



Concrete Substrate



Plywood Substrate

## TECHNICAL DATA

### Pedestrian Traffic Deck Coating System

70-96 Dry Mills (1778-2438 $\mu$ ), ICC-ES Evaluated Class A Fire Rating on 3/4" or 21/32" Plywood

<b>Primer</b>	Polyprime 2180SC or Polyprime 21
<b>Basecoat</b>	PC-440 /440SC /440SF
<b>Topcoat</b>	Polyglaze 400/400C/400SC Polyglaze 400FR/400FR-C/400FR-SC

## PACKAGING

**Polyprime 2180SC**

2 gallon kit: One 1 gallon (3.78 liters) can of Side-A and One 1 gallon (3.78 liters) can of Side-B  
or  
10 gallon kit: One 5 gallon (18.9 liters) pail of Side-A and One 5 gallon (18.9 liters) pail of Side-B

**Polyprime 21**

3-gallon kit: One 3.5 gallon pail, net fill 2 gallons (7.57 liters) of Side-A and One 1 gallon (3.78 liter) can of Side-B or  
15-gallon kit: Two 5 gallon (18.9 liter) pails of Side-A and One 5 gallon (18.9 liter) pail of Side-B

**PC-440/440SC/440SF**

1 gallon (3.78 liters) cans or 5 gallon (18.9 liters) pail

**Polyglaze 400/400C/400SC**

1 gallon (3.78 liters) can or 5 gallon (18.9 liters) pail

**Polyglaze 400FR/400FR-C/400FR-SC**

6-gallon kit: One 6 gallon (22.7 liters) pail containing 1 gallon (3.78 liters) bag of Polyglaze 400 FR Side-A Powder and One 5 gallon (18.9 liters) pail containing 5 gallons of Polyglaze 400 FR Side-B Liquid

FEATURES	TYPICAL USES
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- |                      |                        |
|----------------------|------------------------|
| » Seamless           | » Balconies            |
| » Elastomeric        | » Walkways/Stairs      |
| » Waterproof         | » Patios               |
| » Recoatable         | » Sun Decks            |
| » Chemical Resistant | » Over Occupied Spaces |

Primers, base and topcoats have a shelf life of 1 year from date of manufacture in original, factory-sealed containers when stored indoors at a temperature between 60-95°F (15-35°C).

## Description

The Polydeck® 400 Pedestrian Traffic Deck System is a polyurethane, liquid applied, moisture cured waterproof system with a Class A Fire Rating on 3/4" (1.9 cm) or 21/32" (1.67 cm) plywood. The system utilizes an epoxy primer, two coats of an aromatic polyurethane basecoat and two coats of an aliphatic polyurethane topcoat. The decking system can be applied to protect surfaces against spalling, freeze/thaw damage, and chemicals commonly encountered on these surfaces. It is an elastomeric system designed to expand and contract with normal structural movements. It will neither soften in heat nor embrittle in the cold. Polydeck® 400 Pedestrian Traffic Deck System is a proven fire rated/waterproofing system for use on a wide range of applications. Installed and maintained properly, the decking system will ensure years of service. Make sure to use the correct grade of product which complies with VOC regulations/requirements applicable as per federal, state, statutory, counties, cities and local bodies at the place of installation.

## Approvals, Codes & Testing

- » Class A Fire Rating on 3/4" (1.9cm) or 21/32" (1.67cm) Plywood, UBC Standard 32-7, ASTM E-108, UL 790, NFPA 256
- » ICC-ES Report ESR-2785
- » Los Angeles City General Approval Report #RR25171
- » One-Hour Fire Resistive Construction, UBC Standard No. 7-1

## Product Instructions

For complete information associated with the application of all Polycoat Products decking systems and products, refer to the General Guidelines and Technical Data Sheets of the Polycoat Products catalog, which describes the products, surface preparation, job conditions, finishing details and other necessary information.

## Coatings Application

### PHASE 1:

Check area of application to ensure that it conforms to the substrate requirements, as stated in the General Guidelines. Prime all joints, cracks, flashings with approved primers as specified below in Phase 2. Apply a two-part paste consisting of PC-440/440SC/440SF and PC-50 over all joints, cracks, and flashing. Mixing ratio is a 1/2 pint of PC-50 to 1 gallon of PC-440/440SC/440SF (0.24 liter to 3.78 liters) or 1 quart PC-50 to 5 gallons of PC-440/440SC/440SF (0.9 liter to 18.9 liters). Do not mix more material than can be used in 20 minutes. Bridge the joints, cracks, and flashings with 4" (10.2 cm) Straight Jacket Tape, pushing it into the paste with a trowel. Over Straight Jacket Tape, apply a stripe coat of the PC-440/440SC/440SF and PC-50 mixture and taper it onto the adjacent surface. Allow the surface to cure for 6 to 8 hours.

### PHASE 2:

Substrates other than new plywood are to be primed. Primer is optional for new plywood. Metal and concrete which have been cleaned should be primed with Polyprime 2180SC or Polyprime 21 at a rate of 1 gallon/300 sqft (0.14 liters/sqm) or 300 sqft/gallon. Apply using a brush or phenolic core roller. This will result in a minimum 4 dry mils (102 microns) thick

membrane.

**Note:** For rough or porous concrete or when outgassing is a concern, use Polyprime 2180/2180SC at a rate of 1 gallon/300 sqft or 300 sqft/gallon (0.14 liters/sqm); this rate may vary on the porosity of the substrate. Allow primer to become tack free before moving to the Coating Application. The point at which the primer is deemed tack free is when the primer passes thumbprint test. The thumbprint test is defined by when a thumbprint is left in the primer and primer does not transfer to the thumb. If the primer has been allowed to remain tack free for more than 12 hours, it is necessary to solvent wipe surface with VOC-compliant solvent and re-prime the surface.

### PHASE 3:

Apply PC-440/440SC/440SF to the substrate at a rate of 3 gallons/100 sqft (1.4 liters/sqm) or 33.3 sqft/gallon. For best results, use a 1/8" (0.32 cm) notched trowel or flat squeegee. A 3/8" (0.965 cm) nap phenolic core roller may be used, but extra care should be taken to prevent air bubbles. Spread PC-440/440SC/440SF evenly over the entire deck resulting in a minimum 33 to 48 ± 2 dry mils (838 – 1219 ± 51 microns) thick membrane. Allow PC-440/440SC/440SF to cure before proceeding to Phase 4.

**Note:** Polycoat basecoats should be applied the same day as the primer to avoid missing the primer recoat window. If this is not possible, broadcast heavy with aggregate into the primer to aid in the adhesion of the basecoat to the primer. Do not exceed recoat window of 12 hours after cure and if recoat window is passed then solvent wipe the surface with VOC-compliant solvent and re-prime before proceeding with the next coat/phase.

### PHASE 4:

Apply a second coat of PC-440/440SC/440SF at a rate of 1 1/2 gallons/100 sqft (0.62 liters/sqm) or 75 sqft/gallon. Immediately broadcast washed, dry, rounded sand, 20 mesh (0.841 mm), 6.5+ Mohs minimum hardness at a rate of 100 lbs/100 sqft (4.88 kg/sqm) into the wet second coat, covering it completely. This coat will result in an additional minimum 16 to 22 ± 2 dry mils (406 to 559 ± 51 microns) thick membrane, exclusive of aggregate. Allow to cure before removing all loose aggregate.

### PHASE 5:

Apply desired color of Polyglaze 400FR/400FR-C/400FR-SC topcoat mixture at a rate of 1 1/4 gallons/100 sqft (0.51 liters/sqm) or 80 sqft/gallon. Mixing ratio is 1 part Polyglaze 400FR/400C-FR/400SC-FR Part-1 Powder to 5 parts 400FR/400C-FR/400SC-FR Part-2 Liquid. For best results use a 3/8" (0.965 cm) nap phenolic core roller. This coat will result in an additional minimum 13 to 16 ± 2 dry mils (330 to 406 ± 51 microns) thick coating. Allow to cure before proceeding to Phase 6.

### PHASE 6:

Apply desired color of Polyglaze 400/400C/400SC topcoat at a rate of 3/4 gallon/100 sqft (0.31 liters/sqm) or 75 sqft/gallon. This coat will result in an additional 8 to 10 ± 2 dry mils (203 to 254 ± 51 microns) thick membrane. At 75°F (24°C) and 50% relative humidity, allow 72 hours of cure time before permitting heavy traffic on the finished system.

### FINISHED SYSTEM:

When applied as directed, the Polydeck® 400 Pedestrian



Traffic Deck System will provide 70 to 94 ± 5 dry mils (1778 to 2388 ± 125 dry microns), exclusive of aggregate, of superior waterproofing protection. Requires a continuous coating application to minimize lines and/or streaking. Any optional adhesion test is to be performed seven days after product application.

### Limitations

The following conditions must not be coated with Polycoat Products deck coating systems or products: on grade slabs, split slabs with buried membrane, sandwich slabs with insulation, slabs over unvented metal pan, magnesite, or concrete with a structural integrity less than 3000psi. Asphalt surfaces and asphalt overlays may be coated with Polycoat decking systems if first coated with the Polycoat PC-IM 129.

Concrete must exhibit 3000psi minimum strength. Concrete surfaces to be coated must be trowel finished in compliance with the American Concrete Institute (except that hand troweling is not required), followed by a fine-haired brooming, left free of loose particles, and shall be without ridges, projections, voids and concrete droppings that would be mechanically detrimental to coating application or function.

New concrete must be cured for 28 days (see General Guidelines). Polycoat Products coating systems should not be subjected to rising water tables or hydrostatic pressure on slab-on-grade decks. The only acceptable grade of plywood is APA rated exterior grade or better. The appearance and physical characteristics of the plywood and grade should be considered. Plywood should be new or cleaned and sanded (see General Guidelines). The coating should be applied at least 5°F (3°C) above the dew point.

Coverage rates recommended are based on lab conditions, applied at 75°F (24°C) ambient temperature and are intended to be minimum coverage rates on clean, smooth plywood, and are exclusive of additional amounts needed to fill potholes, spalling, scaling, rough and irregular surfaces. Porosity and roughness of the substrate, aggregate size, and product temperature will affect coverage rates. Material mil thickness rates are calculated on theoretical coverage for a smooth substrate and do not account for the actual texture or substrate conditions in the field or at the time of application. Sample mockups on the projects are recommended to determine the exact coverage rates necessary to waterproof the deck to acceptable standards.

Equipment should be cleaned with a urethane grade environmentally safe solvent, as permitted under local regulations, immediately after use. Uncured materials are sensitive to heat and moisture. The substrate must be

structurally sound and sloped for proper drainage. Polycoat Products assumes no liability for substrate defects. Field visits by Polycoat Products personnel are for the purpose of making technical recommendations only and are not to supervise or provide quality control on the job site.

### Warning

**The products in this system contain Isocyanates, Solvents, Epoxy Resin, and Curatives.**



**Limited Warranty:** Please read all information in the General Guidelines, Technical Data Sheets, Guide Specifications and Safety Data Sheets (SDS) before applying material. These Products are for "Professional Use Only" and preferably applied by professionals who have prior experience with the Polycoat Products materials or have undergone training in application of Polycoat Products materials. Published technical data and instructions are subject to change without notice. Contact your local Polycoat Products representative or visit our website for current technical data, instructions, and project specific recommendations.

Polycoat Products warrants its products to be free of manufacturing defects and that they will meet Polycoat Products current published physical properties. Polycoat Products warrants that its products, when properly installed by a state licensed waterproofing contractor according to Polycoat Products guide specifications and product data sheets over a sound, properly prepared substrate, will not allow water migration for a period of one (1) year. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of this manufacturer which proves to be defective. There are no other warranties by Polycoat Products of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Polycoat Products 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. Polycoat Products shall not be responsible for use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee is being issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. Polycoat Products reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

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