

Cementitious negative side and damp surface waterproofing membrane.

#### DESCRIPTION

Cemproof Flex is a two-component, flexible cementitious waterproofing membrane formulated for use in both positive and negative side waterproofing applications and for use on damp substrates.

Cemproof Flex provides excellent waterproofing performance, whilst allowing the substrate to breath.

Component A is a water based acrylic resin. Component B is a mortar based on a mixture of cements, tough fibres, additives and well-graded aggregates.

#### ADVANTAGES

Cemproof Flex delivers the following advantages;

- Class I membrane.
- Positive and negative side waterproofing. •
- Suitable for use on damp substrates. •
- Excellent adhesion. •
- High abrasion resistance and UV stability. ٠
- Good flexibility. •
- Non-toxic and chloride free, potable water safe. •
- Resistant to high negative hydrostatic pressure. ٠
- · Anti-fracture membrane between substrate and other finishing coats.
- Crack bridging hairline and shrinkage cracks.
- Carbonation and electrochemical corrosion protection.

#### AREAS OF USE

Cemproof Flex is suitable for use in the following areas;

- **Basements & Tunnels**
- Retaining Walls

**Balconies** 

- **Foundations** 
  - Water Retaining Structures
- **General Concrete Protection**

- Planter boxes
- Swimming Pools
- Podium Decks

## SUBSTRATES

Render

Cemproof Flex is suitable for application on;

- Concrete Brick
- Stone Concrete Blocks
  - Light Weight Aggregate Block

#### **TESTING APPROVALS AND STANDARDS**

Cemproof Flex is compliant with the following standards;

- Green Star Design & As Built v1.1: Indoor Pollutants 13.1 Paints, Adhesives, Sealants and Carpets.
- APAS 181 V.O.C limits.
- AS4020 Products for use with Drinking Water.
- AS3740, AS4858 (Refer membrane class).

#### TECHNICAL DATA (@ 25°C)

Number of Coats:	2	
Mixing Ratio:	35kg Kit - 10kg Liquid / 25kg Powder	
Coverage: (per coat)	1 – 1.5kg / m² per coat	
Wet Film: (per coat)	1000 – 1500 microns	
Recoat:	Min 16hrs – Max 72hrs	
Tile/Screed/Overcoat:	72 hours	
Full Cure:	7 – 14 days	
Colour:	White Liquid/Grey Powder	
Clean Up:	Water	
Shelf Life:	12 months	

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## ANCILLARY PRODUCTS

- Crommelin<sup>®</sup> Hybrid MS Polyurethane Sealant 600ml
- Crommelin<sup>®</sup> Silicone& Bond Breaker Sealant 300ml
- Crommelin® Polyfab reinforcing fabric
- Crommelin<sup>®</sup> Polyfab BB bond breaker
- Crommelin<sup>®</sup> Contractor Membrane Applicator Brush 100mm, 75mm
- Crommelin<sup>®</sup> Contractor Membrane Roller Cover 230mm

### **TEST DATA**

Properties	Measurement /Standard	Test Results
Adhesion	ASTM D4541	Concrete - 2.0N/mm <sup>2</sup>
Positive Water Pressure	EN 12390-8	900kPa
Negative Water Pressure	EN 12390-8	100kPa
Elongation	UNE 53510-01	59% ± 5%
Flexibility	ASTM A615	60% (without fissure)
Sulphate Resistance	ASTM C1202	High Resistance

### SUBSTRATE PREPARATION AND PRIMING

Full substrate preparation instructions can be found at <u>www.crommelin.com.au/full-instructions/</u>

- The surface should have a light even texture. Masonry should be flush pointed and all defects in existing surfaces made good.
- Surfaces must be clean, sound and free from dust, grease, curing compounds, release agents, loose particles, efflorescence, concrete laitance or any other contaminants.
- High pressure water cleaning or sandblasting is recommended.
- All high points and protrusions should be removed, blow-holes and areas of honeycombing should be filled and the surface should be brought back to an even profile using a suitable repair mortar.

Note: Due to the wide variety of substrates available, adhesion testing is recommended in a trial area before full application.

Note: Cemproof Flex should only be applied to wet surfaces, surface saturated, but without standing water.

It is recommended that only workable areas are wetted down prior to application to ensure that the immediate surface to be coated remains sufficiently hydrated.

#### **APPLICATION CONDITIONS**

- Pot life between 30 60 minutes, dependent upon temperature and humidity.
- Application temperature between 7°C 35°C.
- If working during high temperature conditions (25°C 35°C) direct sunlight should be avoided during application and curing.
- If working during high temperature conditions (25°C 35°C) ensure that product has is not be stored in direct sunlight or an excessively hot environment before mixing and application.
- Do not apply below 7°C surface temperature, or if low temperatures are expected within 24 hours.
- Do not apply if relative humidity is above 85% during initial cure phases, or if rain is expected before cure.

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#### MIXING

- Cemproof Flex is supplied in two pre-measured components.
- It is recommended to always mix full kits to ensure correct product ratios. Thinning is not recommended.
- If part kits are mixed, it is important that mix ratios are accurate (1kg liquid:2.5kg powder). We do not recommend mixing part kits without using accurate weighing equipment.

Note: The addition of excessive liquid will increase cure time, negatively affect membrane hardness, lower abrasion resistance and may lead to the formation of air bubbles once the coating is under water immersed conditions.

Note: The addition of excessive powder will reduce membrane workability resulting in too high film builds that may lead to cracking.

- Always add powder to liquid, never liquid to powder.
- Pour half of Part A Liquid into a clean pail large enough to contain a full kit. (Minimum 20L pail) Gradually add half of Part B Powder into the pail whilst mixing with a low speed mixing drill (400 – 600 rpm). Mix until homogenous and free of lumps.
- Add remaining Part A liquid to the pail and mix until homogenous. Gradually add the remaining Part B Powder into the pail and continue to mix for between 3 – 5 minutes until a homogenous, lump free consistency is achieved.
- Properly mixed Cemproof Flex should be light grey in colour, smooth in consistency and easily applied by a roller.

Note: Thorough mixing is important to provide a smooth and workable consistency. Ineffective mixing procedure, mix ratios and mixing times will result in stiff and unworkable membrane consistency.

#### APPLICATION

Full application instructions can be found at <u>www.crommelin.com.au/full-instructions/</u>

- 50mm mortar cove, treated with Crommelin Powerflex is required at all wall to floor and wall to wall joints.
- Apply Crommelin<sup>®</sup> Polyfab BB or Bond Breaking Sealant to internal angles/corners (wall & floor junction) and vertical angles/corners (wall & wall junction) as per standard.
- Apply Cemproof Flex with Crommelin<sup>®</sup> Contractor Membrane Brush, Crommelin<sup>®</sup> Contractor Membrane Roller or similar.
- Apply first coat of Cemproof Flex as per recommended coverage rate. Work from corners to central areas and allow to dry.
- If only a bond breaking sealant has been used, it is recommended to install Crommelin<sup>®</sup> PolyFab Reinforcing Fabric to all joints and corners in conjunction with first coat of Cemproof Flex.
- Wet surface with water again before the application of second coat.
- Apply second coat of Cemproof Flex as per recommended coverage rate, at 90° to the first coat.
- Allow to cure for a minimum of 72 hours, before the application of a screed or the commencement of tiling.
- If rendering over, first prime the cured Cemproof Flex with Crommelin Acrylic Modifier. Then mix in Crommelin Acrylic Modifier as an additive into render to improve adhesion, tensile, flexural, impact and compressive strengths. Refer to the Crommelin Acrylic Modifier Technical Data Sheet for coverage & dilutions rates.
- If pond testing is required, allow to dry for a minimum 48 hours (depending on weather conditions) to ensure adequate curing. Pond test with water to a depth of 25mm for 2 hours. After testing ensure area is drained and dried.

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#### **CLEAN UP**

- Uncured material may be removed with warm water and detergent.
- Cured material may be removed mechanically.
- Cured material may be softened by soaking in Crommelin<sup>®</sup> HD Cleaner before attempting removal.

#### MAINTENANCE SCHEDULE AND REPAIR

- Cemproof Flex must be protected from damage by after trades and inspected prior to the application of any over coat.
- Any damage or areas of cracking may be repaired by over coating the affected area as per recommended coverage rates.
- Protect membrane from harsh chemicals, abrasion and other potentially damaging conditions.

#### PRECAUTIONS

- Do not apply if the temperature is below 7°C or relative humidity is above 85% or if rain is imminent.
- Ensure adequate ventilation and air flow to optimise membrane curing.
- Protect against quick drying by wind or direct sunlight and high temperatures by fog spraying with water for two hours after each application.
- If used in a potable water application, ensure that the surface of the membrane is thoroughly washed down before being put into service.

#### WARRANTIES

A standard warranty period of 10 years is offered for Crommelin<sup>®</sup> Cemproof Flex.

Extended warranties are available for project specific applications. Please contact your Crommelin<sup>®</sup> representative, or the Crommelin<sup>®</sup> technical support team for detailed specifications applicable to your project and warranty requirements.

#### TRANSPORT AND STORAGE

- Size: 35kg Kit
- Weight: 35kgFlash Point: N/A
- DG Class: N/A

• UN Number: N/A

Cool and Dry Storage

#### SAFETY AND FIRST AID

Cemproof Flex Safety Data Sheet is available from Crommelin<sup>®</sup> upon request.

#### Safety

- Ensure good ventilation and avoid breathing vapours.
- Avoid skin and eye contact. Wear gloves and eye protection. Remove splashes on skin immediately and remove contaminated clothing.
- Keep out of reach of children.
- Keep container sealed when not in use.
- Do not swallow.

#### First Aid

- If poisoning occurs, contact a doctor or poisons information centre: Ph. 13 11 26.
- If swallowed, do not induce vomiting. Give a glass of water to drink.
- If in eyes, hold eyes open and flood with water for at least 15 minutes.
- If not breathing, apply artificial respiration.

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Any advice, recommendation, information, assistance or service provided by Crommelin<sup>®</sup> in relation to its products or their use is given in good faith, however is provided without responsibility or liability.

Customers need to undertake their own assessment to determine the suitability of a product for the intended use. As the performance of any product is subject to a wide variety of different surface types as well as environmental and surface-specific conditions, it is essential that a sample of the product be applied to the intended area of use to ensure it is acceptable in appearance and finish and that it performs as required on the specific surface.

Crommelin® also reserves the right to update information without prior notice, to reflect ongoing research and product development.