

## STONSEAL® CE4-969

### PRODUCT DESCRIPTION

Stonseal CE4-969 is a two-component, clear, solvent-free chemically modified epoxy resin cured with an aliphatic amine designed to have superior UV resistance with excellent substrate wetting and adhesion on a variety of flooring finishes requiring encapsulation.

### USES:

Stonseal CE4-969 is used in conjunction with various decorative Stonhard flooring systems where a high gloss durable finish is required. On coloured aggregates, PVA flakes and polished concrete floors, the sealer enhances the colour and provides good chemical and wear resistance properties. The sealer also provides a moderate degree of slip resistance whilst retaining its cleanability and resistance to marring and staining. Application areas vary from light manufacturing such as food and pharmaceutical process areas, to shopping centres, laboratories, hallways, offices and holding areas in commercial, healthcare, educational and display areas.

### PRODUCT ADVANTAGES:

- Most advanced epoxy resin technology
- Interior and exterior applications
- High gloss with excellent clarity
- Good chemical and UV light resistance
- High wear and marring properties

**NOTE:** Staining may occur depending on length of exposure time, chemical concentration and temperature.

### PACKAGING & COVERAGE:

5 Litre kit, Part A and B  
 Fine Texture Aggregate and Flakes 2 to 3m<sup>2</sup>/litre/coat  
 Medium Texture Aggregate Finish 3 to 4m<sup>2</sup>/litre/coat  
 Smooth roll-on sealer for flat surfaces 5 to 6m<sup>2</sup>/litre/coat

### REFERENCE SAMPLE

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

### STORAGE CONDITIONS

Store all components of Stonseal CE4-969 between 16 to 32°C in a dry area. Avoid excessive heat and do not freeze. The shelf life is one year in the original, unopened container.

### SHELF LIFE:

24 Months if stored between 16°C to 32°C.

### TYPICAL PROPERTIES AT 25°C

<b>Finish</b>	Gloss
<b>Colour</b>	Clear
<b>Consistency</b>	Liquid
<b>Volume Solids</b>	100%
<b>Number of Components</b>	2
<b>Mix Ratio by Volume (Base:Activator)</b>	Mix complete kit
<b>Pot Life</b>	30 to 40 Minutes
<b>Apply Over</b>	Prepared Stonhard floor finishes, pebble paving and concrete
<b>Apply By</b>	Squeegee, Medium Nap Roller, Brush and Looped Roller
<b>Curing Time</b>	12 hours – Recoat 24 hours – Service 7 Days – Full Cure
<b>Max. Service Temperature</b>	50°C Wet / Dry
<b>Application Temperature Range</b>	16°C to 30°C
<b>Dew Point</b>	Substrate to be 2°C above dew point
<b>VOC Level</b>	34g/litre
<b>Chemical Resistance</b>	Consult StonCor Technical Service
<b>Hardness ASTM D-2440 Shore D</b>	80-85
<b>Bond Strength ASTM D4541</b>	2,7MPa (100% concrete failure)
<b>Flame Spread ASTM 635</b>	Self extinguishing

**NOTE:** The above physical properties were measure 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.

# APPLICATION

## SCOPE OF WORK (BOQ):

Prepare surfaces and apply Stonseal CE4-969 Chemically Modified Epoxy Resin Sealer for interior and exterior applications at specified spread rates to suit required surface finish.

## SUBSTRATE PREPARATION:

### For smooth concrete floor sealing:

Remove all oils, grease and other contaminants by scrubbing with Carboclean 252 and rinsing with clean running potable water to obtain a water break-free surface. Allow to dry. Abrade the surface by etching or grinding or light vacublasting to remove laitance and open all voids. The roughened surface should have a texture similar to 100-grit sandpaper, and minimum tensile strength of 1.5 MPa and moisture content of 5% maximum.

### For Stonhard's Coloured Aggregate and Flake Systems:

Sweep and vacuum all excess unbound materials from the surface. De-nib the sharp edges using the edge of steel finishing trowel to reduce the profile if a Medium Texture is required. For a Fine Texture use a lightweight polishing machine or rubbing blocks taking care not to damage or discolour the finish. Re-sweep and vacuum all unbound materials and protect with plastic sheeting the unsealed surface from dirt, dust, moisture and foot traffic.

## MIXING:

Empty the entire contents of the Base and Activator components into a clean, dry mixing container. Mix thoroughly for 2 minutes with an impeller fitted to a mechanical mixer (400 to 600 RPM). Transfer 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 aerate mix nor mix by hand.

## APPLICATION:

1. By short nap rollers – Apply 2 coats out of paint trays at 5 to 6m<sup>2</sup>/litre/coat.
2. White rubber squeegees – Pour mixed material in a bead line and spread evenly at 2 to 3m<sup>2</sup>/litre/coat. Roll material with a loop roller to level.
3. Notched trowels – Pour mixed material on floor and spread evenly with a 3mm notch trowel at a thickness of 1 to 1,5mm. Spike rollers are utilised by walking with spike shoes on the floor to level and deaerate the surface.
4. The use of floor lights is critical to ensure even spread and levelling without “pooling” has been achieved.

## CURING:

At 25°C the coating system can be exposed to light traffic after 24 hours. Excessive traffic, aqueous cleaning and exposure to aggressive chemicals should only take place after 7 days when full cure has been achieved.

## RECOMMENDATION:

- DO NOT attempt to install material if temperature of components and substrate are not within 16 to 30°C. The cure time and application properties of the material are severely affected.
- DO NOT use water or steam in the vicinity of the application. Moisture can seriously affect the working time and other properties.
- Protect areas from dust and isolate access. Contamination between layers will affect the final appearance.
- Avoid contact with all liquid Parts A and B as they may cause skin and/or eye irritation. Workmen should cover hands with protective creams or rubber gloves and wear safety glasses.
- Use only with adequate ventilation.

## NOTES:

- Procedures for maintenance of the flooring system during operations are described in “StonCor Cleaning Procedures”.
- Specific information regarding chemical resistance is available in the Chemical Resistance Guide.
- Material Safety Data Sheets are available on request.
- A staff of technical service engineers is available to assist in installation or to answer questions related to our flooring products specifically or flooring problems in general.
- Requests for technical service or literature can be made through local sales representatives and offices, or corporate offices located throughout the world.