# **STONHARD**

# **STON**KOTE® HT4

# PRODUCT DESCRIPTION

Stonkote HT4 is a two-component, I 00% solids, epoxy coating. It is specifically formulated to provide outstanding protection from a wide range of chemicals while increasing abrasion resistance and cleanability. Stonkote HT4 is easily applied and hardens to an attractive gloss finish.

#### **USES. APPLICATIONS**

Stonkote HT4 is an excellent protective coating and enhances the chemical and abrasion resistance of Stonclad flooring systems. Stonkote HT4 also exhibits outstanding cleanability with an attractive appearance.

# PRODUCT ADVANTAGES

- 100% solids
- · Long-term abrasion and corrosion resistance
- Excellent bond strength ensures good adhesion
- Protects against moisture penetration
- Easy to apply to vertical and horizontal surfaces
- Durable gloss finish permits easy cleaning and maintenance
- Factory proportioned packaging ensures consistent, high quality mixing

# **PACKAGING**

Stonkote HT4 is packaged in units for easy handling. Each unit consists of:

- I carton containing:
  - 4 foil bags of Part A (curing agent)
  - 4 poly bags of Part B (resin)

#### COVERAGE

Approximately 400 sq. ft./37.16 sq. m per unit at 4 mil thickness over a porous substrate (unsealed concrete, uncoated mortar systems, etc.).

Approximately 750 sq. ft./69.68 sq. m per unit at 4 mil thickness over a sealed substrate (primed concrete, coated mortar system, etc.)

# STORAGE CONDITIONS

Store all components of Stonkote HT4 between 60 to 85°F/16 to 30°C in a dry area. Avoid excessive heat and do not freeze. The shelf life is 3 years in the original, unopened container.

# **COLOR**

Stonkote HT4 is available in 14 standard colors and in a clear gloss finish. Custom colors are available upon request.

# PHYSICAL CHARACTERISTICS

Percent Solids	
Suggested Number of Coats	One - dark colors
	Two - light colors
Cure Rate	4 to 5 hours for
(@ 77°F/25°C)	tack-free surface
	24 hours minimum
	for normal operations
Temperature Limitations	200°F/93°C
	(continuous exposure)
	250°F/121°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 coating were used as test specimens.

# SURFACE 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 HT4.

# 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 TD9) 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**

For use over a Stonhard floor, no primer is necessary. For use over a concrete substrate, HT Primer or Stoncrest GS3 is recommended to ensure maximum product performance.

# **MIXING**

Stonkote HT4 is supplied in factory proportioned quantities. To achieve thorough and proper mixing, Stonkote HT4 must be mechanically mixed using a heavy-duty, slow speed drill (400 to 600 rpm) with a Jiffy Mixer. Pour the contents of Part B into a mixing container and pre-mix to ensure the suspension of solids. Add Part A and continue to mix to a uniform consistency for I to 2 minutes. Avoid high-speed mixing that will entrain air into the mix. Thorough mixing of the two components is essential.

#### **POT LIFE**

After mixing, Stonkote HT4 has a working time of approximately 25 minutes at 77°F/25°C. The working time may vary depending upon ambient and surface conditions.

# **APPLYING**

Stonkote HT4 can be applied at ambient temperatures of 60 to 85°F/16 to 30°C and humidity below 80%. Stonkote HT4 must be applied immediately after mixing the two components. Stonkote HT4 is applied with a rubber squeegee and backrolled with a medium nap roller. The roller is used to remove squeegee lines and smooth out the surface. A brush may be used where necessary. Stonkote HT4 may be applied at a variable thickness ranging from 4 to 6 mil minimum dry film thickness. Each additional coat may be applied when the surface is tack-free, approximately 4 to 5 hours. Any questions regarding the application of Stonkote HT4 should be directed to Stonhard's Technical Service Department.

# **CURING**

The surface of Stonkote HT4 will be tack-free in 4 to 5 hours at 77°F/25°C. The coated area may be put back in service in 24 hours. Ultimate physical and chemical characteristics will be achieved in 7 days.

# **RECOMMENDATIONS**

- Apply only on a clean, sound and properly prepared substrate
- Minimum ambient and surface temperatures are 60°F/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 HT4 material. The reacted material
  will require mechanical means of removal. Use these materials
  only in strict accordance with the manufacturer's recommended safety procedures. Dispose of waste materials in accordance with government regulations.
- 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**

- Procedures for maintenance of the flooring system during operations are described in the Stonkleen Floor Cleaning Procedures Brochure.
- For environments not referenced in the Chemical Resistance Guide, consult Stonhard's Technical Service Department for recommendations.
- Safety Data Sheets for Stonkote HT4 are available on line at www.stonhard.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 products.
- Requests for technical literature or service can be made through local sales representatives and offices, or corporate offices located worldwide
- The appearance of all floor, wall and lining systems will change over time due to normal wear, abrasion, traffic and cleaning.
   Generally, high gloss coatings are subject to a reduction in gloss, while matte finish coatings can increase in gloss level under normal operating conditions.
- Surface texture of resinous flooring surfaces can change over time as a result of wear and surface contaminants. Surfaces should be cleaned regularly and deep cleaned periodically to ensure no contaminant buildup occurs. Surfaces should be periodically inspected to ensure they are performing as expected and may require traction-enhancing maintenance to ensure they continue to meet expectations for the particular area and conditions of use.

# CHEMICAL RESISTANCE GUIDE

The purpose of this guide is to aid in determining the potential value of Stonkote HT4 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 - 15%	Hypochlorous - 5%
Acetic - 50%OS	Lactic - up to 20%E
Acetic - GlacialNR	Maleic - 30%
Benzoic - Sat. 3%E	Maleic - 40%
Boric - Sat. 30%E	Nitric - 10%
Butyric - 10%OS	Nitric - 30%
Chromic - 10%	Oleic
Chromic - 15%E	Oxalic - SatE
Chromic - 40%OS	Perchloric - 35%
Citric - 50%	Phosphoric - up to 50%
CresylicOS	Picric - SatE
DiglycolicG	Phthalic
FattyE	Succinic - SatE
FluoboricG	Sulfuric - 20%E
Formic - up to 10%	Sulfuric - 50%
HeptanoicOS	Sulfuric - 70%OS
Hydrochloric - ConcE	Tannic - SatE
Hydrofluoric - 15%E	Tartartic - SatE

# ALKALIES AND SALTS

Stonkote HT4 is rated *Good* to *Excellent* when exposed to most alkalies and salts.

# SOLVENTS AND OTHER CHEMICALS

RATII	NG RATING
Acetone	Linseed Oil
Alcohol (Methyl)G	Methyl Ethyl KetoneG
Alcohol (Ethyl, Propyl, Isopropyl, Butyl)	Methylene ChlorideNR
Benzene E	Milk
Carbon Tetrachloride	Mineral Spirits
Com Oil	Naphtha E
Cyclohexane E	Oils - Cutting E
Diacetone Alcohol E	Oils - Mineral
Ethylene Glycol	Oils - VegetableG
Ether OS	Perchloroethylene E
Formaldehyde E	SkydrolG
Gasoline	Sucrose (Sugar) - Sat
Glycerine E	TolueneE
Hydrogen Peroxide - 10%	Trichloroethylene
JP5 Jet Fuel	Urea
Juices - Fruit	Vinegar (Household) E
Juices - Vegetable	WaterE
Lard	Xylene E

Note: This data is based on laboratory tests performed under carefully controlled conditions. (All solutions are at ambient temperatures, 72°F/22°C) No warranty can be expressed or implied regarding the accuracy of this information as it applies to actual plant operations 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.

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