# Fabrikem<sup>®</sup> Surface Retarders

- Controlled Aggregate Exposure
- Flatwork Formulation
- Formwork Formulation
- Easy Application
- More Uniform Appearance

# DESCRIPTION AND USE

SURFACE RETARDER is a concrete SURFACE RETARDER that effectively delays the set time of both vertical and horizontal concrete surfaces. It is applied to freshly placed concrete to retard hydration reaction of surface cement of approximately 1/4" thickness for up to 24 hours to create an exposed aggregate surface. SURFACE RETARDER does not affect the colour of the concrete.

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SURFACE RETARDER is available in Horizontal (**Blue**) and Vertical (**Red**) formulations. For horizontal surfaces, SURFACE RETARDER (**Blue**) can be applied directly to freshly poured and troweled concrete. For vertical surfaces, SURFACE RETARDER (**Red**) can be applied to forming materials made of wood, steel or plastic and is fast drying.

#### APPLICATION

Since the depth of etch varies with the physical characteristics of the mix, trial panels should be made first in order that the correct covering capacity can be established to achieve the desired result.

#### Horizontal Surfaces:

For horizontal surfaces, place the concrete first; stir and apply SURFACE RETARDER (**Blue**) just after the surface water disappears. SURFACE RETARDER can be brushed, rolled or sprayed with low-pressure sprayer. Protect the surface from wind, rain or overhead sun. Start to wash the surface when the concrete is hard enough (12 to 24 hours). If the retarded depth is excessive let the concrete cure for several more hours. Retardation time is subject to many variables. Check the set retarder at different time intervals to satisfy personal preferences. Wash the surface with water broom or a stiff broom and hose. Do not leave material on the surface.

#### Vertical Surfaces:

For vertical concrete surfaces, use SURFACE RETARDER (**Red**). Stir and then spray SURFACE RETARDER (**Red**) to vertical surface of the forms and allow to dry before concrete is poured into the forms. On first usage for porous and absorbent surfaces like plywood, a light coat of SURFACE RETARDER should be applied to seal the forms. This will not normally be required for subsequent coats. It usually takes 20 minutes to dry, but this may vary depending on the weather conditions. When the concrete has set, open the forms and hose off the surface to remove retarded surface material to reveal the exposed aggregate.

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# **APPLICATION** continued,

Apply FABRIKEM<sup>®</sup> CURE & SEAL to the exposed surface. Where a wet look surface is desired, apply FABRIGLAZE<sup>®</sup> Acrylic Sealer 28 days after placement. See FABRIKEM<sup>®</sup> technical bulletins for more information. Proper pumping or suitable absorbent material can collect spills. For additional information regarding handling and disposal, please refer to MSDS. Keep the product from freezing. It should be stored at temperatures between 5°C – 20°C.

# CAUTION

Since this product is a retarder, care must be taken in placing the concrete not to displace the SURFACE RETARDER from the form face or to cause excessive movement within the form by poor placing or vibrating methods.

### LIMITATIONS

Retarding time may vary with temperature, humidity and concrete matrix. Concrete accelerators will inhibit the retarding. 10-20% by volume water may be added to SURFACE RETARDER (**Blue**) to decrease the retarding action for horizontal surfaces. Do not apply retarder when rain is anticipated within 12 hours of application, and when temperature is below 0°C (32°F) and above 25°C (77°F). For both horizontal and vertical applications, always conduct a test. Compressive strength prior to water flushing should be between 1,000 and 1,500 psi (6.89 and 10.34 MPa). Using SURFACE RETARDER will not prevent the ultimate hardening of concrete, but will only delay the set time of the surface paste.

Consult product Material Safety Data Sheet before using.

# COVERAGE

Coverages generally vary from 100 to 200 square feet per gallon depending on the porosity and surface texture of the substrate and the desired degree of aggregate exposure. **TEST PANELS ARE THEREFORE IMPERATIVE.** Typically, smooth surfaces require coverages in the range of 150 square feet per gallon; rough surfaces require more material. On re-treated forms, subsequent coating may allow coverages up to 250 square feet per gallon. However, these rates are approximate: the deciding factor for adequate coverage is the amount determined by the test panels to achieve the desired look.

#### GUARANTEE

FABRIKEM MANUFACTURING LTD. guarantees its products when they are applied in accordance with its printed instructions. Results of inadequate surface preparation, improper mixing, incorrect application, inadequate protection, and other factors beyond the manufacturer's control cannot be held to the manufacturer's responsibility. No responsibility can be accepted beyond the purchase price of the product.

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