

# DUROPROOF™ PU BLACK ECO

## SINGLE COMPONENT POLYURETHANE MEMBRANE

**DUROPROOF™ PU BLACK ECO** is a high quality, superior performance single component liquid that cures to rapidly to form a polyurethane membrane that is tack-free, high modulus, tough, and flexible. For non exposed use only.



### PRINCIPLE CHARACTERISTICS

- ◆ Excellent flexibility
- ◆ One component
- ◆ Good adhesion to a wide range of substrate
- ◆ Excellent chemical resistance
- ◆ Decrease in construction cost and time
- ◆ Can be applied as a single const finish at 1mm thickness
- ◆ Tack-free cure & walkable overnight
- ◆ Excellent toughness.
- ◆ Low odour, low VOC
- ◆ Complies with Green Star requirements
- ◆ Good abrasion and tear resistance
- ◆ Class III - elongation as per AS/NZ 4858  
High build application is possible



### USE AREA

- ◆ Planter box internals and retaining walls
- ◆ Roof and Deck areas that are to be paved over with a sand bed, ballasted or otherwise covered without bonding.
- ◆ Landscaped decks.
- ◆ Reinforced concrete and fibrous cement sheeting floors in bathrooms and laundries.
- ◆ Waterproofing beneath screeds on decks, balconies, and podium levels prior to the application of a variety of surface finishes, such as tiles.

## TECHNICAL INFORMATION

Composition		Single-PAck moisture curing Polyurethane
Specific Gravity	(g/cm <sup>3</sup> )	1.30-1.35
Service Temperature	(°C)	-20to +80
Curing time	(hours)	Cured overnight
Shelf life	(months)	9
Non volatilies	(%)	92
VOC content	(g/L)	130
Odour		Light almond smell
Tensile Strength	(MPa)	2.0
Elongation	(%)	690
Hardness	(Shore A)	45
Angle Tear Strength	(Kg/cm)	11
Re-coating interval	(days)	Maximum 2 days after application
Recommended substrate temperature(°C)		+5 to +35
Recommended substrate moisture (%)		Up to 5
Recommended relative humidity (%)		Between 20 and 90

Tiling: DO NOT direct stick tiles to membrane. Use unbonded screed method in accordance with

AS3958.1. Allow 24 hours to cure prior to covering with surface finishes.

## SUBSTRATE PREPARATION

Ensure sheet surfaces are firmly fixed to manufacturer's directions. Surface must be free of dirt, dust, loose particles, oily contaminates, old membranes & coatings laitance, curing compounds and flaking concrete, etc. Grind, acid etch or sandblast concrete if necessary. Concrete must be a minimum strength of 20MPa and have cured a minimum of 28 days. Concrete should be fine broom finished. Surfaces must be dry with a moisture content below 5%. Fill all screw holes, cracks and voids with PU sealant. Install leak control flanges around all pipe penetrations. Build-up areas that are likely to cause ponding.

## PRIMING

The preferred primer for general use is Duromix Hibuild WBE Primer. PU Primer is suitable where the condition of the concrete surface needs a primer with good penetration. Coat PU primer within 24 hrs. For wet areas, e.g. showers or where prolonged water contact is likely prime and completely seal the surface with Hibuild WBE beforehand. Refer to the Hibuild WBE technical data sheet for full instructions. PVC fittings should be etched primed (e.g. pink plumber's primer).

## DETAILING

Apply a 10-15mm fillet of PU Sealant between all horizontal to vertical joints. Apply to all horizontal to vertical junctions, and around pipe/column penetrations. Around water and floor waste outlets, and over fine shrinkage cracks, apply additional DUROPROOF™ PU BLACK ECO to 0.75mm dry film thickness and dress up to penetrations and down into waste outlets. To joints in sheet flooring, tape and bandage over the PU sealant joint. Cut out cracks in concrete to 6mm minimum width by 6mm minimum depth and fill with PU sealant before application of the membrane.

## APPLICATION

To the prepared surface, apply DUROPROOF™ PU BLACK ECO by notched squeegee, spreader, brush or roller within a maximum of 48 hours between coats to achieve an optimum intercoat bond. Turn membrane up at walls and penetrations and down into drainage outlets. When dry, check for pinholes or misses and rectify if necessary. If membrane becomes dirty between coats, clean with Xylene to ensure adhesion. Allow 24 hours to dry before covering.

## PRECAUTIONS

Do not apply above 35°C or below 5°C ambient temperature, or if the Relative Humidity is greater than 90%. If applying more than one coat externally, ensure before starting the job, that rain is not expected between coats. Do not apply mortar beds until the membrane is fully dry. Protect membrane against damage before and during covering with mortar. Protect membrane against the action of roots.

## WARNINGS AND HAZARDS

Keep away from heat and flame. Use only with adequate ventilation.

Refer to MSDS prior to use.

## HANDLING AND STORAGE

DUROPROOF™ PU BLACK ECO can be stored for 6 months at below 25°C. Avoid prolonged exposure to humidity or high temperature, contamination with water or alcohols. The product is very sensitive to air and moisture. Once opened, use completely as soon as possible and do not reseal for future use.



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