

# ECA CSR

Concrete Surface Retarder



### Description

ECA CSR is a surface retarder for the production of washed concrete products using the negative application process. Our surface retarder is available in ten varieties for varying aggregate exposure depths.

The exposure depths are standard values. The results are dependent on the class 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
Turquoise	0 - 3 mm	ca. 0.2 mm
Blue	0 - 4 / 8 mm	ca. 0.5 mm
Brown	2 - 4 / 8 mm	ca. 1.0 mm
Green	4 - 8 / 10 mm	ca. 1.5 mm
Yellow	4 - 8 / 10 mm	ca. 2.0 mm
Red	6 - 9 / 12 mm	ca. 2.5 mm
Gray	8 - 11 mm	ca. 3.0 mm
White	12 - 16 mm	ca. 4.0 mm
Orange	16 - 22 mm	ca. 5.0 mm
Red-Violet	16 - 22 mm	ca. 6.0 mm

### Advantages

There are ten different types of ECA CSR available and these are readily distinguishable by color. The product is easy and economical to apply, usually only one coat of the formwork is needed per application.

After the required drying time, based on weather conditions, the concrete can be poured. Optimal vibrating of the mix should be determined in the sample tests.

When using new, polymer-modified casings, the pH-value is to be checked. With an alkaline

surface, we recommend neutralizing the casing before the first ECA CSR application; this can be achieved by cleaning.

### Washing out

Typically, washing out of the cement matrix should take place after 24 hours. The cast elements must remain in the formwork for at least eight hours. A delayed wash out, such as after production on the weekend, is possible subject to a sample test. When producing multiple elements the production cycle must be exactly replicated for each pour.

To compensate for possible fluctuations in the production parameters or to achieve a reduction of the exposure depth, the cast elements can be exposed to the air for two to eight hours prior to the wash out (determination of the exact time with a sample test). The wash out occurs most efficiently with a high-pressure hose. Dry brushing and final wash out is possible, but sample tests should first be conducted.

### Technical Data

Form	liquid
Color	various
Density	1 - 1.1 g/cm <sup>3</sup>
Shelf life	1 year from date of production
Storage	cool, free from frost, well ventilated and away from sources of ignition
Container	20 kg container

### Uses

ECA CSR uses in the production of washed concrete surfaces including: façade coverings, soundproof walls, landscaping, concrete products, special components, architectural concrete elements and roughening of concrete segment joints. This product is especially applica

ble when producing architectural concrete or products with complex forms.

### **Preparation**

Before each application, ECA CSR should be stirred well with a power whisk. The right type of ECA CSR must be determined in practical sample tests (cement composition, course of production and timing, element thickness, and the setting rate of the cement are to be observed). Additionally the drying time must be taken into account. The heating of the mold should occur, at the earliest, two hours after pouring. The production process used for the sample tests must be exactly replicated to ensure like results. The exposure cycle should be maintained or, with extreme temperature fluctuations, adjusted as necessary.

### **Application**

ECA CSR should be applied sparingly and evenly to the clean form (free of release agents). This should be done with a short pile paint roller, resistant to solvents.

### **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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