



Top Proof CM 503

Product Description

Is a flexible, crack bridging, cement based 2-component coating for waterproofing and ingress protection of concrete and masonry.

Product uses:

- Waterproof and flexible leveling-off for cement based sub-bases even with uneven surfaces
- Waterproof, flexible, skimming on cement-based plasters, even if cracked
- Waterproof coating of walls in contact with the ground, foundations and lift-shafts
- Waterproofing of baths, showers, balconies, terraces, and swimming pools before the ceramic tiles laying
- Waterproof coating of tanks for containing water
- Waterproof flexible coat on plaster-board

Properties

- High adhesion, crack-bridging and waterproofing performance for long-term waterproofing against positive and negative hydro static pressures.
- Fast, easy and cost effective application by manual application or spraying.
- Additional high carbonation, chloride diffusion and freeze-thaw protection, providing a full protection to concrete surfaces.
- Fast setting properties for minimal downtime and rapid completion of the application.

TECHNICAL PROPERTIES

<i>Appearance/Color</i>	Matt / Gray
<i>Consistency:</i>	Thixotropic mortar
<i>Apparent mass volume:</i>	1600 kg/m ³
<i>Application thickness / layer</i>	1 mm
<i>Open time:</i>	≈ 30 [min]



<i>Application temperature:</i>	+5° to +30° [C] / +41°to +86° [F]
<i>Consumption:</i>	1.5 kg for the first layer and the same for the second layer
<i>Re coating time</i>	1 hour

Technical Data Sheet



<i>Adhesion to concrete:</i>	>1.5 [MPa] Dry Concrete >1.5 [MPa] Wet Concrete
<i>Crack bridging properties:</i>	Class A4: >1.25mm (23°C / 73.4°F) Class A3: >0.50mm (-10°C/14°F)
<i>Capillary absorption and water permeability:</i>	< 0.1 permeability [kg/(m ² . h0,5)]
<i>Hydro static pressure resistance:</i>	≈ 15 bar (Positive pressure)
<i>Tensile strength after water immersion:</i>	≥ 0.5 N/mm ²
<i>Maximum/minimum thickness:</i>	From 1 mm to 2 mm per coat (at least 2 coats)

Application Details

<i>Application method:</i>	Brush or airless machine
<i>Thinner:</i>	Do not thin
<i>Cleaning of tools:</i>	Fresh water
<i>Packing:</i>	25 kg Powder + 8 kg liquid

Surface Preparation

- The substrate has to be free from dirt, grease, laitance, loose concrete, loose particles or layers which could adversely affect adhesion.
- Remove all damaged concrete and prepare substrate by sand or grid blasting, high pressure water jetting, or other methods until base concrete is exposed, offering sufficient roughness (bond) and open pores.
- The substrate must be per-wetted with clean water.
- The substrate should be damp, but not saturated and without free standing water.
- The substrate must be frost-free and have a cohesion of minimum 1.5 N/mm².
- Damaged areas need to be repaired with [Top Mortar CM 3000](#)

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 liquid component into the mixer and add the total quantity of powder.*
- *Mix for 2 minutes, then add the remaining liquid.*
- *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.*
- *Always use the total volume of liquid and powder to prevent color variations and to obtain optimum coating properties.*
- *Once the mortar is ready mixed, apply immediately.*
- *Do not prepare more material than can be used within the open time of the material.*

Application

Technical Data Sheet



- *The material is applied in minimum 2 layers of 1mm by using a brush or roller.*
- *Alternatively suitable spray equipment can be used.*
- *Apply the first layer on the dampened substrate in a horizontal stroke and allow curing for minimum 1 hour depending on ambient temperature.*
- *Apply the second layer in a vertical stroke. Predamping the initial layer is only allowed in very dry conditions.*
- *Condensation on the first coat needs to be removed before application of the second layer.*
- *Spray applications require brushing of the first layer to properly fill voids and achieve uniformity.*
- *Do not apply the material if the ambient temperature is below 5°C or expected to fall below 5°C within 24 hours.*

PRECEDING COAT:

Concentrated Sealer

Curing

- *After treatment has to be according EN 13610 in combination with DIN EN 1045-3.*
- *In warm or windy conditions protect the applied material from dehydration by mist-spraying with clean water or protective tarpaulins until the initial set has taken place.*
- *In cold conditions cover with insulated tarpaulin, polystyrene or other insulating material.*
- *Protect surfaces against frost and rain until final set has taken place.*
- *In cold, humid or ventilated areas it can be necessary to allow for a longer curing period, or to introduce forced air movement to avoid condensation.*
- *Never use dehumidifiers during the curing period or within 28 days after application.*

Important Remarks:

- Surfaces must have enough structural strength.
- Concrete should have minimum of 25 N/mm² compression resistance and minimum 1, 5 N/mm² tensile strength.
- Applications below 10°C should be avoided.
- The surface should be protected from moisture and rain for 24 hours after application.
- All application tools and equipment should be cleaned with water immediately after the use. Cured material can only be removed mechanically.
- Use only where application and drying can proceed at temperatures above: 10°C/50°F. The temperature of paint itself should be 15°C/59°F or above.

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:

Technical Data Sheet



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