

ECA CSR-W

WATER BASED CONCRETE SURFACE RETARDER

DESCRIPTION

ECA CSR-W is a water-based surface retarder designed for creating exposed aggregate concrete surfaces using the negative application process. It comes in four varieties to achieve different levels of aggregate exposure.

The effectiveness of this product depends on factors such as cement type, water-cement ratio, aggregate grading, and the amount of cement used.

USES

ECA CSR-W is employed in the production of washed concrete surfaces for various applications, such as façades, landscaping elements, concrete products, and architectural concrete.

It is specifically designed for in-form application and is particularly beneficial when creating architectural concrete products with intricate or complex forms.

ADVANTAGES

- Comes in four variants suitable for various exposure depths
- Applied to formwork for producing even and uniform exposed aggregate concrete surfaces

APPLICATION

Surface Preparation

Before applying ECA CSR-W, thoroughly stir the product with a power whisk. Select the appropriate type through sample tests, considering cement composition, production process, element thickness, and setting rate. Begin mold heating at least two hours after pouring. Replicate the production process used in sample tests and adjust the exposure cycle for temperature fluctuations to achieve desired results for architectural concrete and complex-formed products.

TYPICAL PROPERTIES

Appearance	Variable Color Paste
Density:	1.38 g/mL ± 0.03

Color	Aggregate Size	Exposure Depth
Red-Orange	0 - 3 mm	ca. 0.25 mm
Blue	0 - 4 / 8 mm	ca. 0.5 mm
Pink	8 - 16 mm	ca. 3.5 mm
Green	4 - 8 / 10 mm	ca. 2.0 mm

Application Instructions

Apply ECA CSR-W with a short nap roller, sprayer, or brush on a clean, dust-free formwork surface. Ensure a uniform layer covers the formwork. For strongly absorbent formwork, two coats may be needed initially. Once ECA CSR-W is fully dry, pour the concrete. Determine the optimal vibration for the concrete mix during sample tests.

The appropriate type of ECA CSR-W should be determined in trial tests before actual application. This includes factors like mix design, production method, timings, element thickness, and the concrete's setting rate. It's essential to consider the following electrical equipment when using ECA CSR-W:

- Dosing pump motors
- Seals made of Teflon
- Tools and accessories for cleaning
- Cleaner if necessary (if wax is present)

Wash out the cement matrix 18 to 24 hours after casting, adjusting the timing through trial runs. Delayed washout can reduce exposure depth. Replicate the production process for each pour, and use high-pressure washing for the most efficient results.



COVERAGE

The coverage of ECA CSR-W is approximately 200 g/m² - 350 g/m². Consumption must be determined during the preliminary tests.

PACKAGING

ECA CSR-W is supplied in 20 kg containers.

STORAGE

ECA CSR-W should be stored in closed containers, protected from frost and dirt. Maintain a storage temperature of around 20°C and keep the containers away from direct sunlight. The shelf life of ECA CSR-W is 6 months from the date of production.

HEALTH AND SAFETY

For more information, please check the Material Safety Data Sheet.

CONTACT

Al-Faiha for Engineering Products is the exclusive licensee manufacturer for ECA.

For more information, please contact us at techsupport@alfaihaengineering.com.

DISCLAIMER

ECA aims to ensure the accuracy of information and recommendations in the product literature. However, due to variations in materials, substrates, and site conditions, and without control over product application, storage, weather, and usage conditions, ECA cannot be held liable for any resulting issues.