



# POLYCOAT PRODUCTS

A Division of American Polymers Corp.

## POLYDECK® 555 System Data Sheet

### POLYDECK® 555 36 and 48 Dry Mil Systems Pedestrian Traffic Deck Waterproof Coating Systems

#### Primer:

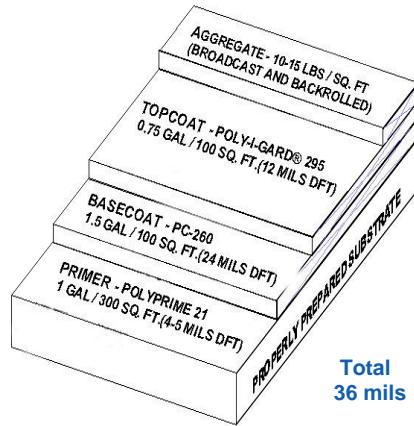
- Polyprime 21

#### Basecoat:

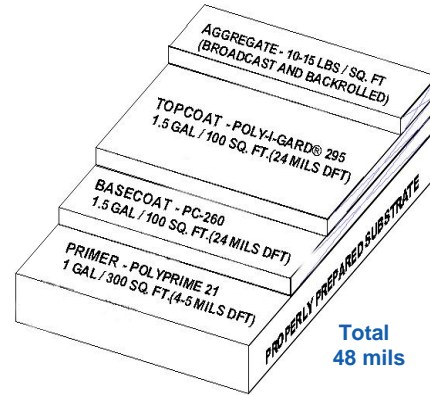
- PC-260

#### Topcoat:

- Poly-I-Gard® 295



**LIGHT PEDESTRIAN SYSTEM**



**HEAVY PEDESTRIAN SYSTEM**

#### System Description:

The Polydeck 555 Pedestrian Traffic Deck Coating System is a very fast setting, rapid curing, 100% solids, polyurethane /polyurea, liquid applied, chemically cured, rapid return-to-service waterproof coating system. The system utilizes Polyprime 21, a two-component epoxy primer, PC-260, a two-component, non-gassing, thermal stable elastomeric basecoat, and Poly-I-Gard® 295, a two-component, solvent free, hybrid aliphatic polyurea topcoat.

The Polydeck 555 system is a user friendly, low odor coating system that is specifically designed to be tough and durable enough to withstand light to heavy pedestrian traffic. It's high elongation elastomeric system properties allow it to expand and contract with normal structural movements. It can be applied to protect surfaces against spalling, freeze/thaw damage, and chemicals commonly encountered on pedestrian decks. It will not soften in heat nor embrittle in cold. Recommended system coverage mil thickness: light pedestrian traffic systems, 36 dry mils and heavy pedestrian traffic systems 48 dry mils.

#### Typical Uses

- Pedestrian Traffic Decks
- Balconies
- Walking Decks
- Stadiums
- Stairs
- Kennels

#### Benefits

- Non-Gassing
- Seamless
- Solvent Free
- Recoatable
- Can Be Applied At Any Thickness
- Very Rapid Setting And Cure Times
- Good thermal Stability
- Environmentally Safe
- Meets USDA Criteria
- Excellent Low Temperature Flexibility
- Good Chemical Resistance

#### Color

- PC-260 - Grey. Tan color is available with minimum order of 250 gallons
- Poly-I-Gard® 295 - Dolphin Grey and Tan.

Custom colors are also available in minimum order of 250 gallons (945 liters). See color chart for special provisions. Contact Polycoat Products for more information.

#### Packaging

- PC-260 - 1-gallon kit: One 1-gallon can, net fill 0.8 gallons of Part-A, and one quart, net fill 0.2 gallons of Part-B. 5-gallon kit: One 5-gallon pail, net fill 4 gallons (15.12 liters) of Part-A, and one 1-gallon (3.78 liters) can of Part-B.
- Poly-I-Gard® 295 - 4.4-gallon kit: One 5-gallon pail, net fill 4-gallons of Part-A, and one ½-gallon, net fill 0.4 gallon jar of Part-B.

#### Application:

##### Substrate Preparation

Check area of application to ensure that it conforms to the substrate requirements. Prime all joints, cracks, flashings with approved primers as specified below in Phase 2. Apply PC-260 over all joints, cracks and flashing. Bridge joints, cracks, and flashings with 4" Straight Jacket Tape pushing it into the PC-260 with a trowel. Using PC-260 as a caulking compound will shorten the curing time appreciably over conventional polyurethane caulks. Over reinforcement tape, apply a stripe coat of PC-260 and taper it onto the adjacent surface. Allow the surface to cure for 1 to 2 hours.

POLYDECK® 555 PEDESTRIAN DECK

### Primer

Concrete should be primed with Polyprime 21 at a rate of 1 gallon/300 sq. ft. Apply using a brush or phenolic core roller. This will result in a 4-5 dry mils thick membrane. Metal should only be primed with Polyprime 2180SC at a rate of 1 gallon/300 sq. ft. Allow Polyprime to become tack free before proceeding to Phase 3. \* **Note:** For rough or porous concrete, use Polyprime EBF-LV at an approximate rate of 1 gallon/200 sq. ft.; this rate may vary on the porosity of the substrate. Allow primer to become tack free before proceeding to basecoat application.

### Technical Data: (Based on draw down film)

Polydeck® 555 System Properties	PC-260	Poly-I-Gard® 295
Mix Ratio	4A : 1B	10A : 1B
Coverage Rate (One Coat) At Dry Mil Thickness	1 gal/100 sq. ft. 15 ± 2 Dry Mils	1 gal/100 sq. ft. 16 ± 2 Dry Mils
Hardness, ASTM D-2240	64 ± 2 Shore A	85 ± 5 Shore A
Tear Resistance, Die C, ASTM D-624	230 ± 25 pli	300 ± 20 pli
Tensile Strength, ASTM D-412	1500 ± 100 psi	3200 ± 200 psi
Ultimate Elongation, ASTM D-412	1000 ± 100%	450 ± 50%
Total Solids by Weight, ASTM D-2369	94%	100%
Total Solids by Volume, ASTM D-2397	95%	100%
Volatile Organic Compounds*, ASTM D-2369-81 <i>*contains some high boiling colorless plasticizers</i>	0.46 lb/gal 55 gm/liter	< 0.12 lb/gal < 15 gm/liter
Pot Life at 75°F (24°C), 50% R.H.	8-12 minutes	30 ± 10 minutes
Cure Time at 75°F (24°C), 50% R.H.	3-5 hours	2-4 hours
Adhesive Peel Strength on Primed Concrete	n/a	40 ± 10 pli
Water Absorption, ASTM D-471	n/a	1.3% by weight
Moisture Vapor Transmission, ASTM E-96	n/a	1.54 perms

### Coverage Guide: Polydeck® 555 Pedestrian Traffic Deck Coating System

Light Pedestrian Traffic System = 36 dry mils

<b>Primer</b> (coverage dependent on substrate profile and porosity)	Polyprime 21	Typically - 1 gal / 300 sq. ft. = 4-5 mils
<b>Basecoat</b>	PC-260	1.5 gal / 100 sq. ft. = <b>24 mils DFT</b> <b>OR</b> 64 sq. ft. / gal
<b>Topcoat 1</b>	Poly-I-Gard® 295	0.75 gal / 100 sq. ft. = <b>12 mils DFT</b> <b>OR</b> 134 sq. ft. / gal
Aggregate		5-10 lbs. / 100 sq. ft. - broadcast and backrolled

Heavy Pedestrian Traffic System = 48 dry mils

<b>Primer</b> (coverage dependent on substrate profile and porosity)	Polyprime 21	Typically - 1 gal / 300 sq. ft. = 4-5 mils
<b>Basecoat</b>	PC-260	1.5 gal / 100 sq. ft. = <b>24 mils DFT</b> <b>OR</b> 64 sq. ft. / gal
<b>Topcoat 1</b>	Poly-I-Gard® 295	1.5 gal / 100 sq. ft. = <b>24 mils DFT</b> <b>OR</b> 67 sq. ft. / gal
Aggregate		10-15 lbs. / 100 sq. ft. - broadcast and backrolled

### Curing / Storage:

#### Curing

PC-260 and Poly-I-Gard® 295 cure best at 75°F (24°C) and 50% relative humidity. Allow each coat to cure for 2-4 hours before proceeding subsequent coats. Cure time will vary depending on temperature and humidity. If more than 24 hours passes between coats, re-prime the surface with Polyprime 21 before proceeding. Poly-I-Gard® 295 is sensitive to heat and moisture. Higher temperatures and/or high humidity will accelerate the cure time. Use caution in batch sizes. Do not use Polyglaze Hardener with Poly-I-Gard® 295.

#### Storage

PC-260 and Poly-I-Gard® 295 have a shelf life of one (1) year from date of manufacture in original, factory-sealed containers when stored indoors at a temperature between 60-95°F (15-35°C).

## Limitations:

### PC-260

- PC-260 should be used as a base membrane only. Topcoat must be applied.
- PC-260 cannot withstand direct wear and abrasion.
- PC-260 is a very quick dry product. To slow the gel time, apply the product on the substrate as quickly as possible following mixing.

### Poly-I-Gard® 295

- Surfaces must be dry, clean and free of foreign matter.
- Surface may be slippery when wet.
- Containers that have been opened must be used as soon as possible.

The following conditions must not be coated with Polycoat Products deck coating systems or products: on below grade slabs, split slabs with buried membrane, sandwich slabs with insulation, slabs over unvented metal pan, suspended pool decks, swimming pools, magnesite, lightweight concrete, asphalt surfaces and asphalt overlays.

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, spallings, scalling, 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. Concrete must exhibit 3000-psi 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 hair 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. 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. Coating should be applied at least 5°F (3°C) above the dew point. 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, Epoxy Resin and Curatives.

### **Limited Warranty:**

***Please read all information in the general guidelines, product data sheets, guide specifications and material safety data sheets (MSDS) before applying material. 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 and instructions.***

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.

### **Disclaimer:**

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the users responsibility to satisfy himself, by his own information and test, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. We do not suggest or guarantee that any hazard listed herein are the only ones which may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements, whether in writing or oral, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and Polycoat Products makes no claim that these tests or any other tests, accurately represent all environments.