and visual refinement unmatched by traditional resin or cementitious products.



ADVANCED POLYMER ARCHITECTURE

The core of P.HB Poly Screed is a UV-stable aliphatic polyaspartic backbone engineered for long-term environmental resistance. Conventional epoxy and polyurethane systems degrade, yellow, or lose gloss under UV exposure. P.HB Poly Screed maintains complete optical clarity and colour integrity, ensuring consistent appearance over time.

The polymer network is built with controlled crosslink density and engineered elasticity, balancing rigidity and movement tolerance. This allows P.HB Poly Screed to withstand dynamic loading, thermal expansion and structural flex without microcracking or delamination.

MECHANICAL STRENGTH & STRUCTURAL ENDURANCE

P.HB Poly Screed delivers exceptional impact resistance and compressive strength due to its hybrid resin and powdered screed composition. The system uses an engineered Infinity Matrix consisting of mineral aggregates, micro-fillers, and reinforcing powders. This multi-phase matrix increases density, abrasion resistance, dimensional stability, and mechanical durability.

Testing shows that P.HB Poly Screed maintains structural integrity under heavy point-loading, dropped tools, industrial equipment, and long-term traffic. Traditional resin systems often mark, crack, or deform under repeated stress — P.HB Poly Screed is designed to remain unaffected.

UNMATCHED ADHESION & SUBSTRATE COMPATIBILITY

P.HB Poly Screed incorporates advanced adhesion promoters and substrate-reactive technology that allows mechanical bonding to concrete, tiles, timber, metals, plastics and more. This broad compatibility removes many of the limitations of standard resin floors and opens the door to new installation environments previously considered unsuitable.

PRECISION-CONTROLLED FLOW & FINISH QUALITY

P.HB Poly Screed's rheology is engineered to provide near-perfect self-levelling characteristics. The material flows smoothly across surfaces, removing micro-variations and forming a continuous, flawless film. Controlled exotherm and curing behaviour ensure that the material settles to a true 100% gloss, flat, mirror-like finish without bubbling, surface rippling, or curing distortion.

This level of surface precision makes P.HB Poly Screed suitable for high-end interiors, reflective design schemes, showroom environments, and spaces where visual perfection is critical.

P.HB POLY SCREED: ADVANTAGES

- **Rapid curing** — Walk-On within hours
- **Exceptional adhesion** — Forms a strong and long-lasting bond with most substrates.
- **Flat Gloss Finish** — Engineered to give you a flat gloss finish suitable for high end residential and commercial
- **Easy application** — Provides a generous pot life after mixing, allowing for a smooth and precise application.
- **Versatile compatibility** — Compatible with our decorative granit & stone systems and more!
- **Limitless color options** — Over 1000+ vibrant colors available through our Infinity Effects Pigmentation machine.
- **Flow Quality** — Rheology is engineered to provide near-perfect self-leveling characteristics
- **Flawless performance** — Delivers exceptional performance, impact resistance, flexibility, combining the best durability and stunning aesthetics.

TECHNICAL SPECIFICATIONS

Property	Details
Type	Two part polyurea coating with reinforcing screed powder matrix
Mix Ratio	RATIO 2:1:1 (Part A : Part B : Part C) See label on tin
Hardener	XF-01
Resin Density	1.10 kg/litre
Coverage	3 – 3.5 m^2/per depending on surface texture and porosity
Minimum Over-coating Time	60 minutes
Maximum Over-coating Time	24 Hours
Solvent	Thin with recommended retarder if necessary for increased worktime
Colours	White, Black, 1,000+ Pre pigmented colours
Pack Sizes	10KG (Part A 2.5kg – Part B 2.5kg – Part C 5kg)
Shelf Life & Storage	6 months in original, unopened container. Store in cool, dry conditions.

SURFACE PREPARATION

Before installing P.HB Poly Screed, contact Infinity Effects for substrate-specific preparation instructions, as requirements vary depending on the surface being treated. As a general guideline, ensure the substrate is completely dry, structurally sound, and free from loose materials, laitance, dust, oils, grease, contaminants, or any residues that may impair adhesion. Mechanical preparation may be required for certain substrates, while others may only need thorough cleaning. Infinity will advise on the correct preparation process for concrete, timber, tiles, metals, or alternative surfaces.

MIXING INSTRUCTIONS

Begin by pouring the entire contents of Part A into Part B. Using a drill fitted with a suitable mixing paddle, blend the two components for a minimum of 30 seconds to ensure proper chemical activation. Once fully combined, gradually introduce Part C while continuing to mix for an additional 2–3 minutes. Ensure that the mixture becomes uniform, free from lumps, dry pockets, or unmixed material along the sides or base of the container. For projects requiring extended working time, an optional retarder is available. This additive increases the pot life but will also extend the overall curing time. Contact Infinity for guidance on correct dosage and suitability.

APPLICATION

Confirm the substrate is dry and all loose material has been removed. Prime porous surfaces using P.HB Poly Screed Primer to ensure proper sealing. After priming, install the P.HB Poly Screed Mesh adhesive layer. Once secured, mix and pour P.HB Poly Screed onto the surface, using a flat trowel to guide the material into edges and corners. Work methodically toward your exit point and allow the system to fully cure. Optionally, Infinity Spray Granite or Spray Stone may be applied afterward, followed by a protective topcoat.

RECOATING

If a recoat or additional pour of Infinity P.HB Poly Screed is required, it must be carried out within the system's 24-hour recoat window to ensure proper chemical bonding. If this time period is exceeded, the cured surface must first be mechanically abraded to create a suitable profile. Once abrasion is complete, reinstall P.HB Poly Screed Mesh adhesive layer to re-establish structural reinforcement before attempting to repour the screed. Following these steps ensures full adhesion, uniform curing, and long-term performance of the system.

UV STABLE • FLEXIBLE • IMPACT RESISTANT | OVER 1000+ COLOURS TO CHOOSE FROM!

UV STABLE · FLEXIBLE · IMPACT RESISTANT · CHEMICAL RESISTANT · ABRASION RESISTANT · FAST CURING · SEAMLESS FINISH · OVER 1,000 COLOURS