

# ARDEX WPM 012\*

## **Cementitious Capillary Waterproofing Coating**

- Crystalline capillary waterproofing in concrete and mortar surfaces
- Effective againts both positive and negative water pressure
- Resists the corrosive effects of salt water and atmospheric pollution
- Suitable for use in contant with drinking water
- Inside and outside use
- Easy to apply
- Certified according EN 1504-2
- \* Optimized & improved version of ARDEX HUMISTOP HWO

### **Scope of Application**

Waterproofing of cementitious like concrete, mortar, concrete blocks, plastered with cement...

Waterproofing of drinking thanks concrete walls and floors, basements and below-grade structures subjected to positive and negative water pressure. Suitable for waterproofing and protecting concrete foundations, retaining walls. Repairing and waterproofing irrigation channels. Waterproof coating for tunnels and elevator shafts. Waterproofing of swimming pools

### **Properties**

Powder mortar specially formulated to waterproof under positive and negative pressure, it penetrates the concrete through its capillary system, crystallizing and protecting its structure. Suitable for contant with potable water. Applicable on fresh or set concrete.

Permeable to water vapor, avoiding the appearance of condensation, as it allows the walls to breathe. Can be applied on dampened surfaces. Waterproofs over time as a new supply of water reactivates the reaction.

### **Substrate Preparation**

Surfaces to be treated must be free from dust, oil, grease, paint, residual curing compounds, mould or any other previous surface treatment that will impair adhesion of the or inhibit penetration of the active chemicals into the surface. These include polymer modified renders and those substrates treated will silicon or silane water repellents.





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23

## 40090

TS EN 1504-2:2004

### 40090 ARDEX WPM 012, EN 1504-2

Surface protection systems for concrete: Impregnation (I)

Reaction to fire : A1
Penetration depth : > 5 mm

Capillary absorption and permeability to water

 $1 \le 0.1 \text{ kg/(m}^2 \cdot h0,5)$ 

Dangerous substances

: Complies with EN 1504-2

clause 5.3



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Remove any laitance and provide an open pored, slightly rough surface sufficient to act as a mechanical key, essential for adequate adhesion of the WPM 012.

Areas of weak or honeycombed concrete must be repaired. Hollow debonded renders must be removed. The concrete or mortar must still be alkaline so that the reaction that will waterproof the capillary network can take place. To check if this is the case, a phenolphthalein test will be performed. The substrate to be waterproofed is moistened with phenolphthalein and the colour acquired by the phenolphthalein is observed. If it is pink, it means that the subsrate is suitable fot the use of WPM 012. If it remans transparent, a layer of mortar or concrete must be removed and returned. To carry out the test until the desired pink colour is obtained. The carbonated layer must be remove by mechanical means

Possible irregularities, such as holes, cracks or fissures, must be corrected beforehand with repair mortars from the ARDEX range. The slab-wall, wall-wall and wall-ceiling deliveries will be smoothed by making half rounds with the same mortars.

The substrates that are not soaked must be damped untik saturation but avoiding waterlogging.

#### **Application**

Mix WPM 012 with approx. 6,75 - 7 litres of water, until the desired consistency. The product can be applied bu brush, paintbrush or projected. Do not overextend the material; leave a good layer to have better impermeability.

The waterproofing treatment must be completed by applying a second layer in a crosswise direction with respect to the first one while it is still fresh. Applied in this way, the approximate consumption is  $1~{\rm Kg/m^2}$  per layer for a total consumption of about  $2~{\rm Kg/m^2}$ 

In highly damp floors WPM 012 can also be applied as a dryshake before applying the concrete layer and/or just after it has been applied by dusting and trowelling on fresh concrete (sandwich system).

When the concrete has enough resistance to be stepped on but the laitance can still be removed by trowelling, the product is sprinkled evenly over the entire surface with a consumption of approximately  $1.5\ kg/m^2.$  Next, it is trowelled to achieve a superficial monolithic film (if the laitance obtained is scarce, the material can be moistened before proceeding to trowelling. Don't apply with temperatures below  $+5^{\circ}\text{C}$  and not above  $+30^{\circ}\text{C}.$ 

### Curing

The WPM 012 should be kept moist during curing process for 5-7 days. This can be done by wetting the surface treated daily beginning at 24 hours of terminating the application or protecting the WPM 012 coating with wet burlap or plastic sheeting.

Allow a minimum of 7 days curing under normal conditions ( $\pm 20^{\circ}$ Cand 50% RH) before subjecting the WPM 012 to permanent immersion. It should be noted that low temperatures and high relative humidities prolong curing times.

### Subsequent Treatments

The total WPM 012 hardening is achieved at least 21 days after application, up to that time moisture slight leakage may occur than later disappear.

In the case of performing subsequent coating operations the high alkalinity of the system may cause problems in products with high percentages of resin.

In such cases, it is recommended that the surface be thoroughly wetted with water and neutralized with a hydrochloric acid solution in water (1 part hydrochloric acid : 8-10 parts water) followed by a thorough washing of the area with water. Or ARDEX B16 coating is recommended to protect the high polymer products mentioned ( for example, in applications before ARDEX  $8\,+9$ ).

#### Warning

Contains cement; causes irritation to eyes and skin. Keep out of reach of children. Avoid contact with eyes and skin. In case of contant with eyes, rinse immediately with plenty of clean water and seek medical attention. In the case that the injured person wears contact lenses, remove them and water.

Use appropriate gloves. Wash contaminated skin with soap and water. Once dry, the product is physiologically and ecologically neutral. The disposal of waste and empty containers must be done in accordance with current local/regional/national/intertional legislation.

For more information consult the current Safety Data Sheet

### **Technical Data According to ARDEX Quality Standards**

Appearance:	Grey powder
Mixing Ratio:	6,75 - 7 I water/ 25 kg of powder
Weight of Fresh Mortar:	Approx. 1,2 kg/l
Consumption:	30 minutes
Waiting Time Between Layers:	30 dakika
Katlar arası bekleme süresi:	6-8 hours

\*All data is approximately based on laboratory test made at a temperature of +20° C and relative humidity of %65. Environmental conditions may change these values. Higher temperatures and lower relative humidity decrease these duration whereas lower temprature and higher relative humidty increases them

Application Temperature:	below +5°C above +30°C
Packaging:	25 kg paper bag
Storage and Shelf Life:	Can be stored up to 12 months in its original unopened package, in a cool dry area. Do not expose bags to direct sunlight.

### Recommended Collomix mixing paddle



KR Serie