

# TRACKCRETE

## FAST SETTING CONCRETE PRE-MIX

### DESCRIPTION

**TRACKCRETE** is a fast setting and curing rapid strength concrete that is resistant to chloride penetration consisting of a blend of Vicalpes Potable Water Approved Cement Binder, specially selected dried graded aggregates and food grade retarders.

### PROPERTIES

- Excellent adhesion.
- Low shrinkage.
- Low modules of elasticity, which make it very effective on poor or friable substrates.
- Excellent resistance to pure water & sulphated water.
- Excellent resistance to aggressive chemicals.
- Very good cohesion & mixing.
- Fine compact surface.
- No curing necessary It can be coated, covered or painted as soon as setting is complete.
- Can be used in wet conditions.
- Can be used under water.
- Fast setting.
- High early strength.

### USES

**TRACKCRETE** can be used for repairs to concrete crossings and slab track, repairs to concrete bridge deck, securing traffic lights, security rails and street furniture, casting of bridge decks, work around the sea, repairs to sewers, and areas where the resistance to chemicals and sea water is required.

# METHOD OF USE

## PREPARING THE SURFACE

Do not use on frozen or over heated substrates (outside the range of 0° - 30°). Prepare the surface in advance to provide an adequate key. It should be clean, free from dust and thoroughly dampened. Where necessary steel or aluminium mesh can be used. Ensure that a 35mm minimum thickness of material is obtained.

## PRIMING

There is no need to prime any reinforcement, but if priming is preferred, any conventional system may be used.

## MIXING

For optimum results mix using conventional mixing machines. To no more than 2.0 litres of clean water per bag, gradually add whilst mixing the TRACKCRETE. If one bag or less is to be used it can be mixed with a rose bud type paddle attached to an electric drill (900 rpm, 1000 W). Mix vigorously for at least 2 minutes after adding all the mixture to the water. TRACKCRETE is designed to give a fluid mix but this only develops after sufficient mixing. The mix will appear dry at first. Continue mixing until fluidity develops. If greater fluidity is required, more water up to 2.25 litres may be used. Exceeding this ratio will lead to lower strength, longer setting time and the risk of surface cracking. In cold weather the set can be accelerated using warm water, likewise in hot weather cold water can be used to slow down the set.

## APPLICATION

### GENERAL

Place the material as quickly as possible after mixing using traditional tools. A 35mm minimum thickness of the material is always necessary. Do not apply additional water to the surface during finishing as this may cause surface cracking. Once setting has started **DO NOT** attempt to re - mix or to smooth the surface, this will cause the mechanical properties in particular strength and adhesion to be lost.

### CONCRETE REPAIRS

Remove all loose material from the concrete and the reinforcement. It is only necessary to remove the loose rust from the reinforcement. Prepare the surface as described previously. Fix any necessary replacement reinforcement and formwork. Well dampen the surface with water ensuring there is no standing water. Mix the material and apply as previously recommended ensuring that the TRACKCRETE is worked around the reinforcement. Protect the surface from direct sunlight or wind until setting has completed.

## SETTING TIMES

TRACKCRETE is designed to begin to set at 30 minutes and finish setting at 35 minutes at 20°C. In winter TRACKCRETE can be used down to 0°C. The set will be slower but can be accelerated by using warm water. In very hot temperatures the set will be faster and can be slowed by using cold water.

## CLEANING

TRACKCRETE should be removed from tools and equipment with water immediately after use.

## STORAGE

TRACKCRETE is packaged in a 25 kg polythene inner bag with a re-sealable tie inside a stitch sealed woven polypropylene outer bag that should be stored in dry conditions and will remain usable for at least six months.

## YIELD

Generally 1 x 25 Kg bag of TRACKCRETE mixed with 2.0 litres of water will produce approximately 10 litres of concrete.

## SETTING TIME AND STRENGTH GAIN

Start Set	30 Min	at 20°C
End Set	35 Min	at 20°C
		Compressive Strength (Mpa)
At 3 Hours		15.9
At 24 Hours		20
At 7 Days		36
At 28 Days		53
<i>Strength continues to develop thereafter</i>		

## HOW TO SPECIFY

TRACKCRETE shall be mixed and applied to prepared surfaces all strictly in accordance with the manufacturer's instructions.

## **PRECAUTIONS**

We strongly recommend the use of GLOVES, GOGGLES and MASK. Please see MSDS sheet for full details.