

CETCOAT-1P

## **1 PART FLEXIBLE CEMENTITOUS MEMBRANE**

#### **DESCRIPTION:**

*CETCOAT 1P* is a unique flexible one component waterproof membrane that is suitable for a wide range of positive & negative waterproofing applications. Based on an advanced cross linking polymer technology, *CETCOAT 1P* is a standalone flexible polymer cementitious membrane that does not require the addition of any liquid additive, requiring only water added to powder to form a high-quality liquid membrane slurry system. Ideally suited over concrete, masonry and mineral substrates, the cured film provides a watertight membrane that is impermeable to vapor diffusion and offers excellent resistance to frost and ageing, as well as outstanding adhesion properties.

Suitable for waterproofing the negative face of structures where access to the positive face is not possible, e.g., basements, underground walls withstanding up to 15m head of pressure on the negative face.

#### **USES/APPLICATIONS**

- \* Lift pits
- \* Podiums, terraces, general external wet areas
- \* Water features, swimming pools \* Potable water storage facilities, retention and water tanks
- \* Waterproofing system over concrete blocks, brick, masonry and mortars where crystal treatments are not suitable
- \* Waterproofing under tiles and pavers in external areas
- \* Sandwich sealing between existing and new concrete toppings
- \* Planters, retaining walls, earth shelters.

#### **FEATURES & BENEFITS**

- \* Able to be used for both positive and negative waterproofing
- \* Waterproof, withstanding continuously wet and immersed environments
- \* Dries without cracking, low shrinkage
- \* 1 component, mixed on site with water, ready to use.
- \* Flexible and good crack bridging properties

\* Tested up to 6 bar water pressure (60m head of pressure); positive side, it is tested to 1.5 bar (15m head of pressure) on negative side.

- \* Withstands UV light exposure
- $\ast$  Can be applied by brush, roller and trowel on horizontal and vertical surfaces without sagging.
- Able to spray apply
- \* Ability to apply over damp concrete
- \* Potable water approved
- \* Non-toxic

#### **SUBSTRATES**

- Substrates suitable for bonding CETCOAT 1P over include:
- \* Concrete \* Render, screeds and general masonry surfaces
- \* Concrete blocks and clay brick

\* Aerated concrete panels and blocks for further information on suitable surfaces and substrates contact technical department of CETCO Australia for correct advice on surface preparation and suitability.



TECHNICAL DATA	
APPEARANCE	Grey Powder
FORM	When mixed – grey viscous slurry When dried – grey film
DRYING Based on normal ambient temperatures of 23°C and 50% RH *Temperature, humidity and porosity will vary dry times	Tack free 15-20 minutes Re-coat- 90 -120 minutes Dry Film 4-5 Hours Tiling or toppings over: 24 hours Flood test: 24 hours Exposure to water pressure: 7 days curing Immersion: 10 days
Mixing ratio	3.5-3.7litres of water per bag
Total Yield (mixed)	12.5litres/18.5kg
SPECIFIC GRAVITY Adhesion to concrete (after 7 days)	1.5kg/litre 1.08MPa
DURABILITY TEST	

<i>RESULTS AS PER AS/NZ 4858-2004</i>	
ELONGATION CLASSIFICATION	85%
TENSILE STRENTH	1.09MPa
After 28-day immersion After freeze thaw cycle After exposure to 70"c After caustic potash immersion (3% solution, 400C)	.89 Mpa .74 Mpa .9 Mpa 1.09 Mpa
Crack Bridging (24-hour cycle)	0.5mm
Water Pressure	1.5 bar, negative pressure 6 bar, positive pressure
Water vapor diffusion - SD Value	1.5

# **SUBSTRATES**

Substrates suitable for bonding CETCOAT 1P over include:

\* Concrete

- \* Render, screeds and general masonry surfaces
- \* Concrete blocks and clay brick

\* Aerated concrete panels and blocks for further information on suitable surfaces and substrates contact technical department of CETCO Australia for correct advice on surface preparation and suitability.

## SURFACE PREPERATION

Surfaces must be prepared thoroughly before commencing application. All substrates must be structurally sound, smooth, stable, dry, and clean.

Highly dense, smooth/shiny and steel trowel finished concrete surfaces to be roughened or etched.

Rough surfaces and voids to be evened or filled first and all brick/block surfaces to be pointed flush.

All general surface defects to be repaired. Building surfaces must be constructed to manufacturer's recommendations and relevant building standards in force at time of membrane application.

All surfaces are to be free of sharp protruding objects, loose material, debonded coatings, curing membranes/agents, release agents, wax residues, foreign particles, laitance, algae and moss, grime, oils, animal fats or grease remains.

Structurally unsound layers and surface contaminants are to be mechanically removed by abrasive blasting, blast tracking, grinding or equivalent methods.

## PRIMING

CETCOAT 1P must be applied onto a pre-dampened or primed surface:

On porous concrete, masonry and mineral based substrates, surfaces can be pre wetted down with light water mist.

When pre-dampening ensure there is no ponding or surface water before membrane application.

Surfaces can be damp but must not have free water present when applying membrane.

HYDROPRIME NP - for non-porous, smooth and dense surfaces. Brush or roller apply primer to total surface area at a minimum coverage of 1 litre per 12m2 and allow to dry for 1 hour

#### Note: Refer to data sheets for above primers before using



### DETAILING

All critical areas such as joints, junctions, movement zones, penetrations drainage points and cracks are to be correctly sealed and detailed prior to membrane application

Voids, gaps and undulating surfaces in concrete/masonry	Filled and evened with repair mortar compound.
Static cracks up to 1mm:	Filled with CETSEAL, followed by reinforcement fabric
Live cracks and cracks >1mm:	Filled with CETSEAL followed by CETBAND Joint Bandage
Bond Breaker:	35mm fillet of CETSEAL or CETBAND Joint Bandage to wall/floor junctions and wall/wall junctions.
Movement or Expansion Joints	CETBAND Joint Bandage
Penetrations, Pipes, Floor wastes	CETBAND Collars or CETSEAL with reinforcement bandage for pipes/penetrations,

# **MEMBRANE APPLICATION**

Mixing

1. CETCOAT 1P consists of a 15kg bag dry powder. Membrane is formed by mixing 3.5-3.7 litres of water to 15kg of powder.

2. Add 2/3 of the required water into a clean pail/drum. Slowly add the dry powder component to the water and mix using an electric stirrer with paddle attachment, ensuring the mixing of components is continuous while the powder is added. Continue mixing to form a lump free consistency. Then slowly add the 1/3 balance of water to the mixture until it is evenly dispersed, and a homogenous consistency is formed.

3. Allow the mix to settle for 2-3 minutes then lightly re-stir before use. Pot life once mixed is 45-60 minutes; however, this may be reduced in warmer weather.

# **APPLICATION & COVERAGE**

The application of CETCOAT 1P is at a minimum of 2 coats.

Product can be applied by trowel, roller (low texture or medium-high nap), brush (slurry masonry brush) or spray unit.

- \* For general waterproofing applications a minimum 1.5mm dried film thickness is required
- \* For immersed applications a minimum 2mm dried film thickness is required
- \* For preventing ingress of water under pressure a minimum 2.5mm dried film thickness is required
- \* Coverage: 1.25kg/m2 per mm layer thickness \*

\* Apply subsequent coats at different directions to the previous coat. Coverage is dependent upon surface condition and will vary accordingly as uneven and porous surfaces will require greater coverage to achieve the specified film thickness

IMPORTANT: For the blocking of vapours and negative entry of moisture on vertical surfaces, running or dripping water must be first treated with *CETCOAT* Plug. Do not apply *CETCOAT* 1P to surfaces where surface water is present. Upon surface condition and will vary accordingly as uneven and porous surfaces will require greater coverage to achieve the specified film thickness. Product can be applied by roller or brush.

COVERAGE RATE	THICKNESS
General waterproofing	1.5mm DFT
Immersed Applications	2.0mm DFT
Negative waterproofing	2.5mm DFT



# **TILING & SURFACE TOPPINGS**

When tiling directly over CETCOAT 1P in internal or external floor areas, polymer modified cement-based adhesives must be used.

If applying a screed, render or concrete topping over CETCOAT 1P it is recommended to incorporate a proprietary bonding agent and water-resistant additive. For use of other adhesives over CETCOAT 1P contact CETCO for detail of compatibility. Pre-mixed tile adhesives are not recommended for use over CETCOAT 1P.

Note: All tiling is to be carried out to AS3958.1 - 2007 "A Guide to the Installation of Ceramic Tiles"

## PRECAUTIONS

- \* Not to be used as a trafficable surface
- \* Do not apply to areas when rain is imminent
- $\ast$  Do not apply when surface temperature is below 5oC or above 30oC
- \* Not to be applied over glass or glazed surfaces
- \* Not designed as a sealant for expansion or control joints
- \* Not to be used in areas where solvent or petroleum-based products may be spilled
- \* All finish coatings over this membrane must be water based and solvent free
- \* Allow minimum 24 hours drying after final application if treated area is to be flood tested
- \* Safety Data sheet (SDS) available

#### **SHELF LIFE & STORAGE**

\*Best stored at room temperature.

- \* Avoid cold freezing conditions and off concrete floors.
- \* Do not store in direct sunlight.
- \* Shelf life: 24 months in unopened container

## **CLEAN UP**

- \* In water while wet.
- \* Once dried product needs to be removed mechanically or by solvent

PACKAGING 15kg Bag

**NOTE:** It is recommended before commencing the application; that adhesion of products to be used (e.g., primers, membranes, coatings adhesives etc.) is tested over a typical area of the prepared surface to ensure satisfactory adhesion. It is the responsibility of the applicator to carry this out and accept the substrate suitability before any application starts. CETCO offers a service for pretesting adhesion to surfaces for large commercial areas or unusual substrates. For further details contact CETCO. Details contained in product data sheets are general. For any situation or items not covered in this data sheet, it is the responsibility of the applicator to check with CETCO Technical Services before commencing the application. A written confirmation will then be issued by CETCO Technical Services.



#### 94 Balham Road, Archerfield, QLD, 4108 T: 617 3719 3500 www.cetco.com.au

Product Disclaimer This Product Data Sheet (PDS) summarises our best knowledge of the product, including how to use and apply the product based on the information available at the time. You should read this PDS carefully and consider the information in the context of how the product will be used, including in conjunction with any other product and the type of surfaces to, and the manner in which, the product will be applied. Our responsibility for products sold is subject to our standard terms and conditions of sale. CETCO does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product whether or not in accordance with any advice, specification, recommendation or information given by it.

