

Kortarflex NB

CEMKRETE

High performance coal tar epoxy coating

Innovative products for your success

Uses

To provide protection to concrete and metal structures in aggressive environments. The material is economical particularly used in dirty water situations such as sewage works, effluent plants and dock and harbour installations.

Advantages

- High film build in a single application
- Easily applied by brush and airless spray
- Provides long term protection
- No primer necessary
- Economic and versatile

Description

Kortarflex NB is a thixotropic, coal-tar extended, two pack epoxy formulation, containing inert, reinforcing fillers and a special blend of solvents. It is supplied in pre-measured quantities ready for site mix use.

Technical Support

Cemkrete offers a comprehensive range of high performance, high quality products suitable for use within all aspects of the concrete repair and protection industry. In addition, the company also offers a technical supports to specifiers, end users and contractors, as well as on-site assistance.

Design criteria

Kortarflex NB is designed to be applied in two coats to achieve a minimum total dry film thickness of 350 microns. To achieve the correct protective properties, **Kortarflex NB** must be applied at the coverage rates recommended.

Properties

Volume solids : 80± 2%

Pot life :

@ 20 °C : 4 hours
@ 35 °C : 90 minutes

The fully cure coating is resistant to

: Water
Saturated sodium chloride
Sewage water
Dilute mineral acids
Dilute mineral alkalis
Acetic acid
Salt solutions

The local Cemkrete office should be consulted for resistance to specific chemicals and conditions.

Application Instructions

Preparation

Concrete surfaces

All surfaces must be dry, smooth, sound and free from debris and loose material. Surfaces must be free from contamination such as oil, grease, dust, loose particles and organic growth. Concrete surfaces must be fully cured, laitance free and free from any traces of shuttering release oils and curing compounds. All surfaces should then be prepared to remove all foreign matter, surface laitance and provide a suitable key for **Kortarflex NB**. All blow holes and imperfections should be filled with Cemkrete repair mortar. Consult separate data sheet for pot file and over-coating time.

Steel surfaces

All surfaces should be prepared to meet the requirement of BS 4232, First Quality.

The lining work should be programmed so that newly cleaned steel is coated as soon as possible before the formation of rust or scale.

Mixing

The contents of the base can should be stirred thoroughly to disperse any settlement. The entire contents of the hardener can should then be added to the base container and mixed thoroughly until a uniform colour and consistency are obtained, taking particular care to scrape the sides and bottom of the container. It is recommended that mechanical mixing be employed using a mixer on a heavy duty, slow speed electric drill.

Application

Number of coats (minimum) : 2
Theoretical application rate per coat : 0.36 kg. Per m²

Theoretical wet film

Thickness per coat : 190 microns

Overcoat times :

@ 5 °C : 16-96 hours
@ 20 °C : 16-72 hours
@ 35 °C : 16-48 hours

Fully cured :

@ 5 °C : 14 days
@ 20 °C : 7 days
@ 35 °C : 4 days

The minimum application temperature is 5 °C.

Kortarflex NB

CEMKRETE

High performance coal tar epoxy coating

Innovative products for your success

Application (Continue)

All surfaces should be treated with at least two coats of **Kortarflex NB**.

The first coat should be applied by brush or airless spray to achieve a uniform coating with a Wet-Film-Thickness not less than 190 microns. This coat should be allowed to dry for 16 hours at 20 °C.

The second coat should be applied as above, again achieving a Wet-Film-Thickness not less than 190 microns.

If a Wet-Film-Thickness of 190 microns per coat is not achievable, nor desired because of possible problems with solvent entrapment, then the number of coats must be increased to obtain a total Wet-Film-Thickness of 380 microns.

When using airless spray equipment, a nozzle pressure of 2000 psi (140 bars) and a nozzle orifice of 0.031 inch are required at 20 °C.

Cleaning

Kortarflex NB should be removed from tools and equipment with Solvent immediately after use. Cured material can only be removed mechanically.

Limitations

Kortarflex NB is formulated for application on cleaned, sound concrete and steel surfaces.

Kortarflex NB should not be applied over existing coatings.

Application should not be undertaken if the temperature is below 5 °C or is 5 °C and falling, nor when the prevailing relative humidity exceeds (RH) 90%.

Kortarflex NB is not colour stable when exposed to direct sunlight, nor when in contact with some chemicals.

Specification clauses

Corrosion, chemical and abrasion resistant lining:

The chemical and abrasion resistant coating shall be of a high build, solvent containing, coal-tar extended two pack epoxy material, specifically designed to provide a tough, impermeable and resistant film.

Fire

Kortarflex NB is flammable. Keep away from sources of ignition. No smoking. In the event of fire, extinguish with CO₂ or foam. **Do not** use a water jet.

Flash points

Kortarflex NB : 30 °C

For further information, refer to the Product Material Safety Data Sheet.

Estimating

Supply

Kortarflex NB : 5 kg. (A+B) per pack

Coverage

Kortarflex NB : 13 -14 m² per kg. per coat
at 150 microns dry film thickness

The coverage figures are theoretical - due to wastage factors and the variety and nature of substrates, practical coverage figures may be substantially reduced.

Storage

Shelf life

All products have a shelf life of 12 months if kept in a dry store between 5 °C and 30 °C in the original, unopened containers.

Storage conditions

Store in dry conditions at temperatures between 5 °C & 30 °C in the original, unopened containers. If stored at high temperatures, the shelf life will be reduced.

Precautions

Health and safety

Kortarflex NB contains coal tar pitch and is flammable.

Harmful : possible risk of irreversible effects in contact with skin. Harmful by inhalation: Avoid contact with eyes and inhalation of vapour. Ensure adequate ventilation. If working in confined areas, then suitable respiratory equipment must be worn. Some people are sensitive to resins and solvents. Wear suitable protective clothing, gloves and eye/face protection. Barrier creams provide additional skin protection. Should accidental skin contact occur, remove immediately with a resin-removing cream, followed by soap and water. **DO NOT** use solvent. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice. If swallowed, seek medical attention immediately - **DO NOT** induce vomiting.

Important Note: Cemcrete warrants its materials free of manufacturing defects and produced as per standard specifications and sold under the terms and conditions of usages, whilst Cemcrete endeavors to ensure that any advice, recommendation, or information, given through its products literatures are reflects of the R&D in-house lab test and practical sites experience and knowledge based feed backs, however, the products are being used under various conditions and applied beyond its control where or how either directly or indirectly at various locations and places at a different stages that of an intended purposes and uses. Therefore, Cemcrete cannot hold warranty or responsible for resultant consequences, such as damages to the property or assets but the product itself.