

GUIDE SPECIFICATIONS | Section 3.4 POLY-I-GARD® 435/435SC

REVISION 4/20/18



Concrete Substrate

FEATURES	TYPICAL USAGE
 » Seamless » Elastomeric » Waterproof » Recoatable » Chemical Resistance » UV Stable 	Vehicular Decks Walkways/Stairs Balconies Helicopter Pads Concrete Roof and Decks 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 Poly-I-Gard® 435/435SC Vehicular Traffic Deck System is a liquid applied, high solids, moisture cured waterproof system. It is a user-friendly application that is specifically designed to be tough and durable enough to withstand vehicular traffic. It is an elastomeric system designed to expand and contract with normal structural movements.

This system saves time and labor. It can be applied to protect surfaces against spalling, freeze/thaw damage, and chemicals commonly encountered on vehicular traffic decks. It will neither soften in heat nor embrittle in the cold. Installed and maintained properly, the Poly-I-Gard® 435/435SC Vehicular Traffic Deck System will ensure years of service. Recommended system coverage mil thickness: vehicular traffic systems, 43 ± 5 dry mils (1092 ± 125 dry microns). 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

TECHNICAL DATA

43 Dry Mil (1092 microns)
Vehicular Traffic Deck Coating System

Primer Polyprime 2180SC
Polyprime EBF-LV

Base Coat PC-235/235SC

Topcoat Poly-I-Gard® 246/246SC
Polyglaze 100/100C/100SC
Polyglaze AL-50/50SC

PACKAGING

Polyprime EBF-LV or 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
PC-235/235SC	5 gallon (18.9 liters) pail, or 55 gallon drum, net fill 50 gallons (189 liters)
Polyglaze 100/100C/100SC or Polyglaze AL-50/50SC	1 gallon (3.78 liters) can, 5 gallon (18.9 liters) pail, or 55 gallon drum, net fill 50 gallons (189 liters)
Poly-I-Gard® 246/246SC	5 gallon (18.9 liters) pail or 55 gallon drum net 50 gallons (189 liters). Includes catalyst

installation.

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-235/235SC and PC-50 over all joints, cracks, and flashing. Mixing ratio is 1/2 pint of PC-50 to 1 gallon of PC-235/235SC (0.24 liters per 3.78 liters) or 1 quart PC-50 to 5 gallons of PC-235/235SC (0.9 liters per 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-235/235SC 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:

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Concrete and metal should be primed with Polyprime 2180SC at a rate of 1 gallon (mixture of Side-A & Side-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 unto 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. A manufacturer approved single or two-component polyurethane sealant may also be used to bridge joints, cracks and flashings.

PHASE 3:

Apply PC-235/235SC to substrate at a rate of 1 1/2 gallons/100 sqft (0.62 liters/sqm) or 66 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 mixed PC-235/235SC evenly over the entire deck resulting in a minimum 19 ± 2 dry mils (458 microns) thick membrane. Allow PC-235/235SC to cure before proceeding to Phase 4.

PHASE 4:

Over ramps, turn radii, and other heavy traffic areas only, apply Poly-I-Gard® 246/246SC at a rate of 1 gallon/100 sqft (0.41 liters/sqm) or 100 sqft/gallon. Immediately broadcast washed, dry, rounded sand, 10-15 mesh (0.841-1.19 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 minimum 11 \pm 2 dry mils (305 microns) thick membrane, exclusive of aggregate. Allow Poly-I-Gard® 246/246 SC to cure before removing all loose aggregate.

PHASE 5:

Apply Poly-I-Gard® 246/246SC over the entire surface, including heavy traffic areas, at a rate of 1 gallon/100 sqft (0.41 liters/sqm) or 100 sqft/gallon. 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 12 \pm 2 dry mils (305 microns) thick membrane, exclusive of aggregate. Allow Poly-I-Gard® 246/246SC to cure before removing all loose aggregate.

PHASE 6:

Apply a final coat of Polyglaze 100/100C/100SC or Polyglaze AL-50/50SC topcoat at the rate of 1 gallon/100 sqft (0.41 liters/sqm) or 100 sqft/gallon over the cured Poly-I-Gard® 246/246SC with aggregate. This coat will result in an additional minimum 12 \pm 2 dry mils (254 microns) thick membrane. At 75°F (24°C) and 50% relative humidity, allow 24 hours before permitting light foot traffic. Keep all vehicular traffic off the finished Poly-I-Gard® 435/435SC Vehicular Traffic Deck System for at least 72 hours.

OPTIONAL CURE:

The use of Polyglaze Hardener will shorten cure time to 6 to 8 hours for each coat an ambient temperature of 75°F (24°C). Recoats should occur 8-12 hours of when surface becomes tack-free. If Polyglaze Hardener is used to accelerate curing then re-coat window for the subsequent coat is reduced to 24 hours after cure. If the recoat window has passed, then solvent wipe the surface with VOC-compliant solvent and re-prime surface.

FINISHED SYSTEM:

When applied as directed, the Poly-I-Gard® 435/435SC Vehicular Traffic Deck System will provide 43 ± 5 dry mils (1092 \pm 125 dry microns) and 54 ± 5 dry mils (1372 \pm 125 dry microns) on ramps, turn radii, and other heavy traffic areas, exclusive of aggregate, of superior waterproofing protection with the assurance of a Class A Fire Rating.

Requires a continuous coating application to minimize lines and/or streaking. Any optional adhesion test is to be performed seven days after product application.

STRIPING:

It is recommended that an epoxy paint is used for line striping.

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.



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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, strinkage, 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 in
