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# ARDEX WPM 422

## Crystalline Waterproofing Admix

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Not a vapour barrier - allows concrete to breathe

Permanent: Added to the concrete at time of batching and therefore is not subject to climatic restraints



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# ARDEX WPM 422

## Crystalline Waterproofing Admix

### DESCRIPTION

ARDEX WPM 422 is added to the concrete mix at the time of batching. ARDEX WPM 422 consists of Portland cement, very fine treated silica sand and various active, proprietary chemicals. These active chemicals react with the moisture in fresh concrete and the by-products of cement hydration to cause a catalytic reaction, which generates a non-soluble crystalline formation throughout the pores and capillary tracts of the concrete.

Thus the concrete becomes permanently sealed against the penetration of water or liquids from any direction. The concrete is also protected from deterioration due to harsh environment conditions.

### FEATURES & BENEFITS

- Resistant to extreme hydrostatic pressure from either positive or negative surface of the concrete slab
- Becomes an integral part of the substrate
- Highly resistant to aggressive chemicals
- Allow concrete to breathe
- Non-toxic
- Less costly to apply than most other methods
- Permanent; Added to the concrete at time of batching and therefore is not subject to climatic restraints
- Increases flexibility in construction scheduling

### APPLICATION RANGE

- Residential, commercial applications for floors & walls
- Swimming Pool, Reservoirs, Sewage and water treatment plants
- Tunnels and Subway Systems
- Underground Vaults
- Foundations
- Parking Structures

### SUBSTRATES

Precast Components

### SURFACE PREPARATION

Remove remaining concrete fins and projections, general surface dirt, grease, oil and other

contaminants

### DOSAGE AND MIXING

Recommend dosage of ARDEX WPM 422 is 0.8% to 1.5% by weight of cement.

#### Mixing ratio

The concrete mixes, water mixing and aggregate sizes should be according to the requirements of construction design, a small practice is to be evaluated for each project before big scale uses.

### APPLICATION

Prepare the dilution right before applying. Ratio of cement/sand/aggregate of concrete should be remained unchanged. Cement for waterproofing must be fresh, free of lumps. Do not change the original applying methods and tools.

Note: It is important to obtain a homogeneous mixture of ARDEX WPM 422 with concrete. Therefore do not add dry ARDEX WPM 422 directly to wet concrete as this may cause clumping and through dispersion will not occur.

Clean the tools and equipment immediately with water before the compound dries.

### PRODUCT LIMITATION

Trial mixes should be carried out under project conditions to determine setting time and strength of the concrete.

ARDEX WPM 422 must be stored dry at a minimum temperature of 7°C.

When incorporating ARDEX WPM 422, the temperature of the concrete mix should be above 5°C.

### PACKAGING

ARDEX WPM 422 is packed in pail - net weight 20kg.

### SHELF LIFE AND STORAGE

ARDEX WPM 422 should be stored in the original unopened packaging in cool and dry warehouse at 25°C and 50% relative humidity. When stored under the correct conditions ARDEX WPM 422

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will have a shelf life of 12 months.

### TECHNICAL DATA

Property	Typical values
Appearance	Grey powder
Bulk density:	Approx. 1.05 - 1.10 kg/L
Working temperature:	5 - 38°C
Testing Method	
Depth of penetration (DIN 1048)	< 15mm
Compressive strength (ASTM C109)	> 40N/mm <sup>2</sup>

### SAFETY PRECAUTIONS

ARDEX WPM 422 is non-toxic. However, the content should not be swallowed or inhaled. Care should be taken at all times to avoid contact with eye, mouth, skin. Wear face mask to prevent dust inhalation. In the event of eye contact, wash immediately with water and seek medical treatment. For more information, please consult the relevant Safety Datasheet for further information available upon request and online at [www.ardex-quickseal.com](http://www.ardex-quickseal.com).

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# ARDEX WPM 415

**Crystalline Waterproofing Slurry**

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