



Thermal Deck™ Cool Surface

PRODUCT DESCRIPTION

Thermal Deck™ Cool Surface is a premium, heat-reflective, waterborne acrylic coating engineered to reduce surface temperatures and improve pedestrian comfort in exterior environments exposed to direct sunlight.

Formulated with advanced infrared-reflective technology, Thermal Deck™ minimizes solar heat absorption while providing long-term UV stability, flexibility, durability, and color retention.

Available in smooth or textured (TDC) anti-slip systems, Thermal Deck™ delivers a durable, decorative, and protective finish for properly prepared concrete and masonry substrates.

Thermal Deck™ is classified as a high-performance architectural concrete coating system designed for exterior pedestrian surfaces.

FEATURES & BENEFITS

- Infrared heat-reflective technology
- Low-VOC, waterborne formulation
- UV stable and non-yellowing
- Flexible and durable coating film
- Textured anti-slip system available (TDC)
- Fast drying and easy application
- Custom colors available

TYPICAL APPLICATIONS

- Pool decks
- Balconies
- Patios
- Walkways and sidewalks
- Tennis and sport courts
- Concrete restoration projects



PERFORMANCE & SLIP RESISTANCE VALIDATION

Thermal Deck™ Cool Surface with Texture (TDC) was independently evaluated by a certified third-party slip resistance laboratory.

ASTM E303-22 Pendulum Test: (British Pendulum Tester – Four S Rubber)

Dry PTV: 62
Wet PTV: 50

Industry guidance commonly references:
PTV \geq 36 = Low Slip Potential (Level Floors)

Thermal Deck™ (TDC) achieved a Wet PTV of 50.

ANSI A326.3 Dynamic Coefficient of Friction (DCOF)

Wet Results:

Area 1 Avg: 0.45
Area 2 Avg: 0.41
Area 3 Avg: 0.44
Overall Wet Average: 0.43

ANSI A326.3 Section 3.1 references a minimum wet DCOF of 0.42 for interior level surfaces expected to be walked upon wet.

Thermal Deck™ (TDC) achieved a Wet DCOF of 0.43.

Important Notice Regarding Slip Testing

ANSI A326.3 does not establish required minimum DCOF values for:

- Exterior applications
- Pool decks
- Sloped surfaces
- Areas contaminated with substances other than water

Slip resistance performance may vary depending on surface profile, slope, maintenance, environmental exposure, wear, and contaminants.



Full laboratory report available upon request.
Results apply only to sample tested.

ADHESION (IN-HOUSE TESTING)

Pull-off adhesion testing was conducted in accordance with ASTM D4541.

Testing was performed on poured concrete approximately one (1) year old with an estimated compressive strength of 3,000 psi.

Average pull-off adhesion values of approximately 400+ psi were achieved.

Failure occurred at the epoxy test adhesive interface. No cohesive or adhesive failure of the Thermal Deck™ coating was observed.

TYPICAL PERFORMANCE PROPERTIES

Property	Test Method	Typical Value
Adhesion	ASTM D4541	~400+ psi
Wet Pendulum Value	ASTM E303-22	50
Wet DCOF	ANSI A326.3	0.43
Cure Mechanism	—	Air Dry
VOC	—	Compliant – All 50 States

Typical values are based on laboratory and in-house testing and are not product specifications.

SURFACE PREPARATION: Proper surface preparation is critical for performance.

- Substrate must be structurally sound
- Remove all dirt, oil, grease, curing compounds, sealers, and contaminants
- Mechanically profile concrete to approximately CSP 2 (similar to 100–120 grit sandpaper) by grinding or other approved mechanical preparation methods
- Surface contaminants may be removed using Classic CW306 Liquid Blast™ or CW305 Eco Cleaner™ prior to mechanical profiling
- Surface must be clean and completely dry
- New concrete must cure a minimum of 28 days



APPLICATION & TEMPERATURE

Primer: CW500 Primer is recommended prior to application. Apply one (1) uniform coat and follow all CW500 Primer label instructions. Prime only the area that can be coated within three (3) hours.

Recommended recoat window: 1–2 hours under normal conditions.
Do not exceed three (3) hours prior to topcoat application.

If contamination occurs or the recoat window is exceeded, mechanically sand, clean thoroughly, and re-prime.

Failure to apply within the specified recoat window may affect intercoat adhesion.

Apply only when ambient and substrate temperatures are between 50°F–90°F (10°C–32°C). Do not apply if temperatures are expected to fall below 50°F within 24 hours.

Do not apply when temperatures approach 40°F or lower.

Avoid application on hot surfaces exceeding 95°F. Surface temperatures above this level may cause rapid drying, reduced workability, lap marks, film defects, or reduced adhesion.

System

Two-Coat Application
Recommended Film Thickness: 5–6 wet mils per coat

Mixing (Textured TDC Systems)

Slip-resistant aggregate may settle or float during use.

Keep material mechanically mixed during application. Re-mix with a drill mixer each time material is reloaded onto the roller to maintain uniform aggregate distribution.

Do not hand stir or add water.

Keep container covered when not in use. Prolonged exposure to air or sun may cause surface skinning or thickening.



Application Method

Apply using a 3/8" nap roller. Use a 9" roller for small areas and detail work. Use an 18" roller for larger open areas. Concrete joints may be applied with a high-quality paint brush and edges with mini roller. Spray application is not recommended for textured (TDC) systems.

First Coat: Apply in one consistent direction.

Recoat: 30–40 minutes (temperature and humidity dependent).

Second Coat: Apply perpendicular to the first coat to ensure uniform coverage and texture distribution. Avoid excessive back-rolling.

CURE: Light Foot Traffic: 24 hours

Full Cure: 3–7 days depending on temperature and weather conditions.

Protect from water, moisture, and contaminants during curing. Cure times may vary based on temperature, humidity, and site conditions.

COLOR DISCLAIMER

Color charts, marketing materials, and sample boards are provided for reference purposes only. Actual color may vary due to:

- Substrate porosity and texture
- Application method and film thickness
- Jobsite lighting conditions
- Environmental exposure and curing conditions
- Batch-to-batch manufacturing tolerances

It is strongly recommended that a jobsite sample or mock-up be prepared and approved prior to full application. Minor batch-to-batch color variation is inherent in pigmented coating systems and does not constitute a product defect.

WEATHER LIMITATIONS

Do not apply if rain is forecast within 48 hours before or after application. Surface must be completely dry prior to application. Do not apply to damp or moisture-saturated substrates. Exposure to rain, dew, fog, or standing water during curing may affect adhesion, appearance, and coating performance.



COVERAGE

Medium Porosity: 200–300 sq. ft. per gallon per coat

Heavy Porosity or Textured Surfaces: 125–175 sq. ft. per gallon per coat

Actual coverage will vary depending on surface profile and porosity.

LIMITATIONS

- Not a structural repair material
- Do not allow product to freeze
- High-traffic commercial areas may require an approved Classic Coatings sealer and Gator Grip

STORAGE & SHELF LIFE

Store tightly sealed in a cool, dry, indoor location between 50°F–90°F (10°C–32°C).

Protect from freezing. Temporary exposure outside this range may affect product performance. Shelf life: 2–3 years unopened.

MAINTENANCE

Clean surface with water only. Do not use harsh chemicals, solvents, or acidic cleaners.

Inspect periodically for wear or damage. Reapply as necessary depending on traffic levels and environmental exposure.

Slip resistance is dependent on surface profile, application method, maintenance, and service conditions.

REGULATORY COMPLIANCE: VOC Compliant in All 50 States.

CAUTION: May cause irritation to eyes and skin. Avoid contact.

FIRST AID: KEEP AWAY FROM CHILDREN & PETS

Eyes: Flush with water for 15 minutes.

Skin: Wash thoroughly with soap and water.

Ingestion: Seek medical attention immediately. Do not induce vomiting.



CALIFORNIA PROP 65 WARNING

This product may contain chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

For more information: www.P65Warnings.ca.gov

WARRANTY: Classic Coatings Systems warrants this product to be free from manufacturing defects and to conform to published specifications. Liability is limited to replacement of defective material only. No other warranty, express or implied, is made. The user is responsible for determining suitability for intended use.

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