

STONKOTE® HT4

PRODUCT DESCRIPTION

Stonkote HT4 is a two-component, 100% 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

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 assures good adhesion
- Protects against moisture penetration
- Easy to apply to vertical and bonds to many different substrates
- Durable, gloss finish permits easy cleaning and maintenance
- Factory proportioned packaging ensures consistent, high quality mixing

PACKAGING AND COVERAGE

2 Litre kit Stonkote HT4, 972 Part A and 972 Part B.

Primed concrete and smooth surfaces:

Squeegee and backroll application 7 to 10m²/litre/coat, 2 coats required

Dip and roll, mohair roller application 6 to 8m²/litre/coat, 2 coats required

Textured non-slip surfaces:

Squeegee and backroll application 3 to 4m²/litre/coat, 1 coat required

Coverage will vary depending on the coarseness of the substrate and desired finish.

SHELF LIFE

24 Months if stored between 16 to 30°C in a dry area

REFERENCE SAMPLE

A trial reference sample should be installed by the Applicator prior to start of contract to ensure correct coverages and workmanship.

TYPICAL PROPERTIES AT 25°C

Finish	Gloss, with a roller texture
Colour	Refer to Stonclad colour card
Consistency	Thixotropic Liquid
Volume Solids	100%
No. of Components	2
Mix Ratio by Volume	Mix complete kit
Pot Life	10 to 15 Minutes
Apply By	Rubber squeegee and back roll with medium nap roller
Apply Over	Sealer for Stonhard floor system. Primed concrete wall and floors.
Curing Time	4 to 5 Hours – recoat 16 to 24 Hours – service 7 Days – full cure
Max Service Temperature	93°C Continuous 121°C Intermittent
Application Conditions	16°C to 30°C (RH below 30%)
Dew Point	Substrate to be 2°C above dew point
Fire Resistance to Dry Film ASTM 635	Self extinguishing Extent of burning 6mm max
VOC Content	30 g/l

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, values obtained on the field applied materials may vary.

PLACEMENT GUIDELINES

SCOPE OF WORK (BOQ):

Prepare surfaces and apply two coats of Stonkote HT4

SURFACE PREPARATION:

PREPARING STONHARD FLOORING AND LINING SYSTEMS OR RECOATING

Before coating a Stonhard system, all contaminants must be removed and trowel marks and surface imperfections must be rectified to produce a smooth surface. Grind floors using a floor grinder with medium stones. Mechanically sand Saturant and engineered fabrics to roughen and remove protrusions. Vacuum using an industrial wet/dry vacuum to remove all dust particles. The Stonhard system 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 grinding. Other contaminants may be removed by scrubbing with a heavy-duty industrial detergent (Carboclean 250 and Carboclean 252) and rinsing with clean water. The surface must show open pores throughout with main aggregate in concrete exposed and have a sandpaper texture. Substrate moisture content prior to coating should be below 5% and substrate tensile strength above 1.5 MPa. For recommendations or additional information regarding substrate preparation, refer to substrate preparation data sheet or contact StonCor Africa Technical Service Department.

PRIMING

For use over Stonhard floor or Stonchem lining, no primer is necessary. For use over a concrete / plastered substrate. Stonprime 786 O.P.R. is recommended to ensure maximum product performance.

MIXING

Under no circumstances are the supplied kits to be split. The contents of the components in a kit are to be thoroughly mixed before use. Empty entire contents of the activator into the base component. Mix thoroughly for 2 minutes with an impeller fitted to a variable speed drill. Transfer mixed material into another mixing container, scraping the sides and bottom of the container and remix for another 2 minutes. This step is critical to ensure complete cross-linking of components is achieved. Do not mix by hand. Avoid high speed mixing that will entrain air into the mix.

APPLICATION

OPTION 1: Transfer mixed material into a paint tray and, using a medium nap roller, dip and roll the Stonkote HT4. The roller should be saturated with sealer at all times. This will smooth and level the sealer to achieve a uniform texture and appearance.

OPTION 2: 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, leaving a slightly textured, mild non-slip finish. A brush may be used where necessary.

Stonkote HT4 may be applied at a variable thickness ranging from 100 to 330 microns 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 25°C. The coated area may be put back in service in 16 to 24 hours dependant on the floor temperature. 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 at 16°C at the time of application and 2°C above dew point.
- 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

- Pro-Struct 105 Brush Cleaner and water are recommended for clean-up of the unreacted Sonkote 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

- For environments not referenced in the Chemical Resistance Guide, consult Stonhard's Technical Service Department for recommendations.

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(Stonkote HT4)

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- Material Safety Data Sheets for Stonkote HT4 are available online at www.stoncor.co.za 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.

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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%	G	Hypochlorous – 5%	E
Acetic – 50%	OS	Lactic – up to 20%	E
Acetic – Glacial	NR	Maleic – 30%	E
Benzoic – Sat 3%	E	Maleic – 40%	G
Boric – Sat 30%	E	Nitric – 10%	G
Butyric – 10%	OS	Nitric – 30%	OS
Chromic – 10%	E	Oleic	G
Chromic – 15%	E	Oxalic – Sat	E
Chromic – 40%	OS	Perchloric – 35%	G
Citric – 50%	E	Phosphoric – up to 50%	G
Cresylic	OS	Picric – Sat	E
Diglycolic	G	Phthalic	G
Fatty	E	Succinic – Sat	E
Fluoboric	G	Sulfuric – 20%	E
Formic – up to 10%	G	Sulfuric – 50%	G
Heptanoic	OS	Sulfuric – 70%	OS
Hydrochloric – Conc	E	Tannic – Sat	E
Hydrofluoric – 15%	E	Tartartic – Sat	E

ALKALIES AND SALTS

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

SOLVENTS AND OTHER CHEMICALS

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

NOTE: This data is based on laboratory tests performed under carefully controlled conditions. (All solutions are at ambient temperatures, 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 by the specific conditions encountered, which are beyond our control.

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