



Plywood/Concrete Substrate (properly prepared substrate)

Features

- Seamless
- Elastomeric
- Waterproof
- Recoatable

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® MR (Mechanical Room) system is a liquid applied, high solids, moisture cured waterproofing system. The system utilizes an epoxy primer, a high tensile polyurethane base coat and an aromatic, moisture cured polyurethane topcoat to complete the system.

Polydeck® MR is a user-friendly application that is specifically designed to be tough and durable. It is an elastomeric system designed to expand and contract with normal structural movements. The three coat application saves time and labor. The system can be applied to protect surfaces against spalling, freeze/thaw damage, and chemicals. It will neither soften in heat nor embrittle in the cold. Installed and maintained properly, the Polydeck® MR (Mechanical Room) 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.

Technical Data

Mechanical Room Waterproof Coating System 48 Dry Mills (1219 microns)

Primer Polyprime® 2180SC
Polyprime® EBF-LV

Basecoat PC-220SC

Topcoat Poly-I-Gard™ 246SC
Poly-I-Gard™ 295

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
Polyprime® EBF-LV 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-220SC 1 gallon (3.78 liters) cans or 5 gallon (18.9 liters) pail

Poly-I-Gard™ 246SC 5 gallon (18.9 liters) pail or 55 gallon drum, net fill 50 gallons (189 liters). Includes catalyst.

Poly-I-Gard™ 295 4.4 gallon kit: One 5 gallon (net 4 gallons, 15.12 liters) pail of Side-A and one 2 gallon (net 0.4 gallon, 1.1512 liters) jar of Side-B

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-220SC and PC-50 over all joints, cracks, and flashing. Mixing ratio is a ½ pint of PC-50 to 1 gallon of PC-220SC (0.24 liters per 3.78 liters) or 1 quart PC-50 to 5 gallons of PC-220SC (0.9 liter to 18.9 liters). A manufacturer approved single or two-component polyurethane sealant may also be used to bridge joints, cracks and flashings. 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-220SC and PC-50 mixture and taper it onto the adjacent surface. All cracks in concrete substrates must be treated per Polycoat Architectural Details. 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 at a rate of 1 gallon (mixture of Part-A & Part-B)/300 sqft (0.14 liters/sqm) or 300 sqft/gallon. Apply using a brush or phenolic core roller. This will result in a 3 dry mils (76 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 onto 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-220SC to substrate at a rate of 2 gallons/100 sqft or 50 sqft/gallon. This coat will result in a 28 ± 2 dry mils (711 \pm 51 microns) thick membrane. For best results, use a 1/8" (0.32 cm) notched trowel or notched squeegee. A 3/8" (0.965 cm) nap phenolic core roller may be used but extra care should be taken to prevent air bubbles. Allow PC-220SC to cure before proceeding to Phase 4.

Poly-I-Gard™ 295 may be substituted for PC-220SC. Apply Poly-I-Gard™ 295 at 2 gallons/100 sqft or 50 sqft/gallon, resulting in a 30 ± 2 dry mils (762 \pm 51 microns).

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 topcoat of Poly-I-Gard™ 246SC over the entire surface at a rate of 1 gallon/100 sqft or 100 sqft/gal. Immediately broadcast washed, dry, rounded sand, 20 mesh (1.19 mm), 6.5+ Mohs minimum hardness at a rate of 10 lbs/100 sqft (0.5

kg/sqm) or as required to achieve a slip-resistant finish. This coat will result in an additional 14 ± 2 dry mils thick membrane, exclusive of aggregate.

Backroll the aggregate into the wet Poly-I-Gard™ 246SC topcoat and allow to cure overnight before exposing the completed Polydeck® MR (Mechanical Room) system to pedestrian traffic.

Poly-I-Gard™ 295 may be substituted for Poly-I-Gard™ 246SC. Apply topcoat of Poly-I-Gard™ 295 at 1 gallon/100 sqft or 100 sqft/gallon resulting in a 14 ± 2 dry mil (357 \pm 50 dry microns) thickness. Immediately broadcast washed, dry, rounded sand 20 mesh into the wet coating at a rate of 10lbs/100 sqft (0.5 kg/sqm) as required to achieve a slip-resistant finish and back roll the aggregate into the wet coating.

FINISHED SYSTEM:

When applied as directed, the Polydeck® MR (Mechanical Room) system will provide 48 ± 5 dry mils (1228 \pm 125 dry microns), and 56 ± 5 dry mils (1422 \pm 125 dry microns) with broadcast sand, 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 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. Concrete cleaning (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. 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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