CITADEL

UC-125 SL
URETHANE CEMENT

DESCRIPTION AND USES

Citadel® UC-125 SL Urethane Cement is a heavy duty, self-leveling, slurry-broadcast, anti-slip and antimicrobial treated cementitious urethane flooring system.

The UC-125 SL product is typically installed by factory trained contractors. Be sure you are fully aware of all application procedures and have all the required equipment available prior to beginning the installation of this product.

PRODUCT FEATURES AND BENEFITS

- 63 sq ft/unit at 1/8" (yielding 3/16" finished floor)
- VOC <10 g/l, SCAQMD Approved
- Contains a silver ion antimicrobial additive to protect the surface
- Positively textured profile to minimize slip risks in wet or damp areas
- Resistant to temperatures of up to 220°F and suitable for steam cleaning
- Unaffected by moisture vapor transmission
- Rapid Return to Service in 24 hours
- Low odor and non-toxic
- This coating complies with USDA FSIS regulatory sanitation performance standards for food establishment facilities

PRODUCT

SKU	DESCRIPTION
400154	UC-125 SL 60 sq. ft. Kit
400163	UC-125 SL Filler (40 lb. Bag)

Kit Contents:

Part A - Base (1.13 Gal.), Part B - Hardener (0.98 Gal.). Pigment, aggregate, and filler sold separately.

COMPANION PRODUCTS

SKU	DESCRIPTION
400157	UC Grey Pigment Pack
400158	UC Red Pigment Pack
400160	UC Dark Grey Pigment Pack
314759	#20-40 Silica Sand (50 lb. bag)

RECOMMENDED TOPCOATS

- Citadel RG-70
- Citadel RG-80
- Citadel UL-80
- Citadel ET-80
- Citadel PLE-100
- Citadel SLE-100

PRODUCT APPLICATION

READ ALL INSTRUCTIONS CAREFULLY BEFORE STARTING PROJECT

SURFACE PREPARATION

NEW CONCRETE: New concrete should be allowed to cure for a minimum of 28 days. The concrete must be structurally sound, dry, and free of grease, oils, dust, curing compounds and other coatings or contaminants. Surface laitance must be removed. The preferred method of surface preparation is to mechanically abrade the floor by diamond grinding to achieve a final 60-80 grit finish, reference profile CSP-5 according to ICRI. If patching is required, use Citadel Fortification Formula Concrete Repair.

PREVIOUSLY COATED: Previously coated surfaces must be sound and in good condition. Smooth, hard, or glossy finishes should be scarified by sanding or sweep blasting to create a surface profile. The UC-125 SL is compatible with most coatings, but a test patch is suggested.

NOTE: Concrete should have a minimum of 3,000 psi compressive strength. Concrete must be visibly dry at time of application.

PRIMING

UC-125 SL does not normally require a primer due to the application method unless the substrate is extremely porous. If a primer is needed, a scratch coat of UC-125 SL is recommended.

MIXING EQUIPMENT

Low speed drill and 3" Hanson Plunge Mixer or 1/2-5/8"-chuck spiral single paddle mud or mortar mixer.

Important: Hand mixing will produce inconsistent results and is not an approved method.

MIXING

Note: Before starting, ensure the concrete surface, and the ambient air are all at 40-90°F (4-32°C), not recommended for relative humidity above 80%. All material, especially the Filler, must be at a minimum of 50°F (10°C) prior to mixing. Allow the Filler to warm-up above minimum temperature if necessary. Filler below this minimum temperature will quickly lower the temperature of the admix and affect application of the coating.

Thoroughly mix each component separately before combining. Pour the base (Part A) and hardener (Part B) components together in a clean, dry 5-gallon (18.93 L) container and power mix using an approved mixer as mentioned above. While mixing, add filler (Part C) and Pigment Pack (Part D) and continue to mix until uniform color is achieved. **DO NOT OVERMIX.** Pigment Pack not required if using color quartz. **DO NOT THIN**

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PRODUCT APPLICATION (cont.)

APPLICATION EQUIPMENT

Steel hand trowel or adjustable screed pin or cam rake
Spiked or looped roller

APPLICATION

Immediately after mixing, spread the UC-125 SL using the steel hand trowel or adjustable screed rake set to the desired thickness. Immediately roll with a spiked or looped roller to release any entrapped air and level the mortar. Do not roll the surface after 4 to 8 minutes of it being applied to the floor. Late rolling will cause problems with the finished texture and appearance.

Broadcast #20-40 quartz aggregate or color quartz aggregate to rejection, approximately 1 lb. per square foot.

CLEAN UP

Applicators and equipment should be cleaned immediately after use with an active solvent like xylene (in SCAQMD, use acetone only). Clean spills or drips while still wet with solvent. Dried UC-125 SL will require mechanical abrasion for removal.

PERFORMANCE CHARACTERISTICS

COMPRESSIVE STRENGTH

METHOD: ASTM C579
RESULT: >7,250 psi

TENSILE STRENGTH

METHOD: ASTM C307
RESULT: 1,740 psi

BOND STRENGTH TO CONCRETE

METHOD: ASTM D4541
RESULT: Minimum 400 psi (100% concrete failure)

FLEXURAL STRENGTH

METHOD: ASTM C580
RESULT: 2,900 psi (20 MPa)

ABRASION RESISTANCE

METHOD: ASTM D4060 (CS 17 wheels, 1000 cycles)
RESULT: 0.05g loss

COEFFICIENT OF THERMAL EXPANSION

METHOD: ASTM C531
RESULT: 2.7 x 10^{-5}in/in/°F

COEFFICIENT FRICTION

METHOD: ASTM D2047
RESULT: Exceeds ADA recommendations

TEMPERATURE RESISTANCE

METHOD: Continuous exposure
RESULT: 180°F

METHOD: Intermittent spills
RESULT: 220°F

	TECHNICAL DATA	CDL-60

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PHYSICAL PROPERTIES

		UC-125 SL
Resin Type		Cementitious Urethane
Pigment Type		Varies depending on color
Weight	**Per Gallon**	8.4-10.2 lbs.
	Per Liter	1.0-1.2 kg
Solids	**By Weight**	100%
	By Volume	100%
Volatile Organic Compounds		<10 g/l
Recommended Dry Film Thickness (DFT) Per Coat		125 mils
Practical Coverage		63 sq ft / kit at 1/8" (yielding 3/16" finished floor)
Mixing Ratio		1 Container Part A : 1 Container Part B : 1 Bag Filler : 1 Pigment Pack
Pot Life @ 70°F (21°C) and 50% Relative Humidity		20-25 minutes
Re-Coat Window (Min./Max)		12 hours/24 hours
Dry Times at 77°F (25ºC) and 50% Relative Humidity	**Foot Traffic**	6-8 hours
	Vehicle Traffic	12-16 hours
	Full Cure*	3-5 days
Dry Heat Resistance		250°F (121°C)
Shelf Life		2 years
Flash Point		>350°F (>176°C)
Safety Information		For additional information, see SDS

*Coating achieves its full physical and chemical resistant properties.
Calculated values are shown and may vary from the actual manufactured material.

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