



**Zahabiya**

**WATER SHIELD CWC-100**

Crystalline Waterproof Coating

**Zahabiya WATER SHIELD CWC-100** is a single component, hydraulic cement based waterproofing coating, specifically designed to penetrate into the capillary network of the concrete. The coating, after a series of chemical reactions, forms insoluble crystals, sealing the capillary network, thus blocking the passage of water.

- Works for both positive and negative pressure
- Safe for Potable/ Drinking water contact
- Applicable of variety of substrates
- Does not alter the water vapour transmission (breathable coating)
- Excellent Finish
- Easy to apply

COLOUR:	Grey Powder.
GRANULOMETRY:	0-0.6mm (EN 12192-1)
APPARENT DENSITY:	Powder: 1.14 g/cm <sup>3</sup> Mortar: 1910 kg/m <sup>3</sup> (EN 1015-6)
APPLICATION TEMP.:	5-30°C
POT LIFE:	30 minute
SETTING TIME:	Initial: 3 hour (EN 13294) Final: 4-5 hour
WATER VAPOUR PERM.:	S <sub>D</sub> < 5 metre (EN ISO 7783-1/-2) Class I - Permeable to water vapour (EN 1504-2)
WATER PERMEABILITY:	< 0.1 kg/m <sup>2</sup> .h <sup>0.5</sup> (EN 1062-3) Water Impermeable (EN 1504-2)
ADHESION :	On Concrete (28 days) > 1.06 MPa / 150 psi On Concrete (6 months) > 4.21 MPa / 600 psi (Product Cohesive Failure) (EN 1542)
COMPRESSIVE STR.:	> 40.0 MPa/ 5800 psi (EN 12190)
FLEXURAL STRENGTH:	> 10.0 MPa/ 1450 psi (EN 196-1)
SAFETY:	Safe in Handling. Complies with section 5.3 of standard EN 1504-2. <u>Safe for use in contact with drinking / potable water.</u>
CLEANER:	Excessive mortar and the tools can be cleaned with water with the mortar is wet.
STORAGE:	Store in a cool, dry place, at 25-35°C. Keep the product away from sunlight & humidity.
SHELF LIFE:	Use within 09 months of manufacturing date. Keep the packing airtight after use.



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**APPLICATIONS:**

Zahabiya Water Shield CWC-100 provides complete and durable waterproofing to concrete and cement mortars on which it is applied, making it an ideal product for waterproofing of numerous substrates including concrete, rendering, cement mortar, concrete block, brick, masonry, etc. Thus, the coating can be used for waterproofing of:

- Concrete structures subjected to positive or negative water pressure, such as basements, foundations, elevator pits, indoor or outdoor walls, etc.
- Swimming-pools, saunas, fountains and water tanks.
- Various structures such as channels, dams, bridges, tunnels and galleries, water treatment plants, waste water tanks etc.
- Waterproofing of walls or floors with rising dampness due to capillarity.

**APPLICATION METHOD:**

**SURFACE PREPARATION:**

- For most effective results, coating should be applied directly on clean, porous and receptive concrete surface (before plaster).
- The surface should be solid and free from any pollutant, such as grease, oil, formwork release agents remains, grout, dust, sand, loose materials, etc. Paint and other waterproofing materials remains should be removed.
- Efflorescence and salts should also be removed before application.
- All damaged areas should be prior repaired.
- Any active water leaks should be repaired/ patched using **Zahabiya AQUAPATCH**.
- Surface should be saturated with water before application of Zahabiya Water Shield CWC-100.

**COVERAGE:**

For best results, a coverage of 0.75 to 1.0kg/m<sup>2</sup> per coat is recommended. Minimum 2 coats are recommended. For areas with high hydraulic pressure such as tanks, swimming pools, 3 coats are recommended.

**APPLICATION AS COATING:**

1. Surface should be saturated with water before application of Zahabiya Water Shield CWC-100.
2. Mix **CWC-100** with sufficient amount of water while constant stirring to make a homogenous paste. Normally, 4 parts of powder to 1 part water is sufficient.
3. Normally, it is recommended to first mix with small amount of water to create thick paste. Stir till the paste is homogenous and free from lumps. Do not stir very fast otherwise, there would be chances of air entrapment. Once the paste is homogenous, add remaining amount of water while mixing.
4. Let the coating mature for 5-10 minutes before application.



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5. Apply Zahabiya Water Shield CWC-100 on the previous wet/ moist surface by means of short haired stiff brush.
6. Let the first coat dry for 6 to 12 hours, depending upon weather conditions.
7. Moist the surface again before application of 2nd coat.
8. Apply the second coat in crossway (perpendicular to first coat).
9. Damp the coating from time to time to ensure homogenous setting.

#### **APPLICATION AS DRY SHAKE (FLOATING):**

Zahabiya Water Shield CWC-100 can be applied as dry shake (dusting and floating) on horizontal concrete surfaces.

1. The concrete surface should be perfectly saturated with water before application.
2. Apply CWC-100 by homogeneously dusting on the wet concrete at a proportion of around 0.75 to 1.0kg/m<sup>2</sup> (approx 75-100g per SFT).
3. After 2-3 hours (depending on weather conditions), place fresh concrete with care not to damage the previous application.
4. Once the fresh concrete shows initially set, dust the second coat @ 1.0 to 1.5kg/m<sup>2</sup> (approx. 100-150g per SFT) and float finish to create a monolithic surface. It is very important to ensure that the dusting is done homogeneously, continuously so as the coating is applied equally at all areas.
5. In case applying as a single application on the fresh concrete, apply at the rate of 1.5 to 2.0kg/m<sup>2</sup> (150-200g per SFT).

#### **IMPORTANT:**

- Do not apply when the surface and surrounding temperature is 5°C or lower or when either the surface is frosty or frost is expected within 24 hours of application.
- Do not excessively damp the surface when temperatures are low (in case of winter).
- Do not apply on gypsum, lime or painted surfaces.
- Let the coating cure for 10-14 days before filling with water or paint application.
- For surface in contact with drinking water, rinse and wash the surface thoroughly before filling.

The Information & Data contained herein are correct to the best of our knowledge, tests and experience. These are presented in good faith to the users. The recommendations and suggestions mentioned are made without guarantees or representations as to the results. The Consumer should satisfy himself as to the suitability of the product for the intended purpose and use. WE ASSUME; NO LIABILITY for damages of any kind and the user accepts the product 'as is' and without any other warranties,



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