

# CONGUARD AC

Elastomeric anti-carbonation protective coating

## DESCRIPTION

**CONGUARD AC** is a single component, high performance elastomeric protective and decorative coating, based on special acrylic polymers with a penetrating acrylic modified silane primer, designed to protect exposed reinforced concrete structures from chloride ions, carbon dioxide, acid gases, water, salts and extreme weathering.

## USAGES

- To protect atmospherically exposed reinforced concrete structures from attack by acid gases, chloride ions, oxygen and water, where there is a danger of subsequent cracks appearing within the substrate
- Suitable to protect all types of structures and cement-based substrates in aggressive marine / coastal environments

## ADVANTAGES

- True elastomeric coating with excellent elongation and recovery properties which are maintained at sub-zero temperature
- Excellent barrier to carbon dioxide, chloride ions, oxygen and water, which makes it suitable for car parks & car tunnels
- UV-resistant
- Water-based
- Available in various colors upon request.
- Protects new and existing concrete against weathering

## TECHNICAL DATA

### CONGUARD AC

	Typical values
Appearance	Colored liquid
Solid Content	70%
Specific gravity @25°C	0.88
Chloride Ion Diffusivity	NIL
Water Vapor Transmission	50 kg/m <sup>2</sup> /24h
Water Sorptivity	0.006 mm/min <sup>1/2</sup>
Tear Resistance	13 Pa
CO <sup>2</sup> Diffusion Resistance	8.25x10 <sup>-7</sup> cm <sup>2</sup> s <sup>-1</sup>
Chemical Resistance	Fuel range, sewage water

## USAGE INSTRUCTIONS

### 1. Surface preparation

Concrete surfaces particularly if new; should be fully cured with a maximum residual relative humidity (RH) of 75%, clean and free from contamination such as dust, oil, grease, organic growth, release agents and curing compounds.

Prepare concrete surfaces preferably by mechanical methods such as angle grinding to remove laitance, curing compounds and other loose materials to provide a mechanical key for **PIOPRIME AC**.

After preparation, fill all blow holes and surface imperfections using **PIOREP** or **PIOMORTAR** ranges as per recommendation.

### 2. Priming

Prior to the application of **CONGUARD AC**, prime the prepared surface using **PIOPRIME AC**.

Apply **PIOPRIME AC** using a brush, roller or low pressure knap-sack sprayer to the prepared concrete surface at a rate of 4-5 m<sup>2</sup> per liter. Allow the primer to become dry before applying **CONGUARD AC**. This is typically 30-90 minutes depending on temperature condition.

A second priming coat may be required if the substrate is particularly porous, in that case, re-prime within 18 hours post previous coat.

### 3. Mixing

Stir the material thoroughly to mix any solid materials that may have settled at the bottom of the packaging, until a homogenous consistency is achieved.

CONGUARD AC	Coverage
CONGUARD AC	5-6 m <sup>2</sup> /150-215µm

### STORAGE & SHELF LIFE

Keep **CONGUARD AC** in dry and shaded place of a temperature range 10 - 35°C, shelf life of the material is 12-months.

### 4. Application

A minimum of 2 coats of **CONGUARD AC** are recommended.

Apply the first coat of **CONGUARD AC** using brush or roller in a continuous uniform way to the primed concrete surface, then apply the second coat allowing the first one to dry for at least 12 hours.

### 5. Curing

No curing required for **CONGUARD AC**.

## PACKAGING

**CONGUARD AC** is supplied in 20 liters pail.

## HEALTH & SAFETY

Before applying **CONGUARD AC**, all safety protections should be worn during application, such as safety goggles and rubber gloves to avoid any harmful accidents.

If **CONGUARD AC** is splashed to skin, it must be washed off by water and soap at once, and if to the eyes seek medical attention immediately.

### TECHNICAL SERVICE

The technical service department of Arkaz is available to assist in the correct and best use of our products, these resources and advice are at your disposal entirely without obligation.

Please contact:  
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