

# Technical Data Sheet

## HYDROFORT PU

### FEATURES

- High solids
- Low odour
- Single pack
- Fast curing
- Permanently flexible
- Seamless waterproofing system
- Excellent adhesion to various substrates

### AREAS OF USE

- Showers
- Bathrooms
- Laundries
- Kitchens
- Balconies
- Patios

### SUITABLE SUBSTRATES

- Concrete & masonry
- Compressed fibre cement sheeting
- Plywood sheeting & wet area particle board
- Cement renders & screeds
- Timber
- Plaster board & wet area gyprock
- Steel – suitably prepared

**HYDROFORT™ PU** is a highly elastic, class 3, single component, liquid applied, polyurethane waterproofing membrane system that complies with AS/NZS 4858. HYDROFORT™ PU forms a tough, durable membrane that bonds well to most suitably primed building substrates and is suitable for above and below ground applications.

### USES

HydroFort™ PU is designed as a waterproofing membrane between the structural substrate and the reinforced unbonded tile screed in both internal and external non-exposed applications

HydroFort™ PU is suitable for use on most building substrates including: concrete, render, screeds, wet area wall sheets, fibre cement sheets, bricks, and MDF. All surfaces to be coated should be sound, stable, dry, clean, and free of dust, dirt, oils, and contaminants.

### APPLICATION

HydroFort™ PU can be easily applied by brush, roller, broom, or squeegee. Two coats are recommended to achieve the recommended dry film thickness of 1.2mm.

### TECHNICAL DATA

<b>Appearance</b>	Wet and dry film - blue
<b>Form</b>	Viscous liquid
<b>Drying</b>	Touch dry: 4 to 6 hours Recoat : 24 hours Tiling or toppings over: 24 to 72 hours Flood test: 10 days curing
<b>Specific gravity</b>	1.4kg/litre
<b>Shore A hardness (ASTM D2240-97)</b>	65
<b>Solids content</b>	90%
<b>Adhesion to concrete (7 days)</b>	1.3MPa
<b>Film thickness</b>	0.5 to 1mm per coat
<b>Coverage rate</b>	1 to 2m <sup>2</sup> per litre
<b>Number of coats</b>	1 to 2
<b>Chemical base</b>	1K solvent based polyurethane

### DURABILITY TEST RESULTS (AS/NZ 4858 – 2004)

<b>Elongation classification</b>	880% (Class 3)
<b>Tensile strength</b>	4.12 MPa
<b>Water immersion test – 56 days</b>	PASS
<b>Bleach immersion test – 56 days</b>	PASS
<b>Detergent immersion test – 56 days</b>	PASS
<b>Heat aging test</b>	PASS
<b>Cyclic movement test</b>	PASS
<b>Water absorption test</b>	PASS – 1.3%
<b>Water vapour transmission test</b>	PASS – 7g/m <sup>2</sup> /24hr

### APPLICATION CONDITIONS

Recommended conditions for application are as follows:

Substrate temperature: 7 to 35 °C

Ambient temperature: 7 to 35 °C

Ambient humidity: max 85% RH

Ensure that substrate and uncured membrane is at least 3C above the dew point. Applying outside of these conditions will result in condensation which may affect the membrane finish (including formation of pinholes) and adhesion.

### CLEAN UP

Avoid spills – difficult to clean from porous surfaces. Equipment can be cleaned with Xylene or Acetone immediately after use. Hardened materials must be removed mechanically. If spilled on carpet, allow to cure and shave carpet.

### SAFETY

Contains Isocyanates: refer to material safety data sheet.

### PACK SIZE

10L and 15L pails

### COLOURS

Blue

### SHELF LIFE

12mths @ 25 °C unopened

For further information, refer to the Fortis website [www.fortisadhesives.com.au](http://www.fortisadhesives.com.au) It contains not only the Safety Data Sheets but also technical bulletins on coatings applications and surface preparation. More in depth instructions are continued on the following pages.

### Disclaimer

Fortis products should be used in accordance with the information contained here. Each user should read and consider this information carefully in the context of how the products will be handled and used in the workplace including in conjunction with other products. While the information contained here is to the best of our knowledge at the date of publication, Fortis makes no representation about the accuracy of the information. If you need clarification or more information, you should contact Fortis Adhesives & Coatings office directly. Fortis products are sold without express or implied warranties, other than as provided by statute, and subject to our standard terms and conditions (provided to customers and available on request). Subject to our standard terms and conditions, and any statutory provisions, Fortis accepts no responsibility (including in negligence) for loss or damage of any nature resulting from the use of Fortis Adhesives & Coatings products or reliance upon the information contained here



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## DETAILED APPLICATION INSTRUCTIONS

Ensure that this technical data sheet and material safety data sheet are read and completely understood prior to the application of this membrane system.

### PRODUCT PREPARATION

HydroFort™ PU is ready to use, simply stir well prior to application – use care to minimize air introduced to product during mixing.

### SURFACE PREPARATION

- Installation of liquid applied membrane shall be taken as acceptance of the substrate suitability and preparation by the applicator.
- Ensure that the surface of all substrates to be coated by this product are structurally sound, clean, dry, smooth and free of voids or protrusions, oils, grease, curing compounds, or other coatings and adhesives and are uncontaminated by previous trades activities.
- Check that all composite substrates, such as wall and floor sheets are fully supported and installed to the manufacturers instructions.
- Where particle board or platform floor sheeting is installed, check manufacturers specification for suitability in wet area applications and that membrane adhesion is not affected by any existing protective coating.
- Concrete must be cured for 28 days prior to application. Screeds and renders must be cured for a minimum of 7 days.
- Excessively porous and dusty surfaces may require an additional primer coat.
- 2 coats of HydroFort™ Epoxy must be used to seal concrete slabs subjects to a negative hydrostatic pressure head.
- Membrane should not be applied until all surface preparation has been completed.

### PRIMING

- Porous substrates: A porous or absorbent substrate that will allow a bead of water to easily soak into and wet out the surface of the substrate must be suitably primed with HydroFort™ Epoxy.
- Bitumen substrates: Bitumen substrates must be primed with HydroFort™ Epoxy.
- Damp substrates: Substrates that are damp and cannot be practicably dried prior to waterproofing must be primed with HydroFort™ Epoxy.
- Plastic and metal: Dry rigid plastics and metallic substrates may require the use of Fortis Adhesion Promoter prior to application eg. UPVC drainage outlets & penetrations, aluminium angle water stops, brass, copper, or galvanised penetrations, stainless steel drains & gutters etc.

### APPLICATION

It is recommended that the installation be carried out by professional licensed applicators holding a current certificate 3 in waterproofing. Application must comply with the Trade Licensing requirements of AS/NZ 3740 “Waterproofing of Internal Wet Areas in residential buildings” or AS/NZ 4654.2 “Waterproofing membrane systems for exterior use – Above ground level” as appropriate.

- Apply a suitable bond breaking tape or flexible Polyurethane sealant in accordance with the manufacturer’s instructions to all horizontal and vertical junctions, corners, wall / floor / hob / floor and shower set downs prior to membrane application.
- A suitable reinforcing fabric is also recommended for use at all junctions to protect vulnerable areas from damage.
- HydroFort™ PU is specially formulated for brush or roller application to both small and large areas. Apply first coat evenly as per recommended coverage rate and allow to dry. Apply the second coat as soon as possible after the first 24 hours of the first coat. Ensure membrane is protected from damage before tiling.
- The minimum film build requirements are identical for horizontal and vertical applications and must be applied without slump or deformation when cured. It is recommended that a wet film build gauge be used to ensure minimum wet film build is being achieved on each coat.
- All vertical terminations, including perimeter walls, hobs, and penetrations must be of adequate height to satisfy AS/NZ 3740 for internal applications and AS/NZ 4654.2 for external applications.
- All external vertical membrane upstands must be covered by an appropriate cross cavity flashing, compatible coating or other appropriate flashing system to ensure that surface water is prevented from bypassing the membrane system above the required termination height.
- If a tiling adhesive is to be applied directly over, broadcasting of sand may be required if recommended by adhesive supplier. Ensure sand is broadcast into final wet coat.

### LIMITATIONS

- HydroFort™ PU is not suitable for direct exposure and should be tiled or topped within six weeks.
- HydroFort™ PU should not be applied directly to damp substrates as gassing will occur, resulting in adhesion and surface finish issues. Prime damp surfaces with HydroFort™ Epoxy prior to waterproofing.
- HydroFort™ PU is not recommended as a membrane system in immersed areas such as pools and spas.

### PRECAUTIONS

- Ensure substrate is completely dry prior to application.
- Ensure all surface preparation is carried out to allow even application.
- Ensure trial patch is prepared to ensure product achieves a suitable result.
- Do not apply during periods where weather conditions exceed those recommended within this document.