



# CORAL Flexible W889

## Flexible Cementitious Co-polymer (Acrylic) Waterproofing Coating

### 彈性水泥基聚合物(丙烯酸)防水塗層/批盪

#### 1.0 Description

CORAL Flexible W889 is kind of “Ready-For-Use” flexible cementitious waterproofing coating which is specially designed to withstand surface movement of concrete; its excellent properties in adhesion strength constitute an unique function for this product in pressure resistance and anti-rust formation. It is an ideal cementitious material for both waterproofing and resurfacing most of the building façade, floor, wall and tanking, etc.

#### 2.0 Technical Data

Content	Special formulated cement power + resin component
Color	Grey
Flexural strength at 28 <sup>th</sup> day	> 2.8 N/mm <sup>2</sup> BS6319:Part 3
Elongation at break	> 170% ASTM D412-92
Adhesion to concrete	> 0.7 N/mm <sup>2</sup> MateriaLab – HKHA/MTS
Flexibility over 25mm diameter mandrel	Passed
Bridge cracks up to 2mm	Passed
Hardness shore A	> 72 ASTM S2240:91
Resistance to Hydrostatic Pressure under standard construction joint	MateriaLab – CNMS -072
- Standing System	Up to 6 meter water head
- Reinforced Sandwich System	Up to 45 meter water head
Water vapour transmission	< 25g/m <sup>2</sup> /24hours
Water vapour co-efficient (DH <sub>2</sub> O)	> 3.64 X 10 <sup>-4</sup> cm <sup>2</sup> /s
Chloride content	< 0.01
Chloride ion diffusivity	Zero penetration #190 days
Chloride ion diffusion co-efficient (DCI)	1.04 X 10 <sup>-7</sup> cm <sup>2</sup> /s
Suitable for water tank	Complied BS6920:part 1 1996 clause 8
Working time (30°C)	Approx. 1 hour
Drying time (30°C) Touch Dry	1 to 2 hours
Foot trafficable	4 hours
Mixing Ratio Power: Resin	15.7 Kg : 4.3 Kg
CO <sup>2</sup> diffusion resistance	Sc>89 cms. (1mm dft) Sc – equivalent concrete thickness
Oxygen diffusion co-efficient (DO <sup>2</sup> )	7.6 X 10 <sup>-6</sup> cm <sup>2</sup> /s

#### 3.0 Typical Application

a) Waterproofing : Drinking water reservoirs, cellars, elevator shafts, drainage channels, dome, tunnel swimming pool and external walls.

b) Flooring: Walkway, Carpark, Washroom.

#### 3.1 Quality System

Depending on following of application chart, Coral Flexible W889 is divided into 2 systems.

(a) Standing System: 1 to 2 coat to achieve minimum thickness of 1 mm.

(b) Reinforced Sandwich System: 2 coats of Coral Flexible W889 reinforced by LABOND Fibra Glass Mesh A907 to achieve thickness > 2mm.

Type of Application	Water Tank & Swimming Pool, Reservoir & Sauna Pool		Kitchen, Sauna Room, Washroom	Floor Decking		External/Internal Façade
	Depth ≤ 3.5M and Area ≤ 100m	Depth: ≤ 20 M and Area: Not Limited	All types	Subject to light traffic	Subject to heavy traffic	
Type of substrate						
Concrete	S	R	S or R	S	R	S
Sound Cement Plaster	S	R	R	R	R	R
Brick Wall	R	R	R	N/A	N/A	R
Tiled Floor	R	R	R	R	R	N/A
Metal Structure	R	R	N/A	R	R	N/A
Light Weight Block Wall	N/A	N/A	N/A	R	R	R
Plastic Type	T	T	T	N/A	N/A	T
Other	Please consult technical officer of LABOND.					

S: Standing System

T: Compatibility Test Requested

R: Reinforced Sandwich System

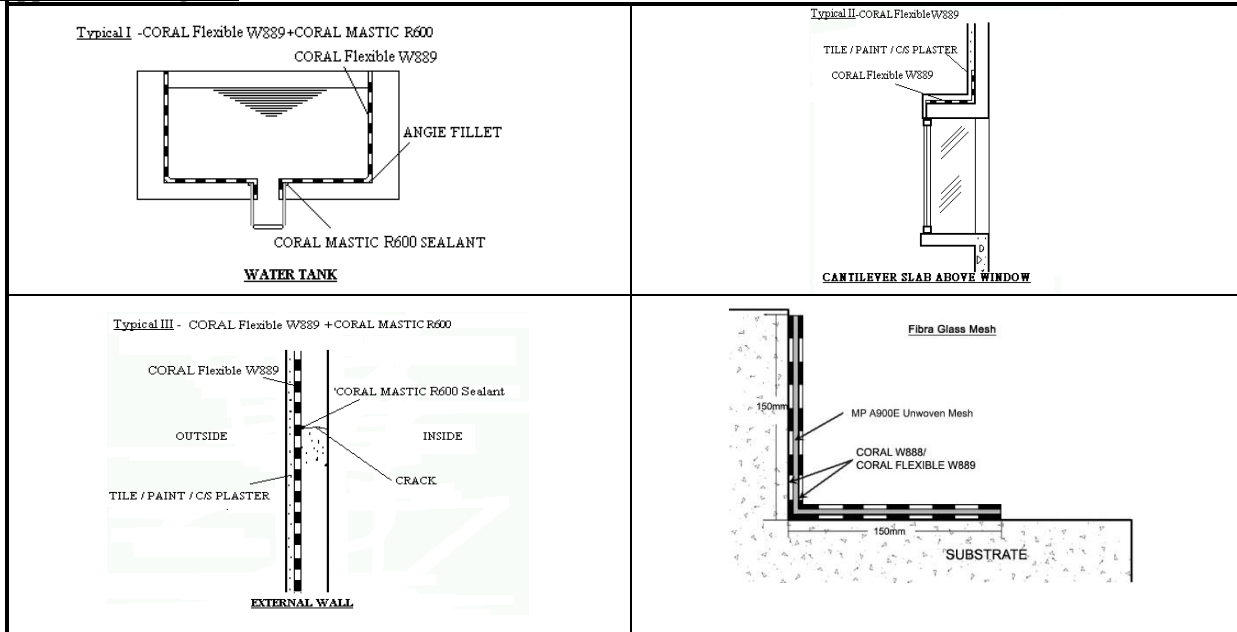
N/A: Not Applicable

**4.0 Application Details**

**4.01 Preparation:**

All surfaces should be sound, clean, dry, free of dust, oil, grease or other contamination. Loose matter should be removed by abrasion, compressed air or high pressure water. Honeycomb concrete, bristles, cracks, hollow joints must be pretreated before application of Coral Flexible W889. V cut perimeter of pipe through slab or wall (where necessary) sealed by CORALMASTIC R600 Cementitious Sealant (Please consult our technical department for recommendation on cracks treatment). Mixing the ready packed powder and resin manually to obtain a creamy mortar. Under high humidity substrate, for instance, water tank and swimming pool after flowing out of water, water content of the substrate is still very high. Therefore, in order to get a good effect of subsequent waterproof coating. You have to pending the application until concrete's water content down to 18 C or below (Detected by Portimeter).

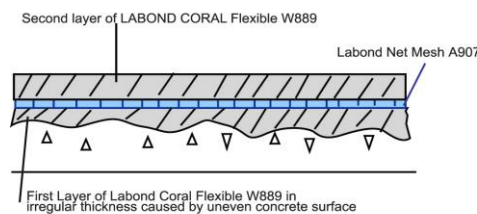
**5.0 Application Diagram**



**6.0 Application**

**For Standing System:** Apply the first layer with a brush or a trowel at a rate of 1 kg per m<sup>2</sup>. Allow at least 2 hours for the first layer to cure initially. Then apply second layer at a rate of 1 to 2 kgs per m<sup>2</sup> and allow 24 hours for second curing. CORAL Flexible W889 does not dry rapidly, you should not allow the uncured product be interrupted by touch or exposed under strong sunlight, winds and busy traffic areas. Do not try to scorch to accurate curing and have to work and cure strictly under temperature range of 5°C to 35°C.

**For Reinforced Sandwich System:** Apply first layer with Coral Flexible W889, lay LABOND Fibra Glass Mesh A907 onto first coat. Slightly press to embed LABOND Fibra Glass Mesh A907 into first coat, then apply second coat immediately to cover all area of LABOND Fibra Glass Mesh A907. Allow 72 hours for complete curing before filling in water.



**7.0 Health and Safety**

Product contains cement which may cause dermatitis. Wear rubber gloves when handling the product. In case of insufficient ventilation, put on suitable respiratory equipment. Product is classified as non-hazardous.

**8.0 Material Coverage**

3 Kg per M<sup>2</sup> per 2 layers application in achieving minimum 1.5mm.

**9.0 Technical Services**

The Technical office of Master Proofer Company Ltd are readily available for advice on any of LABOND's products.

**10.0 Packaging**

20 Kg / kit (A-powder:15.7 kg + B-resin.:4.3 kg)