

Product Data Sheet

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CN2000®C – CN2000®D

ISO 9001-2015 — GB/T19001-2015
CERTIFIED



Manufacturer:

ZHONGHE WATERPROOF MATERIAL CO. LTD.
China

Exclusive International Distributor:

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FLEXIBLE -- Polymer Modified Cementitious Waterproofing Coating

Description:

The waterproof material **CN2000®C & CN2000®D (CN2000®C-D FLEXIBLE)** is a polymer/ latex and cement composite coating. It has a dual function of volatilization solidification and reaction solidification.

After thoroughly mixing **CN2000®C** and **CN2000®D** in the proper ratio and applying to the substrate surface, a polymer latex is formed which wraps the cement granules present on the substrate surface. The latex dehydrates and becomes a form of continuous rubber membrane with an engineered strength and elasticity.

The cement absorbs other water to cause a hydro-reaction and develops into insoluble crystals. The crystal combines with the above-mentioned rubber membrane forming an impenetrable waterproof coating with an integrated structure.

The **CN2000®C-D** coating membrane has a designed elasticity and can be utilized in the waterproofing of expansion joints and deformation joints of concrete construction. It can also be used in waterproofing of concrete structures that are permanently immersed in water.

CN2000®C-D can be utilized in large areas of waterproofing that have been previously coated with **CN2000®B**, rigid waterproof material to enhance the coating with flexible properties.

CN2000®C-D can be used as a coating film over **CN2000®B** that has not cured to ensure its proper hydration during the curing process.

Applications:

CN2000®C-D can be utilized in the following projects for waterproof and anti-corrosion in structurally sound concrete structures:

- ▶ Highway Overpass Structures
- ▶ Bridges and Piers
- ▶ Underground and Tunnels
- ▶ Mining
- ▶ Potable Water Facilities
- ▶ Sewage Treatment and Transport

- ▶ Hydro Electric Facilities
- ▶ Seaports and Seaways
- ▶ Swimming Pools
- ▶ Ponds and Waterfalls
- ▶ Lavatories and Kitchens

Advantages:

All technical performances of **CN2000®C-D** achieve or exceed national and industrial standards.

- ▶ **CN2000®C-D** is water-soluble and is non-toxic, odorless and flavorless; it's safe to the human body and is non-polluting to the environment.
- ▶ **Environmentally Friendly Product**
- ▶ Application is executed at normal temperatures. The **CN2000®C-D** coating is thin and the application procedure is simple and quick. Curing requires only natural air drying.
- ▶ **CN2000®C-D** can firmly adhere to materials such as concrete, marble, wood, glass, plastics, metal, etc.
- ▶ Coating varies with the shape of the concrete substrate surface without joints. **CN2000®C-D** can be applied by trowel, brush coating or spray coating. **CN2000®C-D** is extremely flexible and has high strength.
- ▶ **CN2000®C-D** has superior resistance to the effects of extreme temperature variations and is resistant to ultraviolet radiation, oxidation, and carbonation. (Effective at temperatures of up to 160°C)
- ▶ Its freeze-thaw resistance and anti-corrosion abilities are superior.
- ▶ **CN2000®C-D** can be utilized in any project exposed to water, seawater and/or soil with high salinity.

Packaging:

- ▶ **CN2000®C** (Liquid Latex) 25kg Sealed Plastic Pail with pour spout.
- ▶ **CN2000®D** (Dry Material) 25kg Sealed Plastic Pail.

Storage:

- ▶ **CN2000®C**: When stored in a dry place away from direct sunlight, between 5°C – 40°C, in the original packaging unopened and undamaged, the shelf life is 1 year.
- ▶ **CN2000®D**: When stored in a dry place, between -30°C – 40°C, in the original packaging unopened and undamaged, the shelf life is 2 years.

How to Use CN2000®C-D

Coverage Area:

For Normal surface conditions 25kg (55lb) bucket of CN2000C and 25kg (55lb) bucket of CN2000D when mixed together (1:1) will cover approximately 84m² (900ft²)

The coverage rate for **each** coat is approximately .50kg – 1kg/m².

In General:

1 kg/m² (thickness: Approx. 0.5 mm).

Each coat at approx. 0.3 mm or less

Finished coating should be 1 mm to 1.2 mm thick

(Unless specified by specific engineering requirements -- refer to the product instruction manual.)

**CN2000®C and CN2000®D
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Remarks:

Typical application of CN2000C-D when applied on top of the CN2000B coating for curing requires one consistent coat.

Final coating should be approximately .50mm - 1mm (.02" - .04") thick.

For proper coverage – 1st coat - left to right – 2nd coat from top to bottom

Unless specified by engineering requirements – refer to the product instruction manual.

For any additional applications, contact the sales representative.

Surface Preparation:

- ▶ Allow at least 7 days or more curing of the concrete of last pour before coating.
- ▶ The substrate surface must be solid and clean. Seepage, dust, oil stains and any dirt should be cleared and removed.
- ▶ If the substrate surface has been smoothed by rolling, it should be roughened.
- ▶ The loose honeycomb--type concretes, hollows, joint seams and holes left over by pull rods and scaffolds must be eliminated beforehand and filled with **CN2000® MORTAR**, in order to obtain the best application surface.
- ▶ The substrate surface must be dry.
- ▶ In areas that require reinforcement, utilization of approved fibrous netting is recommended. (See product instruction manual)

Mixing:

Materials' ratio (By weight):

Trowel coating: Brush coating: Spray coating:

CN2000®C: CN2000®D = 1:1 (By Weight)

For structures that are permanently immersed – the ratio is:

CN2000®C: CN2000®D = 2:3 (By Weight)

Mix weighed measures of **CN2000®C** with **CN2000®D**. (**CN2000®C** must be in mixing container first.) Mix only as much material as can be used within 20 to 30 minutes and stir the mixture evenly, leaving no visible powders. The stirring time generally is 3 to 5 minutes by mechanical means. (i.e. electric drill with paddle)

Once the **CN2000®C-D** mixture is completed, you must not add water to thin the remaining mixture for reuse. It must be disposed of.

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Applying:

Brush or Roller Application for Curing CN2000®B: After CN2000®B has initially set (not tacky to the touch), apply one consistent coat of CN2000®C-D on top of final coat of CN2000®B to keep hydrated for curing purposes. (Recommended method)

Trowel coating: Under certain conditions using a trowel or squeegee, apply evenly mixed CN2000®C-D to the working surface. First apply into the corners, sides and shaped areas. Then apply on the level surfaces. Each coating should be applied consistently and in one direction. Successive coatings should be applied perpendicular to the last coat. The thickness of joining layers should be very thin and even.

Allow preceding coating to dry for approximately 3 hours before applying the next coating. Apply 4 or more coatings to reach the total required thickness of 1mm – 1.2mm. (Or coating thickness specified by specific engineering requirements) For the best results each coat should be less than 0.3mm thick.

Brush coating: the procedures are the same as with trowel coating.

Spray coating: Except for using special spray equipment, the procedures are the same as with trowel coating.

Typical Data:

	CN2000®C	CN2000®D
State:	Liquid Latex	Powder
Color:	Milk White	Off White
Density:	1.05	
Bulk Density:		Approx. 1.3

Precautions:

- ▶ The best temperature for application is 20°C ± 10°C. Avoid application under 5°C or above 35°C, or in hot, dry environments.
- ▶ Do not apply CN2000®C-D at or below freezing temperatures.
- ▶ The waterproof coating must thoroughly dry before the next construction process is initiated to avoid destroying the coating.
- ▶ If vehicles and pedestrians are to pass over the waterproof coating, protective covers are required. (Pavement, tiling etc.)

First Aid:

- ▶ **CN2000®C-D** is cementitious. Avoid contact with skin and eyes. In case of contact with eyes or skin, rinse immediately with plenty of water and seek medical advice if necessary.
- ▶ Workers should wear masks, goggles and gloves while mixing and stirring the product.
- ▶ **Keep out of reach of children.**

Disposal:

CN2000®C-D is cementitious and should be disposed of as required by Federal, State, Provincial and Municipal laws and By-Laws.

CN2000®C-D is an **Environmentally Friendly Product.**

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Warranty:

ZHONGHE Waterproof Material Co., Ltd. warrants that the products manufactured by it comply with the national standard **JT/T894--2001 Polymer modified Cementitious Waterproofing Coating**, shall be free from material defects and will conform to formulation standards and contain all components in their proper proportion.

Should any of the products be proven defective, the liability to **ZHONGHE Waterproof Material Co., Ltd.** shall be limited to replacement of the material proven to be defective.

ZHONGHE Waterproof Material Co., Ltd. shall in no case be liable for incidental or consequential damages.

If problems are caused due to violation of the use regulations, **ZHONGHE Waterproof Material Co., Ltd.** will not be responsible.