Technical Data Sheet

Crommelin® Waterproofing & Sealing

7 Day Technical Support 1800 655 711

14/04/2016

Cemproof Flex®

Cementitious negative side and damp surface waterproofing membrane

Description

Cemproof Flex® is a two component, flexible cementitious waterproofing membrane, based upon a water based acrylic resin, cement, additives and graded aggregates. Cemproof Flex® is formulated for use in both positive and negative side waterproofing applications and for use on damp substrates.

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
- Good flexibility
- Non toxic and chloride free, potable water safe
- Resistant to high negative hydrostatic pressure
- 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
- Foundations
- Water retaining structures
- Balconies
- Podium decks
- Swimming Pools
- Planter boxes
- General concrete protection

Substrates

Cemproof Flex® is suitable for application on:

- Concrete
- Stone
- Render
- Brick
- Concrete blocks
- Light weight aggregate block

Testing Approvals and Standards

Cemproof Flex® is compliant with the following standards:

- Green Star IEQ V2 2013
- Green Star Office V2 / V3 and Green Star Interiors
- APAS 181 – V.O.C limits
- AS4020:2005 – Products for use with Drinking Water

Technical Data (@ 25°c)

Number of Coats:	2
Mixing Ratio	35kg Kit - 10 kg Liquid / 25kg Powder
Coverage:	1 – 1.5kg / m^2 per coat
Wet Film Per Coat:	1000 – 1500 Microns
Recoat	Min 16 – Max 72 Hours
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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Quality Endorsed Company ISO 9001

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Ancillary Products

Contractor Polyurethane Sealant – 600ml Grey	Silicone WP Plus – 300ml Trans, Grey, White
Polyfab – reinforcing fabric	Polyfab BB – bond breaker
Contractor Applicator Brush – 100mm, 75mm	Contractor Roller Cover – 230mm

Test Data

Properties	Measurement / Standard	Test Results
Adhesion	ASTM D-4541	Concrete 2.0N/mm^2 (Substrate Failure)
Positive Water Pressure	EN 12390-8	900 kPa
Negative Water Pressure	EN 12390-8	300 kPa
Elongation	UNE 53510-01	59% ± 5%
Flexibility	ASTM A 615	60% (without fissure)
Sulphate Resistance	ASTM C1202	High Resistance

Substrate Preparation & Priming

Surface Preparation

- 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 and surface defects should be brought back to an even profile using a suitable repair mortar

Substrate Preparation & Priming (continued)

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

- Priming is not required on well prepared surfaces

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

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)

Note: The addition of excessive liquid will increase cure time, negatively effect 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

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Mixing (continued)

Note: Mixing time 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 Conditions

- Pot life between 30 – 60 minutes, dependent upon temperature and humidity.
- Cemproof Flex® should only be applied to wet surfaces, surface saturated, but without standing water
- Application temperature between 10°c - 25°c
- If applying during high temperature conditions (25°c – 35°c) , application and curing in direct sunlight should be avoided
- If working during high temperature conditions (25°c – 35°c), ensure that product has not be stored in direct sunlight or excessively hot environment before mixing and application
- Do not apply below 5°c surface temperature, or if low temperatures are expected within 24 hours
- Do not apply if rain is expected within 24 hours of application

Application

- 50mm mortar cove, treated with Crommelin® Powerflex is required at all wall to floor and wall to wall joints
- Apply Crommelin® Contractor Polyurethane Sealant to all construction joints and cracks, and around all penetrations and allow to cure
- Ensure that surface is prepared as per instructions and sufficient surface moisture is present
- Ensure that correct mixing instructions have been followed and consistency is workable and as expected
- Apply Crommelin® Polyfab reinforcing fabric to all construction joints and cracks, and around all penetrations, as part of the 1st coat
- Apply Cemproof Flex® with Crommelin® Contractor Brush, Crommelin® Contractor Roller or a trowel if a smooth finish is required

Application (continued)

- Apply 1st coat of Cemproof Flex® as per recommended coverage rate and allow to cure for a minimum of 16 hours and a maximum of 72 hours. Film thickness of 1mm – 1.5mm required
- Wet surface again before the application of 2nd coat
- Apply 2nd coat of Cemproof Flex® as per recommended coverage rate and allow to cure. Film thickness of 1mm – 1.5mm required
- Always apply as per recommended coverage rates. Too thin applications may lead to poor adhesion and pin holing, too thick applications may lead to mud cracking

Clean Up

- Uncured material may be removed with warm water and Detergent
- Cured material may only be removed mechanically

Maintenance Schedule & 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 effected area as per recommended coverage rates
- Protect membrane from harsh chemicals, abrasion and other potentially damaging conditions

Precautions

- Protect against quick drying by wind or direct sunlight and high temperatures by fog spraying with water for two hours after each application
- Do not apply during periods of extreme weather conditions – temperature or humidity
- Do not put membrane into service until full cure has been achieved
- If used in a potable water application, ensure that the surface of the membrane is thoroughly washed down before being put into service

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Warrantees

Cemproof Flex® system warrantees are available for the following time periods:

10 Years	✔	15 Years	✔	20 Years	

Please contact your Crommelin® representative, or the Crommelin® technical support team for detailed specifications applicable to your project

Transport & Storage

- Size: 35kg Kit
- Weight: 35kg
- DG Class: N/A
- Flash Point: N/A
- UN Number: N/A
- Cool and dry storage

Safety & First Aid

Cemproof Flex® material safety data sheet available from Crommelin® 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® 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 particular use intended. 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.

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