

Acrylic Spray Overlay System

Spray-Tek Acrylic™ Overlay System is a restoration system designed for interior, exterior, commercial and residential use. These products are versatile, and can be sprayed, troweled or acid stained in an endless array of colors, textures and patterns, providing limitless possibilities for any concrete surface new or old, horizontal or vertical.

Features – Freeze-Thaw Resistant – Salt & Alkali Resistant – Stain & UV Resistant – Excellent Flexural Properties – Outstanding Mechanical Properties Including Impact Resistance, Compression & Tensile Strength Nearly Twice That of Regular Concrete – Cured Product is Non-Flammable

DESCRIPTION

CCI Spray-Tek Acrylic™ Overlay System is typically composed of 4 components; Duraset™ 1000 Modified Acrylic Resin, G100 Professional Series Grout Mix™, C-Series Liquid Colorant, and SuperSeal™ 2000, GemKote 100 or GemKote 400 Acrylic Sealer. SuperSeal™ 3600 or SuperGlaze™ VOC (both urethanes) can increase durability and improve overall performance. Spray-Tek Acrylic™ Overlay System is specifically designed as a decorative concrete restoration system, providing outstanding weatherproofing and stain resistance to almost any concrete surface, old or new.

USES

CCI Spray-Tek Acrylic™ Overlay System can be used on interior or exterior masonry and concrete type surfaces. It can be used on driveways, walkways, patios, porches and pool decks. Spray-Tek Acrylic™ Overlay System can be applied vertical or horizontal. It is used frequently in industrial and commercial applications for decorative and restorative purposes.

TECHNICAL DATA

General Data & Characteristics

Duraset™ 1000/1001 Acrylic Modifier (Acrylic Polymer Resin)

Appearance: Milky
Color: White
Solids Content: By Weight- 32%
By Volume- 30%
Viscosity: 60 cps (Max)
Wt/Gal: 8.79 LB
pH: 9.5-10.5
Flash Point: Non-Flammable
Packaging: 5-Gallon

“C” Series Colorants

State: Liquid, Water Soluble
Color: Various
Viscosity: 85-105 cps
Solids Content:
pH: 8.0-9.0
Flash Point: Non-Flammable
Packaging: 1 Quart Bottle (950 cc)

G-100 Series Grout Mix™

White Portland Cement: 30-40%
Silica Sand: 60-65%(crystalline free)
Flow Agent: <1%
Packing: 50 LB. Bag

SuperSeal™ 2000 (Solvent Base Sealer)

Color: Clear
Solid Content:* By Weight: 24.79%
By Volume: 20.35%
Wt/Gal: 8.9
Flash Point: 96°F (closed cup)
Packaging: 5-Gallon Pail

System Data

Sheer Bond Strength: (ASTM C-1042-99)	28 days	680 PSI
Tensile Strength: (ASTM C-109-72)	28 days	630 PSI
Compressive Strength: (ASTM C-109-73)	28 days	5735 PSI
Flexural Strength: (ASTM C-348-72)	28 days	1615 PSI
Freeze/Thaw Resistance: (ASTM C-291)	Passes 60 cycles	
UV Resistance:	No discoloration when exposed to UV light	
Chloride Ion Resistance:	(Ponding 3% Sodium Chloride/60 days) 100% @ 1" depth	
Sodium Hydroxide:	10% solution, 5-minute immersion – not affected	
Lactic Acid:	10% solution, 5-minute immersion – not affected	
Sulfuric Acid:	10% solution, 5-minute immersion – not affected	
Citric Acid:	10% solution, 5-minute immersion – not affected	
Gasoline:	5-minute immersion – very slight abrasion	
	15-minute exposure (ponding) - Slight dulling	

Moisture Retention, Test ASTM C309

SS2000 (at 300 ft² per gallon),
g/m².....0.32
Test requirement, not to exceed, kg/m².....<0.4

Pencil Hardness

30 minutes at 180°F.....F
30 minutes at 300°F.....H

Tukon Hardness

30 minutes at 180°F.....9.3
30 minutes at 300°F.....13.7

Flexibility

1/8, 1/4, 1/2 inch mandrels*.....6, 5, 4

Abrasion Resistance (ASTM D 4060)

Mg lost cs-17 wheel 1000 g load 1000 cycles.....160

Roll conditions (Recommended Method)

Viscosity, No. 2 Zhan cup, sec.....26

Spray conditions

Viscosity, No. 2 Zhan cup, sec.....19

Tg°C

.....50

*The degree of cracking at the bend over each mandrel is rated on a 0 (no failure) to 10 (flaking) scale.

Testing completed by manufacturer in accordance to ASTM guidelines under laboratory conditions.

All figures are based on typical applications. Variations of recommended formulations and applications may affect actual specification

PACKAGING

Spray-Tek Acrylic™ Overlay System is available in the following packaging. DuraSet™ 1000/1001 Modified Acrylic Resin is available in five-gallon (18.925 L) containers and fifty-five gallon (208.175 L) drums. G-100 Professional Series Grout Mix™ is available in 50 LB. Bags. C-Series™ Liquid Colorant is available in one-quart (950cc) and one-gallon (3.89 L) container. SuperSeal™ 2000 Acrylic Sealer, GemKote 100 & GemKote 400 is available in one-gallon (3.89 L) five-gallon (18.925 L) and fifty-five gallon (208.175 L) drums. SuperSeal™ 3600 (Moisture cure single component polyurethane is available in one-gallon (3.785 L) and five-gallon (18.925 L) containers. SuperGlaze™ VOC (Two-component commercial/industrial polyurethane) is available in five-gallon (18.925 L) and fifty-five gallon (208.175 L) drums.

COVERAGE

Spray-Tek Acrylic[™] Overlay System can be applied by sprayer or trowel. Coverage is calculated in the following manner:

Spray

1" MIX" = 1 Bag G-100 Series Grout Mix[™]
4.5 - 5 qt Duraset[™] 1000/1001 Modifier
¾ - 1 Cup C-Series Colorant

} = Approximately
= 100 ft² Finished Product
(Skim & Spray)

Trowel

1" MIX" = 1 Bag G-100 Series Grout Mix[™]
4.5 - 5 qt Duraset[™] 1000/1001 Modifier
¾ - 1 Cup C-Series Colorant

} = Approximately
= 75 ft² Finished Product
(Skim & Trowel)

STORAGE

Store in a safe place. Keep containers tightly sealed. DO NOT allow product to freeze. Material that is frozen CANNOT be used when thawed. Shelf life is approximately 12 months.

CAUTIONS

KEEP OUT OF REACH OF CHILDREN. Before using or handling, read the Material Safety Data Sheets and Warranty. DO NOT TAKE INTERNALLY. Close containers after each use. Use good hygiene when handling these products and wash and bathe after each use.

EQUIPMENT FOR APPLICATION

Hopper gun, steel pool trowel, continuous run compressor, knee pads, double row cut grinding wheel, diamond crack chaser, diamond blades, 4" and/or 9" grinders, ½" heavy duty drill, pressure washer, rubber spray shields, mixing paddle, masking paper and maskers. Also see the Spray-Tek Acrylic[™] Overlay tool checklist.

PREPARATION FOR APPLICATION

Eliminate all debris, dirt and contaminants. Repair cracks as necessary. Grind all high spots and non-uniform areas. Round off any square edges. Re-cut all existing expansion and control joints another ¼" deep. Remove paint, glue and sealers. Rebuild, re-slope and repair using Fast-Patch[™] mortar. The surface must be cleaned and etched using one part muriatic acid to four parts water. Pressure wash the surface with a minimum of 3000 psi and 3-4 gallons of water per minute.

Mix 4.5 to 5 quarts of DuraSet[™] Modifier per bag of grout. Add modifier then grout in an empty 5-gallon bucket. Mix vigorously with a mixing paddle attached to a ½" drill. Make sure mix is even, consistent and free of lumps. Add ¾-1 cup of desired colorant to mix and blend until color is consistent. Primary colors require additional colorant to achieve proper color. (Blue, Black, Red, White and Chocolate are colors that require the addition of more colorant.) **The color achieved is determined by the contractor mixing this product.**

APPLICATION

Skim Coat: Pour about 1-gallon of the mixture from the 5-gallon bucket on the concrete surface. Due to the porous nature of concrete, priming the surface during skim coat application using a plastic wee sprayer is recommended. Use a mixture of DuraSet[™] 1000/1001 modifier thinned with no more than 25% water. This keeps the material that has been poured wet and workable. Apply evenly and smoothly using a squeegee or pool trowel until the entire surface is covered. A thick application is not necessary or recommended. Apply only to the thickness of a business card for most applications. Prime edges generously to allow material to run down the edge radius, particularly on stairs. Use a trowel to remove excess material from control joints. Note: In extreme heat, it is acceptable to mist the surface with water to reduce temperature of concrete.

After this coat has dried, clean all joints using a small diamond blade and use a rubbing brick to smooth out imperfections. Sweep and blow the surface clean with a leaf blower prior to tape application. Apply pattern tape or paper stencil on the dried skim coat to create desired look. Mask areas as necessary to prevent over-spray.

Spray Coat: Reduce DuraSet™ 1000/1001 modifier to 4 – 4 ½ quarts per bag and mix thoroughly. A slightly grainy texture should be noticeable. Add mixture to hopper gun. When spraying, consistency is most important than coverage. Consistent application gives the appearance of spraying 100% coverage. Overlap each stroke 1/3 – ½ each time. Spray edges and radius first then vertical surfaces such as steps. Lower air pressure at higher air flow is preferred. Stay about 16” above the surface. Ensure all tape lines are covered consistently.

Highlight: Highlights may include three or more colors. We recommend a dark and light color. Spray in short bursts with a fast side to side motion at chest height. Pull the trigger back fully on each burst. Spray all vertical areas then all horizontal areas. Spray colors from darkest to lightest.

After spray has dried completely, scrape the surface lightly with a 16” floor scraper to remove extreme high spots. DO NOT push down on the scraper. Scrape at 45 degree angles to pattern lines. Lightly clean tool joints again with a diamond blade. Remove all pattern tape, masking and stencils. Sweep and blow the surface thoroughly prior to sealer application.

SEALER

SuperSeal™ 2000, GemKote™ 100 and GemKote™ 400 are commonly used for sealing Spray-Tek Acrylic™ Overlays. Concrete Coatings Inc. Saf-T-Seal™, SuperGlaze™ VOC, SuperGlaze™ 3600, SuperSeal™ 20WB, SuperGlaze™ WBU and UV Shield™. Consult technical support for specific recommendations instructions. See Sealer TDS for sealer information.

MAINTENANCE

The sealed surface should be inspected periodically for areas of thin or traffic-worn sealer and reapplied as needed. If traces of efflorescence are present, this should first be eliminated with a gentle cleaner. For maximum life expectancy, routinely sweep and wash floors with appropriate cleaners and detergents. All chemicals or abrasive grit should be removed as soon as possible.

WARRANTY

This product is not intended for public use and is intended for use by licensed contractors and installers, experienced and trained in the use of these products. It is warranted to be of uniform quality, within manufacturing tolerances. The manufacturer has no control over the use of this product, therefore, no warranty, expressed or implied, is or can be made either as to the effects or results of such use. In any case, the manufacturer’s obligations shall be limited to refunding the purchase price or replace material proven defective. The end user shall be responsible for determining product’s suitability and assumes all risks and liability.

PLAN SPECIFICATION

Spray-Tek Acrylic™ Overlay System Suggested Short Form Specification:

All surfaces to be sealed and maintained in the plans and specifications shall be treated with 1-2 light even coats of SuperSeal™ 2000, GemKote 100 or GemKote 400 at the rate of approximately 150-200 square feet per gallon, manufactured by CCI 800-443-2871, Layton, UT. SuperSeal 2000, GemKote 100 and GemKote 400 shall be applied in accordance with the SuperSeal™ 2000, GemKote™ 100 or GemKote™ 400 Technical Information Sheet.

ORDER SPECIFICATION

Product: Spray-Tek Acrylic™ Overlay System		
DuraSet™1000/1001 Modified Acrylic Polymer Shipping Weight: 40 lbs (18 kg)	Container Size: 5-Gallon (18.9255 L)	Item No: M-1000-5 Item No: M-1001-5
DuraSet™1000/1001 Modified Acrylic Polymer Shipping Weight: 450 lbs (202.5 kg)	Container Size: 55-Gallon Drum (18.925 L)	Item No: M-1000-55 Item No: M-1001-55
G-100 Pro-Series Grout Mix™	Container Size: 50-lb bag	Item No: G-100
C-Series Liquid Colorant	Container Size: 1-Quart Bottle (950 cc)	Item No: C-101 to C-127
C-Series Liquid Colorant	Container Size: 1-Gallon Bucket	Item No: C-1001-G to C-127-G



Spray-Tek Acrylic™ Overlay System

Technical Information Sheet

LIMITED WARRANTY - "Concrete Coatings Inc. warrants its products to be free of manufacturing defects, to be of good quality, and that they will meet Concrete Coatings Inc. current published physical properties when applied in accordance with Concrete Coatings Inc. written directions and tested in accordance with ACI, ASTM and Concrete Coatings Inc. Standards. Product proved to be defective will be replaced. **There are no other warranties by Concrete Coatings Inc. of any nature whatsoever, expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product.** Concrete Coatings Inc. shall not be liable for damages of any sort, including remote or consequential damages, resulting from any claimed breach of any warranty, whether expressed or implied, from any other cause whatsoever. Concrete Coatings Inc. will not be responsible for use of this product in a manner to infringe on any patent held by others."

**For the Location of Your Nearest Concrete Coatings Inc. Representative
CALL NATIONWIDE TOLL-FREE 1-800-443-2871**