

PRODUCT DESCRIPTION

Stonseal 541 is a one component, moisture curing polyurethane resin floor hardener. It is designed to penetrate the concrete pores and seal the concrete from water and chemical ingress, strengthening the surface layer.

USES

An anti-dusting and case hardening surface dressing for interior industrial floors subject to high traffic and mild chemical exposure. Stonseal 541 is ideal for warehouse floors, raw material stores and distribution facilities.

PRODUCT ADVANTAGES

- Outstanding abrasion resistance
- High penetration
- One-pack
- Quick opening to traffic after application

RESISTANCE

Films of this product are resistant to the following:

Water and sea water	Common salt solution 10%
Distilled water	Sugar solution 30%
Nitric Acid 10%	Caustic potash solution 10%
Sulphuric Acid 10%	Chlorine solution, 3% free chlorine
Lactic Acid 10%	Hydrogen peroxide 10%
Citric Acid 10%	Premium grade petrol (gasoline)
Hydrochloric Acid 10%	Xylene
Tannic Acid Solution	Ethyl glycol acetate
Linseed Oil	Alcohol 10%
Soda Solution 20%	

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

PACKAGING AND COVERAGE

5 Litre and 20 litre units
2 to 4m²/litre/coat, depending on surface absorption

SHELF LIFE

12 Months if stored in original sealed packaging between 15°C to 30°C

REFERENCE SAMPLE

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

TYPICAL PROPERTIES AT 25°C

Finish	Gloss
Colour	Amber, which will darken on ageing
Recommended Film Thickness Per Coat	60 Microns
No. of Coats Required	2 to 4, depending on porosity
Theoretical Coverage Per Coat	Depends on surface absorption
No. of Components	1
Apply Over	Wood or concrete
Apply By	Squeegee and roller
Curing Time	3 Hours – recoat 24 Hours – service
Thinner	Nil
Cleaner	Pro-Struct 105 Brush Cleaner
Temperature Resistance	60°C
VOC	712 g/l
Volume Solids	18%

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):

All prepared concrete surfaces to be hardened by a multiple coat application of Stonseal 541 Resin Floor Hardener. A suitable reference sample needs to be carried out on each site to ascertain appearance and correct coverage rates.

SUBSTRATE PREPARATION:

Remove 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. Refer to Product Data Sheet for additional surface preparation requirements.

APPLICATION:

- Ensure substrate is completely dry.
- Apply two or more coats of Stonseal 541 Resin Floor Hardener with a rubber squeegee, wet-on-wet, allowing a maximum of 3 hours between coats. Very porous surface may require up to 4 coats to achieve the desired hardening effect.
- Backroll with a medium pile roller, wearing spike shoes if necessary.
- Brushes and hands should be cleaned with Pro-Struct 105 Brush Cleaner.
- Always wear gloves when working with this material.

CAUTION:

If Stonseal 541 Resin Floor Hardener should come in contact with skin, a brown stain develops which can only be removed with a pumice stone. Good ventilation is essential.

Product is extremely flammable and the necessary safety precautions should be taken during its use.

RECOMMENDATIONS:

- 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 liquid 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 operation 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.

COLD CONDITIONS:

Low temperatures decrease flow, delay set and affect water resistance and final appearance. Materials should be conditioned for 16 hours at 21°C to 27°C; heaters should be utilised to warm floors.