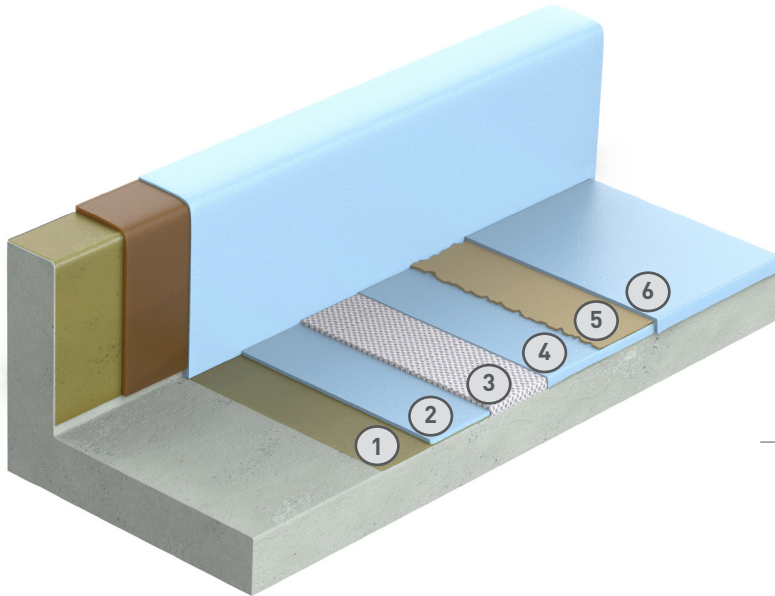


Semstone[®] 145 AFRC

SYSTEM INFORMATION SHEET



68-85 mils (1700-2125 microns)

SYSTEM STEPS

- ① Semstone 110
- ② Semstone 145
- ③ Semstone Scrim Cloth
- ④ Semstone 145
- ⑤ 20/40 mesh aggregate
- ⑥ Semstone 145



ABRASION RESISTANT

The filler used in this system protects against abrasion and breakdown of the epoxy resin, allowing for asset longevity.



CHEMICAL RESISTANCE

The Semstone 145 AFRC system is broadly chemical resistant and withstands exposure to various fuels, fluids, lubricants, and cleaning agents.



CRACK PROTECTION

Semstone 145 AFRC isolates future cracks in concrete, extending the potential service life of the coating system.

Semstone 145 AFRC

SYSTEM INFORMATION SHEET



PERFORMANCE DATA	TEST METHOD	RESULTS
	Shore D Hardness (ASTM D2240)	75 (Semstone 145 neat)
	Adhesion (ASTM D4541)	>400 psi (100% concrete failure)
	Compressive Strength	16,000 PSI
	Flexural Strength (ASTM C580)	13,000 PSI
	Flexural Modulus of Elasticity (ASTM D790)	7.5 x 10 ⁵ PSI

SYSTEM STEPS	PRODUCT	THICKNESS	THEORETICAL COVERAGE RATE	PACKAGING	APPLICATION EQUIPMENT	RECOAT / DRY TIME*
Primer	Semstone 110	8-10 mils (200-250 microns)	160-200 ft ² /gallon	Part A Part B	Medium nap roller	6 hours (min) 3 days (max)
	-OR- Primer 67 Series	3-4 mils (75-100 microns)	337-449 ft ² /gallon			2 hours (min) 3 days (max)

The mixed product can be poured out directly to the floor. Spread to the desired thickness with a medium nap roller. An optional light aggregate broadcast can be employed to protect the primer and extend maximum recoat times. Allow primer to cure to tack-free prior to continuing.

Basecoat	Semstone 145	20-25 mils (500-625 microns)	64-80 ft ² /gallon	Part A Part B	Notched squeegee Medium nap roller	N/A
----------	--------------	---------------------------------	-------------------------------	------------------	---------------------------------------	-----

The mixed product can be poured out directly to the floor. Spread to the desired thickness with a notched squeegee, finish by backrolling with a medium nap roller.

Reinforcement	Semstone Scrim Cloth	N/A	N/A	N/A	Medium nap roller Serrated roller or flat trowel	12 hours (min) 24 hours (max)
---------------	----------------------	-----	-----	-----	--	----------------------------------

Unroll the scrim cloth evenly and carefully. Embed into the wet basecoat. Overlap seams a minimum of 1-1/2". Ensure that all wrinkles and air are removed and that the cloth conforms to the surface, and that this is no apparent blush.

Saturant Coat	Semstone 145	25-30 mils (625-750 microns)	53-64 ft ² /gallon	Part A Part B	Notched squeegee Medium nap roller	N/A
---------------	--------------	---------------------------------	-------------------------------	------------------	---------------------------------------	-----

The mixed product can be poured out directly to the floor. Spread to the desired thickness with a notched squeegee, finish by backrolling with a medium nap roller. Make sure to completely embed Semstone scrim cloth.

Broadcast	Broadcast Sand	N/A	Up to 1.5 lbs per ft ²	N/A	N/A	12 hours (min) Unlimited (max)
-----------	----------------	-----	-----------------------------------	-----	-----	-----------------------------------

Aggregate to be clean and dry. Broadcast aggregate to rejection. Allow to cure until the system can support weight without disrupting the basecoat. Once cured, remove all excess aggregate.

Topcoat	Semstone 145	15-20 mils (375-500 microns)	80-100 ft ² /gal	Part A Part B	Flat squeegee Medium nap roller	12 hours (min) 24 hours (max)
---------	--------------	---------------------------------	-----------------------------	------------------	------------------------------------	----------------------------------

Apply Semstone topcoat with flat squeegee and back-roll with a medium nap roller. Allow to cure a minimum of 48 hours @ 75°F prior to putting the area in service.

NOTE: The topcoat thickness can be adjusted to reflect more of an aggressive non-skid effect or a more cleanable effect.

Ⓐ 15 mils, the surface would result in an aggressive non-skid.

Ⓑ 20 mils, the surface would result in a good non-skid surface and easily cleanable.

Ⓒ 25 mils, the surface will lose it's non-skid and be very cleanable

*Recoat time at 75°F (24°C).

Semstone 145 AFRC

SYSTEM INFORMATION SHEET



VERTICAL APPLICATION						
SYSTEM STEPS	PRODUCT	THICKNESS	THEORETICAL COVERAGE RATE	PACKAGING	APPLICATION EQUIPMENT	RECOAT / DRY TIME*
Primer	Semstone 110	5-6 mils (125-150 microns)	267-320 ft² /gallon	Part A Part B	Medium nap roller	6 hours (min) 3 days (max)
	-OR- Primer 67 Series	3-4 mils (75-100 microns)	337-449 ft²/gallon			2 hours (min) 3 days (max)
The mixed product can be rolled directly onto the wall. Allow to cure to a tacky state (6-8 hours) prior to topcoating.						
Patch & Repair	Scratch-Coat 300	up to 1/8 inch (3 mm)	24 ft² per gallon kit @ 1/16 inch	Part A Part B	Flat trowel	8 hours (min) 2 days (max)
Though the Scratch-Coat 300 is a trowel or squeegee applied material, it is not intended to be utilized as a surface “coating”. The compound should be spread firmly, forcing the material into voids and pinholes. Use the trowel blade to scrape excess material from flat, void-free surfaces. The consistency of the mortar provides excellent non-slumping characteristics for vertical or overhead use. This normally allows completion of the surface preparation following only one application. Allow the Scratch-Coat 300 to cure until firm before proceeding with the specified basecoat and topcoat. Excessive trowel marks and/or rough areas should be sanded smooth.						
Topcoat	Semstone 145 - Blended	25-32 mils (625-800 microns)	40 ft² per gallon @ 25 mils** 51 ft² per gallon @ 32 mils**	Part A Part B	Flat trowel	12 hours (min) 24 hours (max)
Blend Semstone 145 with a fine aggregate (80-120 mesh) and Semstone Thixotrope “D” (Cab-O-Sil TS-720) at a ratio of 1 part Semstone 145 to 1 part fine aggregate to .5 part Thixotrope “D” by volume. If necessary, add Semstone Thixotrope Part “D” until the mixture hangs on a stir stick. Trowel apply @ 25 - 32 mils. Remove trowel marks with odorless mineral spirits on a clean trowel. **Coverage per blended gallon. For Chemical Service, allow to cure 48 hours @ 75°F prior to putting the area in service.						

INSTALL

This document is meant as a guideline for the installation of the system. Contact Carboline Technical service for further assistance prior to the installation of the system.

SURFACE PREPARATION

Follow NACE 6/SSPC 13 guidelines. Concrete or screed substrate should be sound, free from laitance, dust, and other contamination with a minimum of 3,625 PSI compressive strength. The substrate should be dry and free from excess rising moisture. Abrade the surface to achieve an ICRI CSP 3 or greater surface profile.

All control joints must be honored. Welded joints and cracks in the concrete may be coated, but if movement occurs the coating will also crack. All residues must be removed to provide a dry, dust free open textured surface. Contact Carboline Technical Service for further information.

MIXING

Specific mixing instructions for each product can be found on its corresponding Product Data Page.



Dudick is part of Carboline
1818 Miller Parkway
Streetsboro, Ohio 44241
1-800-322-1970

NOTE: The technical data presented in this document is accurate to the best of Dudick and Carboline's knowledge based on laboratory testing of the product(s) or system(s) described. Actual results in the field may vary depending on field conditions and application methods. The performance characteristics stated do not constitute a guarantee or warranty that the products will meet the stated results under all circumstances. Contact Dudick or Carboline technical staff with questions.