



Corporate Offices
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 www.dudick.com

PROTECTO-CRETE 140T/140TSF

**TROWEL APPLIED OR SEEDED
 NOVOLAC EPOXY TOPPING AND
 RESURFACER**

FEATURES

Low Odor
 VOC Compliant
 Can be used for Coving, Pitch and Curb Construction
 100% Solids

RECOMMENDED APPLICATIONS

Pulp and Paper Mills
 Dike Areas
 Chemical Storage
 Pickling Room Floors
 Truck Unloading Platforms
 Warehouse Floors
 Aisleways
 98% Sulfuric Acid Containment

CHEMICAL RESISTANCE

Salts	Alkaline Solutions
Dilute Inorganic Acids	Oils
Sulfuric Acid 98%	Solvents

TEMPERATURE LIMITS

150°F Continuous
 200°F Intermittent

PHYSICAL PROPERTIES

	PC 140TSF	PC 140T
Compressive Strength ASTM C-579	9500 PSI	5000-6550 PSI
Tensile Strength ASTM C-307	2000 PSI	1500-1600 PSI
Flexural Strength ASTM C-580	2900 PSI	2200-2400 PSI

PC 140TSF PC 140T

Taber Abrasion ASTM D 4060 CS-17 Wheel, 1000 Revolutions	40 mg.	60 mg.
Volatile Organic Compounds (VOC) ASTM D-3960	0	Same
Tensile Bond Strength ASTM D 4541 of Concrete	Cohesive Failure	Same

SPECIFICATIONS

Protecto-Crete 140T shall be a 3/16" novolac epoxy floor topping and resurfacer consisting of an epoxy primer, novolac epoxy binder blended with an engineered aggregate.

Protecto-Crete 140TSF shall be a 1/16" - 1/8" thick seeded novolac epoxy floor topping. Both products are manufactured by Dudick, Inc. and applied in accordance with the manufacturer's recommendations.

THE PROTECTO-CRETE 140T SYSTEM

Protecto-Crete 140T uses a moisture tolerant primer, an engineered aggregate filled novolac epoxy topcoat and a grout coat and an optional sealer to achieve a strongly bonded monolithic floor topping with excellent physical and mechanical properties.

Primer 67: The prepared concrete surface must be primed to provide the "wetting out" required for good bonding. **Protecto-Crete 140T** can be applied while the primer is tacky. Do not allow primer to puddle.

Topcoat: The aggregate filled **Protecto-Crete 140T** topcoat develops a cured strength 2-3 times that of the

concrete substrate to which it has been applied providing exceptional durability to prolong the life of the concrete.

Grout Coat: Apply 8-10 mils of **Protecto-Crete 140T** Resin.

THE PROTECTO-CRETE 140TSF SYSTEM

Protecto-Crete 140TSF uses a moisture-tolerant primer and broadcast to excess to achieve a strongly bonded monolithic topping with moderate chemical resistance and good physical and mechanical properties.

Primer 67: The blasted or etched concrete surface must be primed to provide the “wetting out” required for good bonding. **Protecto-Crete 140TSF** can be applied while the primer is still tacky. Do not allow the primer to puddle.

Basecoat: The aggregate filled **Protecto-Crete 140TSF** basecoat develops a cured strength 2-3 times that of the concrete base to which it is applied to provide exceptional durability and prolong the life of the substrate.

Broadcast: Aggregate is used for a non-slip texture; aluminum oxide and EA-2 provides additional chemical and abrasion resistance. Material is broadcast to complete saturation, and the excess removed by sweeping.

Topcoat: Apply 8-10 mils of **Protecto-Crete 140T SF** Resin to encapsulate the broadcast sand. **Protecto-Crete 140TSF** resin system.

ESTIMATING QUANTITIES AND ORDER BILL OF MATERIAL

THEORETICAL SQUARE FEET PER GALLON		
Primer 67	150-200 ft. ²	4-5 WFT
PROTECTO-CRETE 140T		
Topcoat	115-120 ft. ² /Unit	3/16”
Grout Coat	390 ft. ² / 2.7 gallons	10 mils
S-10 Solvent	500 ft. ²	Clean-Up

THEORETICAL SQUARE FEET PER 2.7 GALLON PER UNIT @ 1/16” CONCRETE	
PRIMER 67	150-200 ft. ²
PROTECTO-CRETE 140TSF/UNIT	
Basecoat	195 ft. ² @ 20 mils
S-10 Solvent	500 ft. ²
Aluminum Oxide and EA-2	1-1.25 lbs./ft. ²
20-40 Mesh Sand	.75 lbs./ft. ²
Topcoat/Unit	390 ft. ² @ 10 mils

Quantities shown are for estimating purposes only. Actual field usage may vary.

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

Concrete: Concrete must be prepared mechanically to remove surface laitance. Oils, grease and other contaminant must be removed prior to surface preparation. Concrete must be free of curing compounds and form release agents. Surface texture should be similar to 40-60 grit sandpaper or the visual standard, CSP-5 from the International Concrete Repair

Institute **with exposed pea gravel**. The prepared surface should have a nominal tensile strength of 250 PSI per ASTM D-4541.

All concrete substrates must be checked for moisture prior to primer application using the Plastic Sheet Test per ASTM D-4263.

Additional surface preparation will be required if a 40-60 grit texture **with exposed pea gravel** is not achieved and the surface laitance not completely removed with the first mechanical preparation procedure.

Mechanical preparation removes laitance, exposing honeycombs or voids beneath the surface which can be filled with **Scratch Coat 300**. (Refer to separate product bulletin)



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APPLICATION SPECIFICATIONS

Temperature of the concrete substrate must be between 50°F and 110°F.

Relative humidity must not exceed 90%.

Substrate temperature must be 5°F above the Dew Point.

PRIMER 67 MIX RATIO (BY VOLUME)

Component A 1 gallon
 Component B 1 gallon.

PRIMER 67 POT LIFE

Temperature	Pot Life
50°F	90 min.
75°F	60 min.
90°F	30 min.

PRIMING

Concrete: Mix the pre-measured units of **Primer 67 Component A with Component B**. Prime all concrete surfaces with **Primer 67** at 3-4 mils WFT. The basecoat may be applied over primer that is “tacky.” Do not allow the primer to puddle.

PROTECTO-CRETE 140T MIX RATIO (BY VOLUME)

Component A 1 gallon
 Component B 88 fl. oz.

***Full Unit**

Component A 16.25 lbs.
 Component B 9.6875 lbs.
 EA-1 Aggregate 4 - 50 lb. Bags

***1 Bag Unit**

Component A 52 fl. oz.
 Component B 35 fl. oz.
 EA-1 Aggregate 50 lbs.

***Premeasured Units – Do not break down**

The pot life of **Protecto-Crete 140T** will depend on the temperature. To prevent material waste and avoid damage to equipment, do not mix more material than can be used according to the following table:

POT LIFE AND CURE CYCLES

PROTECTO-CRETE 140T/140TSF		
Temperature	Pot Life	Cure Time
50°F	50-60 min.	72 hrs.
75°F	20-30 min.	24 hrs.
90°F	10-15 min.	20 hrs.

Do not attempt to store mixed material. Residual material should be properly disposed of at the end of each work period.

Application of **Protecto-Crete 140T/140TSF** in direct sunlight may lead to blistering, pinholes, or wrinkling due to out-gassing of air in the concrete and high substrate temperatures. Double priming, shading or evening application may be required. Consult a Dudick representative.

TOPCOAT

Protecto-Crete 140T Components should be mixed in a concrete mixer. The liquids must be thoroughly blended before adding the aggregate. Mechanically premix pre-measured **Protecto-Crete 140T Components A & B** thoroughly for 1-2 minutes before adding to mixer. Gradually add four (4) bags of **EA-1 aggregate** and mix 2-3 minutes or until a uniform consistency is achieved. For the first batch, use only 3 1/2 bags to allow the mixer to wet-out.

Pour the mixed **Protecto-Crete 140T** into a wheelbarrow and transport to each work area. Dump directly onto the primed concrete for hand trowel applications. Use a wooden straight edge to initially distribute the material, and finish tightly using steel trowels.

For power trowel applications, the mix should be spread with a screed box to evenly distribute the material in rows.

For optimum results, finish the topping with a 48"-52" power trowel within 10-20 minutes of placement. Over-troweling can lead to blistering and excessive burnishing. Final finishing using a hover trowel (if available) can achieve an extremely smooth and tightly closed surface. Workmen must wear spiked shoes to avoid depressions while power-troweling. The power and hand trowel blades should be cleaned periodically to remove resin buildup.

To terminate work, square cut the topping and start the next work period butting to this edge. Permanent terminating edges should be beveled into saw cuts in the concrete.

GROUT COAT

Prior to adding **Component B**, mix **Protecto-Crete 140T Resin Component A** for 1-2 minutes to assure that any pigment or filler which may have settled is re-dispersed so that a uniform color is achieved. Combine the **A and B Components** and stir mechanically for approximately 2-3 minutes. Thoroughly scrape the sides and bottom of the container and remix for another 30 seconds to achieve a uniform color and consistency. Pour the **Protecto-Crete 140T Resin** mix directly onto cured surface. The mix should be spread to 8-10 mil thickness with a serrated squeegee or roller.

Allow **Protecto-Crete 140T** to cure overnight before subjecting the area to foot traffic, and 24 hours at 75°F before permitting truck traffic.

PROTECTO-CRETE 140TSF MIX RATIO (BY VOLUME)

Component A	1 gallon
Component B	88 fl. oz.

PRIMING

Same as for **Protecto-Crete 140T**

Basecoat: Prior to adding **Component B**, mix **Protecto-Crete 140TSF Component A** for 1-2 minutes to assure

that any pigment or filler which may have settled is re-dispersed so that a uniform color is achieved. Combine the **A and B Components** and stir mechanically for approximately 2-3 minutes. Thoroughly scrape the sides and bottom of the container and remix for another 30 seconds to achieve a uniform color and consistency. Pour the **Protecto-Crete 140TSF** mix directly onto the primed concrete.

The mix should be spread to a 20 mil thickness with a serrated squeegee, notched trowel or gauge rake. The gauge rake is preferred. After spreading the material to the proper thickness, roll with a porcupine roller to level and de-aerate. Broadcast aggregate into the wet basecoat to complete saturation. Once cured, remove excess with a broom. This will produce a 1/16" thick topping. If additional thickness is specified, repeat the above steps.

When a 1/8" thickness is required, it is recommended that the application be made in two successive layers. Using two "seed coats" assures greater uniformity in both thickness as well as aesthetic quality.

Topcoat: Prior to adding **Component B**, mix **Protecto-Crete 140TSF Component A** for 1-2 minutes to assure that any pigment or filler which may have settled is re-dispersed so that a uniform color is achieved. Combine the **A and B Components** and stir mechanically for approximately 2-3 minutes. Thoroughly scrape the sides and bottom of the container and remix for another 30 seconds to achieve a uniform color and consistency. Apply by roller squeegee at 8-10 mils and then back-roll for uniformity. If surface texture is too rough, a second sealer coat can be applied.

CLEANING

Use **S-10 Cleaning Solvent** to clean tools and equipment.

SHIPPING

Refer to Material Safety Data Sheets.

STORAGE

Warning: All Dudick products classified by DOT as either white, yellow or red labels must not be mixed or stored together as an explosive reaction may occur. Store all products in a cool, dry area away from open flames, sparks or other hazards.

When stored in their original, unopened containers at 50°F-75°F, **Primer 67 and Protecto-Crete 140T/140TSF** components have a one-year shelf life.



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Storage in direct sunlight or excessive heat will reduce working time and shelf life.

SAFETY

M.S.D.S.: **Material Safety Data Sheets** must always be read before using products. **Protecto-Crete 140T/140TSF** materials are intended for application by experienced, professional personnel. Dudick, Inc. can supply supervision to help determine that the surface has been properly prepared, the ingredients correctly mixed, and the materials properly and safely applied.

If **Protecto-Crete 140T/140TSF** toppings are to be applied by your own personnel or by a third party contractor, please be sure that they are aware of the following safety precautions:

- Exposure to resins and hardeners through direct skin contact and/or inhalation may cause severe dermatitis reactions in some people. Cleanliness of the skin and clothing is critical and must be of paramount concern.
- Fumes are flammable and heavier than air. Proper ventilation should be maintained to minimize breathing of concentrated fumes.
- Suitable respirators should be used during application.
- Safety glasses, gloves, and suitable protective clothing must be worn at all times during application.
- If contact with hardeners occurs, remove any clothing involved and flush the skin with flowing water. Discard the clothing. Do not attempt to wash and reuse it. **Protecto-Crete 140T/140TSF** liquid can be removed with **S-10 Cleaning Solvent**, MEK, or lacquer thinner.

- Keep open flames and sparks away from the area where materials are being mixed and applied.
- If a rash occurs, remove the individual from the work area and seek a physician's care for dermatitis.
- In case of eye contact, flush with water for at least 15 minutes and consult a physician.
- If swallowed, do not induce vomiting; call a physician immediately.

NOTE: Dudick, Inc. ("Dudick") warrants all goods of its manufacture to be as represented in its catalogs and that the manufacture of its products by its employees or sub-contractors shall be performed in a workmanlike manner. Dudick's sole obligation under this warranty shall be to replace any material which its examination shall disclose to be defective. Dudick makes no warranty concerning the suitability of its product for application to any surface, it being understood that the goods have been selected and the application ordered by the Purchaser. DUDICK, INC. MAKES NO WARRANTY, EXPRESS OR IMPLIED, THAT THE GOODS SHALL BE MERCHANTABLE OR THAT THE GOODS ARE FIT FOR ANY PARTICULAR PURPOSE. THE WARRANTY OF REPAIR OR REPLACEMENT SET FORTH HEREIN IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES ARISING BY LAW OR OTHERWISE; AND DUDICK INC. SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOST PROFITS, DOWN TIME, DAMAGES TO PROPERTY OF THE PURCHASER OR OTHER PERSONS, OR DAMAGES FOR WHICH THE PURCHASER MAY BE LIABLE TO OTHER PERSONS, WHETHER OR NOT OCCASIONED BY DUDICK'S NEGLIGENCE. This warranty shall not be extended, altered or varied except by written instrument signed by Dudick and Purchaser.

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