



## Top Fix CR 100

### Product Description

It is a cementations, brush applied, and waterproofing treatment for concrete. When it is mixed with water & applied to concrete, it penetrates into the concrete mass protecting against the passage of water. It reacts chemically to form billions of needles like crystals which block the pores, voids & micro cracks in concrete. The product contains active waterproofing chemicals which react with moisture and anhydrates cement in the concrete, creating insoluble crystalline complexes which seal the capillaries and minor shrinkage cracks.

### Product uses:

- Water retaining structures such as water tank and retaining walls.
- Sewage treatment and water treatment plants.
- Basements and pits.
- Wet area waterproofing.
- Manholes and cementations pipes, canals, tunnels..
- Swimming pool.
- Bridge Decks.
- Dams.
- Water Tanks

### Properties

- Applicable on moist substrates.
- Single component system.
- Easy to mix and use
- Non-toxic nonflammable and chloride free.
- Can be applied on old or new concrete.
- Shrinkage compensated
- Good sulfate resistance
- Good resistance against aggressive media with a pH range of 3-12 and against soft water with low ion content.
- Stops water movement through concrete.
- Protects reinforcing steel against corrosion.
- Can be applied to positive or negative side of concrete.
- Tunnels and subway systems

### TECHNICAL PROPERTIES

<i>Appearance/Color</i>	Matt / Gray
<i>Consistency:</i>	Thixotropic mortar
<i>Mixture density:</i>	1,9-2 kg/ltr
<i>Application thickness / layer</i>	1-1.5 mm
<i>Application Time:</i>	≈ 20 [min]
<i>Application temperature:</i>	+5° to +30° [C] / +41°to +86° [F]
<i>Consumption:</i>	2,0-3,0 kg/m <sup>2</sup> for two layers
<i>Re coating time</i>	5-6 hour
<i>Pressurized Water Resistance:</i>	≥3 bars (negative)
<i>Maturation Time:</i>	3-5 minutes (the time needed before applying the material after it is mixed)
<i>Bond Resistance:</i>	≥ 1N/mm <sup>2</sup> ( 28 days )



<i>Time needed for waterproofing (positive direction):</i>	7 days s ( 20 °C)
<i>Time needed for waterproofing (negative Direction)</i>	14 days s ( 20 °C)
<i>Mechanical Strength:</i>	24 hours
<i>Service Temperature:</i>	-20 °C- +80 °C
<i>Water vapor permeability:</i>	: S <sup>D</sup> <3 m
<i>Capillary water absorption:</i>	≤ 0,1 kg.m <sup>2</sup> .h <sup>0,5</sup>
<i>Bond strength:</i>	≥ 1N/mm <sup>2</sup>
<i>Fire reaction category:</i>	A1
<i>Mixture Ratio:</i>	For 20 kg of capillary: 6-7 liters of water

### **Application Details**

<i>Application method:</i>	Brush
<i>Cleaning of tools:</i>	Fresh water
<i>Packing:</i>	20 kg Powder

### **Surface Preparation**

Make sure the application surface is solid, bearing, dust-free, and clean. Any oil, grease, rust, paint, paraffin and curing compound residue should be removed, as they may weaken the adherence. Remove any loose pieces from the surface and open pores to increase adherence. The places with active water leakage should be filled with **Aqua Blocco**. The corners and the edges should be chamfered with the product **Top Mortar CM 3000**. The surface should be saturated with water a day before the application and the product should be applied while the concrete looks wet.

### **Mixing**

- *The product has to be mixed using a suitable forced action mixer (400-600rpm).*
- *The mixing head must be completely immersed in the powder.*
- *Add 50% of the water into the mixer and add the total quantity of powder.*
- *Mix for 2 minutes, then add the remaining water.*
- *Mix for an additional 2 minutes until a lump-free, homogeneous mixture is obtained.*
- *The mixing time depends on the type of mixer.*
- *4 minutes is the minimum.*

### **Application**

*The product is applied to the previously water-logged surface with a brush. When the first layers hardens enough (5-6 hours depending on the temperature), apply the second layer. Each layer application should be perpendicular to the previous one.*

### **PRECEDING COAT:**

None



### **Important Remarks:**

- Top Fix CR 100 is appropriate for application in +5 °C +30 °C temperature conditions. If the temperature does not fit the specified values, wait until it does.
- The material should be prepared in an amount that it can be used and consumed in 20 minutes.
- Do not use in roof and terrace insulation.
- Before the application of the last layer on the material, wait at least a week.
- Top Fix CR 100 becomes waterproof positively in 7 days and negatively in 14 days.
- The application surface should definitely be kept wet for 7 days.
- Do not apply any curing on the surface with **Top Fix CR 100** application in any way.
- Do not apply on surfaces which are frozen, melting or under the risk of rain and frost in 24 hours.

### **Shelf life & Storage:**

12 months from date of production if stored properly in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5°C and +30°C.

### **Safety:**

For information and precautions on the safe handling, transportation storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

### **Legal Notice:**

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