GUIDE SPECIFICATIONS | Section 2.5
POLYDECK® 160MR/MR-SC

Technical Data

Metal Lath Reinforced Pedestrian Traffic Deck Coating System
- 125 Dry Mils (3175 Dry Microns)

Primer
- Polyprime® 2180SC
- Polyprime® EBF-LV

Basecoat
- PC-260

Topcoat
- Polyglaze™ 100/100C/100SC
- Polyglaze™ AL-50/AL-50SC

Packaging

Polyprime® 2180SC or Polyprime® EBF-LV
- 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

PC-260
- 1-gallon kit: One 1 gallon can, net fill 0.8 gallons (3 liters) of Side-A and One quart can, net fill 0.2 gallons 0.78 liters) of Side-B or
- 5-gallon kit: One 5 gallon pail, net fill 4 gallons (15.12 liters) of Side-A and One 1 gallon (3.78 liters) can of Side-B

Polyglaze™ AR/AR-OF or 100/100SC or AL-50/AL-50SC
- 1 gallon (3.78 liters) cans or 5 gallon (18.9 liters) pail

Description

The Polydeck® 160MR/160MR-SC Pedestrian Traffic Deck System is a fluid applied, metal reinforced, polyurethane, waterproofing decking system. The system utilizes a primer, a sand slurry mixture over attached Metal Lath, one coat of a fast setting, chemically cured polyurethane elastomeric basecoat with rubber aggregate, and one or two coats of an aliphatic polyurethane topcoat. The system protects 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. Installed and maintained properly, the Polydeck® 160MR/160MR-SC Pedestrian Traffic Deck 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.

**Product Instructions**

For complete information associated with the application of all Polycote Products decking systems and products, refer to the General Guidelines and Technical Data Sheets of the Polycote 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 PC-260 over all joints, cracks, and flashing. Bridge joints, cracks, and flashings with 4” (10.2 cm) Straight Jacket Tape, pushing it into the PC-260 with a tool. 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. A manufacturer approved single or two-component polyurethane sealant may also be used to bridge joints, cracks and flashings.

**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 at a rate of 1 gallon/300 sqft (0.14 liters/sqm) or 300 sqft/gallon. Apply using a brush or a 3/8” (0.965 cm) nap phenolic core roller. This will result in a 4 dry mils (102 microns) thick membrane.

**Note:** For rough or porous concrete or when outgassing is a concern, use Polyprime® EBF-LV at an approximate rate of 1 gallon/200 sqft (0.21 liters/sqm) or 200 sqft/gallon; 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 as 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:**

Fasten 2.5 lbs/sqm hot dipped, galvanized metal lath to deck. Apply sand slurry mixture* of One part mixed PC-260 and One Part Sand (see mixing instructions for PC-260; 1:1 ratio by volume, 1/20 grit sand) to substrate through metal lath to encapsulate metal lath at 6 gallons/100 sqft (2.46 liters/sqm).

*Mixture is four gallons of PC-260 mixed with four gallons of dry sand, will yield approximately six gallons of the mixture for 100 sqft. Use a notched trowel or notched squeegee to spread PC-260 evenly over the entire deck resulting in a 90 ± 2 dry mils (2286 ± 51 microns) thick membrane, exclusive of aggregate.

While PC-260 and sand mixture is still wet and starting to gel (approximately 20-30 minutes), broadcast 16-30 mesh (0.595-1.19 mm) white sand granules onto the PC-260 membrane (rubber granules should sink only partially into the basecoat) at a rate of 10 lbs/100 sqft (0.5 kg/sqm) or as required to achieve a slip-resistant finish. The amount of rubber used will vary. When the PC-260 is stiff enough to walk on without denting, remove all loose aggregate

**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.

**PHASE 4:**

Apply pigmented Polyglaze™ 100/100C/100SC or Polyglaze “AL-50/AL-50SC topcoat at a rate of 1/4 gallon/100 sqft (0.51 liters/sqm) or 80 sqft/gallon. This coat will result in an additional 15 ± 2 dry mils (381 ± 51 microns) thick coating. Topcoat should be applied within 24 hours of applying PC-260 Sand Slurry. If re-coat window has passed, then solvent wipe the surface with VOC-compliant solvent and re-prime with Polyprime® U.

**OPTIONAL RUBBER AGGREGATE**

If a rubber aggregate is to be used instead of sand aggregate, Phase 3 and Phase 4 should be applied as follows:

**PHASE 3:**

Apply rubber slurry mixture* of one part mixed PC-260 and one part rubber granules (see mixing instructions for PC-260; 1:1 ratio by volume) to substrate through metal lath to encapsulate metal lath at 6 gallons/100 sqft (2.46 liters/sqm). *Mixture is five gallons (18.9 liters) of PC-260 mixed with five gallons (18.9 liters) of rubber granules, will yield approximately six gallons of Mixture for 100 sqft. Size and porosity of rubber will vary.

While PC-260 and rubber slurry mixture is still wet and starting to gel, broadcast 16-30 white rubber granules onto the PC-260 membrane (rubber granules should sink only partially into the basecoat) at a rate of 10 lbs/100 sqft (0.5 kg/sqm) or as required to achieve a slip-resistant finish. The amount of rubber used will vary. When the PC-260 is stiff enough to walk on without denting, remove all loose aggregate.

**PHASE 4:**

Apply pigmented Polyglaze™ 100/100C/100SC or Polyglaze “AL-50/AL-50SC topcoat at a rate of 11/4 gallon/100 sqft (0.51 liters/sqm) or 80 sqft/gallon. This coat will result in an additional 15 ± 2 dry mils (381 ± 51 microns) thick coating. Topcoat should be applied within 24 hours of apply PC-260 Sand Slurry. If re-coat window has passed, then solvent wipe the surface with VOC-compliant solvent and re-prime with Polyprime® U.
**PHASE 5:**
A second topcoat is required for a warranted system. It is difficult to properly coat rubber granules with a single application of topcoat. Apply desired color of pigmented Polyglaze™ 100/100C/100SC or AL-50/AL-50SC topcoat at a rate of 1 gallon/100 sq ft (0.41 liters/sqm) or 100 sq ft/gallon. This coat will result in an additional 12 ± 2 dry mils (305 ± 51 microns) thick membrane.

**OPTIONAL FAST CURE:**
Topcoat: The addition of Polyglaze™ Hardener will shorten cure time to 2-4 hours for each coat an ambient temperature of 75°F (24°C). Recoats should occur 8-12 hours of when the surface becomes tack-free.

**SLOPING, CONCRETE REPAIR, CRACK FILLING:**
For sloping, concrete repair or to fill cracks, use PC-260 neat or add sand/rubber granules from 0.5 to 1.5 by volume into mixed PC-260.

**FINISHED SYSTEM:**
When applied as directed, the Polydeck® 160MR/160MR-SC Pedestrian Traffic Deck System will provide 125 ± 5 dry mils (3175 ± 125 dry microns) of waterproofing, exclusive of sand slurry and aggregate. Requires a continuous coating application to minimize lines and/or streaking.

**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 3000 psi. Asphalt surfaces and asphalt overlays may be coated with Polycoat decking systems if first coated with the Polycoat™ PC-IM 129.

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-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.

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). 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. Seller’s and manufacturer’s sole responsibility shall be to replace that portion of the product 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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