

HIGHLY FLEXIBLE CEMENTITIOUS WATERPROOFING MEMBRANE FOR HORIZONTAL & VERTICAL SURFACES

DESCRIPTION

A two part acrylic polymer modified highly flexible cementitious waterproof membrane supplied in kits ready to use for the protection of concrete and mortar. **Contite FCW** provides excellent adhesion, flexibility, crack bridging ability, and durability.

USES & ADVANTAGES

Contite FCW is suitable for many waterproofing applications including for sealing swimming pools, balconies, bathrooms, wet areas, basements and as a low cost roof waterproofing system in damp conditions where other systems cannot be used.

In roofing applications **Elastodeck** acrylic roof coating may be applied over **Contite FCW** in a minimum of 2 coats to provide an aesthetically pleasing appearance and protection.

Advantages include:

- Crack bridging.
- Non toxic.
- Excellent adhesion. Fully bonded.
- Protection against carbonation and chlorides.
- Unlike conventional coatings that require the concrete to cure for 7 - 28 days it can be applied to 24 hour old concrete.
- Excellent elongation and flexibility.
- Increased frost & salt resistance.
- Easy to apply by trowel or brush.
- Minimum surface preparation needed.
- Excellent for damp-proofing basements below ground.
- Good chemical resistance to mild inorganic acid solution, diesel, gasoline, chlorides, deicing salts, organic solvents and effluents.
- Breathable - allows transmission of water vapour from interior of building.



- Over bridging of hairline cracks.
- Withstands light pedestrian traffic.

PROPERTIES

Appearance:	Grey & special colours on request
Polymer Characterisation:	Polyacrylate styrene
Mixing Ratio:	A : B = 4 : 5 by weight
Density:	A + B (mixed) Approx. 1.5 kg/l.
Coverage:	Approx. 1.5 kg/m ² /mm.
Pot life:	30 minutes at 30°C. Pot life will be shortened at higher temperatures

Initial Hardness Shore A: >50 ASTM D2240

Tensile Strength: 1.5 N/mm² ASTM C-412

Chloride Content: 0.008% ISEA Method

Adhesion to Substrate: Approx. 1.0-1.5 N/mm² ASTM D4541

Drying Time: 1.30 to 2.00 hours depending on temperature

Flexibility Test: No crack at 25 mm bending

Crack Bridging: No cracking at 2 mm width at full thickness

ASTM C-836
No crack after 10 cycles of stretching and closing at 1mm width

Elongation: > 300% (2 mm. thickness)

Resistance to Water Penetration: No water penetration DIN 1048 pt 5:1991

** Properties are typical under laboratory conditions and do not constitute a specification. Field trials are recommended.*

COVERAGERATES

Surface Water Pressure: 0.75-1.12 kg/m²/coat - 2 coats
DFT approx. 1-1.5 mm.

Ground Water Pressure: 1.12-1.5 kg/m²/coat - 2 coats
DFT approx. 1.5-2 mm.

Light Foot Traffic: 2 mm thickness in 2 coats

Moderate to Heavy Foot Traffic: 4 mm in 4 coats

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SUBSTRATE PREPARATION

The substrate should be clean and sound, free of dust loose particles, grease, oil, primers from previous membrane systems or bitumen. Bitumen or primers should be removed by shotblasting or mechanical means, alternatively seal with a **Cormix Sealer**. Bond tests should be undertaken if the surface is already saturated with bitumen or bitumen primers. Spalled concrete should be repaired by cutting out to sound concrete and patching with **Conpatch 600**. Cracks, holes and honeycombs must be repaired prior to application (consult Cormix International Technical Department).

Areas at brickwalls to receive waterproofing shall have brick joints evenly finished or skim-plastered while floor trap pipes shall be cut to the same level as the R.C. slab prior to waterproofing application.

At juncture or change of plane, between the slab and the wall, at corners and around pipe protrusion, a 25x25 mm cement mortar cant fillet shall be formed.

MIXING

Contite FCW is supplied in premeasured units. Slowly add the powder to the liquid and mix to a lump free smooth consistency.



Do not add water or rework a stiffened mix by adding water. Mix sufficient material to use within 30-40 minutes.

APPLICATION

At high temperatures protect material from direct sun and wind to prevent early drying & shrinkage cracks. Concrete surface imperfections up to 2 mm. level with **Conpatch 300** above 2 mm. use **Conpatch 600**.

Construction joints should have **Contite Waterstop** installed and joints wall to parapet a fillet of **Conpatch 600** formed. Static cracks should be routed out & repaired with **Conpatch 600** & covered with **Contite FCW** reinforced with **Elastocloth** embedded into the first coat. Smooth out any wrinkles using a trowel. Cover with second coat. Moving cracks should be filled with **Conflex LM** & a debond tape installed before over coating with **Contite FCW**.

Saturate the concrete's surface with clean water. Apply the first coat while the surface is still damp but no free standing water. Apply using a short stiff bristle brush, rubber squeegee or roller at a rate of 1-2 mm. for walls and floors, depending on the expected water pressure. The required thickness is achieved by applying 2 layers, taking care that each layer is not thicker than 1mm. Leave the first coat to dry for 2-3 hours before applying the second coat. The second coat can be rubbed down with a soft dry sponge. Spray or trowel application is acceptable providing the mixing ratio is adjusted to achieve the right consistency. Leave the second coat of **Contite FCW** to cure overnight before proceeding to conduct water ponding test.

On hot surfaces e.g. above 40°C surface temperature a primer coat of mixed **Contite FCW** and water with a slurry consistency should be applied. Consideration to saturating the surface in advance and protection from adverse wind & sun conditions must be given in exposed areas. The **Contite FCW** must be applied over the primer coat before it dries. For light foot traffic areas the coating should be at least 2 mm thick. For advise contact Cormix Technical Service Department.



Apply by brush

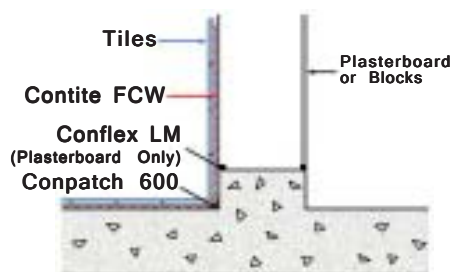
HIGHLY FLEXIBLE CEMENTITIOUS WATERPROOFING MEMBRANE FOR HORIZONTAL & VERTICAL SURFACES

TIME TO EXPOSURE AFTER APPLICATION

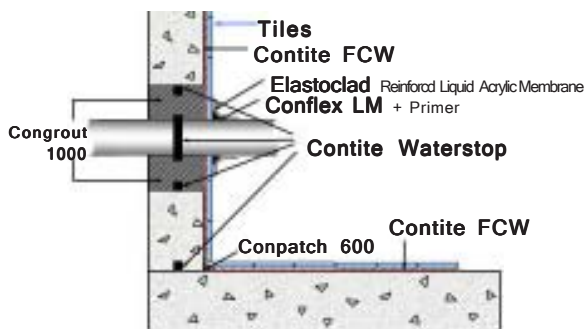
Open to foot traffic after approx. 1 day. Application of tile mortar & tiles after approx. 1 day. Backfilling after approx. 3 days protect from damage if fill contains sharp material. Vertical surfaces may be exposed to rain after approx. 3 hours & horizontal surfaces after approx. 6 hours. Hydrostatic pressure after 3-7 days at 23°C 60% humidity. Variations may occur due to climatic conditions such as temperature, humidity & substrate porosity.

TYPICAL DETAILING

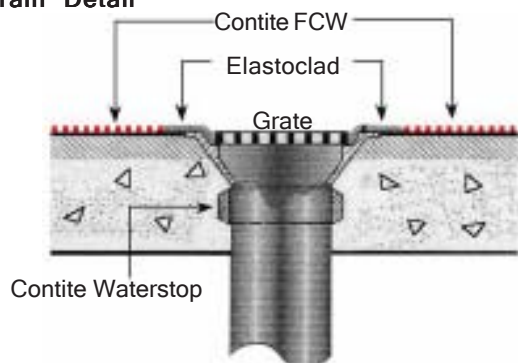
Wall to Floor Joint Detail



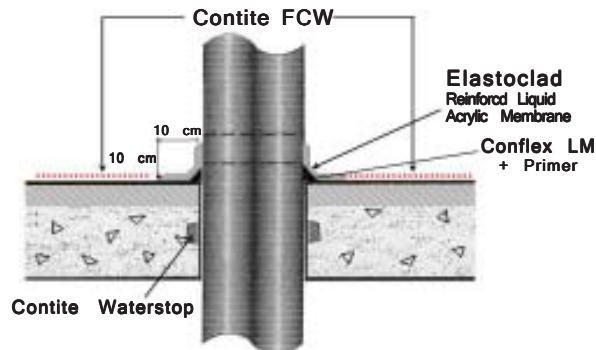
Construction Joint & Pipe Penetration Detail



Drain Detail



Penetration Detail



CURING

Contite FCW should be protected from high wind & intense sunshine. Keep moist for 3 - 4 days after application. Protect from rain until fully hardened.

SUBSEQUENT FINISHES

Contite FCW is compatible with most forms of subsequent coatings. The material may be trowelled over after 1 day or painted with a breathable solvent free paint (non silicate) after 3 days. It is manufactured to use in conjunction with Elastodeck acrylic coloured coatings from Cormix.

Important Notes

The product may be coloured, however, uniformity is not guaranteed.

Do not expose to water during setting.

Prolonged setting will be apparent if in high humidity. Mechanically damaged **Contite FCW** is easily repaired by cleaning the surface & reapplying material. Detailing must be undertaken at joints, penetrations, upstands and cracks.

Do not apply **Contite FCW** at temperatures below 5°C. At temperatures above 30°C **Contite FCW** can be applied once the concrete has reached 3 days old.

If in doubt consult Cormix International Ltd.



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COMPARISON BETWEEN CONTITE FCW FULLY BONDED LIQUID APPLIED MEMBRANE & SHEET MEMBRANE

Features	Sheet Membrane	Contite FCW
• Membrane formation	In factory	At site
• Wait 28 days to apply	Yes	No
• Primer	Yes	No
• Apply to rough surface	No	Yes
• Lowers cost of waterproofing	No	Yes
• Cutting required	Yes	No
• Application / detailing easy	No	Yes
• Adhesion of toppings tile adhesive etc.	Poor	Excellent
• Seams / Joints	Yes	No
• Undercutting possible	Yes	No
• Fully bonded	No	Yes
• Crack bridging	Yes	Yes
• Salt resistance	Yes	Yes
• Carbonation resistance	Yes	Yes
• Protection boards / blocks required	Yes	No

HEALTH & SAFETY

Contite FCW is non-toxic but is alkaline in its nature. When applying gloves & goggles should be worn. Wash off splashes to skin with water. If in eyes wash out with plenty of clean water and seek medical attention. **Contite FCW** is non-flammable. MSDS is available from Cormix.

TECHNICAL SERVICE

The Cormix International Technical Service Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.

QUALITY ASSURANCE

ISO 9001 : 2008 verified by TUV Nord.

CONTACT DETAILS

Cormix International Limited

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CLEANING

Clean tools with water immediately after use.

PACKAGING

36 kgs set.
Part A liquid 16 kg plastic pails; Part B powder 20 kg bags.

STORAGE & SHELF LIFE

The shelflife is 12 months if unopened, stored free from frost, moisture and direct sunlight.

NOTE : Every reasonable precaution is taken in the manufacture of all CORMIX-products to ensure that they comply with CORMIX's high standard of quality. The recommendations and properties of the product are based upon what is believed to be the most reliable information available, and are not intended as recommendations which infringe on other patents. Although all CORMIX-products are subject to rigid quality tests, no specific guarantee can be given, because results depend, not only on quality, but also on other factors beyond our control. We welcome therefore consultation in the event of doubt concerning application, or performance, and point out that oral recommendations, which vary from the instructions contained herein, are not binding without written confirmation by CORMIX. All transactions shall be subject to our terms and conditions of sale-delivery-and-service. This data sheet supersedes the previous one and a reprint may be issued without notice to supersede this edition, as and when deemed necessary. The information given in this leaflet is to the best of our knowledge true and reliable. Field service where provided does not constitute supervisory responsibility. Our guarantee is therefore limited to the quality of materials delivered.