

# DUROMASTIC ACS-3

The World's Most Flexible 2 Part Cementitious Membrane with over 800% Elongation

## Technical Data Sheet

### Description

**Duromix ACS-3** is a two-component cementitious membrane that consists of a liquid and a powder. The product is designed as a two component system so the unique property of the mix ratio allows for fast drying system and a degree of flexibility in this waterproofing membrane. ACS-3 is particularly suitable for applications where polymer modified render will be applied or in conditions where other water based waterproofing products have difficulty in drying due to excessive humidity and/or coolness. (Please consult with Durotech Technical Representative regarding suitable drying conditions for this product). ACS-3 will form a waterproofing lining on materials like concrete, cement render, Fibre cement board and other sheeting materials All surfaces must be clean and dry. The product is classified Class III in accordance with AS 4858 2004.

### Features:

- Pre-weighed kit and requires mixing
- Fast drying
- Very flexibility
- Seamless application
- No solvents used
- Economically friendly

### USES

- Showers and internal wet area
- Decks
- Balconies



### Component Properties

Property	Liquid	Powder
Appearance	Ivory to white liquid	Green grey colour
Specific gravity g/cm <sup>3</sup>	1.03 ± 0.03	
Viscosity @ 25°C	17,000 – 23,000 cps	Not applicable

### Properties and Curing Conditions

Property	Liquid/Powder
Mix ratio by weight (resin/ weight)	150/100
Solids Content	65-70 % approx
Dry Time	Approx< 1 hour at 25°C, 0.8 WFT
Wet Film per coat	1.0 mm (Use within 2 to 3 hours)
Dry film thickness	0.7 mm
Coverage	1L/m <sup>2</sup> / coat
No. Of Coats required	2
Recoat Time	2-4 hours at 25°C
Elongation %	800% (Cure at 7 days)

### Application for Under Tile Membrane:

**Surface Preparation:** Remove all dirt, dust and cement, oil and debris. The surface must be clean, dry and free from loose particles, including dust, grease, coatings and other foreign matter. Seal all screw holes and any voids with Durotech polyurethane sealant.

Apply polyurethane sealant to all horizontal joints for the area to be waterproofed. To all wall/floor and wall/wall junctions, apply approximately 12 mm bead sealant as a bond breaker. Apply sealant around floor wastes, tap fittings and other penetrations.

Prime all internal surfaces with Durotech ARW or WBE primer. Prime external surfaces with Highbuild WBE. Prime all PVC fitting with plumbing PVC primer.

Fill nonmoving and hairline cracks with a brush coat of **Duromix ACS-3**. Moving cracks above 1 mm shall be routed out, cleaned and filled with silicone/polyurethane sealant. Apply a polyester reinforcing bandage embedded in Duromix ACS-3 and allow to dry. Ensure the joint is not beyond the elastic limits of the membrane.

For sheet flooring joints, apply a 200 mm wide reinforced bandage of polyester fabric embedded in **DUROMIX ACS-3** and allow to dry.  
**DO NOT add water to mixture before use or during use.**

**Mixing:** Mix the powder component into half the liquid until smooth for 2 to 3 minutes, restir and add the remainder of the liquid and stir at 300-600 rpm, moving powder and liquid together to form a uniform mix. **DO NOT BEAT IN OR INDUCE AIR.**

Apply a minimum of two or more coats of DUROMIX ACS-3 to the floor and cover areas to ensure a minimum dry film thickness of 1.2 mm. Apply one or two coats to wall areas above the shower tray to a dry film thickness of 0.7 mm. Use a brush or short nap roller for walls. Ensure the membrane is turned down into the floor waste or well sealed around the leak control flange and other penetrations. Ensure the flashing angles are properly sealed across doorways, check for pinholes or cracks in the membrane when dry and rectify.

**Limitations and objectives of application:**

**Do not apply above 30°C and below 10°C.** Areas subject to rising damp or back pressure should be first sealed with an epoxy coating such as Highbuild WBE. Cold damp conditions retard cure, allow plenty of air to flow to aid drying. Do not apply excessive thickness to internal corners or shrinkage and cracking may occur. Where there are sharp corners, application of a cove before tiling over, normally 1-3 days. Protect membrane against damage before and during tiling. Do not apply more than 1.2 mm DFT or reduced flexibility will occur. Do not expose to solvent. **Duromix ACS-3** is suitable for tiling over. Ensure the powder component is sealed and stored in dry conditions at all times before use.

**Flood Test And Tiling:**

A flood test may be carried out after 72 hours of drying, at 25°C and 50% RH. Apply water to a depth of 25 mm for approx 2 hours. **Duromix ACS-3** may be tiled over after 3-4 days at 25°C, 50% RH, using quality cement based tile adhesive as per 3958.1

**Packaging:**

12 KG liquid and 8KG Powder yielding 17L (20KG) of membrane

**Storage:**

**Duromix ACS-3 liquid** has a shelf life 12 month stored in the original containers unopened. **Duromix ACS-3 powder** stored in its original sealed containers for up to 4 months in controlled environment at 20°C and 50% relative humidity. Place out of direct sunlight at temperatures between 15-30°C.

A flood test may be carried out after 72 hours of drying, at 25°C and 50% RH. Apply water to a depth of 25 mm for approx. 2 hours. **Duromix ACS-3** may be tiled over after 3-4 days at 25°C, 50% RH, using quality cement-based tile adhesive as per 3958.1

**Cleaning:**

Clean the tools and equipment with rags, then wipe off the excess before curing. Wash the paddle stirrer and tools in water.

**Health and safety:**

Please observe the precautionary notices displayed on container. Avoid skin contact and eye contact. Spillage on the skin should be removed immediately with suitable cleanser, soap and water. Eyes should be well flushed with water and seek medical attention immediately. For the full health and safety hazard information and how to safely handle and use the product, please make sure you refer to relevant MSDS.