CONCRETE CASTING

TECHNICAL DATA SHEET

XS 327

FOOD SAFE CONCRETE CASTING SEALER

View More Info for this Product at
www.surecretedesign.com/product/concrete-countertop-sealer

XtremeSeries

XS-327

SURECRETE®

PACKAGING
40 oz. kit
1 – 1 qt (0.9 L) short filled can part A (containing 24 oz. [0.7 L])
1 – 1 pt (0.47 L) can part B

MIXING RATIO
3:2 (3 part A to 2 parts B)

COVERAGE
Approximately 100 ft² per qt. (9.3 m² per 0.9 L) of catalyzed and diluted product
4 mils wet / completed system 2 mils cured

SHELF LIFE
Under normal, moisture free conditions 12 months for unopened container.

DESCRIPTION

XS-327™ is a specially formulated two component, moisture-cure, high solids hybrid water based polyurethane coating designed for application over completed concrete surfaces. ***XS-327*** is a penetrating, UV stable, minimal color enhancing sealer, available in both matte and gloss finishes. At 64% solids (varies upon reduction rate) and 25 g/L VOC this high performance clear top coat generates the premier balance of strength, flexibility, chemical and scratch resistance. ***XS-327*** is ideally suited for both commercial and residential settings applied upon concrete countertops, fireplace surrounds, shower panels, floor tiles, wall panels, and all ***Xtreme Series*** products. Like some other sealers, ***XS-327*** becomes food safe upon curing. It is stain resistant to most household chemicals and culinary items, and is heat resistant to 300°F (149°C). ***XS-327*** is distinctive in its ability to be touched up or repaired.

SURFACE PREP

The principles for surface preparation for ***XS-327*** are aligned with other coating systems placed on Xtreme Series materials or concrete, the substrate must be:

1. Cured: Before sealer application, ***Xtreme Series*** cast products must hydrate out of the mold for a minimum of 12 hours depending on temperature & humidity. Any standard concrete must be sufficiently cured to have complete hydration, approximately 14 days depending on temperature & humidity.

2. Clean: The surface must be free of dust, dirt, oil, grease, paints, glues, sealers, curing agents, efflorescence, chemical contaminants, rust, algae, mildew and other foreign matter that may serve as a bond breaker or prevent proper adhesion. Clean surface with ***SCR*** in a dilution rate of 3 parts water to 1 part ***SCR*** (water: SCR; 3:1). Allow surface to dry. For specific directions on cleaning refer to the TDS of ***SCR***.

3. Profiled: For ***Xtreme Series*** cast products and standard concrete, the proper profile is achieved through cleaning with ***SCR*** as described above. For polished pieces, like terrazzo, do not polish in excess of 400 grit, so that suitable profile is maintained for adhesion. ***XS-327*** may be applied upon densified concrete. For specific directions on densifying, refer to the TDS of ***LD1800***.

TEMPERATURE/CURE

Do not allow product to freeze, whether in shipping or storage. Part A of product that has frozen will separate and curdle; Part B does not change in appearance. However, product that has frozen, should not be used.

Apply in ambient and surface temperatures ranging above 60°F (16°C) and below 90°F (32°C) and that will remain within ranges for at least 12 hours. As ***XS-327*** is a moisture-cure product, the use of more water in dilution rates may be required in those areas with very dry climates.

Maximum pot life	30 minutes
Ready for recoat	Dry to the touch
Recoat "window"	After 12 hours sanding required
Light duty use	24 hours
Complete cure / Full use	7 days

APPLICATION

Planning

1. Provide for ventilation. Product should never be sprayed or atomized.
2. Elevate the surface to be sealed above the supporting table, so that all edges can be conveniently sealed without dragging the roller across the supporting table.

Mixing and handling A and B

1. Organize mixing area with appropriate measuring cups or spoons, as A and B measurements are critical. Once A and B (and water) are mixed, the product should be placed within 30 minutes.
2. Add 2 parts B into clean mixing vessel containing 3 parts A. To prevent moisture from entering product, reseal kits immediately after use. When resealing a partially used kit, clean any excess product from edge of can with denatured alcohol.
3. Mechanically mix parts A and B for 3 minutes at slow to medium speed with a jiffy style mixer. After the 3 minute mix time the product is now catalyzed.
4. Clean out or replace mixing and measuring containers and mixer blades in a reasonable fashion, so that the chemistry of A and B remain consistent, and that measuring containers may be reused if desired. Denatured alcohol cleans up containers and product well prior to curing.

Prime coat

1. Induction time of mixed product should be 10 minutes. Simply allow product to remain in mixing vessel after mixing.
2. Add 7 parts water to 1 part catalyzed product (7:1). Be aware

TECHNICAL DATA SHEET

that this much dilution often creates much more useable product than realized. (To illustrate: 3 oz. [90 ml] Part A + 2 oz. [60 ml] Part B = 5 oz. [150 ml] of catalyzed product. At 7:1 ratio, 35 oz. [1 L] water is added to create 40 oz. [1.15 L] of product ready for prime coat.

3. Mechanically mix for 2 minutes with jiffy style mixer.

4. Clean surface to be sealed of dust or contaminants with denatured alcohol on micro-fiber rag.

5. Utilize 4" – 6" (10 – 15 cm) high density foam roller, such as found at home centers, and identified as "door and cabinet" roller.

6. Apply to vertical edge profiles first.

7. Flood surface with generous quantity of product rolling sealer around and keeping surface completely saturated. Do not allow surface to become dry. The goal here is to have as much product absorbed into the surface as possible.

8. Saturation point of surface is reached when excessive bubbling and foaming are manifested. No more product is penetrating, but rather is being rejected. Push off excess ***XS-327*** from surface and squeeze out the roller with a downward pressure.

9. Backroll surface with relatively dry roller using only the weight of the roller. Backroll until all roller marks and bubbles disappear, leaving a blemish free surface. If lines are visible on surface at this stage they will be seen in successive coats.

10. Allow to dry sufficiently to proceed to next step. Surface must be completely dry and tack free. Wide variance in dry time can occur due to temperature, humidity, and surface texture.

First Coat

1. If prime coat is dry to the touch, proceed with first coat.

2. If prime coat has cured beyond 12 hours, it must be sanded with 220 grit sand paper by hand or with an orbital sander. This sanding will ensure not only a good bond between coats, but also eliminate any imperfections, debris, or dust that may have settled onto the prime coat as it was drying. Clean surface with compressed air or lint-free rag.

3. First coat mixes similar to prime coat described above. Add 2 parts B into clean mixing vessel containing 3 parts A. To prevent moisture from entering product, reseal kits immediately after use. When resealing a partially used kit, clean any excess product from edge of can with denatured alcohol.

4. Mechanically mix parts A and B for 3 minutes at slow to medium speed with a jiffy style mixer. After the 3 minute mix time the product is now catalyzed.

5. Induction time of mixed product should be 10 minutes. Simply allow product to remain in mixing vessel after mixing.

6. Dilution rate changes: add 2 parts water to 1 part catalyzed product (To illustrate: 3 oz. [90 ml] Part A + 2 oz. [60 ml] Part B = 5 oz. [150 ml] of catalyzed product. At 2:1 ratio, 10 oz. [300 ml] water is added to create 15 oz. [450 ml] of product ready for first coat.)

7. First coat applies similar to prime coat. However, saturation of product is no longer the goal.

8. Backroll surface with relatively dry roller using only the weight of the roller. Backroll until all roller marks and bubbles disappear, leaving a blemish free surface. If lines are visible on surface at this stage they will be seen in successive coats.

9. Allow to dry sufficiently to proceed to next step. Surface must be completely dry and tack free. Wide variance in dry time can occur due to temperature, humidity, and surface texture.

Second Coat

1. If first coat is dry to the touch, proceed with second coat.

2. If first coat has cured beyond 12 hours, it must be sanded with 220 grit sand paper by hand or with an orbital sander. This sanding will ensure not only a good bond between coats, but also eliminate any imperfections, debris, or dust that may have settled onto the first coat as it was drying. Clean surface with compressed air or lint-free rag.

3. Second coat mixes and applies as first coat above. Dilution of product remains 2 parts water to 1 part catalyzed mix (2:1).

24 hours after application of second coat, surface is ready for light duty use.

7 days after application of second coat, complete cure is achieved and surface is ready for full use.

SOLIDS CONTENT

XS-327 is packaged at 64% solids. In recommended application as described above, note solids content below:

	(water : catalyzed mix)	**% solids**
Prime coat	7:1	8%
First coat	2:1	21%
Second coat	2:1	21%
Completed coats		**50% total**

The system established as primer coat + first coat + second coat is adequate for all but the most severe conditions. Wet water areas, integral sinks, and some commercial applications may benefit from additional coat(s).

SUITABILITY SAMPLE

Always prepare an adequate number of test areas, including wear protection system and aesthetic suitability for products' intended use.

CLEAN-UP

Before ***XS-327*** dries; spills and tools can be cleaned up with a solvent such denatured alcohol.

DISPOSAL

Contact your local government household hazardous waste coordinator for information on disposal of unused product. Upon curing, left over catalyzed product is not hazardous.

LIMITATIONS

For use by trained professionals that have read the complete SDS.

WARRANTY

Warranty of this product, when used according to the directions, is limited to refund of purchase price, or replacement of product (if defective), at manufactures/seller's option. SureCrete Design Products shall not be liable for cost of labor or direct and/or incidental consequential damages.

CAUTIONS

KEEP OUT OF REACH OF CHILDREN. Avoid sources of ignition. Keep areas ventilated to prevent the accumulation of vapors. **Inhalation:** Use NIOSH approved respirator for organic vapors. **Skin Contact:** Skin contact may cause irritation. Remove contaminated clothing and wash affected skin with soap and water. Launder clothing before reuse. If symptoms persist, seek medical attention. **Eyes:** Wear safety eye protection when applying. If contact occurs, flush eyes with water for 15 minutes, seek medical attention.

TEST DATA

Appearance (cured)	Clear matte or gloss
Water Resistance	Excellent, beads water
Mechanical Stability	Excellent
Light Stability	Excellent
Solids	64% as packaged
Appearance (wet)	Milky
Odor	Sweet
Application Temperature	60°F – 90°F (16°C - 32°C)
VOC content	25 g/L before dilution
Pot life	Approximately 30 mins
Gardener direct / reverse impact	>160 inch pounds
Taber abrasion	40-60 mg loss
QUV – A	<5.0 @ 2000 hours
Gloss retention	>95% @ 2000 hours

CHEMICAL RESISTANCE

Industrial Chemicals	**24 hours**
MEK (methyl ethyl ketone)	no effect
Xylene	no effect
Tap Water	no effect
Mineral Spirits	no effect
100% Ethanol	no effect
10% acetic acid	no effect
5% sodium hydroxide	no effect
50% sodium hydroxide	no effect
85% lactic acid	no effect
50% sulfuric acid	no effect
38% hydrochloric acid	no effect
10% sodium chloride solution	no effect
28% ammonia	no effect

Household Chemicals	**24 hours**
Coffee	no effect
Cola	no effect
Grape juice	no effect
Ketchup	no effect
Mustard	transient staining
Clorox Bleach 5 – 10%	no effect

SAFETY DATA SHEETS

The following are links to all available safety data sheets related to this product:

- xtreme-series-xs-327-a-sds.pdf
- xtreme-series-xs-327-b-sds.pdf

PRODUCT PART #'S

Part A - XS 327 Matte	SKU# 45102005
Part A - XS 327 Gloss	SKU# 45102006
Part B - XS 327	SKU# 45102002

TECHNICAL DATA SHEET