



# CONCRETE RETARD COAT FOR HORIZONTAL SURFACES

**DESCRIPTION:**

Concrete Retard Coat For Horizontal Surfaces is a waterbased solution which is applied directly to a freshly placed concrete flatwork surface to retard the set of the surface cement to obtain an exposed aggregate surface.

**USES:**

Concrete Retard Coat For Horizontal Surfaces is a liquid that when sprayed on fresh soft concrete will retard the cement and expose the aggregate to produce a three dimensional surface. Concrete Retard Coat will retard the set of the surface cement between 12 to 24 hours after application and when applied as directed. The amount of retardation will be influenced by the concrete setting time which, in turn, is influenced by air temperature, concrete temperature, mix design, slump, wind and humidity. Concrete Retard Coat will only retard the surface cement and will not retard or "kill" the set of the mix.

**LIMITATIONS:**

Concrete Retard Coat For Horizontal Surfaces may only be applied to concrete flatwork. Do not apply to vertical formwork, instead use Concrete Retard Coat For Vertical Surfaces. Concrete Retard Coat is to be applied to fresh concrete surfaces only. Do not apply when rain is anticipated within 12 hours of application, when surface temperature is below 0°C, or when air temperature is above 25°C.

Using the mix design, prepare a test batch of concrete, lay the concrete and apply Concrete Retard Coat. It is recommended that in all applications that a test be conducted. It is also recommended that the work on exposed surfaces is always started as early as possible and that the applicator remain with the surface until Concrete Retard Coat is removed. If very small aggregate is used, it is important not to start the wash off too early to avoid creating bare spots. It is recommended that for concrete mixes that are going to be treated with Concrete Retard Coat, the mix design should be enriched with 20 percent more rock.

**TECHNICAL DATA:****Typical Properties**

Colour	Light Blue Liquid
Weight	2.17 pounds per Litre
Viscosity	Sprayable
Freezing Point	0°C
Boiling Point	100°C

**INSTALLATION INSTRUCTIONS:**

Place the concrete (It is recommended that the mix design is enriched with 20% more stone than the standard mix). Mag float the surface to cover all stones.

**DIRECTIONS:**

Stir Concrete Retard Coat before application. Product may settle during storage. After concrete finishing is complete, apply Concrete Retard Coat just as the surface water disappears. Apply at the specified application rate by using a brush, roller or low pressure sprayer. Protect the treated surface from wind, rain or high overhead sun. Re-apply Concrete Retard Coat to any sloping surface where run off may have occurred. When concrete's compressive strength reaches 7MPa (1000 psi) (between 12 to 24 hours), begin to expose the surface. Using a water broom or a stiff broom and hose, start washing down the surface to remove the Concrete Retard Coat. DO NOT leave material on the concrete indefinitely. As the amount of retardation desired is a personal preference, and timing of retardation is subject to many variables, it is recommended that the applicator stay with the surface and remove the Concrete Retard Coat at the exposure relief required or specified.

**RATE OF APPLICATION:**

Apply Concrete Retard Coat For Horizontal Surfaces as follows:

Surface Profile	Rate of Application
Average Retardation	3.7 m <sup>2</sup> /L (160 ft <sup>2</sup> /4 L)
Deep Retardation	2.5 m <sup>2</sup> /L (100 ft <sup>2</sup> /4 L)

**CLEAN UP:**

Clean tools and equipment with water. Clean hands and skin with soap and water.

**PACKAGING:**

Concrete Retard Coat is packaged in 4 Litre and 20 Litre containers.

**FIRST AID:**

Keep away from eyes. Use goggles during application. If in contact with eyes, flush with water immediately for 10 minutes. Call a physician. Avoid prolonged contact with skin. Use protective clothing and gloves. Wash hands thoroughly after using or before smoking or eating. If large amounts swallowed call physician immediately. Keep out of reach of children. See Safety Data Sheet for more information.

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**Notice to User** - Con-Spec Industries Ltd. warrants that the product described on the face hereof has been manufactured of selected raw materials by skilled technicians. Con-Spec Industries Ltd. shall not be responsible for any claims resulting from the failure to utilize the product in the manner in which it was intended and in accordance with instructions provided for use of product. The only obligation of Con-Spec Industries Ltd. shall be to replace any quantity of this product which proved to be defective. Con-Spec Industries Ltd. assumes no liability, loss, or damage resulting from use of this product. **Your use of this product constitutes your acknowledgment and acceptance of these terms and limitations.**



# CONCRETE RETARD COAT FOR VERTICAL SURFACES

## DESCRIPTION:

Concrete Retard Coat For Vertical Surfaces is an emulsion which is applied to concrete forms to retard the set of the surface cement to obtain an exposed aggregate surface.

## USES:

Concrete Retard Coat For Vertical Surfaces is a liquid that when sprayed on wood or steel form work will retard the cement and expose the aggregate to produce a three dimensional surface. The amount of retardation will be influenced by the concrete form work strip/wash time which, in turn, is influenced by air temperature and humidity. Concrete Retard Coat will only retard the surface cement and will not retard or "kill" the set of the mix.

## LIMITATIONS:

Concrete Retard Coat For Vertical Surfaces may only be applied to concrete formwork. Do not apply to formwork that will be subject to extreme weather conditions. Do not apply to flat or fresh concrete, instead use Concrete Retard Coat For Horizontal Surfaces. Do not apply when surface temperature is below 0°C (32°F) or when air temperature is above 25°C (77°F).

## TECHNICAL DATA:

### Typical Properties

Colour	Light Blue Liquid
Viscosity	Sprayable
Freezing Point	0°C
Boiling Point	100°C

## INSTALLATION INSTRUCTIONS:

When new or uncoated forms are to be used, coat form with a concrete release agent, before applying first coat of Concrete Retard Coat For Vertical Surfaces. Prior to commencement of the job, an actual field sample form should be made. A test using a proposed mix design should be placed in the field sample form treated with Concrete Retard Coat and stripped/washed at 24, 30 and 36 hours to satisfy which penetration depth is acceptable. It is recommended that work on vertical exposed surfaces be done to allow sufficient time the next day to strip the form and wash the surfaces.

## DIRECTIONS:

Stir Concrete Retard Coat before application. Product will settle during storage, a gentle agitation or stirring will re-emulsify the mixture. Apply Concrete Retard Coat to form by using a brush, roller or low pressure sprayer. First coat should be applied lightly. Check adhesion before applying second coat. Apply a heavy, uniform second coat as evenly as possible. Allow second coat to dry thoroughly for 2-4 hours. Protect coated forms from extreme weathering. Place Concrete (it is recommended a mix design that is enriched with at least 20% more stone than the standard mix used). Forms should be removed in 24 hours. After stripping forms, remove retarded concrete immediately. If small aggregate is used, it is important not to start wash off too early to avoid creating bare spots. Use a water jet followed by brushing.

## RATE OF APPLICATION:

Apply Concrete Retard Coat for vertical surfaces at 3.2 m<sup>2</sup>/litre (145ft<sup>2</sup>/gal).

## CLEAN UP:

Clean tools and equipment with water. Clean hands and skin with soap and water.

## PACKAGING:

Concrete Retard Coat is packaged in 4 litre and 20 litre containers.

## FIRST AID:

Keep away from eyes. Use goggles during application. If in contact with eyes, flush with water immediately for 20 minutes. Call a physician. Avoid prolonged contact with skin. Use protective clothing and gloves. Wash hands thoroughly after using or before smoking or eating. If large amounts swallowed call physician immediately. Keep out of reach of children. See Safety Data Sheet for more information.

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## FAST DRY CONCRETE RETARD COAT

### DESCRIPTION:

FAST DRY CONCRETE RETARD COAT is an alcohol based retardant solution which is applied to concrete forms to retard the set of the surface cement to obtain and exposed aggregate surface. It is thick enough to adequately coat vertical surfaces and is designed for fast drying.

### USES:

Fast Dry Concrete Retard Coat is a liquid that when sprayed on wood or steel form work will retard the cement and expose the aggregate to produce a three dimensional surface. The amount of retardation will be influenced by the concrete form work strip/wash time which, in turn, is influenced by air temperature and humidity. Concrete Retard Coat will only retard the surface cement and will not retard or "kill" the set of the mix.

### LIMITATIONS:

Concrete Retard Coat For Vertical Surfaces may only be applied to concrete formwork. Do not apply to formwork that will be subject to extreme weather conditions. Do not apply to flat or fresh concrete; use Concrete Retard Coat For Horizontal Surfaces. Do not apply when surface is below 0°C (32°F) or when air temperature is above 25°C.

### TECHNICAL DATA:

#### Typical Properties

Colour	Red Viscous Liquid
Viscosity	Sprayable

### INSTALLATION INSTRUCTIONS:

When new or uncoated forms are to be used, coat form with Concrete Form Release Agent, before applying first coat of Concrete Retard Coat. Prior to commencement of the job, an actual field sample form should be made. A test using a proposed mix design should be placed in the field sample form treated with Concrete Retard Coat and stripped/washed at 24, 30 and 36 hours to satisfy which penetration depth is acceptable. It is recommended that work on vertical exposed surfaces be done to allow sufficient time the next day to strip the form and wash the surfaces.

### DIRECTIONS:

Stir Concrete Retard Coat before application. Product will settle during storage, a gentle agitation or stirring will re-emulsify the mixture. Apply Concrete Retard Coat to form by using a brush, roller or low pressure sprayer. First coat should be applied lightly. Check adhesion before applying second coat. Apply a heavy, uniform second coat as evenly as possible. Allow second coat to dry thoroughly for 1/2 hour. Protect coated forms from extreme weathering. Place Concrete (it is recommended a mix design that is enriched with at least 20% more stone than the standard mix). Forms should be removed in 24 hours. After stripping forms, remove retarded concrete immediately. If small aggregate is used, it is important not to start wash off too early to prevent bare spots. Use a water jet followed by brushing.

### RATE OF APPLICATION:

Apply Concrete Retard Coat for vertical surfaces at 3.2 m<sup>2</sup>/litre (120ft<sup>2</sup>/US gal).

### CLEAN UP:

Clean tools and equipment with water. Clean hands and skin with soap and water.

### PACKAGING:

Concrete Retard Coat is packaged in 1 US Gallon containers.

### FIRST AID:

Contains methanol. Use in well ventilated areas only. Keep away from eyes. Use goggles during application. If in contact with eyes, flush with water immediately for fifteen minutes. Call a physician. Avoid prolonged contact with skin. Use protective clothing and gloves. Wash thoroughly after using or before smoking or eating. If swallowed, give patient 1 to 2 glasses of water. Do not induce vomiting. Call physician immediately. Keep out of reach of children.

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