

## STONKOTE HB4

### PRODUCT DESCRIPTION

Stonkote HB4 is a two-component, 100% solids, highbuild, protective epoxy floor coating. Stonkote HB4, due to its high-build composition, has increased abrasion resistance when compared to a general service thin film coating. It also has enhanced aesthetic appeal and cleanability. Stonkote HB4 cures to a high gloss, smooth finish

### USES, APPLICATIONS

Stonkote HB4 is designed for use whenever a highbuild, 100% solids, chemical resistant, high-gloss, smooth epoxy coating is required on horizontal surfaces. Some applications of Stonkote HB4 are:

- In conjunction with various Stonhard flooring systems
- Substrates requiring high-build, protective coating that is easily cleaned and maintained
- Protection of concrete surfaces exposed to abrasive or corrosive environments

### PRODUCT ADVANTAGES

- 100% solids
- High-build, epoxy coating
- Dense, impervious finish with good stain resistance
- Long-term abrasion and corrosion resistance
- Easily applied to horizontal surfaces
- Excellent bond strength assures good adhesion
- Bonds to many different substrates.
- Durable, high-gloss finish permits easy cleaning and maintenance.
- Factory proportioned packaging ensures consistent, high quality, simplified mixing.

### PACKAGING

Stonkote HB4 is packaged in units for easy handling. Each unit consists of one carton containing:

- 1 gallon pail of Part A (curing agent)
- 5 gallon pail of Part B (resin)

### COVERAGE

Approximately 23 m<sup>2</sup> per 4 gallon unit at 508 to 762 μm thickness (DFT).

### STORAGE CONDITIONS

Store all components of Stonkote HB4 between 16 to 29°C in a dry area. Avoid excessive heat and do not freeze. The shelf life is one year in the original, unopened container.

### COLOR

Stonkote HB4 is available in 14 standard colors. Refer to the Stonclad color sheet. Custom colors are available upon request.

### SUBSTRATE PREPARATION

#### Preparing Stonhard Flooring Systems

Before coating a Stonhard floor, all trowel marks and surface imperfections must be removed to produce a smooth surface. Grind the floor using a floor grinder with medium stones and vacuum using an industrial wet/dry vacuum to remove all dust particles. The Stonhard floor is now ready to be coated with Stonkote HB4.

### PHYSICAL CHARACTERISTICS

Percent Solids	100%
Pot Life (@ 25°C)	35 minutes
Suggested Number of Coats	One
Coverage @ 762 μm (DFT)	23 m <sup>2</sup> per unit
Cure Rate (@ 25°C)	8 hours for tack-free surface 24 hours minimum for normal operations
Temperature Limitations.	60°C continuous exposure 93°C intermittent exposure
Fire Resistance of Dry Film	Self-extinguishing

**Note:** The above physical properties were measured in accordance with the referenced standards. Samples of the actual floor system, including binder and filler, were used as test specimens. All sample preparation and testing is conducted in a laboratory environment, values obtained on field applied materials may vary and certain test methods can only be conducted on lab made test coupons.

### Preparing Concrete Substrates

Proper preparation is critical to ensure an adequate bond. The substrate must be dry and free of all wax, grease, oils, fats, soil, loose or foreign materials and laitance. Laitance and unbonded cement particles must be removed by mechanical methods, i.e., abrasive blasting or scarifying. Other contaminants may be removed by scrubbing with a heavy-duty industrial detergent (Stonkleen DG9) and rinsing with clean water. The surface must show open pores throughout and have a sandpaper texture. For recommendations or additional information regarding substrate preparation, contact Stonhard's Technical Service Department.

### PRIMING

Apply Standard Primer to the substrate. Next, apply the first coat of SL Primer. Then, apply the second coat of SL Primer 30 minutes after beginning the first coat. Both the Standard Primer and the first coat of SL Primer must be wet while applying each coat of SL Primer. The primer system must be applied by squeegee and cure to a tack-free state before applying the Stonkote HB4.

### MIXING

Stonkote HB4 is supplied in factory proportioned quantities. To achieve thorough and proper mixing, the Stonkote HB4 must be mechanically mixed using a heavy-duty, slow-speed drill (400 to 600 rpm) with a Jiffy Mixer. Pre-mix the Part B for 45 seconds. Empty the contents of the Part A into the Part B pail and continue to mix to a uniform consistency for 1 to 2 minutes. Avoid high speed mixing that will entrain air into the mix. Thorough mixing of the two components is required.

## POT LIFE

After mixing, Stonkote HB4 has a working time of approximately 35 minutes at 25°C. The working time may vary depending upon ambient and surface conditions.

## APPLYING

Stonkote HB4 can be applied at ambient temperatures of 16 to 29°C and humidity below 80%. The HB4 must be applied immediately after mixing the two components. Stonkote HB4 is applied with a V-notched rubber squeegee, a spiked roller and a looped roller. The roller is used to remove squeegee lines and smooth out the surface. Stonkote HB4 may be applied at variable thicknesses ranging from 381 to 762 µm dry film thickness.

If two applications of Stonkote HB4 are necessary, the second application should begin within 24 hours of the original coating. If the original coating has been allowed to cure for more than 24 hours, the coated surface must be re-prepared. To prepare the surface of the Stonkote HB4 for a second coat, utilize a Clarke® sander with 80 grit sand paper to roughen the surface, then ensure that all dust is thoroughly removed from the surface. Any questions regarding the application of Stonkote HB4 should be directed to Stonhard's Technical Service Department.

## CURING

The surface of Stonkote HB4 will be tack-free in 8 hours at 25°C. The coated area may be put back into service in 24 hours. Ultimate physical characteristics will be achieved in 7 days.

## RECOMMENDATIONS

- Apply only on a clean, sound and properly prepared substrate.
- Minimum ambient and surface temperatures are 16°C at the time of application.
- Do not use water or steam in the vicinity of the application. Moisture can seriously affect the working time and properties of the material.
- Application and curing times are dependent upon ambient and surface conditions.

## PRECAUTIONS

- Toluene and Xylene solvents are recommended for clean up of the unreacted Stonkote HB4 material.
- Use these materials only in strict accordance with the manufacturer's recommended safety procedures.
- Dispose of waste materials in accordance with government regulations. The reacted material will require mechanical means of removal.
- The use of safety glasses and impervious gloves is required during application.
- In case of contact, flush the area with copious amounts of water for 15 minutes and seek medical attention. Wash skin with soap and water.
- Use only with adequate ventilation.

## NOTES

- For environments not referenced in the Chemical Resistance Guide, consult Stonhard's Technical Service Department for recommendations.
- Material Safety Data Sheets for Stonkote HB4 are available on line at [www.stoncor-europe.com](http://www.stoncor-europe.com) under Tech Info or upon request.
- A staff of technical service engineers is available to assist with product application or to answer questions related to Stonhard's flooring products.
- Requests for technical literature or service can be made through local sales representatives and offices, or corporate offices located worldwide.

## CHEMICAL RESISTANCE GUIDE

The purpose of this guide is to aid in determining the potential value of Stonkote HB4 when exposed to the damaging effects of corrosive chemical environments.

## RATING CODE

E - Excellent  
 G - Good  
 NR - Not Recommended  
 OS - Suitable for use where "occasional spillages" occur, when flushing with water immediately follows.

### ACIDS

	RATING		RATING
Acetic - 5%	G	Hypochlorous - 5%	E
Acetic - 20%	OS	Lactic - up to 20%	OS
Acetic - Glacial	NR	Maleic - 30%	G
Benzoic - Sat.	E	Maleic - 40%	OS
Boric - Sat.	E	Nitric - 10%	G
Butyric - 10%	OS	Nitric - 30%	OS
Chromic - 10%	G	Oleic	G
Chromic - 20%	OS	Oxalic - Sat	E
Citric - 50%	E	Perchloric - 35%	G
Cresylic	OS	Phosphoric - up to 50%	OS
Diglycolic	G	Picric - Sat	E
Fatty	G	Phthalic	G
Fluoboric	G	Succinic - Sat	E
Formic - up to 10%	OS	Sulfuric - 20%	E
Heptanoic	OS	Sulfuric - 50%	G
Hydrochloric - 15%	G	Sulfuric - 70%	OS
Hydrochloric - 37%	OS	Tannic - Sat.	G
Hydrofluoric - 10%	OS	Tartaric - Sat	E

### ALKALIES AND SALTS

Stonkote HB4 is rated Good to Excellent when exposed to most alkalies and salts.

### SOLVENTS AND OTHER CHEMICALS

	RATING		RATING
Acetone	NR	Linseed Oil	G
Alcohol (Methyl)	OS	Methyl Ethyl Ketone	NR
Alcohol (Ethyl, Propyl, Isopropyl, Butyl)	G	Methylene Chloride	NR
Benzene	OS	Milk	E
Carbon Tetrachloride	OS	Mineral Spirits	G
Corn Oil	E	Naphtha	G
Cyclohexane	G	Oils - Cutting	G
Denatured Alcohol	G	Oils - Mineral	E
Ethylene Glycol	G	Oils - Vegetable	G
Ether	OS	Perchloroethylene	G
Formaldehyde	G	Skydrol	G
Gasoline	E	Sucrose - Sat. (Sugar)	E
Glycerine	E	Toluene	OS
Hydrogen Peroxide - 10%	G	Trichloroethylene	NR
JP5 Jet Fuel	G	Urea	G
Juices - Fruit	E	Vinegar (Household)	G
Juices - Vegetable	E	Water	E
Lard	G	Xylene	OS

**Note:** This data is based on laboratory tests performed under carefully controlled conditions. (All solutions are at ambient temperatures.) No warranty can be expressed or implied regarding the accuracy of this information as it will apply to actual plant operation or job site use. Plant operations and job site uses vary widely, and the individual results obtained are affected by the specific conditions encountered, which are beyond our control.

#### IMPORTANT:

Stonhard believes the information contained here to be true and accurate as of the date of publication. Stonhard makes no warranty, expressed or implied, based on this literature and assumes no responsibility for consequential or incidental damages in the use of the systems described, including any warranty of merchantability or fitness. Information contained here is for evaluation only. We further reserve the right to modify and change products or literature at any time and without prior notice.

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