# **Surface Treatments - Gel Surface Retarder**

# **ECA CSR-W**

Water Based Concrete Surface Retarder





## Description

ECA CSR-W is a water based surface retarder for the production of exposed aggregate concrete surfaces using the negative (in formwork) application process. Our surface retarder is available in 4 varieties for varying aggregate exposure depths. Exact results are dependent on the type of cement, water-cement ratio, aggregate grading, and quantity of cement used. Our technical support staff are available to advise you in determining the suitable product for your requirements.

## **Types**

Color	Aggregate Size	Exposure Depth
Red Orange	0 - 3 mm	ca. 0.25 mm
Blue	0 - 4 / 8 mm	ca. 0.50 mm
Pink	8 - 16 mm	ca. 3.50 mm
Green	4 - 8 / 10 mm	ca. 2.0 mm

### **Advantages**

ECA CSR-W is a water-based surface retarder available in 4 variants, each offering a different exposure depth.

ECA CSR-W is easy and economical to apply to formwork and results in even and consistent exposed aggregate surfaces.

#### **Technical Data**

Form: Thin Paste Color: Various

**Density:** 1.38 ± 0.03 g/ml

**Shelf Life:** Min. 6 months from manufacture date **Storage:** Protect against frost and dirt and store at approx. 20°C in closed containers away from

sunlight

## Coverage

Between 200 – 350 g/m<sup>2</sup> (Consumption must be determined during the preliminary tests)

#### Uses

ECA CSR-W uses for the production of washed concrete surfaces including: facades, land-scraping elements, concrete products and architectural concrete. Designed for in-form application, especially applicable when manufacturing architectural concrete products with complex forms.

## **Preparation**

Before each use, ECA CSR-W should be stirred well to ensure the product has a homogenous consistency. If used for the first time on strongly absorbent form- work it may be necessary to apply two coats.

### **Application**

ECA CSR-W should be applied with a short nap roller, sprayer or brush to the surface of a clean formwork. This must be free of dust, dirt and release agent

residues. A uniform layer should be applied to the entire surface of the formwork (the formwork surface should not be visible under the ECA CSR-W)

Once the ECA CSR-W is completely dry (depending on ambient temperatures) the concrete can be poured. Optimal vibrating of the mix should be determined during sample tests.

The appropriate type of ECA CSR-W should be determined in trial tests prior to commercial application (mix design, production method and timings, element thickness, and the setting rate of the concrete are to be observed).

The production process used for the sample tests

ble when producing architectural concrete or products with complex forms.

## **Washing out**

Washing out of the cement matrix should take place after approximately 18-24 hours. The time before wash out must also be determined during trials. A delayed wash out, such as after production on the weekend or during periods of extreme temperatures can result in reduced exposure depth.

When producing multiple elements the production cycle must be exactly replicated for each pour.

The wash out occurs most efficiently with a high-pressure.

## **Tools for application**

We recommend that the electrical equipment which is used alongside the application

- Dosing pump motors
- Seals made of Teflon
- Tools and accessories for cleaning and cleaner if it need (if wax founded).

### **Technical Service**

The Technical Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.

# **Contact Information**

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