

PRODUCT DESCRIPTION

Stonglaze VSE Topcoat is a two-component, high-performance, waterborne, polyurethane coating designed for use on vertical surfaces. Stonglaze VSE Topcoat combines superior chemical and impact resistance with excellent adhesion and resistance to color and gloss changes from ultraviolet light.

USES, APPLICATIONS

Stonglaze VSE Topcoat is a general service urethane coating designed to improve cleanability, increase stain resistance, and improve UV resistance on vertical surfaces. Typical uses for Stonglaze VSE Topcoat include:

- UV-resistant topcoat
- Increased stain resistance

OPTIONS

Antimicrobial

Stonplus PROTECT is an antimicrobial, organic thione compound that acts as a long-lasting bacteriostat and fungistat to protect the floor against a broad range of gram-positive and gram-negative bacteria and fungi.

Stonplus PROTECT is EPA registered and contains no heavy metals.

PRODUCT ADVANTAGES

- Maximum ultraviolet light resistance
- Easily cleaned surface for simple maintenance
- Excellent abrasion resistance
- Minimal odor during application
- May be applied with a brush or a roller or an airless sprayer

PACKAGING

Stonglaze VSE Topcoat is packaged in units for easy handling. Each unit consists of:

Stonglaze VSE Topcoat

1 carton containing:

2 foil bags of isocyanate curing agent

(2) one-gallon pails of polyol resin

COVERAGE

Approximately 300 sq. ft./27.87 sq. m per unit for two coats 4 to 6 mils/100 to 150 microns (WFT) over a smooth substrate. Stonglaze VSE Topcoat requires two coats for a proper finish.

STORAGE CONDITIONS

Store both components of Stonglaze VSE Topcoat between 65 and 85°F/18 to 30°C in a dry area. Avoid excessive heat. Do not freeze. The shelf life is one year in the original, unopened container.

COLOR

Stonglaze VSE Topcoat is currently available in 9 dynamic colors. Custom colors are available upon request.

SUBSTRATES/PREPARATION

When used in conjunction with its appropriate base layer, Stonglaze VSE Topcoat is suitable for use over wall board, wood, metal and concrete substrates. These substrates must be clean, dry, and free of any laitance or unbonded materials.

Any wall board surface must be finished to a level 1,2, or 3 drywall finish with an appropriate spackle compound (green board and cement board will require water resistant drywall compound or setting compound). To ensure excellent, long term performance, it is critical that Stonglaze VSE Topcoat is never installed over a level 4 or 5 drywall finish.

Concrete block walls (CMU) must be given sufficient time for the mortar to fully cure. Excess mortar and any residual laitance or debris must be removed by mechanical means prior to installing Stonglaze VSE Topcoat.

Formed or poured concrete walls must be prepared by mechanical means to remove any laitance or efflorescence and provide a sandpaper texture suitable for bonding.

Previously painted substrates must be inspected to determine the level of drywall finish (for wall boards) and the type of paint. Stonglaze VSE Topcoat will bond well to prepared epoxy paints, but will not bond to latex, oil, urethane, or acrylic paints. If upon inspection, a level 4 or 5 drywall finish, or one of the previously mentioned paints is found, it must be removed by mechanical means prior to application of the Stonglaze system.

PHYSICAL CHARACTERISTICS

VOC Content 5 g/l
(ASTM D-2369)

Pot Life 35 to 45 minutes
(@ 70°F/21°C)

Cure Rate 12 hours
(@77°F/25°C)

for tack-free surface

24 hours minimum

for normal operations

Abrasion Resistance 0.03 gm weight loss

(ASTM D-4060, CS-17 wheel)

Note: The above physical properties were measured in accordance with the referenced standards.

MIXING

1. Using a heavy-duty, slow-speed drill (400 to 600 rpm) with a mixing paddle or Jiffy mixer, premix the polyol for 30 seconds to ensure the suspension of solids.
2. Slowly pour the contents of the bag of isocyanate directly into the one-gallon bucket of polyol.
3. Mix the polyol and Iso for a minimum of 90 seconds until well blended.
4. Pour the contents into a 5-gallon/18.93 liter bucket, paint tray or suitable container for application.

POT LIFE

After mixing, Stonglaze VSE Topcoat has a working time of 35 to 40 minutes at 70°F/21°C.

APPLYING

Two layers of Stonglaze VSE Topcoat are required to ensure proper coverage and hiding of the basecoat. Stonglaze VSE Topcoat must be applied immediately after mixing the two components. The Topcoat may be applied using a 1/4 in. to 3/8 in. /6 mm to 10 mm nap roller. Dip and roll the Topcoat onto the wall surface at a thickness of 4 to 6 mils/100 to 150 microns (wft). Immediately after rolling the coating on the wall, a saturated nap roller should be used to remove roller lines and drips. Finish roll on one direction only, picking the roller up between passes.

Application of the second coat of Topcoat can begin once the first layer is cured. Installing the Topcoat thicker than 8 mils in one coat is not recommended and may result in drips, runs and foaming.

CURING

The curing time of Stonglaze VSE Topcoat is 12 hours at 77°F/25°C. Before resuming normal operations, a curing period of 24 hours is recommended. The coating will achieve ultimate physical characteristics in 7 days.

RECOMMENDATIONS

- Apply only on a clean, sound, properly prepared substrate.
- Application and curing times are dependent upon ambient and surface conditions.
- Minimum ambient and surface temperature is 60°F/16°C at the time of application.
- Stonglaze VSE Topcoat should be allowed to cure for a minimum of 48 hours before being covered with non-porous material such as plastic sheeting.

PRECAUTIONS

- Water is recommended for cleanup of Stonglaze VSE Topcoat material spills. The cured material will require mechanical means of removal.
- NIOSH-approved respirators, safety goggles and impervious gloves are recommended when spraying the product.
- In case of contact with eyes, flush with water for 15 minutes and seek medical attention. Wash skin with soap and water.
- Mechanical ventilation is recommended.

NOTES

- Procedures for maintenance of the Stonglaze system during operations are described in the Stonkleen Cleaning Procedures Brochure.
- Safety Data Sheets for Stonglaze VSE Topcoat are available online at www.stonhard.com under Products 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.

CHEMICAL RESISTANCE GUIDE

The purpose of this guide is to aid in determining the potential value of Stonglaze VSE Topcoat 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%	OS
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%	G
Hydrochloric - 37%	OS
Hydrofluoric 5%	G
Hydrofluoric - 10%	OS
Hypochlorous - 5%	E
Lactic - up to 20%	OS
Maleic - 30%	OS
Maleic - 40%	OS
Nitric - 10%	G
Nitric - 30%	OS
Oleic	G
Oxalic - Sat	E
Perchloric - 35%	OS
Phosphoric - up to 50%	OS
Picric - Sat	E
Phthalic.....	G
Succinic - Sat	E
Sulfuric - 20%	E
Sulfuric - 50%	OS
Sulfuric - 70%	OS
Tannic - Sat	G
Tartartic - Sat	E

ALKALIES AND SALTS

Stonglaze VSE Topcoat 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
Corn Oil.....	E
Cyclohexane	OS
Denatured Alcohol	NR
Ethylene Glycol.....	G
Ether	OS
Formaldehyde.....	OS
Gasoline.....	E
Glycerine.....	E
Hydrogen Peroxide - 10%.....	NR
JP5 Jet Fuel	G
Juices - Fruit	E
Juices - Vegetable	E
Lard	G
Linseed Oil.....	G
Methyl Ethyl Ketone.....	NR
Methylene Chloride	NR
Milk	E
Mineral Spirits	G
Naphtha	OS
Oils - Cutting	G
Oils - Mineral.....	E
Oils - Vegetable	G
Perchloroethylene.....	OS
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:
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