

## LIQUID AND POWDER FORM INTEGRAL WATERPROOFING ADMIXTURE BY CRYSTALLIZATION

### DESCRIPTION

A high grade easy to handle integral waterproofing admixture for both waterproofing and concrete corrosion protection using unique nanotechnology to chemically modify the cement matrix by reacting with the cement paste to reduce pore & capillary size. The reaction between Conmix H<sub>2</sub>O Stop and cement paste produces a non soluble crystalline structure throughout the pores & capillaries permanently sealing the concrete. Conmix H<sub>2</sub>O Stop is available in two forms liquid or powder.

### USES & ADVANTAGES

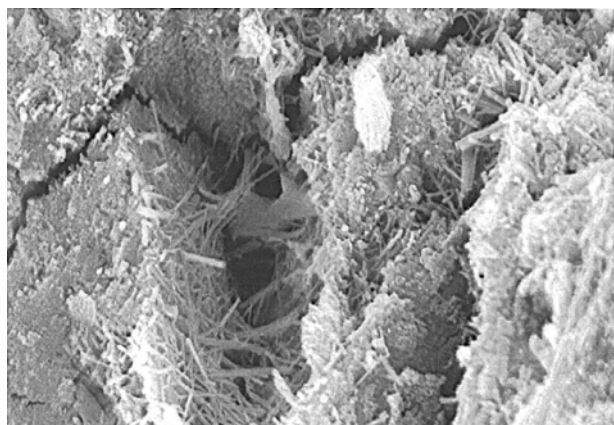
Uses include for all types of waterproofing and concrete corrosion protection in basements, water tanks, roofs, reservoirs, dams, waste water plants, swimming pools, water treatment plants, tunnels, marine structures etc.

#### Advantages include:-

- Seals microcracks. Can seal hairline cracks up to 0.5 mm.
- Concrete waterproofed throughout.
- Improved durability.
- Protection against Chloride and sulphate ingress.
- Withstands hydrostatic pressure.
- Improves chemical and carbonation resistance.
- Fast tracks construction.
- No installation costs, seams or joints.
- Does not rely on bond to work.
- Permanent waterproofing.
- Integral waterproofer.
- Non toxic.
- Reduces opportunity for freeze thaw damage.
- Improves workability and strength.
- May reduce existing admixture dosage.
- No costly surface preparation.
- Added to concrete not constrained by weather conditions.
- Liquid does not clump as powders and easy to dose.
- Enhances hydration process.

### PROPERTIES AND COMPLIANCES

	Liquid	Powder
Appearance :	Liquid	Powder
Colour:	Transparent or Blue	Grey Powder
pH :	13-14	13-14
Specific Gravity :	Approx. 1.21-1.23	-
Chloride Content :	Nil	Nil
DIN EN 480-10		
Bulk Density :	-	1.25-1.35



Initiation of Crystal Growth in Cement Paste

### APPLICATION

#### Conmix H<sub>2</sub>O Stop - Liquid

Conmix H<sub>2</sub>O Stop is added to the concrete at the time of batching at dosages of 0.8 - 1 litre per 100 kg of total cementitious material by automatic dispensers. Under certain conditions the dosage used may be 2-3 litre per 100 kg of total cementitious material to meet the specific requirements of a project. For the optimum dosage consult Cormix.

#### Conmix H<sub>2</sub>O Stop - Powder

Conmix H<sub>2</sub>O Stop powder should be added along with cement/sand/aggregates in the batching plant at a dosage of 0.8-1 kg per 100 kg of total cementitious material. Under certain conditions the dosage used may be 2-3 kg per 100 kg of total cementitious material to meet the specific requirements of a project. For the optimum dosage consult Cormix.

**Note :** Conmix H<sub>2</sub>O Stop should be tested in trial mixes to determine the optimum dosage and any necessary changes to existing additive dosages. Do not use without checking workability, slump retention and retardation in advance. Agitate before use, the liquid version.

### OVERDOSING

Overdosing of Conmix H<sub>2</sub>O Stop will result in increased workability and possibly more rapid set. In the case of accidental overdosing check strengths and setting times before stripping forms.

Overdosing normally will have no detrimental long term side effects as long as cured correctly with water before stripping forms. In general 28 day strengths would be improved. If in doubt contact Cormix Technical Department.

### STANDARDS

#### Permeability

• According to Permeability tests CRD 48-73 Conmix H<sub>2</sub>O Stop shows no leakage at 7 days compared to the control which showed continuous leakage. Pressure tested to 150 m. head of water. Complies to BSEN 12390-8

#### Compressive Strength

• Compressive strengths at 28 days according to ASTM C 39 showed strength increases of 10% compared to the control.



Basement Waterproofing Wastewater & Potable Water Tank Waterproofing

# Conmix® H<sub>2</sub>O Stop



## LIQUID AND POWDER FORM INTEGRAL WATERPROOFING ADMIXTURE BY CRYSTALLIZATION

### Chemical Resistance

• Sulphuric acid test resistance shows a significant reduction in percentage weight loss compared to the control. Resistant to alkali / acid conditions pH range 3-11 constant contact.

### Sulphate Resistance

• Sulphate resistance is significantly improved when measured by both weight loss and length gain.

### Freeze Thaw Resistance

• When measured to ASTM C666-97 Freeze Thaw Durability the treated concrete showed a marked reduction to attack over the control mix.

### Rapid Chloride Penetration Test

• Chloride diffusion is reduced significantly when measured according to ASTM C1202

### **PACKAGING**

Conmix H<sub>2</sub>O Stop (Liquid) is available in 25 ltr Pail & 200 ltr drum.

Conmix H<sub>2</sub>O Stop (Powder) is available in 25 kg paper bags or 25 kg plastic pails.

### **STORAGE & SHELF LIFE**

The product must be stored shaded at a minimum temperature of 45°F (7°C). Shelf life is one year when stored under proper conditions in original unopened packaging. Agitate the liquid form before use and protect from freezing.

### **HEALTH & SAFETY**

Conmix H<sub>2</sub>O Stop is highly alkaline. Protect hands with rubber gloves and wear safety goggles during mixing & application. Avoid contact with skin or eyes. Should contact occur, flush copiously with water. If irritation persists, contact a physician.



Basement, Swimming Pool & Water Tank Waterproofing

### **TECHNICAL SERVICE**

Technical assistance including mix design preparation and supervision on site during incorporation of Conmix H<sub>2</sub>O Stop is available by contacting Cormix International Limited.

### **QUALITY ASSURANCE**

ISO 9001 : 2008 verified by TUV Nord.



1012

Cormix International Limited 89 Romklao Rd., Sansab, Minburi Bangkok 10510 09 1012-CPD-0102 <b>EN 934-2</b> Water Resisting Admixtures	Capillary absorption: 7 days curing: ≤ 50 % 90 days curing: ≤ 60 % Compressive Strength: ≥ 85 % 28 days Air Content in fresh concrete: ≤ 2 %
--	--

### **CONTACT DETAILS**

Cormix International Limited

Regional Office,

89 Romklao Rd., Sansab, Minburi, Bangkok 10510

Tel. (66 2) 917 3955-8, 543 8890

Fax. (66 2) 917 3959, 543 8891

<http://www.cormix.com> E-mail : [info@cormix.com](mailto:info@cormix.com)



Basement & Water Tank Waterproofing

NOTE : Every reasonable precaution is taken in the manufacture of all CORMIX-products to ensure that they comply with CORMIX's high standard of quality. The recommendations and properties of the product are based upon what is believed to be the most reliable information available, and are not intended as recommendations which infringe on other patents. Although all CORMIX-products are subject to rigid quality tests, no specific guarantee can be given, because results depend, not only on quality, but also on other factors beyond our control. We welcome therefore consultation in the event of doubt concerning application, or performance, and point out that oral recommendations, which vary from the instructions contained herein, are not binding without written confirmation by CORMIX. All transactions shall be subject to our terms and conditions of sale-delivery-and-service. This data sheet supersedes the previous one and a reprint may be issued without notice to supersede this edition, as and when deemed necessary. The information given in this leaflet is to the best of our knowledge true and reliable. Field service where provided does not constitute supervisory responsibility. Our guarantee is therefore limited to the quality of materials delivered.