



2 PART BROOMED OVERLAY SYSTEM

MANUFACTURER

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GENERAL USES

For thin repairs of horizontal concrete surfaces and as a dressing to bring the concrete back to a 'like new' appearance. Typical areas include parking decks, driveways, sidewalks, parking lots or any horizontal concrete surface requiring repair of spalled areas, low spots, etc. Overlay System is usually applied with first a bond coat using squeegees, then doubled back with a broom finish. In areas requiring re-sloping or patching of deeper areas, the Overlay is first placed in low areas and screeded off to the proper elevation. A second application utilizing a broom finish is then placed to cover repaired areas for a consistent finish. The quartz aggregate in the system gives a slip resistant finish and is usually sprayed with Acrylic Sealer to penetrate and protect against staining. In areas subjected to heavy traffic or forklift traffic, a non-rusting aluminum oxide aggregate can be pre-blended in the cementitious part of the system.

FEATURES

Exterior or interior applications, traffic bearing, can be sloped to drains, fills spalls and low areas, slip/skid resistant, abrasive resistant, freeze-thaw resistant, excellent bond, flexural and tensile strengths that are superior to concrete. Utilizing Acrylic Sealer imparts greater resistance to salts and attack from acids and alkali.

CHEMICAL MAKEUP

Broomed Overlay System imparts additives, which enhance the cement in the system. Special polymers create adhesion and flexibility essential in a thin topping. Our use of high-reactivity metakaolin pozzolan (HRM) admixture increases strength, reduces permeability and shrinkage by combining with calcium hydroxide produced during the hydration of the cement. The HRM also helps improve chemical resistance, reduces efflorescence and alkali-silica reactions.

SURFACE PREPARATION

Remove all laitance, efflorescence, chemical contaminants, grease, oil, old paint, and other foreign matter. The prepared surface must be clean and structurally sound. Shot blasting, scarifying or water blasting may be necessary to achieve this proper profile. Acid etching and

de-greasing, should be evaluated. Substrate must be 40° F and rising before installation. Surface at 100° F and above must be cooled before installation.

APPLICATION

Bonding Primer: Begin by saturating area to be covered with water. Before application of primer, remove any excess water leaving no puddles. The surface should be saturated, surface dry (SSD). Mix Universal Polymer Concentrate 1 to 1 with water and scrub into the surface with a medium or stiff bristle broom and allow to dry clear. Cover all areas that will be topped with the Broomed Overlay. Use spiked or golf shoes when walking on primed surfaces so as not to pull up primer film. Next dilute Universal Polymer Concentrate at a rate of 1 gallon concentrate to 1 gallon water. Add this mixture to mixing vessel, next add one 50 lb. bag of powder and color pack if applicable. Pour out this mixture and spread over area that has received bonding primer. Use a trowel or squeegee for this application, double back with a concrete finishing broom for desired texture. Allow to dry 24 hours then spray a thin coating of Acrylic Sealer over entire area.

CURING

Allow to air cure after application. Care should be used when weather conditions impart variables, which may cause the overlay to dry out too quickly. High heat, sunlight and especially windy conditions may be detrimental to the proper curing of the overlay. Attempt to minimize application during such harsh conditions by working during cooler hours, keeping all materials shaded prior to mixing and setting up plastic or temporary walls to block wind.

HANDLING

Do not allow UNIVERSAL POLYMER mixtures to freeze. Apply between 40 F and 100 F. Allow 4-7 days of curing time before allowing vehicular traffic. Keep placed material from freezing for 48 hours. Acrylic Sealer is flammable. Use in well ventilated areas! Adding more water than recommended when diluting will negate any guarantees and will be extremely detrimental to the performance of the finished product.



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PRECAUTIONS

Contains Portland cement; avoid eye contact or prolonged contact with skin. Wash thoroughly after handling. In case of eye contact, flush with water for 15 minutes, Consult a physician immediately. Keep out of reach of children. Contains free silica - DO NOT breathe dust. May cause delayed lung injury. Follow OSHA safety and health standards for crystalline silica (quartz). See material safety data sheet for detailed information.

SHEAR BOND

ASTM C-882	Modified
7 day	1150 PSI
28 day	1850 PSI

Mortar scrubbed into substrate

PACKAGING

Universal Polymer Concentrate	5 gal. Pail
Broomed Overlay Powder	50 lb. bag
Concrete gray or white	
Color Pigment Packs	
1 lb 25 colors (must be mixed with white powder)	
Acrylic Sealer	
5 gal. Pail	

COVERAGE

50 lb. powder will cover approx. 100 square feet at 1/8" thickness.

TECHNICAL DATA

COMPRESSIVE STRENGTH

ASTM C-109

7 day	2800 PSI
14 day	4875 PSI
28 day	6100 PSI

ABRASION RESISTANCE

ASTM C-944

1 day	1 grams lost
7 day	1 grams lost

TENSILE STRENGTH

ASTM C-190

1 day	250 PSI
7 day	540 PSI
28 day	860 PSI

FLEXURAL STRENGTH

ASTM C-78

7 day	800 PSI
28 day	1850 PSI