



**Dudick inc.**

Corporate Offices  
1818 Miller Parkway  
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330-562-1970  
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www.dudick.com

**PROTECTO-COAT 1130**

**FLAKE GLASS FILLED, 100% SOLIDS,  
HIGH PERFORMANCE, MULTI-  
FUNCTIONAL EPOXY COATING,  
30-40 MILS (1 mm)**

**FEATURES**

Meets all VOC Requirements  
Low Odor  
Low Temperature Cure  
Excellent Solvent Resistance

**RECOMMENDED APPLICATIONS**

Containment Areas                      Pump Housings  
Structural Steel                            Storage Tanks  
Solvent Storage

**CHEMICAL RESISTANCE**

Inorganic Acids                            Oils  
Alkali Solutions                            Salts  
Solvents ( including Methylene  
Chloride and Ethylene Dichloride )

**TEMPERATURE LIMITS  
(METAL APPLICATIONS)**

Immersion up to 120°F  
Dry -     200°F - Continuous  
           250°F - Intermittent

**COLORS:** This product is only offered in RED. Contact a Dudick representative for other colors.

**PHYSICAL PROPERTIES**

|                      |                  |
|----------------------|------------------|
| Compressive Strength | 9,000-9,500 PSI  |
| ASTM C-579           |                  |
| Tensile Strength     | 3,000-3,500 PSI  |
| ASTM C-307           |                  |
| Flexural Strength    | 5,000-5,200 PSI  |
| ASTM C-580           |                  |
| Shore D Hardness     | 75 - 80          |
| ASTM D-2240          |                  |
| Tabor Abrasion       | 58 mg.           |
| ASTM D-4060          |                  |
| Flame Spread         | <5 mm            |
| ASTM D-635           |                  |
| VOC                  | 0                |
| ASTM D-3960          |                  |
| WVT                  | 0.0018 perm. in. |
| ASTM E-96            |                  |

**SPECIFICATIONS**

**Protecto-Coat 1130** shall be a 30-40 mils thick, 100% solids, flake glass filled, polymer alloy epoxy coating consisting of a basecoat and topcoat of 15-20 mils each, as manufactured by Dudick, Inc. Materials shall be applied by brush, roller or plural component spray in accordance with manufacturer's recommended practices.

**THE PROTECTO-COAT 1130 SYSTEM**

**The Protecto-Coat 1130** uses a moisture tolerant primer and two coats of low temperature cure, flake glass filled, multi-functional epoxy resin to protect concrete and metal substrates.

**Primer 67** is designed to prevent abrasive blasted metal from developing rust bloom prior to the application of the **Protecto-Coat 1130**. For maximum performance, all metal surfaces should be primed, but primer may not be

needed for mild, non-immersion service. Concrete must be primed to aid in the “wetting out” required for good bonding.

**Primer 67C** is designed for applications on concrete where spark testing is required or specified.

**Protecto-Coat 1130** is applied in two coats by brush, roller or plural component spray. Each coat to be 15-20 mils thick for a total of 30-40 mils DFT.

**ESTIMATING QUANTITIES AND ORDER BILL OF MATERIAL**

| APPROXIMATE SQUARE FEET PER GALLON |                          |                          |
|------------------------------------|--------------------------|--------------------------|
|                                    | CONCRETE                 | STEEL                    |
| PRIMER 67                          | 150-200 ft. <sup>2</sup> | 250-300 ft. <sup>2</sup> |
| PRIMER 67C                         | 100-150 ft. <sup>2</sup> | -----                    |
| Protecto-Coat 1130                 |                          |                          |
| Actual 30-40 MIL DFT               | 30 ft. <sup>2</sup>      | 30 ft. <sup>2</sup>      |
| Theoretical 30-40 MIL DFT          | 45 ft. <sup>2</sup>      | 45 ft. <sup>2</sup>      |
| S-10 Solvent                       | 500 ft. <sup>2</sup>     | 500 ft. <sup>2</sup>     |

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

**APPLICATION INSTRUCTIONS**

**SURFACE PREPARATION**

**Metal:** Metal surfaces must be abrasive blasted to an appropriate finish.

Immersion and heavy spillage service: White Metal, SSPC SP 5 or NACE #1, minimum 3.0 mil profile. Heavy non-immersion service (i.e. fumes and spillage): Near white, SSPC SP 10 or NACE #2, minimum 2.0 mil profile. Atmospheric service: Commercial SSPC SP 6 or NACE #3, minimum 2.0 mil profile.

**Concrete:** Concrete must be mechanically prepared to remove surface laitance. Oils, grease or 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 product application using the Plastic Sheet Test, 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.

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

**APPLICATION SPECIFICATIONS**

Substrate temperature for both concrete and metal 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 67/67C MIX RATIOS**

|            |             |            |
|------------|-------------|------------|
| Primer 67  | Component A | 1 gallon   |
| Primer 67  | Component B | 1 gallon   |
| Primer 67C | Component A | 1 gallon   |
| Primer 67C | Component B | 29 fl. oz. |

Important: **Primer 67C Component A** must be mechanically mixed for 1-2 minutes prior to adding the correct amount of **Component B.**

**Primer 67C** must be roller applied. Use brush application for small touch-up or repair work only.

**PRIMER 67/ 67C POT LIFE**

| TEMPERATURE | PRIMER 67 | PRIMER 67C |
|-------------|-----------|------------|
| 50°F        | 90 min.   | 110 min.   |
| 75°F        | 60 min.   | 90 min.    |
| 90°F        | 30 min.   | 50 min.    |

**PRIMING**

**Metal:** Mix the pre-measured units of **Component A with Component B.** Prime all metal surfaces to be coated with **Primer 67** at 3-4 mils WFT.



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**Concrete:** Mix the pre-measured units of **Component A with Component B**. Prime all concrete surfaces to be coated with either

**Primer 67 or 67C** at 3-4 mils WFT. The basecoat may be applied over primer that is “tacky”. Do not allow the primer to puddle.

**Important** - With all epoxies after priming and before each additional coat, examine the surface for amine blush (oily film). If present, remove by washing with warm water and detergent.

**Protecto-Coat 1130 Mix Ratio (By Volume)  
(Plural Component Spray)**

Component A 5 gallon  
Component B 220 fl. oz.

**Protecto-Coat 1130 Mix Ratio  
(Batch Mixing)**

Component A 1 gallon  
Component B 44 fl. oz.

Pot life of the mixed **Protecto-Coat 1130** 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:

| TEMPERATURE | POT LIFE |
|-------------|----------|
| 50°F        | 20 min.  |
| 75°F        | 15 min.  |
| 90°F        | 10 min.  |

*In view of the short pot life it is recommended that the material be cooled, either by refrigeration or icing, down to 50°F. Protecto-Coat 1130 will cure in 72 hrs. at 38°F.*

*If cooling is not possible, small batches of mixed material must be used to work within the pot life limitations.*

*This material develops high exotherm when in mass. It is recommended that a pail of water be accessible to put residual mixed material into if not totally used.*

*Catalyzed material must never be left unattended!*

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

**BASECOAT/TOPCOAT  
(Plural Component Spray)**

Pre-stir **Component A and B** separately to a uniform consistency with a drill and paddle mixer. Spray apply the coating to a nominal 15-20 mils WFT.

Allow the basecoat to cure until “firm” or slightly “tacky” before applying the topcoat.

*If you notice a streaking effect while spraying, stop immediately. The spray equipment is not mixing the material properly or the mix ratios are incorrect. Check your equipment.*

*This streaked material will not cure properly and must be removed. Scrape the material off and solvent wash the area with MEK, toluene or S-10 Cleaning Solvent. Alternatively, abrasive blasting may be used to remove the material.*

**BASECOAT/TOPCOAT (Batch Mixing)**

Pre-mix **Component A and B** separately to a uniform consistency with a drill and paddle mixer. Add the correct amount of **Component B** to **Protecto-Coat 1130**

**Component A** and mix thoroughly until a uniform color is achieved. Apply at 15-20 mils WFT using a brush or roller.

## SPRAY SPECIFICATIONS

Plural component airless spray equipment: Graco 2.5:1 Fixed Ratio King or equivalent 5:1 Monarch feed pumps; 626 mix manifold; 1/2-32 mixer; #207945 Graco Gun equipped with a Reverse-A-Clean tip and a tip size between .027 and .041. 1/2" ID spray hose on each side with a maximum length of 100 ft.; 3/8" whip hose.

Brush or roller application may require additional coats to meet the specified dry film thickness.

### Protecto-Coat 1130 Cure Cycle

| TEMPERATURE | RECOAT TIME |          | CURE TIME |
|-------------|-------------|----------|-----------|
|             | MIN.        | MAX.     |           |
| 50°F        | 16 hrs.     | 120 hrs. | 96 hrs.   |
| 75°F        | 4 hrs.      | 96 hrs.  | 72 hrs.   |
| 90°F        | 3 hrs.      | 72 hrs.  | 48 hrs.   |

If these recoat times are exceeded, consult a Dudick representative; sanding or abrasive blasting may be required before the next coat.

Recoat times are dramatically reduced when the coating is exposed to direct sunlight.

**Application of Protecto-Coat 1130** in direct sunlight may lead to blistering, pinholes, or wrinkling due to outgassing of air in the concrete and high substrate temperatures. Double priming, shading, or evening application may be required. Consult a Dudick representative.

## TESTING

Where immersion service is required, spark test the cured coating with a 5,000-volt AC spark tester.

Mark and repair all pinholes using **Protecto-Coat 1130**. Retest only the repairs.

## 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 with either white, yellow or red labels must not be mixed or stored together as an explosive reaction may occur.

All products should be stored in a cool, dry area, away from open flames, sparks or other hazards. Exposure to direct sunlight or excessive heat may cause premature gelling and reduce working time and shelf life.

When properly stored in their original, unopened containers at 50°F-75°F, the **Primer 67** and the **Protecto-Coat 1130 Component B** will have a six-month shelf life. **Protecto-Coat 1130 Component A** will have a shelf life of six-weeks. The shelf life of **Protecto-Coat 1130 Component A is not predictable after six weeks**. Ideal storage conditions are at 50°F or lower. Keep all containers tightly sealed when not in use as well as shelf life. **Primer 67C** will have a thirty-day shelf life. 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-Coat 1130** systems 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-Coat 1130** materials 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.



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- 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-Coat 1130** 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.

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.

3/17/10

**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