



# CONCRETE SURFACE RETARDER

## FORMULA F & FORMULA S FOR EXPOSED AGGREGATE SURFACES

### DESCRIPTION

**CONCRETE SURFACE RETARDER F & S** are chemical formulations which retard, but do not "kill" the set of the mortar at the surface of concrete. When the underlying concrete has hardened, the retarded mortar surface can be flushed off with a stream of water and/or removed by scrubbing with a stiff brush. Since these compounds do not "kill" the set, if they are left on the concrete or unintentionally splashed on other fresh concrete, they will permit the concrete to eventually attain a set and achieve full strength. CONCRETE SURFACE RETARDER is available in two formulations to meet varying job requirements:

**Formula F** is a paint-like emulsion designed for application directly to forms.

**Formula S** is a neutral, sprayable liquid for application to freshly placed horizontal concrete surfaces.

### PRIMARY APPLICATIONS

- Creation of exposed aggregate surfaces
- Precast panels
- Decorative sidewalks and walkways
- Bond improvement for water-proofing materials
- Slip-resistant surfaces
- Formulations for both horizontal and vertical

### FEATURES/BENEFITS

- Safe to use - easy to apply
- Works quickly and effectively
- Provides up to 1/4" (6 mm) depth retardation
- Reduces cost of mechanically preparing surfaces for waterproofing, stucco or plaster application
- Etch depth can be adjusted as desired

### TECHNICAL INFORMATION

	Formula S	Formula F
Weight/gal	8.9 lb/gal (1.1 kg/L)	8.8 lb/gal (1.0 kg/L)
Solids Content	17%	30%
VOC	≤5 g/L	653 g/L

**Appearance:** CONCRETE SURFACE RETARDER **Formula F** is a tan paint-like emulsion for application on vertical surfaces such as forms. CONCRETE SURFACE RETARDER **Formula S** is a low viscosity green liquid for application directly on freshly placed horizontal concrete surfaces.

### PACKAGING

CONCRETE SURFACE RETARDER F & S are packaged in 55 gal (208 L) drums and 5 gal (18.9 L) pails.

CONCRETE SURFACE RETARDER S is also available in cases of 1 gal (3.8 L) jugs (6 jugs per case).

### SHELF LIFE

2 years in original, unopened containers

### COVERAGE

**Formula F:** 150 ft<sup>2</sup>/gal (3.7 m<sup>2</sup>/L). This coverage rate will provide up to 1/4" (6 mm) of surface retardation.

**Formula S:** 100 to 200 ft<sup>2</sup>/gal (2.5 to 4.9 m<sup>2</sup>/L). This coverage rate will provide 1/8" to 3/16" (3.2 to 4.8 mm) of surface retardation.

### DIRECTIONS FOR USE

**Surface Preparation:** Forms to be coated should be clean and free of oil, dirt and form release agents.

**Mixing:** CONCRETE SURFACE RETARDER does not require pre-blending. These products should be used directly from the container.

**Application:** CONCRETE SURFACE RETARDER Formula F should be painted on forms without thinning in a continuous unbroken film. Forms may be coated several days in advance or in as short a time as will allow complete drying of the film. Drying time varies between one and four hours depending on weather conditions. In warm weather, forms may be stripped in one day, in cooler weather allow two to three days. Immediately after stripping remove the retarded surface mortar by flushing off with a stream of water and/or remove by scrubbing with a stiff brush. Pre-cast structural members should be stripped from their forms in their usual time and the surface mortar then removed.

**CONCRETE SURFACE RETARDER Formula S** is applied to freshly placed horizontal concrete surfaces immediately after final finishing operations. It should be applied by low pressure spray and the treated surfaces then covered to prevent rapid evaporation. The retarded mortar should be flushed off with water in 12 to 24 hours after application depending upon weather conditions.

Use BROWNTONE CS to cure and seal exposed aggregate concrete to give these surfaces a subtle, earthtoned look with an attractive gloss.

## CLEAN UP

Clean tools and equipment with soap and water before the material dries.

## PRECAUTIONS/LIMITATIONS

- These products are affected by environmental conditions. Warmer temperatures will allow earlier stripping of forms and earlier surface flushing, while cooler temperatures delay these procedures.
- Store in a dry place and protect from freezing.
- In all cases, consult the Safety Data Sheet before use.

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