

# hybrid 150

One component, water based Fully Aliphatic Polyurethane Coating



## DESCRIPTION

Hybrid 150 is a water based polyurethane acrylic membrane, suitable for a range of under tile and exposed applications. Hybrid 150 offers excellent adhesion and outstanding low vapor transmission. The unique formulation provides with a membrane which is highly durable and flexible for easy workability and durability.

## APPLICATIONS

- Internal wet areas
- External wet areas
- Balconies
- Podiums
- Parapet walls
- Plant floors and external areas

## FEATURES AND BENEFITS

- Certified class III elasticised water-based polyurethane membrane
- Compliant to AS 4858:2004
- Compliant to AS 4654.1
- Does not re-emulsify once fully dried
- Fast cure
- Durable and tough seamless finish
- Flexible & Elastomeric
- Salt and carbon attack resistant
- Environmentally friendly
- Compatible with most common tile adhesives

## PHYSICAL PROPERTIES AND TEST RESULTS

Hybrid 150 has been tested and passed AS 4654.1 & AS4858. Categorizing it as a class III Membrane

% SOLIDS	BY VOLUME	61%
Cyclic movement	Moving test joint	Pass Class III
Heat Ageing	AS/NZS4858 / 2 days at 23°C	2.01mpa, 338% Elongation
Full cure time	@ 23°C / 55 RH	96 hours



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TEST	AVERAGE TENSILE STRAIN AT BREAK	% AVERAGE TENSILE STRAIN AT BREAK N/MM2
7 day dry test	428.44 %	2.62 n/mm2
56-day water immersion	720.38 %	1.364 n/mm2
56- day detergent immersion	331.95 %	1.35 n/mm2
56- day bleach immersion	789.25 %	1.155 n/mm2

## SURFACE PREPARATION / PRIMING

All Surfaces to be waterproofed must be clean, dry, sound, and smooth. Ensure all laitance, grease, oil, wax, curing compounds, loose material, paint, and any other contaminants which may prevent adhesion must be completely removed, mechanically where necessary. Masonry surfaces must be pointed flush, and all surface defects repaired. New concrete must be cured for a minimum of 28 days. Or primed with Polybit Hydrapoxy.

Cement screeds must be fully cured or primed with epoxy. Fiber cement sheeting, water resistant plasterboard must be installed in accordance with the manufacturer's installation Instructions.

Porous substrates such as plasterboard or cement boards should be Primed with Polybit WB Primer. Green screed or concrete should be primed with Polybit Hydrapoxy.

Polybit Hydrapoxy must be used for external exposed areas, timber and particle board surfaces, bitumen or where there is a risk of evaporation of entrapped moisture in the substrate which may cause the membrane to bubble.

Metal surfaces must be clean, free of contaminants and then metal etch primed. If rusted, treat to remove rust, apply a rust converter and then metal etch prime.

Excessively porous, friable, and dusty surfaces such as PVC, scyon sheets & glass may require an additional priming coat.

## CORNERS

Apply an adequate flexible sealant in accordance with the manufacturers instruction and tool off to form a solid, coved or 45° fillet extending at least 10mm on to the adjacent surfaces. Allow to cure. Apply Hybrid 150 membrane directly over the sealant and on the adjacent surfaces.

### JOINTS – GAPS - CRACKS

For cracks less than 1mm, clean crack and sufficiently fill Joints, gaps, and cracks with an appropriate polyurethane or equivalent sealant and allowed to cure. Large cracks should be routed out to form a 'V' and then filled and sealed with a waterproof joint sealant as per the manufacturer's instructions. The sealant should be finished slightly proud of the surface and allowed to cure. After priming, as required, lay a suitable RF (woven fabric) TPE Or NBR (rubberized tape) or Self-adhesive fabric (butyl tape).

Bandage tape at least 48mm over the joint or crack and apply a fully reinforced Polybit membrane consisting of a base coat of membrane into which the reinforcing fabric is embedded. A saturating coat of the Hybrid 150 membrane ensuring that the fabric is entirely saturated and covered and then allowed to cure. At least one or two further coats are applied as per the Polybit membrane's Product Data Sheet extending at least 75mm on to the adjacent surfaces.



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## WASTE/OUTLETS/PENETRATIONS/ANGLES

### WASTE OUTLETS:

Floor wastes and puddle flanges should be rebated into the floor to allow water to readily drain.

### PLASTIC OR METAL ANGLES:

Where required by the Building Code such as internal hobs and exterior door barriers and plastic corner angles under wall boards, they should be securely embedded in to a continuous, gap free bed of a polyurethane sealant/mastic. Minimum application requirement set forth by NCC and relevant standard (AS4858) & (AS4454.2) Applicant must comply with AS3740-2010 of internal residential areas, as well as project specific requirements / recommendations by POLYBIT waterproofing systems.

## SURFACE PREPARATION – APPLICATION

After primer has sufficiently dried, stir contents thoroughly and Apply Hybrid 150 using a brush or roller in a minimum of two coat system.

Apply an even and consistent first coat of a minimum 0.85mm Wet Film Thickness (WFT) and once 1st coat is dry apply 2nd coat of a minimum 0.85mm WFT. To achieve a minimum 1mm DFT or 3+ coats to achieve equivalent result.

Hybrid 150 Must be applied to achieve a DFT of no less than 1.00mm (1000 microns) for floors & Walls when conforming to the NCC Waterproofing requirement coverage:  $WFT = 0.82\text{ltr/sq mtr}/2 \text{ coats} = \text{DFT } 1.00\text{mm}$ .

To test depth of coats, use a wet film thickness gauge at regular intervals.

In Jointed areas, corners or cracks the membrane should be used in conjunction with reinforcing mesh tape. Applying primer and mesh, allowing for saturation to allow the product to perform at its max capability. Without wrinkles or bubbles. Allow to cure. Apply a further one or two coats of membrane.

## SURFACE PREPARATION – COVERAGE

The stated Coverage of this membrane is dependent on substrate conditions and preparation.

Approximate coverage of 9m<sup>2</sup> per drum when achieving a 1.00mm DFT.

Note: Coverage figures are dependent on substrates condition. Surface preparation Performance data @ 23°C & 55% RH

- Tac touch after 2 hours
- Allow 6 -12 hours between coats
- Allow 36 hours drying time prior to tiling
- Always allow longer drying times in cooler or damp conditions.
- Flood Test 4 days curing

Drying & curing is affected by porosity of surface, ventilation, weather. And application techniques. Curing time and drying are given as a guide.



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## STORAGE

Keep in cool, dry place away from heat and direct sunlight

## SHELF LIFE

Up to 12 months in unopened original containers. Best used within 6 months one open and properly re sealed.

## CLEAN UP

Being a water-based product, any minor spills or on any equipment, it can be cleaned with water if still wet. Cured products should be cleaned with a solvent.

## SAFETY AND PRECAUTIONS

Hybrid 150 is a water-based product; however, avoid contact with skin and eyes. If poisoning occurs, contact a doctor immediately or the poison information center. Use of gloves and eye protection is always recommended.

## WARRANTY

Polybit Waterproofing Systems products are manufactured very rigid quality standards and guarantees the performance of Hybrid 150 when the following applications are followed.

- Applied to adequately prepared and structurally sound surfaces
- All tiling installed in accordance with AS3958
- All waterproofing membrane installed in accordance with AS4654 and AS3740
- All relevant requirements of NCC
- Polybit Waterproofing Systems TDS or other written instructions

Polybit Waterproofing Systems Will warrant its products for 10 years from time of application. If any product that have been applied in accordance with its specific data sheet or with Polybit Waterproofing Systems written instructions that have been proven faulty or defective, Polybit Waterproofing Systems will replace product free of charge and cover labor of original installation.

### DISCLAIMER

The information, and, in particular, the recommendations relating to the application and end-use of Polybit Waterproofing Systems products, are given in good faith based on Polybit Waterproofing Systems current knowledge and experience of the products when properly stored, handled and applied under normal conditions.

It is your responsibility to ensure that our products meet your requirements, are used and handled correctly in accordance with any applicable Australian Standard, our instructions and recommendations and only used for the applications for which they are intended.

In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered.

We also reserve the right to update information without prior notice to you to reflect our ongoing research and development.

The supply of our products and services is also subject to certain terms, warranties and exclusions, which may have been disclosed to you in prior dealings or are otherwise available to you on request. You should make yourself familiar with these.



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