

TAKTL® is a mineral-based product with raw materials that can vary from delivery to delivery and cause subtle color variation in the cast facade and wall panels. TAKTL minimizes this variation by carefully controlling raw material specifications, project batch coordination, and production conditions. Color readings are taken on three different color measurement scales with a spectrophotometer during the production and curing processes to ensure panels are within quality tolerance of the approved control sample. Darker colors and certain textures have greater potential for color variance; therefore, the tolerance for color variation ranges up to ± 2 on the L scale and ± 1.5 on the A and B scales. Custom color variation shall be established on a case-by-case basis.

In order to accommodate projects in which the natural qualities of TAKTL's color variation and weathering are NOT desired, a standard, factory-applied option, ColorSeal/T, is available. This method produces an even color within and between panels and exhibits minimal weathering over extended periods. Please note that the ColorSeal/T process eliminates the subtle batch-to-batch color variation that results from raw materials that are natural minerals. ColorSeal/T™ provides superior protection and beauty for both exterior and interior concrete. Features:

- Protects and beautifies interior and exterior surfaces
- Will not peel or flake
- Resists oil, gasoline, water, and UV rays
- Makes the surface easier to clean
- Soap and water clean up

ColorSeal/T™ CONCRETE STAIN PRODUCT DATA

Vehicle Type	100% Acrylic	
VOC (less exempt solvents)	1.87 lb/gal*	224 g/L*
Pigmented Sheen	Low Luster < 35	
Volume Solids	30 \pm 2%*	
Weight Solids	43 \pm 2%*	
Weight per Gallon	10.0 lb*	
Static Coefficient of Friction	0.9	
Water Vapor Transmission ASTM D1653	5.21 \pm 0.12 grains/(hr ft ²)	
Perm Rating ASTM D1653	11.2 \pm 0.3 grains/(hr ft ² in Hg)	

*Value may vary by color

Cleaning To clean and maintain TAKTL panels, use only water and mild detergent. For best results:

1. Do not use harsh cleaners, solvents or abrasives; they might alter the appearance of the panels.
2. Use only a mild detergent with water and a soft scrub brush (if required).
3. Rinse the detergent off completely with clean water, brushing lightly with a soft plastic brush to ensure complete removal.
4. Power washing is an acceptable means of cleaning. Use a wide nozzle at a minimum of 12 in. from the surface of the panel. Close range and small (concentrated) nozzle size will damage the finish.
5. Allow the panel face to dry thoroughly and evenly.

ColorSeal/T™ PERFORMANCE DATA¹

STANDARD	PROPERTY	RESULT
ASTM G154	Accelerated Weathering ²	3000 hrs, no effect ΔE (total color difference) = 0.35
ASTM G190	Color and Gloss Retention	Color: < 0.30 change Sheen: 0.5 difference at 60°
AASHTO T 259/T 260	Chloride Ion Penetration	Reduction of 54% at 0.0625"-0.5" penetration, 83% at 0.5"-1.0" penetration, and 36% at 1.0"-1.5" penetration
Rilem Tube Method #11.4	Resistance to Wind Driven Rain	Zero water penetration over 60 minute exposure
ASTM B117	Resistance to Salt Spray	No film defect after 500 hour exposure
ASTM B1712	Resistance to Sulfide Staining	No change after 15 minutes
	Chemical Resistance: 10% Sodium Hydroxide	No softening or color change
	Chemical Resistance: 10% Ammonium Hydroxide	No softening or color change
	Chemical Resistance: Mineral Spirits KB value 38	No softening or color change
Fed Std 141A Method #205 ASTM D2794	6 inch-pounds direct impact	No film chipping
Flexibility ASTM D522 Method B	1-inch diameter mandrel	No cracking, breaking, etc.
	Scrub Resistance	1200 cycles, no failure
ASTM 3359 Classification 5A	Adhesion Testing Method A X-Cut Tape Test	No film loss
ASTM 3359 Classification 4B	Adhesion Testing Method B Cross-Cut Tape Test	< 5% removed
ASTM D968	Abrasion Resistance	> 2000 Liters of sand

¹ Test data is provided for White [20.00121-] ColorSeal/T™.

² Generally, long-term fading in accelerated xenon light chamber testing is negligible. It can vary minimally depending on color. Certain vibrant colors in the red to yellow family will fade more. For example:

- White, 3000 hours, no effect, ΔE (total color difference) = 0.35 (a normally invisible difference)
- Custom Brown, 2000 hours, ΔE = 1.69 (a very small difference, only obvious to a trained eye)
- Contact TAKTL Technical Support for more information.

If the surface of TAKTL products are stained by uneven hydration/ weathering or graffiti, the application of ColorSeal/T™ water-based concrete stain has proved to be an excellent remedy. It has been field tested by TAKTL in facade panel applications and in long-term accelerated weather tests performed by Architectural Testing, Inc. in accordance with ASTM G 155-05a. Please contact TAKTL Technical Support for further instruction.

Recommended Applicators

Spray Airless*	Pressure	1500 psi
	Tip	.013" - .017"
Spray HVLP	Pressure	40-50 psi
	Tip	1.4mm
Roller	Smooth Textures	6" high-density foam roller
	Rough Textures	1/2" nap roller

* TAKTL recommends use of a Graco Ultra 395 Airless Spray Gun with size 315 tip, with pressure knob set to 1/2 pressure.

Caution Contains CRYSTALLINE SILICA. Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (NIOSH approved) or leave the area. Adequate ventilation required when sanding or abrading the dried film. If adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. Do not use on wood surfaces. Non-photochemically reactive.

First Aid In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Abrading or sanding of the dry film may release crystalline silica which has been shown to cause lung damage and cancer under long term exposure.

Warning This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN. LCE 12/02/2002 20.001214 01 00

APPLICATION

[1] When To Use ColorSeal/T™ should be applied to a dry surface where moisture content should not exceed 3lbs/1000 sq. ft. of surface (ASTM F710). Air, surface and material temperature must be between 50° and 90°F and at least 5°F above the dew point during and for 12 hours after application. Do not apply ColorSeal/T if rain is expected in 12 hours following the application. Stir stain thoroughly before and during application. Apply with a roller or an airless sprayer.

[2] Prepare Surfaces to be treated should be clean and free of dirt and dust.

[3] Dry Surfaces to be treated should be dry.

[4] Mask Windows and other stainless steel and painted metal components should be masked with tape

[5] Apply ColorSeal/T can be applied successfully using either of the following methods:

Roller Use recommended roller based on panel texture

[A] First brush in the edges around metal trim with a foam chip brush.

[B] Apply a thin coat of ColorSeal/T to the face. Back roll to remove as much ColorSeal/T as possible from the roller and re-roll the face to attain a uniform application, free of roller marks.

[C] Allow to dry for 2 hours. A second coat is not required for a panel surface cleaning and re-finishing treatment.

Airless Sprayer

[A] Adjust tip to the lowest volume setting. Use wide fan width.

[B] Apply a thin coat of ColorSeal/T to each face with controlled, even strokes, and a spray gun distance of 18-24" from the panel.

[C] Allow to dry for 2 hours. A second coat is not required for a panel surface cleaning and re-finishing treatment.

HVLP Sprayer

[A] Set fan width between 12"-14" before adjusting air and fluid volume to produce a homogenous oval pattern.

[B] Apply a thin coat of ColorSeal/T to each face with controlled, even strokes, and a spray gun distance of 12-16" from the panel.

[C] Allow to dry for 2 hours. A second coat is not required for a panel surface cleaning and re-finishing treatment.

Clean Rinse tools with a mixture of water and dishwashing liquid. Wipe overspray with clean, dry-cloth. If already dry, wipe using a 50/50 mix of denatured alcohol and water.