

STONDRI® MVT

PRODUCT DESCRIPTION

Stondri MVT is a two component solvent-free liquid epoxy resin, lightly pigmented designed to have excellent surface wetting properties of substrates and penetrative features promoting substrate consolidation.

USES

Stondri MVT is designed as a primer for all Stonhard systems, as well as other floor products where moisture vapour is a concern. Time-saving primer on new construction projects, which is unaffected by the high levels of moisture found in green concrete. Stondri MVT is also used to gravity-feed into fine cracks and can be mixed with Graded Aggregate # 622 to make a patching mortar to fill wide cracks and depressions.

PRODUCT ADVANTAGES

- Controls excess moisture in substrate
- Low odour and quick setting
- Allows for early installation of numerous floor systems on new concrete
- Contrasting colour allows for visual control of film thickness

PACKAGING & COVERAGE

5lt Stondri MVT, 130 Part A + B
2.5m²/litre at 400 microns

The product must be installed at a minimum thickness of 400 microns. Failure to do so will limit the product's performance.

STORAGE CONDITIONS

Store all components of Stondri MVT between 16 to 32°C in a dry area. Avoid excessive heat and do not freeze.

REFERENCE SAMPLE

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

SHELF LIFE

The shelf life is 24 months in the original, unopened container.

SUBSTRATE

Stondri MVT is suitable for applications over concrete only. All other overlays or coatings must be removed by mechanical means to expose concrete surfaces.

TYPICAL PROPERTIES AT 25°C

Finish	Sheen
Colour	White
Consistency	Liquid
Volume Solids	100%
Number of Components	2
Mix Ratio by Volume	Mix complete kit
Pot Life	15 minutes at 21°C
Apply Over	Prepared concrete
Apply By	Notched trowel, squeegee and nap roller
Curing Time	4 to 16 Hours – recoat 24 Hours – service 7 Days – full cure
Max Service Temperature	50°C
Application Temperature Range	16 to 32°C temp.
Dew Point	Substrate to be 2°C above the dew point
VOC Level	25g/litre
Chemical Resistance	Consult StonCor Africa Technical Service
Compressive Strength ASTM C579	49 MPa
Tensile Strength ASTM D638	30 MPa
Hardness ASTM D2240 Shore D	80 to 90
Bond Strength ASTM D4541	3.4 MPa (100% concrete failure)
Permeance ASTM E96 at 400 microns	0.1 Pem

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 Stondri MVT at 400 microns to control moisture vapour transmission.

SUBSTRATE PREPARATION:

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 vacu-blasting or scarifying to remove the laitance, open all voids and expose the aggregate to a depth of 1 to 2mm. The roughened surface should be a dust free, sound concrete surface with a portion of the main aggregate in the concrete exposed. A minimum tensile strength of 2 MPa and moisture content of less than 5% is required. On green concrete, the design strength must be at least 25 MPa and have been in place for 5 days to allow for sufficient strength build and surface drying prior to surface preparation.

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 variable speed drill. **Do not aerate mix nor mix by hand.** **NOTE:** Do not start mixing until surface is properly prepared and dry with temperature of both substrate and material above 16°C.

APPLICATION:

The product must be installed at a minimum thickness of 400 microns. Use a wet film gauge to record thickness. Failure to do so will limit the product's performance. Stondri MVT is applied using a 1mm notched rake. Pour a bead of Stondri MVT out onto the substrate and, utilising the notch rake, apply at a minimum of 400 microns. A saturated nap roller should be used in conjunction with a squeegee to even out the material to a uniform colour and ensure proper thickness. If there are any bubbles, voids or areas of exposed concrete in the Stondri MVT after its cure, they must be patched using the material. There must be a continuous barrier of Stondri MVT material, at least 400 microns across the entire concrete surface bonded onto the main aggregate in the concrete in order to ensure proper moisture mitigating performance.

CURING FOR STONHARD RESIN SYSTEMS:

Stondri MVT must be fully cured prior to overlaying with Stonhard flooring systems. The cure time is 4 hours at 25°C and will vary depending on ambient and surface conditions. Lightly abrade the surface and overcoat within 16 hours.

APPLICATION FOR TILE AND VINYL FLOORING OVERLAYS IN THE ABSENCE OF A MOISTURE BARRIER:

Stondri MVT is applied in two coats using a rubber squeegee at 200 microns per coat, allowing 4 hours curing between coats. Use a wet film thickness gauge to record thickness. Into the second coat, whilst still wet, broadcast Medium Texture # 6222 evenly to rejection and allow to cure. Sweep off unbound aggregate when cured. Remove high spots with the edge of a trowel and vacuum to ensure no loose particles. Apply the cementitious levelling underlayment, Pro-Struct 513 / Pro-Struct 518 prior to the installation of the specified protection systems.

RECOMMENDATIONS:

- DO NOT attempt to install material if temperature of components and substrate are not within 16°C 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 literature or service can be made through local sales representatives and offices, or corporate offices located worldwide.