

## Corrocoat AC

### Flexible anti-carbonation coating

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#### Product Features

**Corrocoat AC** is a single component, high performance, elastomeric, protective and decorative coating based on special acrylic polymers with a penetrating acrylic modified silane primer, designed to protect exposed reinforced concrete structures from chloride ions, carbon dioxide, acid gases, water, salts and extreme weathering.

**Corrocoat AC** can reduce chloride ion penetration by up to 97% and dramatically increases concrete cover, whilst also providing excellent long term UV protection.

**Corrocoat AC** is normally applied in two coats to a nominal dry film thickness of 110 - 150 microns per coat and is available in a range of attractive colours.

#### Typical Uses

**Corrocoat AC** is typically used to protect new or existing concrete and masonry against weathering, particularly in harsh areas subject to high levels of chlorides such as coastal or estuarine areas, high humidity environments, and areas with high concentrations of carbon dioxide, particularly from traffic exhaust fumes such as car parks and tunnels.

#### Technical Data

Properties	Typical Values
Solids content @ room temperature	: 70%
CO <sup>2</sup> diffusion resistance	: 8.25 x 10 <sup>-7</sup> cm <sup>2</sup> S <sup>-1</sup>
Water vapour transmission	: 50 g / m <sup>2</sup> / 24 hours
Chloride ion diffusivity	: Nil
Reduction in chloride ion penetration	: 97%
Reduction in water absorption	: 95%
Water sorptivity	: 0.006 mm/min <sup>1/2</sup>
Tear resistance	: 13 Pa
Chemical resistance	: resistant to gasoline, diesel, sewage, water, weak acids, weak alkalis
<b>Corrocoat AC primer</b>	
Solid content (active ingredients)	: over 10%
Specific gravity @ 25°C	: 0.88 ± 0.02
Kinematic viscosity @ 25°C	: 0.97 cSt
Water sorptivity	: 0.007 mm/min <sup>1/2</sup>
Rapid chloride permeability	: very low
Chloride ion diffusivity	: Nil

Note: All values given are subject to 5 - 10% tolerance.

#### Directions for Use

##### Preparation

Long term durability and function can only be achieved with good preparation to give a strong adhesive & mechanical bond to the substrate.

New concrete should be fully cured with a maximum residual relative humidity (RH) of 75%.

Prepare surfaces preferably by mechanical methods such as grinding to remove laitance, curing compounds and other loose materials and provide a key for **Corroprime AC**.

After preparation, fill all blow holes and surface imperfections using **Corrofill AR** (see separate data sheet) to provide a smooth even surface prior to priming or over coating. Allow to dry and lightly abrade before over coating.

##### Priming

Prior to the application of **Corrocoat AC**, prime the prepared surface using **Corroprime AC**.

Apply **Corroprime AC** using a brushes, rollers or low pressure knap-sack sprayer to the prepared concrete surface at a rate of 4 - 5 m<sup>2</sup> per litre. Allow the primer to become dry before applying **Corrocoat AC**. This is typically 30 – 90 minutes, depending on temperature and conditions.

A second priming coat may be required if the substrate is particularly porous.

Re-prime if the primer coat has not been over coated within 18 hours.

Surface contamination, stones & debris must be removed prior to the subsequent application of **Corrocoat AC**.

##### Mixing

Stir the material thoroughly to mix any solid materials that may have settled at the bottom of the packaging, until a homogenous consistency is achieved.

##### Application

A minimum of 2 coats of **Corrocoat AC** are recommended.

Apply the first coat of **Corrocoat AC** using brushes or rollers in a continuous uniform coating to the primed concrete surface, at a theoretical coverage rate of 4.5 – 6.7 m<sup>2</sup> per litre, to give an approximate wet film thickness of 150 – 215 microns.

For high risk applications, we recommend a fabric scrim be embedded into the wet first coat, particularly at junctions and joints in concrete substrates, to reinforce the coating.

Apply the second coat of **Corrocoat AC** in the same manner as the first, allowing at least 12 hours drying time between coats.

A third coat of **Corrocoat AC** may be required if the substrate is particularly porous.

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### Curing

No special curing is required for **Corrocoat AC**.

### Hot weather conditions

For application above 40°C we recommend adopting the following guidelines:

Store materials in a cool preferably air conditioned environment.

Keep equipment that will be in contact with the product cool and away from direct sunlight.

Avoid application during the hottest time of day.

### Cleaning

Clean tools & equipment immediately after use with detergent and water.

### Limitations

**Corrocoat AC** should not be used in areas subject to permanent immersion or negative hydrostatic pressure.

Substrate temperatures should be above 5°C and rising.

For application in temperatures above 40°C please refer to hot weather condition recommendations.

Avoid application if the work area may be subject to the onset of rain, moving water, or humidity above 90%.

All products should be used within the pot life. Materials not used within the specified time should be discarded.

The product should not be thinned with any type of solvent under any circumstances.

If the above general application details do not meet with your requirements, please contact Corrotech for a project specific method statement.

Never allow product to freeze.

### Estimating

**Corrocoat AC** pack size: 20 litres. Coverage rate approximately 5 - 6 m<sup>2</sup> per litre @ 125 microns dry film thickness per coat

**Corrofill AR** pack size: 20 litres. Coverage rate approximately 2 – 5 m<sup>2</sup> per litre depending on surface profile

**Corroprime AC** pack size: 20 litres. Coverage rate approximately 4 - 5 m<sup>2</sup> per litre

All coverage rates given are theoretical and subject to actual site conditions. We recommend trial areas are done to establish practical consumption particularly for primers.

### Health & Safety

Always use appropriate PPE including gloves, goggles and a barrier cream to avoid contact with skin and eyes.

Should contact with skin or eyes occur, wash immediately with plenty of clean water and seek medical advice.

If swallowed, seek medical attention immediately. Do not induce vomiting.

Avoid inhalation and ensure adequate ventilation or suitable respiratory equipment if working in confined spaces.

Do not expose products to fire or naked flames under any circumstances.

Always refer to the product Material Safety Data Sheet (MSDS) for full health & safety and handling recommendations.

### Storage

**Corrocoat AC** has a maximum shelf life of 12 months from the date of manufacture.

To maximize shelf life always store products in their original, unopened packaging in a dry environment, away from direct sunlight with a minimum temperature of 10°C.

Damaged packaging, high humidity or extreme temperatures may reduce the shelf life.