

POLY-I-GARD® 435SC System Data Sheet

POLY-I-GARD[®] 435SC 45 Dry Mil Vehicular Traffic Deck Coating System

Primer:

- Polyprime 2180SC
- Polyprime EBF-LV

Basecoat:

- PC-2220C
- PC-235SC

Topcoat:

- Poly-I-Gard® 246SC
- Polyglaze 100SC

POLYGLAZE 100SC POLY-I-GARD 246SC (1 GAL / 100 SQ. FT. @) POLY-I-GARD 246SC RAMPS, TURN RADII & HEAVY TRAFFIC AREAS PC.220SC OR PC.235SC (1 GAL / 100 SQ. FT.) PC-220SC OR PC.235SC (1.5 GAL / 100 SQ. FT.) POLYPRIME 2180SC OTHER PRIMERS ARE OPTIONAL PROPERLY PREPARED Total 45 mils

Poly-I-Gard[®] 435SC Vehicular System

System Description:

The Poly-I-Gard® 435SC vehicular 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. The Poly-I-Gard® 435SC is an elastomeric system designed to expand and contract with normal structural movements.

The Poly-I-Gard® 435SC 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 not soften in heat nor embrittle in cold. Installed and maintained properly, the Poly-I-Gard® 435SC vehicular deck system will ensure years of service. Recommended system coverage mil thickness: vehicular traffic systems, 45 dry mils.

Typical Uses:

Vehicular Decks

Parking Lots

• Concrete Roofs and Decks

Walkways and Stairs

Helicopter Pads

BalconiesBenefits:

Seamless
 Elastomeric

Chemical Resistant

Waterproof

Recoatable

• Meets California VOC and AQMD Requirements, Including SCAQMD & BAAQMD Areas.

Product Instructions

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

Application:

<u>Phase 1</u>: Check area of application to ensure that it conforms to the substrate requirements, as stated in the general information section. 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 1/2 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 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-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.

<u>Phase 2</u>: Concrete and metal should be primed with Polyprime 2180SC at a rate of 1 gallon (mixture of Part-A & Part-B) /300 sq. ft. (0.14 liters/m²). 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 sq. ft. (0.21 liters/m²); this rate may vary on the porosity of the substrate. Polyprime EBF-LV meets standards set forth by the South Coast Air Quality Management District (SCAQMD). Allow primer to become tack free before proceeding to Phase 3. A manufacturer approved single or two-component polyurethane sealant may also be used to bridge joints, cracks and flashings.

<u>Phase 3</u>: Apply PC-220SC or PC-235SC to substrate at a rate of 1 1/2 gallons/100 sq. ft. (0.62 liters/m²). For best results, use a notched trowel or squeegee. A phenolic core roller may be used but extra care should be taken to prevent air bubbles. Spread mixed PC-220SC evenly over the entire deck resulting in a minimum 19 ± 2 dry mils (482 microns) thick membrane. Allow PC-220SC or PC-235SC to cure before proceeding to Phase 4.

Phase 4: Over ramps, turn radii, and other heavy traffic areas only, apply PC-220SC or PC-235SC at a rate of 1 gallon/100 sq. ft. (0.41 liters/m²). Immediately broadcast washed, dry, rounded sand, 20-30 mesh (0.0469-0.0331 in.; 1.19-0.841 mm), 6.5+ Moh's minimum hardness at a rate of 10 lbs/100 sq. ft. or as required to achieve a slip-resistant finish. This coat will result in an additional minimum 13 ± 2 dry mils (330 microns) thick membrane, exclusive of aggregate. Allow PC-220SC or PC-235SC to cure before removing all loose aggregate.

Phase 5: Apply Poly-I-Gard® 246SC over the entire surface, including heavy traffic areas, at a rate of 1 gallon/100 sq. ft. (0.41 liters/m²). Immediately broadcast washed, dry, rounded sand, 20 mesh (0.0469 in.; 1.19 mm), 6.5+ Moh's minimum hardness at a rate of 10 lbs/100 sq. ft. or as required to achieve a slip-resistant finish. This coat will result in an additional 14 ± 2 dry mils (356 microns) thick membrane, exclusive of aggregate. Allow Poly-I-Gard® 246SC to cure before removing all loose aggregate.

<u>Phase 6:</u> Apply a final coat of Polyglaze 100SC topcoat at the rate of 1 gallon/100 sq. ft. (0.41 liters/m²) over the cured Poly-I-Gard® 246SC with aggregate. This coat will result in an additional minimum 12 ± 2 dry mils (305 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® 435SC Vehicular 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. Recoats should occur 8-12 hours of when surface becomes tack-free.

Finished System:

When applied as directed, the Poly-I-Gard[®] 435SC vehicular deck system will provide 45 dry mils (1143 dry microns) and 58 dry mils (1473) 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.

Striping

It is recommended that an Epoxy paint be used for line striping.

Limitations:

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. 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.

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). 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, 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. Equipment should be cleaned with a urethane grade environmentally safe solvent, as permitted under local regulations, immediately after use. Uncurred 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. Poly-I-Gard 246 should be applied in declining temperature when the ambient temperature reaches 80°F to avoid the possibility of out-gassing.

Warning

The products in this system contain Isocyanates, Solvents, 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.

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