

SELECTION & SPECIFICATION DATA

Description	<p>Semstone 5407 is a 100 % solids, moisture epoxy mortar. It is a three component system consisting of Part A resin and Part B hardener. A premeasured aggregate (Part C) blend component is included with each kit. This product is designed to be applied by trowel from 1/8" to 1/4" or up to 3/8" needed.</p> <p>Semstone 5407 is formulated to provide exceptional performance in areas subject to extreme mechanical abuse. It possesses excellent resistance to impact, heavy loads, thermal stresses and abrasive environments. With appropriate chemical resistant top-coat, it will resist acids, alkalies and solvent attack.</p>
Typical Uses	<p>Semstone 5407 is suitable for a variety of flooring applications including:</p> <ul style="list-style-type: none"> • USDA Inspected Facilities • Warehouse Floors • Operations Areas • Forklift Traffic Areas • Chemical Loading / Unloading Areas • Loading Docks • Animal Holding Pens • Laboratories • Wet Processing Areas
Solids Content	By Volume 100%
Coverage Rate	Approximately 2.97 sqm (Theoretical) per unit at 5mm thickness.

SUBSTRATES & SURFACE PREPARATION

General	<p>Immediately prior to application of coating, concrete substrate must be:</p> <ul style="list-style-type: none"> * Adequately cured (generally, 28 days) structurally sound * Free of all dirt, dust, debris, oil, grease. <p>MASKING</p> <p>Mask adjacent surfaces and equipment that are not to be coated. These coating and lining materials are difficult to remove, once applied.</p> <p>Refer to StonCor ME Technical Service Department for instruction in the preparation of concrete surfaces to accept a protective coating system.</p>
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MIXING & THINNING

Mixing	<p>Semstone 5407 is supplied in premeasured kits. Using a clean mixing container, blend Semstone 5407 Part A epoxy resin with Semstone 5407 Part B hardener for two minutes. Then slowly add aggregate to the blended Semstone 5407 and mix until all particles are thoroughly wet.</p>
Pot Life	<p>45-60 min.*</p> <p>*significantly less at elevated temperatures</p>

APPLICATION PROCEDURES

General	<p>Equipment Necessary</p> <ul style="list-style-type: none"> Kol mixer or Mortar mixer Felt rollers with extension handles to apply primer 4" wide paint brushes Flat steel trowels
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Semstone 5407

PRODUCT DATA SHEET



APPLICATION PROCEDURES

	<p>Clean mixing containers Knee pads</p> <p>PRIMING Mix Semstone 5407 liquid in a clean mixing container for two minutes and apply to prepared concrete to be topped in a thin even coat using felt rollers. Prime only that area which can be topped while primer coat is still tacky or wet (approximately 3 to 4 hours). If primed area cannot be finished while primer coat is still tacky, the area must be primed again prior to application of the topping.</p>
Application	<p>Spread mixed Semstone 5407 over tacky primed surface to the desired thickness (typically 6mm over horizontal and 4mm over vertical). After spreading material to thickness, dip trowels into Thinner 45 to act as a smoothing liquid and finish with full pressure to compact and seal topping. Note: Work area should be shaded from direct sunlight to minimize blister formation. Note: Typically on a large project, the use of a screed box and power troweling is recommended for uniformity and compacting. When work is interrupted, or at end of the day, edge of work must be squared in straight line and straight up and down from surface to substrate.</p> <p>SEALING Can be sealed with Carboguard 890 / Pro-Struct 959, a chemical resistant two pack epoxy coating at a spread rate of 5-6 sq. mtrs./ltr. A minimum of two coats to be applied in perpendicular to each other. For special requirements consult StonCor Technical Service Department.</p>

CURING SCHEDULE

Curing Details	12 hrs at 21°C (70°F)* *Foot Traffic
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CLEANUP & SAFETY

Cleanup	<p>Before Semstone 5407 Trowel Mix gels, it can be cleaned from tools and equipment using hot soapy water. After Semstone 5407 gel, xylene or MEK will be required for cleaning. Chlorinated solvents may be used if flammable solvents are not allowed.</p>
Caution	<p>SAFETY PRECAUTIONS: FOR INDUSTRIAL USE ONLY!</p> <p>When using Semstone 5407 Trowel Mix, be aware of these safety precautions: Avoid contact with eyes and skin. Do not ingest or inhale. Always wear chemical goggles, rubber gloves, and appropriate work clothing. Make provisions for forced ventilation when working in a confined area. Prolonged or repeated exposure to the mixed material or the unreacted Part A and Part B components may cause skin irritation or allergic reaction. Refer to material safety data sheets (MSDS) regarding individual components.</p>

PACKAGING, HANDLING & STORAGE

Shelf Life	24 months at 70°F
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PACKAGING, HANDLING & STORAGE

Storage | Keep Semstone 5407 Trowel Mix tightly sealed in its original containers until ready for use. Store at 50°-75°F out of direct sunlight.

Packaging | Each unit consists of:
A premeasured kit contains A+B component - 3.8 ltrs (2.85 Liters A + 0.95 Liters B)
A premeasured aggregate (Part C) blend component - 30 kgs

PHYSICAL PROPERTIES

Test Method	System	Cure Time	Results
ASTM C-579	Compressive Strength		12,000 psi
ASTM C-722	Flexural Modulus of Elasticity		1.7×10^6
ASTM D-2240 Shore D	Hardness		87-90
ASTM D-638	Tensile Strength		2,200 psi
ASTM D-790	Flexural Strength		5,000 psi

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.

WARRANTY

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