

PRODUCT DESCRIPTION

Stonchem 630 is a 100% solids, high performance epoxy lining system applied at thicknesses of 60 mil/1.5 mm and 125 mil/3 mm. The broadcast sequencing provides a smooth, heavy-duty barrier against chemical attack and abrasion. The Stonchem 630 system has excellent resistance to 98% sulfuric acid.

USES, APPLICATIONS

- Plating lines
- Drum storage
- Traffic aisles
- Chemical processing
- Chemical storage rooms
- Secondary containment

PRODUCT ADVANTAGES

- Excellent chemical resistance to a broad range of acids, bases and solvents
- Mineral composite topcoat for increased impermeability
- Factory proportioned units for easy application

CHEMICAL RESISTANCE

Stonchem 630 is formulated to resist a variety of chemical solutions. (Refer to the Stonchem 600 Series Chemical Resistance Guide for lists of reagent concentrations and temperature recommendations.)

PACKAGING

Stonchem 630 is packaged in units for easy handling. Each unit consists of:

60 mil

5 cartons of Stonchem 600 Series base coat/topcoat

A carton contains:

- 2 cans of amine
- 2 cans of resin

9 bags of aggregate

125 mil

5 cartons of Stonchem 600 Series base coat/topcoat

A carton contains:

- 2 cans of amine
- 2 cans of resin

7 bags of aggregate

PHYSICAL CHARACTERISTICS

Compressive Strength	16,000 psi
(ASTM C-579)	
Tensile Strength	7,000 psi
(ASTM D-638)	
Flexural Strength	6,200 psi
(ASTM C-580)	
Flexural Modulus of Elasticity	1.3×10^6 psi
(ASTM C-580)	
Hardness	75
(ASTM D-2240, Shore D)	
Abrasion Resistance	0.056 gm max. weight loss
(ASTM D-4060, CS-17)	
Thermal Coefficient of Linear Expansion	1.06×10^{-5} in./in.°C
(ASTM C-531)	
Color	Gray

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.

COVERAGE

Stonchem 630 at 60 mil/1.5 mm will cover 400 sq. ft./ 37.2 sq. m per unit. Stonchem 630 at 125 mil/3 mm will cover 245 sq. ft./22.7 sq. m per unit.

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. Avoid excessive heat and do not freeze. The shelf life is 3 years in the original, unopened container.

SUBSTRATE PREPARATION

General

Proper preparation is critical to ensure an adequate bond. The substrate must be dry and free of all wax, grease, oils, fats, soil, loose or foreign materials and laitance. Laitance and unbonded cement particles must be removed by mechanical methods, i.e.,

abrasive blasting or scarifying. Other contaminants may be removed by scrubbing with a heavy-duty industrial detergent and rinsing with clean water. For recommendations or additional information regarding substrate preparation, please contact Stonhard's Technical Service Department.

APPLICATION GUIDELINES

Before mixing and applying any material, make sure environmental conditions are satisfactory for application. For optimal working conditions, substrate temperature must be between 60 to 80°F/15 to 27°C. Measure the surface temperature with a surface thermometer. Cold areas must be heated until the slab temperature is above 50°F/10°C. This will allow the material to achieve a proper cure. Also, 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 (90 to 100°F/32 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 should be greater than 5°F/3°C above dew point.

APPLYING

Priming

All surfaces to which Stonchem 630 will be applied must be primed, steel as well as concrete. Use only HT Primer. Mix and apply HT Primer in accordance with the corresponding product data sheet. Avoid puddling. Allow the primer to cure tack-free.

Stonchem 630 – 60 mil system

Mix amine and resin components of Stonchem 630 thoroughly. A drill and a Jiffy Mixer are recommended.

Apply a 25 mil/0.63 mm base coat of Stonchem 630 liquids by roller or squeegee, making sure that the proper coverage is obtained.

While wet, immediately broadcast the aggregate. Do not allow the aggregate to be broadcast ahead of the applicator. Broadcast the aggregate until a dry layer is achieved. Allow the coating to cure. Remove the excess aggregate.

Note: When broadcasting in a large or congested area, it may be desirable for workers to wear spike shoes (e.g., golf shoes) to enable them to walk out onto the coating without disturbing it.

Apply a 15 mil/375 microns topcoat to the surface, or apply enough material to achieve the desired non-skid surface texture.

Stonchem 630 – 125 mil system

Mix amine and resin components of Stonchem 630 thoroughly. A drill and Jiffy Mixer are recommended.

Apply a 50 mil/1.25 mm base coat of Stonchem 630 liquids by roller or squeegee, making sure that proper coverage is obtained.

While wet, immediately broadcast the aggregate. Do not allow the aggregate to be broadcast ahead of the applicator. Broadcast the aggregate until a dry layer is achieved. Allow the coating to cure. Remove the excess aggregate.

Note: When broadcasting in a large or congested area, it may be desirable for workers to wear spike shoes (e.g., golf shoes) to enable them to walk out onto the coating without disturbing it.

Apply a 15 mil/375 microns topcoat to the surface, or apply enough material to achieve the desired non-skid surface texture.

Vertical Surfaces

Consult your local Stonhard sales representative or Stonhard's Technical Service Department for a recommendation.

CURING

The surface of Stonchem 630 will be tack-free in 12 to 18 hours at 70°F/21°C. For chemical service, the coated area may be put back into service in 36 hours at 75°F/24°C. Ultimate physical characteristics will be achieved in 7 days.

RECOMMENDATIONS

- Apply only on clean, sound, dry and properly prepared substrates.
- Minimum ambient and surface temperature is 55°F/13°C at the time of application.
- Maximum surface temperature should not exceed 90°F/32°C during application. **Substrate temperatures above 100°F/38°C will drastically affect the working time of the product.**
- Substrate temperature should be greater than 5°F/3°C above dew point.
- Material should not be applied if humidity is above 85%.
- Application and curing times are dependent upon ambient and surface conditions. Consult Stonhard's Technical Service Department if conditions are not within recommended guidelines.

PRECAUTIONS

- Avoid contact with Stonchem 630 amine and resin as they may cause skin, respiratory and eye irritation.
- Toluene or Xylene solvents are recommended for clean up of Stonchem 630 amine or resin spills. Use these materials only in strict accordance with the manufacturers' recommended safety procedures. Dispose of waste materials in accordance with government regulations.
- The selection of proper protective clothing and equipment will significantly reduce the risk of injury. Body covering apparel, safety glasses and impermeable nitrile gloves are highly recommended.
- In the event of accidental eye contact, rinse eyes immediately with water.
- 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 and reference the MSDS
- Use only with adequate ventilation.

NOTES

- Material Safety Data Sheets for Stonchem 630 are available on line at www.stonhard.com under Tech Info or upon request.
- Specific information regarding the chemical resistance of Stonchem 630 is available in the Stonchem 600 Series Chemical Resistance Guide.
- A staff of technical service engineers is available to assist in 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.

IMPORTANT:
Stonhard believes the information contained here to be true and accurate as of the date of publication. Stonhard makes no warranty, expressed or implied, based on this literature and assumes no responsibility for consequential or incidental damages in the use of the systems described, including any warranty of merchantability or fitness. Information contained here is for evaluation only. We further reserve the right to modify and change products or literature at any time and without prior notice.

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