STONCHEM® 501

PRODUCT DESCRIPTION
Stonchem 501 is a high-performance, epoxy lining system applied at a nominal thickness of 25 mil/625 microns. Two coats of mineral composite-filled coating is ideal for the coating of bases, piers, walls and concrete structures. A one-coat, 10 to 12 mil/250 to 300 microns application will renew the surface of an aged lining system. The Stonchem 501 system has excellent resistance to caustics and moderate concentrations of acids.

USES, APPLICATIONS
- Secondary containment areas
- Concrete pads and pedestals
- Splash/spill areas

PRODUCT ADVANTAGES
- Excellent chemical resistance to caustics and moderate concentrations of acids
- Mineral composite filled for increased impermeability
- Factory proportioned units for easy application

PHYSICAL CHARACTERISTICS

Tensile Strength (ASTM D-638)	4,900 psi
Hardness (ASTM D-2240, Shore D)	85-90
Abrasion Resistance (ASTM D-4060, CS-17)	0.07 gm max. weight loss
Color	Gray
Cure Rate (@70F˚/21˚C)	4 to 6 hours tack-free 24 hours chemical service
VOC (ASTM D-2369, Method E)	500 Series Topcoat - 55 g/l

Note: The above physical properties were measured in accordance with the referenced standards. Samples of the actual system, including binder and filler, were used as test specimens.

CHEMICAL RESISTANCE
Stonchem 501 is formulated to resist a variety of chemical solutions. Refer to the Stonchem 500 Series Chemical Resistance Guide which lists reagent concentration and temperature recommendations for each product.

PACKAGING
Stonchem 501 is packaged in units for easy handling. Each unit consists of:

Topcoat
2 cartons of Stonchem 500 Series Topcoat
A carton contains:
4 foil bags of Amine
4 polybags of Resin

COVERAGE
Each unit of Stonchem 501 will cover approximately 180 sq. ft./16.72 sq. m at a thickness of 25 mil/625 microns.

Note: Coverage rates shown are theoretical. Actual coverage rates may vary. Make necessary allowances for the condition of the surface to be coated, working conditions, waste, spillage, experience level and skill of the installers, etc.

STORAGE CONDITIONS
Store all components between 50 to 75˚F/10 to 24˚C in a dry area. Keep out of direct sunlight. When stored in the unopened containers at the proper temperatures, the shelf life is 3 years.

SUBSTRATE
Stonchem 501, with appropriate primer, is suitable for application over concrete and the following uncoated, newly-applied Stonhard mortars and grouts: GS, HT, UR, UT, TG6, TG8, CR5 and PM5. For questions regarding other possible substrates or an appropriate primer, contact your local Stonhard representative or Technical Service.

SUBSTRATE PREPARATION
Proper preparation is critical to ensure an adequate bond and system performance. The substrate must be dry and properly prepared utilizing mechanical methods. Questions regarding substrate preparation should be directed to your local Stonhard representative or Technical Service.

APPLICATION GUIDELINES
For optimal working conditions, substrate temperature must be between 60 to 80˚F/15 to 27˚C. Cold areas must be heated until the slab temperature is above 55˚F/13˚C to ensure the material achieves a proper cure. A cold substrate will make the material stiff and difficult to apply. Warm areas or areas in direct sunlight must be shaded or arrangements made to work during evenings or at night. A warm substrate (60 to 80˚F/15 to 27˚C) will aid in the material's workability; however, a hot substrate (80 to 100˚F/27 to 37˚C) or a substrate directly in the sun will shorten the material's working time and can cause other phenomenon such as pinholing and bubbling. Substrate temperature must be greater than 5˚F/3˚C above dew point during application and curing period.

Application and curing times are dependent upon ambient and surface conditions. Consult Stonhard's Technical Service Department if conditions are not within recommended guidelines.

APPLYING

Priming

Vacuum the surface before priming and make sure the substrate is dry. The use of Stonchem Epoxy Primer is necessary in all applications of Stonchem 501.This ensures maximum product performance. (See the Stonchem Epoxy Primer product data sheet for details.)

Note: Stonchem Epoxy Primer must be tack-free prior to application of the mortarcoat.

Topcoat - First Coat

After allowing the primer to cure, mix the amine and resin in a 5-gallon mixing bucket using a heavy-duty, slow-speed drill (400 to 600 rpm) with a Jiffy Mixer for one minute. Pour the material onto the floor and spread out with a 15-mil notched squeegee. Backroll the area with a medium nap roller to remove squeegee lines, using long roll strokes to decrease the visibility of roller lines. For vertical surfaces, pour a bead of material along the base of the wall. Using a medium nap roller, roll the material onto the wall. The wet film thickness of the coating is 10 to 12 mil/250 to 300 microns. Check the thickness with a wet film gauge.

Second Coat

Apply the same as the first coat.

CURING

The surface of Stonchem 501 will be tack-free in 4 to 6 hours at 70°F/21°C.The coated area may be put back in service in 24 hours at 70°F/21°C. Ultimate physical characteristics will be achieved in 7 days.

PRECAUTIONS

- Avoid contact with Stonchem 500 amine and resin, as they may cause skin, respiratory and eye irritation.
- Acetone is recommended for cleanup of Stonchem 500 amine and resin material spills. Use this material only in strict accordance with the manufacturer's recommended safety procedures. Dispose of waste materials in accordance with government regulations.
- The use of NIOSH/MSHA approved respirators using an organic vapor/acid gas cartridge is recommended.
- The selection of proper protective clothing and equipment will significantly reduce the risk of injury. Body covering apparel, safety goggles and impermeable nitrile gloves are highly 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.
- If material is ingested, immediately contact a physician. DO NOT INDUCE VOMITING.
- Use only with adequate ventilation.

NOTES

- Safety Data Sheets for Stonchem 501 are available online at www.stonhard.com under Products or upon request.
- Specific information regarding chemical resistance is available in the Stonchem 500 Series Chemical Resistance Guide.
- 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.
- Surface texture of resinous flooring surfaces can change over time as a result of wear and surface contaminants. Surfaces should be cleaned regularly and deep cleaned periodically to ensure no contaminant buildup occurs. Surfaces should be periodically inspected to ensure they are performing as expected and may require traction-enhancing maintenance to ensure they continue to meet expectations for the particular area and conditions of use.

04/25

STONHARD EST. 1922

USA HQ	(800) 257 7953	Mexico	+(52) 55 9140 4500	Belgium	+(32) 67 49 37 10	South Africa	+(27) 11 254 5500	Australia	+(61) 3 9587 7433
Canada	(800) 263 3112	Argentina	+(54) 11 5032 3113	Dubai, UAE	+(971) 4 3470460	India	+(91) 22 28500321		