



# CORALSEAL W884

## Bentonite Water Solid

### 膨潤土止水膏條

#### 1.0 Description

CORALSEAL W884 is a plasticized Bentonite which is designed to tackle ingress of water in concrete structure, its swelling property against moisture direction forms a natural barrier to stop water penetration. Unlike other swelling type water stop material, CORALSEAL W884 only expand to the direction of source of moisture; it will not cause hydrostatic pressure inside the concrete structure and will not create “crack” problem to structure. It can be glued to the most types of drain, pipe and water facilities, such as Iron, Alloy, UPVC, PVC and PP, etc. by applying respective primer while the waterproofing mechanism of CoralSeal W884 is based its swelling character to form gasket effect. It is also an effective material to waterproof ‘Pipe-Through-Slab’ and ‘Pipe-Through-Wall’ of drainage system.

#### 2.0 Technical Data

1) Composition of CORALSEAL	Test Value
Bentonite	: 70-80%
Oil	: 10-15%
Rubber	: 10-20%
2) Physical Data	
Specific Gravity	: 1.57
pH	: 7.7
Coefficient of Water Penetration	: $3.1 \times 10^{-9}$ (CM/SEC)
Heat Resistance	: 185°C
Hydrostatic Head Resistance(Embed in Construction Joint)	: >70 m
S.G.	: 1.5 – 1.6 ASTM D297
Wet / Dry Cycling	: No effect
Service Temperatures	: -40°C to 80°C
Elongation	: >300%
Colour	: Black colour available
Penetration Cone	: 4±5 ASTM D-217
Expansion	: >300% within 7 days in cement water

#### 3.0 Product Advantages

CORALSEAL W884 is used to stop water infiltration through both vertical and horizontal non-moving construction joints, irregular surfaces and around penetrations through concrete by its swelling property to form gasket effect. It is not intended as an expansion joint sealant. It is designed to replace conventional waterstops in construction joints. The sodium Bentonite in CORALSEAL W884 is the key to its success. Bentonite swells when in contact with water blocking pores, capillaries, minor cracks & other paths for water forming a permanent impermeable barrier. Uses include in construction joints in various structures including tunnels, basements, culverts, underground structures, pools, reservoirs, canals etc.

##### Advantages include: -

- Light weight flexible coils easy to install
- Eliminates seam welding & split forming associated with PVC/rubber waterbars.
- Butt end joining, continuous waterstop.
- Withstands hydrostatic water head up to 70 meters.
- Forms a positive seal, sealing cracks & small voids.
- May use in potable water tanks. Non-toxic.
- Can apply to irregular concrete surfaces. No need to level.
- Compressible and malleable allowing for good contact in precast applications.
- Unaffected by repeated wetting & drying cycles. Permanently active system
- Does not deteriorate lasts life of structure
- Fast installation
- Ecologically safe & can be used in structures in contact with potable water. A “green” product.
- Self-healing

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## BENTONITE WATER SOLID



### 4.0 Typical Application

Apply by brush Primer along the concrete by the width of CoralSeal W884. Whilst still tacky (within 10-15 minutes), apply the CoralSeal W884. Remove the release paper and press the CoralSeal W884 firmly to the surface for several seconds. At the highest coil end on vertical sections pay particular attention. Tightly butt end together to form a continuous waterstop. Do not prehydrate or submerge in water.

### 5.0 Application Diagram

<table border="1"> <caption>Swell Rates in tap Water &amp; Cement Water</caption> <thead> <tr> <th>Day</th> <th>Tap Water (% Swelling)</th> <th>Cement Water (% Swelling)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>250</td> <td>100</td> </tr> <tr> <td>2</td> <td>450</td> <td>150</td> </tr> <tr> <td>3</td> <td>650</td> <td>200</td> </tr> <tr> <td>4</td> <td>750</td> <td>250</td> </tr> <tr> <td>5</td> <td>800</td> <td>300</td> </tr> </tbody> </table>	Day	Tap Water (% Swelling)	Cement Water (% Swelling)	1	250	100	2	450	150	3	650	200	4	750	250	5	800	300	<p><b>Footing Joint Vertical Wall Joint</b></p>
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<p>Powerful effect of stopping moisture penetration in concrete joint</p>	<p>Application of CORALSEAL W884 for repair works</p>																		
<p>CORALSEAL W884 BENTONITE</p> <p>THE CONCRETE IS NOT SUBJECT TO EXPANSION AND STRESS CRACKS EVEN WHEN EXPOSED TO WATER IN A PRESSURIZED ENVIRONMENT</p> <p>CORALSEAL W884 (BENTONITE) THE PERFECT MOISTURE BARRIER</p> <p>CORALSEAL W884 WORKS PERFECTLY IN NARROW CONCRETE SECTIONS</p> <p>WATER</p> <p>CONCRETE</p> <p>STELL REBAR</p>	<p>MORTAR</p> <p>CORALSEAL W884</p> <p>CRACKS</p> <p>UNDERGROUND WATER</p> <p>CORALSEAL W884</p> <p>Fill up the cracks with CoralSeal W884. Then cover it with mortar or rapid curing cement, so that CoralSeal W884 will not leak outside. Depending on each situation, water soluble film can be removed before.</p>																		

### 6.0 Application Details

**(I) For Construction Joint** - It is just installed by manual insertion method to shape up to tackle water source. In case that if rain is anticipated before the pouring of concrete, CoralSeal W884 may be protected by CoralSeal W884 Delay Coating. The delay coating is applied to the surface of CoralSeal W884 either by brush or spray and will delay swelling for up to several days. For vertical surface, it is able to be nailed by 4 nailed points per meter.

**(II) For Sealing Waterproofing Repair Work** – It is just installed by manual fixing onto the substrate after treatment of Primer, CoralSeal W884 is easily deformed its shape to fit for actual profile of substrate.

### 7.0 Material Coverage

It is packed as a strip with dimension 5LM X 25mm X 19mm or other dimension as requested. One carton box contains 6 pieces of CORALSEAL W884.

### 8.0 Health and Safety

CORALSEAL W884 is non toxin and is safe to be in contact with water without dissolving harmful material to human.

### 9.0 Technical Services

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