# **CEMGUARD HB 500**

A REACTIVE NANO SILICATE HYBRID COATING



## **DESCRIPTION**

**CEMGUARD HB 500** is a hybrid coating which is synthesized of inorganic component as a main component and organic component as a subcomponent with molecular unit reaction. It simultaneously has both inorganic properties such as fire resistance, diamond hardness, acid resistance and organic properties such as water resistance, alkali resistance, toughness and shock resistance. It is an eco-friendly product which contains very little hazardous organic solvent.

#### **USES**

**CEMGUARD HB 500** provides exceptional adhesion to a variety of substrates including prepared old/new concrete floors which are free from oil, stain and other contaminants. Area of application includes car parking lot, aircraft hangar, machinery room, utility room, maintenance room, factory, warehouse, chemical lab, general office and food processing plant.

## **BENEFITS**

- Anti stain, Anti-Graffiti.
- Chemical and oil resistant.
- Fire resistant cured coating is nonflammable (>500 °C).
- Extremely hard wearing, behave like glass when fully cured.
- Water tolerant product is not sensitive to ground moisture.
- Product is not sensitive to high humidity and low temperature during application.

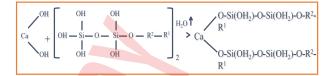
#### **COLOR**

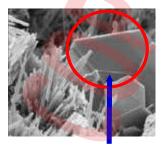
Available in clear and in six standard colors: Red, Blue, Green, Yellow, Light Grey and Dark Grey.

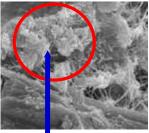
#### **FINISH**

Semi gloss

# **CEMGUARD HB 500 STRUCTURE**







Calcium Hydroxide

Transformation to Calcium Silicate Hydrate and other organic compound.





Shopping Center Carpark, Bangkok

University Carpark, Cambodia

Technical Data :	Snopping Center Carpank, Bangkok University Carpank, Cambodia
No. of Components	2
No. of Coats Recommended	2-3
Recommended Dry Film Thickness	100 - 200 μm (depends on application process)
Mixing Ratio (By Weight)	Pigmented         11:7           Clear         11:3.14
Estimated Coverage	Pigmented 10m²/kg/coats (depending on porosity of substrates) Clear 12m²/kg/coats (depending on porosity of substrates)
Curing Time	Tack-free time 2 - 4 hours @ 30°C Recoat 4 hours @ 30°C Vehicular Traffic 8 hours @ 30°C
Bond Strength	>2.5 N/mm² (failure in concrete)
Compressive Strength	Stronger than concrete
Temperature Resistance	>500°C
Abrasion Resistance	0.1 - 0.5 ml/cycle (1kg, H-22 Wheels)
Pot Life	20 minutes at 30°C
Packaging	Pigmented Part A:11kg; Part B:7kg Clear Part A:11kg; Part B:3.14kg

The information given in this data sheet is to the best of our knowledge true and accurate; but as we have no control over where or how the product is applied, there are no warranties expressed or implied regarding the product's use or performance. Customers are advised to thoroughly test before adapting them to their own use. It is strongly recommended to trial on small area before large scale application.



























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# APPLICATION PROCEDURE SURFACE PREPARATION

Substrate to be coated should be structurally sound, clean, and free from loose particles, oil, grease and other contaminants.

# **APPLICATION**

Apply mixed material by short nap roller or spray. Take precaution not to have material build up on joints or it may create roller marks or worse, a difference in color tone. Roller must be applied in uniform strokes and directions to avoid joint marks.

## **MIXING**

As the material may settle after long storage, it is very important to stir each component separately using a slow speed (750rpm) electric drill fitted with a paint mixer or a wing type mixing paddle. Then pour the entire content of Part B into Part A and continue to mix for 1-2 minutes until homogeneous before use. Over mixing must be avoided to minimise air entrainment and shortened pot life.

#### **CLEANING**

Clean all tools and application equipment immediately after use with thinner. Hardened / cured material can only be removed mechanically.

# **TEMPERATURE**

Cemguard HB 500 should not be applied on substrate with temperatures <10°C or >30°C.

# **STORAGE & SHELF LIFE**

Shelf life of approx. 6 months if stored in dry conditions in its original unopened packaging at 30°C

#### **PRECAUTION**

**CEMGUARD HB 500** is flammable during application and even after 4 hours from application. Care should be taken not to ignite **CEMGUARD HB 500** during application.

# **MAINTENANCE**

Regular cleaning and maintenance will prolong the life of all resin floors, enhance the appearance and reduce the tendency to retain dirt.

#### **SAFETY**

Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Do not take internally. Wear skin and eye protection. Conform to local regulations for disposal. For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety related data

# **FURTHER INFORMATION**

Where other products are to be used in conjunction with this material, the relevant technical data sheets should be consulted or tested at site to determine product compatibility.

**CEMKRETE** have a wealth of technical and practical experience built up over many years in our pursuit of excellence in flooring and concrete technology, customers are welcome to call our Technical Service Department.

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