

# Kenal tek Prufe CCW

## Single Component Cementitious Crystalline Waterproof Coating.

### Description:

Kenal Tek-Prufe CCW is a single component cementitious crystalline waterproof coating for new and old concrete and masonry surfaces to resist hydrostatic pressure.

### Advantages

- Penetrates concrete, seals capillary tracts and hairline cracks
- Chloride free
- Resists positive and hydrostatic negative pressure Interior & exterior use
- Easy application
- Non-toxic, non-odor
- Can be used in contact with potable water
- Can be applied on damp concrete surfaces Allows concrete to breath
- Crystals continue to react until cracks are completely sealed

### Uses

- Potable water tanks & reservoirs
- Concrete & masonry substrates Swimming pools
- Above or below ground structures
- Lift pits, Basements & Tunnels
- Sewage treatment & water treatment plants Leaking joints
- Residential connections

### Standards Compliance

- BS 6920

### Packing

Kenal Tek-Prufe CCW is available in 25 kg bag.

### Coverage

1 to 3 kg per / m<sup>2</sup> depending upon the areas of application.

### Shelf Life

12 months when stored in factory packed unopened bag in a cool dry and elevated place away from direct sunlight excess humidity and at a temperature not more than 35°C.

## Physical Properties\*

PROPERTY	TYPICAL RESULTS
Appearance	Grey
Bending strength	>22 MPa - 28 days
Compressive strength	>40 MPa – 28 days
Bonding strength	>2 MPa
Pot life	30 min at 24°C
Initial set	4 5 min at 24°C
Improves water impermeability of concrete by more than 300%	
Impermeable at 140m head of water for 200 hours, resistance to negative hydrostatic pressure, no leakage.	
The above properties are average laboratory values	

## Installation Guidelines

Kenal provides detailed method statements on all its products for use in various applications. These must be referred to prior to starting the work. The information below is a summary intended for guidance only. Waterproof coatings should only be applied by experienced application team.

## Surface Preparation

Concrete substrate must be structurally sound. Loose or unsound concrete should be removed. Surfaces must be entirely free of oil, grease, paint, corrosion deposits, dust, laitance or other surface deposits. The substrate must be prepared to create a 'key' for bonding. Any blow holes or cracks should be filled with Kenal Tek-Crete FR repair mortar. All construction and expansion movement joints should be continued through the coating using an appropriate joint detail system.

## Mixing

Kenal Tek-Prufe CCW is single component consisting of powder, mix one 25 kg bag into 6.5 to 7.9 liters of clean water using with low speed drill (300-500 rpm) with mixing paddle. Mix approximately for 3 minutes to achieve lump-free consistency.

Do not mix more material that can be safely used in 30 minutes at 25°C at 50% Relative Humidity. If the mixed product thickens, re-mix to reduce consistency. Do not add additional water.

## Application

### Dry shake

Kenal Tek-Prufe CCW directly from the bag can be applied using dry-shake method by hand using appropriate gauntlet. Broadcast the powder evenly over freshly poured concrete at the rate of 1.2-1.5 kg/m<sup>2</sup> per application, before final float, it is recommended to evenly distribute 50% of the powder first in one direction and remaining 50% at right angles to first application.

Broadcast the powder as close as possible to wet poured concrete, this will prevent in losing material loss during windy conditions. For large floor areas, a rotary type spreader may be used.

Two applications are recommended, with first application to be little rough to provide 'key' to the second application. Float slab and trowel to the desired surface profile.

### **Slurry Coat**

Kenal Tek-Prufe CCW may be applied as a slurry coat using soft bristle brush, broom or plaster sprayer at the rate of 1 to 3 kg per / m<sup>2</sup> depending upon the areas of application. The slurry should be worked well into openings, rough surfaces, joints and routed out areas.

Carry-out the second application when the first coat has reached initial set, normally within one hour dependent on ambient temperature. If the first coat has dried out, moisten the surface prior to carry-out the second coat application.

### **Curing**

Kenal Tek-Prufe CCW applied surfaces must be kept moist for a minimum period of 48 hours to allow the crystals to form. Soon after initial setting, fog spray the coated surfaces 3 to 4 times daily for minimum 48 hours period to moist the surfaces. In hot climate, it is recommended to spray water more frequently to keep the coated surfaces constantly kept moist.

The Kenal Tek-Prufe CCW applied surfaces to be kept moist for crystal formation. All the treated surfaces should be protected from foot traffic for 48 hours and 7 days for heavy traffic.

### **Precautions**

- Do not add additional water.
- Ensure the temperature of the mortar does not exceed 35°C at the time of mixing.
- Do not mix by hand.
- Do not apply in rain or wet conditions or at temperature below 5°C.
- Do not expose to running water until the product is fully cured for 7 days.

### **Technical Support**

Kenal Chemical offers full technical support package to specifiers, contractors and end users, as well as technical assistance on site and after sales consultations.

### **Health & Safety**

As with all chemical products, caution should always be exercised. Protective clothing, such as gloves and goggles, should be worn. See packaging/MSDS for specific instructions.

Treat any splashes to the skin or eyes with fresh water immediately. Should any of the products be accidentally swallowed, do not induce vomiting, but call for medical assistance immediately.

Ensure the container is available for the medical attendant to examine for any relevant instructions and content details. Reseal all containers after use and ensure product is stored as instructed on the safety section of the labeling.