

TECHNICAL DATA SHEET- STAMP OVERLAY SYSTEM

1. DESCRIPTION & USE

Xcel Surfaces Stamp Overlay is a polymer modified, cementitious surfacing system designed for use on structurally sound concrete substrates. The Stamp Overlay System is used for interior or exterior applications and can be stamped to simulate a variety of textures and patterns ranging from natural stone to wood.

Available in WHITE, CREAM AND GRAY, Xcel Surfaces Stamp Overlay System can also be pigmented or stained to produce an extremely attractive, durable, stain resistant surfacing system for concrete. When properly mixed and applied, Xcel Surfaces Stamp Overlay will not shrink when setting, resists breakdown due to dampness and cures to an extremely durable surface that will not crack or break up. A typical finished application is 1/4" – 3/8" (.635 cm-.95cm) maximum thickness.

2. COMPOSITION

Xcel Surfaces Stamp Overlay System consists of the following proprietary components:

- 2.1. **STAMP MIX**- A blend of graded silica sands, cement and special additives.
- 2.2. **TEXTURE MIX**- A very fine blend of silica sands, cement and special additives. Used as the scratch coat when used with the Stamp Overlay System.
- 2.3. **ACRYLIC ADDITIVE**- A 100% acrylic liquid polymer admixture for use as a bond coat and additive for **Texture Mix**.
- 2.4. **SMP-5000 ADDITIVE**- A proprietary polymer blend for use as an admixture for **Stamp Mix**.
- 2.5. **DRY COLOUR**- Dry colored pigment for use when integrally coloring **Stamp Mix** or **Texture Mix**.
- 2.6. **BUBBLE GUM RELEASE**- Liquid mold release agent.
- 2.7. **DRY RELEASE**- Dry colored releasing agent used for coloring **Bubble Gum Release** when wanting to achieve antiquing effects during the stamping process.

- 2.8. **EFF-FACTOR**- A specialty hybrid emulsion designed to be used as an efflorescence inhibitor; can be used as a *bond coat* or sealer.

3. PREPARATION

The concrete surface must be dry and free of all grease, oil, dirt, dust, curing compounds, sealers, coatings, efflorescence, old adhesive residues or any other foreign matter. New concrete should be cured for at least 7 days before applying acrylic additive bond coat; if using Xcel Surfaces **EFF-Factor** as a *Bond Coat*; overlayment can be applied next day. Clean concrete substrate using Xcel Surfaces **Citrus Cleaner** or **Degreaser**. Treat all cracks as necessary with Xcel Surfaces **Epoxy Crack Treatment**. Repair or replace any expansion joints prior to installation of overlayment. Repair any major spalling, chipping, voids or 'bird baths' using Xcel Surfaces **Deep Level** or **Fast Patch**.

4. MIXING

- 4.1. **SCRATCH COAT**- Using a clean 5 gallon (18.93L) container, add 50 lbs. (22.6 Kg) of **Texture Mix** to approximately 2 gallons (7.57L) of **Acrylic Additive** and mix with a variable speed drill and paddle. DO NOT OVERMIX. If integral color is desired, add the appropriate amount of **Dry Colour** to the mixture during the mixing process. Ensure all **Dry Colour** is thoroughly blended. LET SLAKE FOR 5-7 MINUTES; REMIX FOR APPROXIMATELY 30 SECONDS. (Do not add water. Always use **Acrylic Additive** for any adjustment to the mix.)
- 4.2. **STAMP COAT**- Using a clean 5 gallon (18.93L) container, add 50 lbs. (22.6Kg) of **Stamp Mix** to approximately 1 gallon (3.79 L) of **SMP-5000 Additive** and mix with a variable speed drill and paddle. DO NOT OVERMIX. If integral color is desired, add the appropriate amount of **Dry Colour** to the mixture during the mixing process. Ensure all **Dry Colour** is thoroughly blended. LET SLAKE FOR 5-7 MINUTES; REMIX FOR APPROXIMATELY 30 SECONDS. (Do not add water. Always use **SMP-5000 Additive** for any adjustment to the mix.)

5. INSTALLATION

- 5.1. **BOND COAT**- Using a 3/8" – 1/2" (.95-1.27 cm) nap paint roller, roll a thin even coat of **Acrylic Additive** onto the prepared concrete substrate. The *Bond Coat* can also be applied via sprayer. **DO NOT OVER APPLY.**
- 5.2. **SCRATCH COAT**- Using a steel trowel or squeegee, apply a thin *Scratch Coat*, 1/16" thick (.159 cm) directly on the bonded substrate. Allow the *Scratch Coat* to cure enough for general foot traffic. (Depending on substrate and ambient temperatures, cure time can vary from 30 minutes to a few hours.) **IMPORTANT:** All existing substrate control joints must be honored. Once the *Scratch Coat* has dried, prepare the surface by scraping any burrs or unwanted slag; blow clean or vacuum.
- 5.3. **STAMP COAT**- On the prepared *Scratch Coat*, disburse the **Stamp Mix** onto the surface, using a gauge rake (1/4" / 6.35 cm cams) to spread the material, obtaining a consistent thickness (~1/4" / 6.35 cm); lightly mist the scratch coat if working in warm, dry conditions to help cool the surface and eliminate accelerated moisture loss from the **Stamp Mix**. After the material has been 'raked' to achieve a consistent thickness, lightly trowel the surface to smooth out unwanted gauge marks and inconsistencies using steel trowel or flex smoother. **DO NOT OVER TROWEL.** When the material has dried to the point where it has developed a thin 'skin', but is still relatively soft, the stamp coat is ready to be impressed with the stamping mats. Using a pump-type sprayer, apply an even film of **Bubble Gum Release** to both the overlay surface and the face of the stamps. Carefully place the stamp mat on the surface and lightly tamp the mat to create the desired impression. Xcel Surfaces **Dry Release** may be mixed with the **Bubble Gum Release** to create unique antiquing effects during the stamping process. After the stamp coat has dried (preferably for 24-48 hours), an approved Xcel Surfaces clear coat sealer is applied to enhance coloring and provide a durable, protective surface.
CAUTION: Do not apply **Stamp Mix** in extreme temperatures. Substrate temperature should be between 45°F- 95°F (7.2-35°C).

6. PACKAGING

Stamp Mix: 50 lb. (22.68 Kg) bags; available in Cream, White, and Gray.

Texture Mix: 50 lb. (22.68 Kg) bags; available in Cream, White, Gray, Sand and Brick Red.

Acrylic Additive: 5 gallon (18.93 L) and 1gallon (3.79L) pails; available in summer or winter formula.

SMP-5000 Additive: 5 gallon (18.93 L) pails.

Bubble Gum Release: 5 gallon (18.93 L) and 1 gallon (3.79 L) pails.

7. COVERAGE

Stamp Mix: Approximately 20-25 sq. ft. (1.86-2.32 sq. M) at 1/4" inch (.635 cm) thick.

Texture Mix: Approximately 200 sq. ft. (18.58 sq. M) per 50 lb. (22.68 Kg) bag when used as a *Scratch Coat*.

Acrylic Additive: 150 – 200 sq. ft. (13.94-18.58sq. M)/gallon when used as *Bond Coat*.

Bubble Gum Release: Approximately 250-300sq. ft. (23.23-27.87 sq. M) per gallon

8. QUALITY CONTROL

Provide a job site sample prior to the installation for approval of color, texture and pattern. Consistent batching and finishing will ensure the uniformity of architectural concrete. Verify adequate wet and dry slip resistance.

9. SPECIFICATIONS

The data presented here is typical for XCEL SURFACES mixed and placed at 77° F (23.9°C).

Compressive Strength: (ASTM C-109):

2220 PSI @ 3 days

2950 PSI @ 7 days

5000 PSI @ 28 days

Shear Bond Adhesion:

713 PSI @ 7 days

Absorption Test: (ASTM D-570)

12.7%

Impact Resistance: (mil D3134 F)

No breakage/ <.062 in.

Fire Resistance: (ASTM E108/ UBCSTD #32-7/UL

790.....Class A

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