PRODUCT DESCRIPTION

Stonchem 602 is a highly cross-linked, novolac epoxy lining system applied at a nominal thickness of 1 mm. The mortarcoat, mineral composite-filled topcoat sequencing provides a light-duty chemical barrier for areas with occasional foot traffic. The Stonchem 602 has excellent resistance to concentrated sulfuric acid, chlorinated solvents and caustics.

USES, APPLICATIONS

- Secondary containment areas
- Concrete pads and pedestals
- Process piping and equipment
- Storage tanks
- Neutralization pits
- Splash/spill areas

PRODUCT ADVANTAGES

- Excellent chemical resistance to most mineral acids, solvents and all caustics.
- Mineral composite-filled for increased impermeability
- Factory proportioned units for easy application

PHYSICAL CHARACTERISTICS

Tensile Strength (ASTM D-638)	17.9 N/mm^2
Flexural Strength (ASTM C-580)	63.4 N/mm^2
Flexural Modulus of Elasticity (ASTM C-580)	9.6 x 10^3 N/mm^2
Hardness (ASTM D-2240, Shore D)	85 to 90
Abrasion Resistance (ASTM D-4060, CS-17)	0.07 gm max. weight loss
Thermal Coefficient of Linear Expansion (ASTM C-531)	2.4 x 10^{-5} m./mm.°C
Color	Gray
Cure Rate (@21°C)	4 to 6 hours tack-free
VOC (ASTM D-2369, Method E)	600/620 Liquids 20 g/l 600 Topcoat 68 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 602 is formulated to resist a variety of chemical solutions. Please refer to the Stonchem 600 Series Chemical Resistance Guide for lists of reagent concentrations and temperature recommendations.

PACKAGING

Stonchem 602 is packaged in units for easy handling. Each unit consists of:

Mortarcoat

0.5 cartons of Stonchem 600 Liquids
A carton contains:
4 foil bags of Amine
4 poly bags of Resin

2 bags of Mortarcoat aggregate

Topcoat

1 carton of Stonchem 600 Series Topcoat
A carton contains:
4 foil bags of Amine
4 poly bags of Resin

COVERAGE

Each unit of Stonchem 602 will cover approximately 16.72 m^2 at a thickness of 1 mm.

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 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 602, 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 you local Stonhard representative or Technical Service.

APPLICATION GUIDELINES

For optimal working conditions, substrate temperature must be between 15 to 27˚C. Cold areas must be heated until the slab temperature is above 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 (15 to 27˚C) will aid in the material's workability; however, a hot substrate (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 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 602. 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.

Mortarcoat

After the primer has been applied and allowed to fully cure, pre-mix the amine and resin in a c.a. 20 liter mixing bucket with a heavy-duty, slow-speed drill (400 to 600 rpm) with a Jiffy mixer attachment for one minute. Next, gradually add Mortarcoat aggregate while mixing for an additional 2 minutes. For vertical applications, use Vertical Mortarcoat aggregate. Mixing is complete when no dry clumps of material exist. Pour the material onto the floor and spread out with a 0.4 mm notched squeegee. Backroll the material with a medium nap roller to remove squeegee lines. The material may appear rough at first but will level out to a smooth finish. For vertical surfaces, use a large steel trowel or knife to pull an initial coat of vertical material onto the wall, then finish smooth with a flat rubber squeegee.

Topcoat

Lightly sand the mortarcoat in areas where protrusions exist. Vacuum the area completely. Mix the amine and resin in a c.a. 20 liter mixing container using a heavy-duty, slow-speed drill (400 to 600 rpm) with a mixing blade for one minute. Pour the material onto the floor and spread out with a 0.4 mm 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 applications, pour a bead of material along the base of the wall and, using a medium nap roller, roll the material onto the vertical surface. The wet film thickness of the coating is 250 to 300 microns. Check the thickness with a wet film gauge.

CURING

The surface of Stonchem 602 will be tack-free in 4 to 6 hours at 21˚C. The coated area may be put back in service in 24 hours at 21˚C. Ultimate physical characteristics will be achieved in 7 days.

PRECAUTIONS

- Avoid contact with Stonchem 600 amine and resin, as they may cause skin, respiratory and eye irritation.
- Acetone is recommended for clean up of Stonchem 600 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 602 are available online at www.stonhard.com under Products or upon request.
- Specific information regarding chemical resistance is available in the Stonchem 600 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.

CE MARKING

The harmonized European Standard EN 1504-2 „Products and systems for the protection and repair of concrete structures – Definitions, requirements, quality control and evaluation of conformity – Part 2: Surface protection systems for concrete" gives specifications for products and systems based on methods "hydrophobic impregnation", "impregnation" and "coating" for the various principles presented under EN 1504-9.

Products which fall under this specification have to be CE labelled as per Annex ZA. 1, Tables ZA1a to ZA 1g according to the scope and relevant clauses there indicated, and fulfill the requirements of the given mandate of the Construction Products Regulation nr. 305/2011.

For flooring systems not dedicated to protect or reinstate the integrity of a concrete structure, EN 13813 applies. Products acc. EN 1504-2 used as flooring systems with mechanical loads also must fulfil EN 13813. Here below indicated are the performance classes achieve according to the standard. For the specific performance results of the product to the particular tests, please see the actual values above in the PDS.

CE

Stoncor Europe
Rue du Travail 9
1400 Nivelles, Belgium

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DOP.602.2021.25.6-3

EN 1504-2

Surface Protection Product
Ingress Protection 1.3(C)

Cap. Absorption & Permeability to Water Vapor	W<0.1 kg/m^2*h$^{0.5}$
Water Permeability	Class III
Permeability to CO_2	S_d>50 m
Adhesion Strength by Pull-Off Test	>2.0 MPa
Fire Resistance	Bfl-s1
Abrasion Resistance	<3000 mg

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STONHARD®

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