

PRODUCT DESCRIPTION

Stoncrest GS3 is a two-component, solvent based, epoxy polyamide coating. It cures to a hard, impact resistant film characterized by exceptional adhesion to metals, wood, concrete, masonry and other construction materials. Stoncrest GS3 is also a chemical and abrasion resistant coating that is available in clear and pigmented versions.

USES, APPLICATIONS

Stoncrest GS3 is a general service coating designed to improve cleanability and provide increased chemical and abrasion resistance. It may be applied to vertical and horizontal surfaces of many various substrates.

- Structural steel subject to corrosive environments
- Floors and decks subject to chemicals, solvents and salts
- Substrates requiring a cleanable, high gloss, protective coating

PRODUCT ADVANTAGES

- Long-term abrasion and corrosion resistance
- Excellent bond strength assures good adhesion
- Bonds to many different substrates
- Viscosity suitable for spray, brush or roller application
- Factory proportioned packaging ensures consistent, high quality
- and simplified mixing
- Easily applied to vertical and horizontal surfaces
- No induction time

PACKAGING

Stoncrest GS3 is packaged in units for easy handling. Each unit consists of one carton containing:

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

COVERAGE

Approximately 60 m² per unit at 51 µm dry film thickness (DFT) over a smooth substrate and 37 m² per unit at 51 µm dry film thickness over a porous substrate.

STORAGE CONDITIONS

Store all components of Stoncrest GS3 between 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

Stoncrest GS3 is available in Clear and 15 standard colors. Custom colors are available upon request.

PHYSICAL CHARACTERISTICS

VOC Content (ASTM D-2369)	Pigmented: 300 g/l Clear: 340 g/l
Percent solids	Pigmented: 74% Clear: 74%
Impact Resistance	18 N/m.
Abrasion Resistance (ASTM D-4060, CS-17)	0.077 gm max. weight loss
Coverage	@ 51 µm (DFT) per unit Smooth substrate: 60 m ² Porous substrate: 37 m ²
Pot Life (@ 21°C)	2 hours
Temperature Limitations	60°C (continuous exposure) 93°C (intermittent exposure)
Fire Resistance of Dry Film	Self Extinguishing
Cure Rate (@ 21°C)	8 hours for tack-free surface 24 hours for normal operations

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.

SURFACE PREPARATION

Preparing Stonhard Floor 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 Stoncrest GS3.

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

The use of primer before the application of Stoncrest GS3 is not necessary.

MIXING

Stoncrest GS3 is supplied in pre-measured units. Mix the entire unit. Mixing must be achieved by mechanical means. Mechanical mixing should be done using a heavy-duty, slow-speed drill (400 to 600 rpm) with a Jiffy Mixer. Pour the contents of Part B into an appropriate mixing container and pre-mix to assure the suspension of solids. Add Part A and continue to mix to a uniform consistency for a period of 2 to 3 minutes. Avoid high-speed mixing that will entrain air bubbles. Thorough mixing of the two components is required.

POT LIFE

After mixing, Stoncrest GS3 has a working time of approximately 2 hours at 21°C. The working time may vary depending on ambient and surface conditions.

APPLICATION

Stoncrest GS3 can be applied at ambient temperatures of 16 to 30°C and humidity below 80%. Stoncrest GS3 may be applied by airless sprayer, brush or roller (medium nap). During application, a suitable NIOSH/MSHA approved respirator should be worn by all personnel in the area. Stoncrest GS3 may be applied at thicknesses from 79 µm to 127 µm wet film thickness and 2 to 3 mil minimum dry film thickness. Any questions regarding the application of Stoncrest GS3 should be directed to Stonhard's Technical Service Department.

CURING

The surface of Stoncrest GS3 will be tack-free in 4 hours at 21°C and may be recoated in 8 hours. The coated area may be put back into service in 24 hours. Ultimate physical characteristics will be achieved in 7 days.

RECOMMENDATIONS

- Minimum ambient and surface temperature is 16°C at the time of application.
- Apply only on a clean, sound and properly prepared substrate.
- 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 Stoncrest GS3 material. Use these materials only in strict accordance with 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 NIOSH/MSHA approved respirators with Organic Vapor/Acid Gas cartridges, safety glasses and impervious gloves is recommended.
- 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 Stoncrest GS3 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's 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 Stoncrest GS3 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

Acetic - 5%.....	G
Acetic - 20%.....	OS
Acetic - Glacial.....	NR
Benzoic - Sat. 3%.....	E
Boric - Sat. 30%.....	E
Butyric - 10%.....	G
Chromic - 10%.....	G
Chromic - 20%.....	OS
Citric - 50%.....	E
Cresylic.....	OS
Diglycolic.....	G
Fatty.....	G
Fluoboric.....	G
Formic - up to 10%.....	OS
Heptanoic.....	OS
Hydrochloric - 15%.....	E
Hydrochloric - 37%.....	G
Hydrofluoric - 10%.....	G

RATING

Hypochlorous Acid- 5%.....	E
Lactic - up to 20%.....	OS
Maleic - 30%.....	G
Maleic - 40%.....	OS
Nitric - 10%.....	G
Nitric - 30%.....	OS
Oleic.....	G
Oxalic – Sat.....	E
Perchloric - 35%.....	OS
Phosphoric - up to 50%.....	OS
Picric - Sat.....	G
Phthalic.....	G
Succinic - Sat.....	E
Sulfuric - 20%.....	G
Sulfuric - 50%.....	OS
Sulfuric - 70%.....	OS
Tannic - Sat.....	G
Tartaric - Sat.....	E

ALKALIES AND SALTS

Stoncrest GS3 is rated Good to Excellent when exposed to most alkalies and salts.

SOLVENTS AND OTHER CHEMICALS

RATING

Acetone.....	NR
Alcohol (Methyl).....	OS
Alcohol (Ethyl, Propyl, Isopropyl, Butyl).....	G
Benzene.....	OS
Carbon Tetrachloride.....	OS
Cyclohexane.....	G
Ethylene Glycol.....	G
Ether.....	OS
Formaldehyde.....	G
Gasoline.....	E
Glycerine.....	E
Hydrogen Peroxide - 10%.....	G
JP5 Jet Fuel.....	G
Juices - Fruit.....	E
Juices – Vegetable.....	E
Lard.....	G
Linseed Oil.....	G

RATING

Methyl Ethyl Ketone.....	NR
Methylene Chloride.....	NR
Milk.....	E
Mineral Spirits.....	G
Naphtha.....	G
Oils - Cutting.....	G
Oils - Mineral.....	E
Oils – Vegetable.....	G
Perchloroethylene.....	G
Skydrol.....	G
Sucrose - Sat. (Sugar).....	E
Toluene.....	OS
Trichloroethylene.....	NR
Urea.....	G
Vinegar (Household).....	G
Water.....	E
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 nor 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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