

# MAXBOND 101

## CRYSTALLINE WATERPROOFING

### About The Product

**Maxbond 101** is a unique surface treatment that penetrates deep into concrete to form non-soluble crystals which permanently seals pores, capillaries and cracks. Consisting of Portland cement, very fine treated silica sand and various active chemicals, it diffuses into the matrix of concrete and reacts with moisture and the byproducts of cement hydration to form crystalline structures to block the passage of water from all directions.

### Design Features

- Resists extreme hydrostatic pressure over 7 bars.
- Suitable for application to positive or negative side
- Can seal hairline cracks up to 0.4mm.
- Protects concrete and steel reinforcements from aggressive chemicals and corrosion.
- UV resistant and do not require protection layer.
- Suitable for use in structures for potable water.
- Integral and permanent waterproofing system

### It's Uses

- Underground structures
- Sumps, lift and elevator pits
- Ground slab
- Marine structures
- Tunnels and utility trench
- Precast elements
- External wall
- Cold joints and pile caps

### Performance Data

Test	Value*
Resistance to Hydrostatic Pressure	>7 Bar
Bond Strength of plaster over treatment	0.8 N/mm <sup>2</sup>
Pot Life (Slurry Application)	15 minutes

### The Installation

Maxbond 101 can be applied as dry-shake broadcast before or after concrete pours and as brush-on slurry onto harden concrete in both positive or negative applications.

#### Dry-shake before concrete pours

Thoroughly wet down lean concrete and remove all standing water.

Sprinkle Maxbond 101 at a rate of 1.5 - 2.0kg per m<sup>2</sup> on the damp surface just before concrete placement.

Place concrete with minimal displacement to the dry-shake. Position pump hoses and discharge chutes to the closest distance directly over the dry shake material and execute a controlled discharge to form a uniform layer of fresh concrete.

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### **Dry-shake after concrete pours**

If rapid dehydration from sunny or windy conditions is encountered, shade the area and mist spray if necessary.

Once concrete have achieved initial set, remove bleed water and float open the surface before proceeding to broadcast Maxbond 101 in 2 passes.

Broadcast each pass at a rate of 0.75 -1.0kg per m<sup>2</sup>, letting the dry powder absorb enough moisture to turn a darker tone before troweling by hand or power float.

Broadcast the second pass in a perpendicular direction and float to final finish.

Wet cure with water spray or wet burlap at least 3 times a day for the next 3 days. Protect from sunlight and wind.

### **Slurry coat on hardened concrete**

Concrete must be clean and free from coating, paint, curing agent and other foreign substance.

Surface must have an open capillary system and preferably jet washed to free pores for maximum penetration.

Mixed 5 parts Maxbond 101 powder to 2 parts clean water and stir with a slow speed mixer for 2 minutes.

Mix only enough material that can be used within 15 minutes.

Prior to application, saturate the substrate thoroughly but leave no standing water.

Apply in 2 coats using spray equipment or a semi-stiff nylon broom at a rate of 0.75kg per m<sup>2</sup> for each coat.

Work the slurry well into the surface and leave to become touch dry but still green and proceed with application of the second coat in a perpendicular direction. Dampen drying surface with a light mist before application.

Perform wet curing once the final coat had hardened enough to resist damage. Spray with a light mist over the coating at least 3 times a day for the next 3 days. In extremely hot weather, increase wet curing frequency and extend curing duration.

### **Protection**

Maxbond 101 treated surface can be left unprotected from traffic and UV radiation.

If a topping is desired, a rinse and brush down with a soft bristle brush is required to remove surface crystals.

A test section is recommended to determine compatibility and demonstrate bond strength.

### **Packaging**

20kg Bag

### **Storage & Shelf Life**

Keep elevated in dry, moisture free condition. Can be stored for 12 months in sealed original packaging.

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### Health & Safety

Prevent contact with skin and wear waterproof gloves and goggles when handling. Upon contact with skin, wash with soap and water. In case of eye contact, flush with water and seek medical attention immediately.

Note The information in this publication is given in good faith and is based on our current knowledge and experience.

We assume no liability, expressed or implied, to any particular use and/or application.

All information herein is effective from the date of issue and supersedes all previous editions.

\* Values are typical and not meant as performance benchmark.