

# HYDRO MIX & FIX

An Exciting new product added to our Revolutionary range of Products. A pre-blended Chemical Set Mortar for High strength repairs: A maintenance product to complete the job within minutes instead of hours. Over and above our specified typical applications this product can be used for repairs to the following:

- \* **Potholes**
- \* **Swimming pool structures and weirs**
- \* **Koi pond / fish ponds**
- \* **Concrete water retaining units**
- \* **Gate Rails**
- \* **Palisade Posts, etc**

## Typical Applications

Used in situations where minimum delay and work disruption is of utmost importance

- \* Repairs to industrial floors
- \* Repair of concrete roads
- \* Repairs to all types of pre-cast concrete
- \* Crane rails and small base plates
- \* Loading bays and Platforms
- \* Beams / columns / plinths
- \* Used as a bedding mortar
- \* Bridge decks and nosings
- \* Cold room floor areas
- \* Around fixing bolts and pipes
- \* Repairs to honeycombing
- \* Raising and levelling manhole covers, gratings, hydrants, etc.
- \* Sewerage repairs

## Description

HYDRO MIX & FIX a pre-blended grey coloured powder incorporating selected aggregates and is chemically formulated to give controlled high early strength properties.

HYDRO MIX & FIX is a repair material for concrete /pavements and reaches adequate strength for trafficking normally within 1 hour. It is also used as a repair medium at low ambient temperatures.

## Advantages

The advantages over conventional repair materials are:

- \* High early strength
- \* Minimum delays to traffic and production. When used to repair concrete paving it allows the opening to traffic within one hour after laying
- \* Pre-mixed - only requires the addition of water (see Mixing)
- \* High bond strength. No secondary bonding agents required ( +- 7 times greater than that of concrete)
- \* Highly durable, excellent resistance to de-icing salts
- \* No curing required
- \* Can be placed in sub-zero temperatures
- \* Non-shrink
- \* No pre-saturation to substrate required
- \* Thermal expansion and contraction similar to that of Ordinary Portland Cement

## Typical Properties

### HYDRO MIX N FIX

Compressive Strength:	1Hr MPA	24Hrs MPA	7 Days MPA	28 Days MPA
	10	18	25	30

**Note:** Alternative formulations are available where higher ultimate strengths are required.

### Setting Time

Temperature can effect the setting time of HYDRO MIX & FIX. Initial set is +/- 10 minutes and final set 1 hour. This allows sufficient time for mixing, placing and finishing.

### Typical Setting times for HYDRO MIX & FIX

Temp °C	Initial Set Time (Minutes)	1 Hr MPA	24Hrs MPA	7 Days MPA
4	60	2.5	15	25
22	10	10	18	30

**Bond Strength:** Using 12mm diameter x 1000mm long reinforcing bars, bond pull-out strengths of 10 tons in 6 hours are achieved.

**Expansion:** HYDRO MIX & FIX is non-shrink and has slight expansive properties. When mixing small batches at a time the entire bag should be thoroughly mixed dry before weighing off the required quantity.

### Direction of Use

Surface Preparation: Concrete surface must be dean, sound and free of all contamination viz., dust, dirt, grease, acids, oil and curing membranes, etc. Areas for repair must be square cut to a minimum depth of 25mm and made rough. Do not feather edge this material. When reinforcing bars are exposed ensure that they are thoroughly wire brushed or sand blasted prior to application of HYDRO MIX & FIX. do not use bonding compounds on the reinforcing steel. Never add more water than the mixing instructions allow as additional water will destroy the strength and chemical properties of he HYDRO MIX & FIX Formulations.

### Mixing Instructions - No Priming Is Required

Mortar: 1 x 25kg bag HYDRO MIX & FIX  
2-2,5 litres of clean water

Patching: 1 x 25kg bag HYDRO MIX & FIX  
"Fine Patch" to 2-2,5 litres of clean water

Concrete: 1 x 25kg bag HYDRO MIX & FIX to maximum 2 litres  
of clean water

Small Batches: 5kg MIX & FIX TO 400ML - 500ML OF CLEAN WATER

Note: Never add cement and / or sand to HYDRO MIX & FIX

When mixing small batches at a time, the entire bag should be thoroughly mixed dry before weighing off the required quantity

### Watch points

**Joints:** All joints and non-static cracks in the substrate must be duplicated in the HYDRO MIX & FIX repair. As soon as the repair is hard any joints that could not be formed must be saw-cut through the full depth of the repair and to the same width as the joint in the substrate, clean out all debris from the formed joint and seal with a HYDRO JOINT SEALANT.

**Coverage:** 25kg HYDRO MIX & FIX combined with the correct amount of water (see instructions) will yield +/- 12 litres / bag. Compacted density is +/- 2280kg / m<sup>3</sup> (77 x 25kg bags per m<sup>3</sup>). HYDRO MIX & FIX yields 10 litres / 2500kg /m<sup>3</sup>.

### Packaging

Supplied in 25kg polyethylene lined bags or bucket.