



ELASTO-DECK 5000 X2

POLYURETHANE COATING SYSTEM FOR PEDESTRIAN TRAFFIC

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION:

Pacific Polymers® ELASTO-DECK 5000 X2 is an elastomeric coating system for walking decks, balconies, patios, etc., where an absolutely waterproof coating is crucial, such as above living quarters or any other occupied areas.

COMPOSITION: Liquid-applied, single-component, moisture-cured, polyurethane deck covering system. System consists of ELASTO-DECK 5001 NON-GASSING Base-Coat, ELASTO-GLAZE 6001AL-HT Top-Coat and primer where necessary. ELASTO-DECK 5000 X2 is available in a pigmented finish or a natural aggregate finish.

BASIC USES: For waterproofing patios, sun decks, stairways, balconies, etc. ELASTO-DECK 5000 X2 can be used on all decks where a waterproof skid-resistant, long-lasting, wear-resistant surface is required. It may be used on new decks as well as on old concrete decks which are damaged, or cracked. The system is suitable for exterior as well as interior applications in all kinds of climates. The coating retains its elastomeric properties in below freezing weather as well as in very hot climates. The complete system including aggregate is approximately 1/8" thick (3.2 mm).

- **LIMITATIONS:** All materials shall be delivered to the jobsite in unopened containers clearly marked and labeled. Containers that have been opened must be used up within one or two days since these materials are moisture-reactive. The coating sets up when exposed to air. All surfaces must be completely free of foreign matter and primed where necessary.

MATERIALS:

Recommended materials and their uses are as follows:

- **PERMATHANE® SM7108** a one part gun grade, non-staining, polyurethane sealant Mfg. by ITW POLYMER SEALANTS NORTH AMERICA.
- **ELASTO-THANE 227/227R** is a two part gun grade, non-staining, polyurethane sealant.
- **ELASTO-POXY PRIMER W.B** A two-component, solvent free, water based epoxy primer for use on concrete.
- **ELASTO-POXY PRIMER VOC** A two-component VOC compliant primer for use on concrete and metal/metal flashing.
- **ELASTO-DECK 5001NG** Coating. A one-part, VOC Compliant, Moisture Cured Polyurethane Coating used as the elastomeric waterproof membrane of the system.
- **ELASTO-GLAZE 6001AL-HT** Coating. A one-part, VOC Compliant, moisture-cured, aliphatic polyurethane abrasion resistant sealer which protects the ELASTO-DECK 5000 X2 from U.V exposure.
- **AGGREGATE.** 20 mesh Monterey sand or equal, which imparts the slip resistant texture and contributes to wear resistance.

CONDITION OF SURFACES:

- Before coating work is commenced, surface shall be re-inspected and treated as necessary to remove laitance, loose material on the surface, grease, oil and other contaminants which will affect bond of the coating. The following is a "mat test" which is accomplished by placing a 2' x 2' (0.6m x 0.6m) non-breathing rubber or vinyl mat directly onto the substrate. The edges of the mat are to be taped to the surface. The mat is removed after a minimum of 4 daylight hours. If there is no visible condensate, the Applicator may begin coating operations.
- Concrete surfaces shall be visibly dry and pass a 4-hour rubber mat test (no condensate) prior to application of coating system. Mat shall be taped to deck on all sides.
- Metal surfaces shall be dry, clean, free of grease, oil, dirt, rust and corrosion, other coatings and contaminants which could affect bond of coating system, and without sharp edges or offsets at joints. **Metal** substrates shall be primed with **ELASTO-POXY PRIMER VOC**
- Commencement of coating installation implies acceptance of that surface area, as it regards the suitability of the surface to accept the coating systems.

Standards: ASTM C-957

Standard colors: Concrete Grey, Tan and Clear.

Additional colors available with Color-Paks.

WARNING AND HAZARDS:

Before using the products, always refer to SDS for important warnings and safety information. Use only in areas with adequate ventilation. Avoid breathing vapors. Keep away from heat and flame. Avoid contact with eyes and skin. In the event of skin contact, remove immediately and wash with warm, soapy water. Wear suitable eye protection. Always wash hands before eating.

TYPICAL PROPERTIES (See Chart on Page 4)

INSTALLATION:

Preparation:

- Surface Preparation: All surfaces which are to receive ELASTO-DECK 5000 X2 shall be free of contamination such as water, curing compounds, hardeners, bond-breakers, paint, etc. A light broom-finish is recommended for concrete surfaces. It is desirable to water cure concrete in lieu of curing compounds. Only exterior grade plywood should be used. Contaminants should be removed by sandblasting, grinding or acid-etching. If etching is used, properly neutralize the acid and allow adequate time for surface to dry. Except for non-moving shrinkage cracks, all other cracks and joints must be sealed with SM7108, a single-component, moisture-cured polyurethane sealant

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manufactured by ITW POLYMERS SEALANTS NORTH AMERICA. All surfaces must be primed with PRIMER prior to application of the coating system at a rate of 250-350 square feet per gallon. (6.14 – 8.6 M2/LITER), except for plywood in good condition.

- **Metal/Metal Flashing:** Prime with Elasto-Poxy Primer VOC. All seams between plywood sheets and those between metal flashing and the plywood deck must be reinforced by imbedding a 4-inch (10 cm) wide strip of **Perma-Glass Mesh** cloth tape in wet ELASTO-DECK 5001 NON-GASSING, which is brushed evenly over the seam in a width of about 5 inches (12.7 cm) and a thickness of about 20 mils wet (.5 mm). The application of **ELASTO-DECK 5001 NON-GASSING** can subsequently be made immediately over the entire area, including the taped areas.
- Rout or saw cut all cracks exceeding 1/16" (.16cm) in width and caulk with **PERMATHANE®SM7108** or **ELASTO-THANE 227/227R**
- Caulk all expansion, control and construction joints to be over coated by deck coating with **PERMATHANE®SM7108**. Protect adjacent surfaces with drop cloths or masking as required.

Flashing:

- Provide fluid applied flashings at all locations where a horizontal surface butts a vertical surface and at all deck penetration as specified.
- At projections through deck coatings such as posts, vents, pipes, stanchions, railings and similar locations of potential slight movement, provide a 1/4" (0.64 cm) bead of **PERMATHANE®SM7108**. Tool sealant to form a cove and allow to cure before over-coating.

Primer and Detail Work:

- Concrete Primer: Prime all concrete masonry surfaces. Apply primers at coating Manufacturer's recommended rate. Prime coat may be allowed to completely dry but shall not be applied more than 8 hours preceding application of deck coating. **ELASTO-POXY PRIMER VOC** or **W.B.** or shall be applied at the rate of 250-350 sq.ft. per gallon (7.36m2/liter). Mix only enough for use over a 2 hour period (max.). Allow a minimum dry time of 2 hours not to exceed 8 hours. Install deck coating base coat on the same day.
- Apply 25 mil (0.63 mm) dry film thickness of base coat material over all flashings (sheet flashings, sealant coves and rigid corners). Extend coating 2" (5.08 cm) beyond flashing out onto adjacent deck surface. Unless otherwise indicated on Drawings or where limited by height of base, extend coating a minimum of 1" (2.54 cm) above the top of the flashing and terminate in a neat straight line. Use masking tape for such purpose.
- Apply 25 mil (0.63 mm) dry film thickness of base coat material over and for a distance of 1-1/2" (3.8 cm) on each side of all cracks. Do not permit coating to extend over any joints larger than 1" (2.54 cm) nominal width and/or any joints which may move in excess of 25% of nominal dimension. This requirement shall apply to detail coatings as well as deck coatings.
- Apply 25 mil (0.63mm) dry film thickness of base coat material over and for a distance of 2" (5.08 cm) on each side of all expansion joints, control joints and construction joints to be coated.

APPLICATION:

- **ELASTO-DECK 5001 NON-GASSING** shall be applied to the plywood or primed concrete at a rate of 56 square feet per gallon (1.35 m2/liter) resulting in a dry film thickness of 25 mils (.6 mm).
- After allowing overnight cure (12-16 hours), another coat of ELASTO-DECK 5001 NON-GASSING is applied at the same 25 mil (.6 mm) coverage for a total dry thickness of 50 mils (1.27 mm). **ELASTO-DECK 5001 NON-GASSING** may be applied in one coat at the rate of 28 square feet per gallon (0.68 m2/liter) over sound surfaces without danger of gassing. Application must be made uniformly to avoid thin spots and care must be taken to avoid pinholes and repair them should they occur. **ELASTO-DECK 5001 NON-GASSING** may be accelerated to cure in just a few hours by adding approximately ½ to 1 fluid ounce of water per gallon of material.
- Following an overnight cure (12-16 hours), apply **ELASTO-GLAZE 6001AL-HT** pigmented, at the rate of 120 square feet per gallon (2.94 m2/liter). Broadcast the desired dry and clean aggregate into the wet coating to refusal. We suggest using #20 Monterrey Sand.
- After an overnight cure, sweep or blow off all the loose aggregate and apply another coat of **ELASTO-GLAZE 6001AL-HT** pigmented or clear at coverage of 110 square feet per gallon (2.70 m2/liter). Coverage will vary depending on the size of aggregate used.
- Allow 48 hours cure time before permitting any traffic on the finished system.

TEMPERATURE CONSTRAINTS:

- Minimum application temperature is 40°F (4°C) and rising and more than 5°F above dew point.
- Contact Technical Service when substrates are over 90°F (32°C) or under 40°F (4°C).
- Avoid application when inclement weather is present or imminent.
- Do not apply to damp, wet, or contaminated surfaces.

AVAILABILITY AND COST:

ELASTO-DECK 5000 X2: is supplied through building material dealers. Prices vary with quantity and packaging. Quotations are made on request. These products are designed and manufactured to be installed by professional installers familiar with surface preparation and application procedures. All others should consult a professional installer; those who choose to install these products without professional assistance do so at their own risk.

MAINTENANCE:

Since, as with all deck coatings, the topcoat is subject to staining by such foreign matter as nitrates, fertilizers, hard water, and other substances, it must be maintained. Please refer to the Maintenance Manual for proper maintenance procedures. The manufacturer is not liable for staining caused by hard water deposits, nitrates, fertilizers and other foreign matter.

If **ELASTO-DECK 5000 X2** is damaged, it can be repaired by cleaning the surface, priming with **ELASTO-POXY PRIMER VOC** and recoating with the **ELASTO-DECK 5000 X2** system.
(See Maintenance Manual)

TECHNICAL SERVICE

All of the latest updates to product data and specifications are available at www.pacpoly.com. Since product data and specifications change, it is the user's responsibility to make certain the most current versions of product data and specifications are being used.

Technical assistance can be obtained by contacting:

ITW POLYMER SEALANTS NORTH AMERICA

12271 Monarch Street
Garden Grove, CA 92841
Tel: 1-800-888-8340
Fax: 714-898-5687

PRODUCT WARRANTY:

SATISFACTORY RESULTS DEPEND NOT ONLY UPON QUALITY PRODUCTS BUT ALSO UPON FACTORS BEYOND OUR CONTROL; METHODS OF APPLICATION AND SITE CONDITIONS ARE EXAMPLES OF SUCH FACTORS AND CAN AFFECT PRODUCT PERFORMANCE. THIS WARRANTY CONSEQUENTLY EXTENDS ONLY TO PRODUCTS INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. IT IS THE USER'S RESPONSIBILITY TO SATISFY HIMSELF, BY HIS OWN INFORMATION AND TESTS, OF THE SUITABILITY OF THE PRODUCT FOR HIS OWN INTENDED USE; USER ASSUMES ALL RISK AND LIABILITY RESULTING FROM HIS USE OF THE PRODUCT. THE SUBSTRATE TO WHICH THE PRODUCT IS APPLIED MUST BE SOUND STRUCTURALLY AND OTHERWISE. STRUCTURAL OR SUBSTRATE FAILURES OR IMPERFECTIONS RESULTING IN DAMAGE TO OR FAILURE OF THE PRODUCT ARE NOT COVERED BY THIS WARRANTY.

SINCE THE USE OF THE PRODUCT IS BEYOND THE CONTROL OF THE MANUFACTURER, THE MANUFACTURER ASSUMES NO LIABILITY FOR MISAPPLICATION AND MISUSE OF THE PRODUCT.

THIS WARRANTY DOES NOT COVER CONSEQUENTIAL DAMAGES, NOR DOES IT COVER THE LABOR ATTENDANT TO REPLACING PRODUCT IN THE EVENT OF A PRODUCT FAILURE. THE WARRANTY ONLY EXTENDS TO REPLACEMENT OF THE PRODUCT ITSELF.

ALL PRODUCTS PROVEN TO BE DEFECTIVE IN MANUFACTURE WILL BE REPLACED AT NO CHARGE. SINCE THE USE OF THESE PRODUCTS IS BEYOND OUR CONTROL WE CANNOT ASSUME ANY RISK OR LIABILITY FOR RESULTS OBTAINED, NOR CAN WE ACCEPT DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THESE PRODUCTS.

Complete technical information is available from
ITW Polymers Sealants North America, Inc.

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TYPICAL PROPERTIES: ELASTO-DECK 5000 X2

| PROPERTY | TEST METHOD | ELASTO-DECK 5001NG BASE COAT | ELASTO-GLAZE 6001 ALHT TOP COAT SEALER |
|--|---|--|--|
| Shore "A" Hardness: | ASTM D-2240 | 50A-55A | 95A ± 5% (40D) |
| Ultimate Tensile Strength: | ASTM D-412 | 430 P.S.I. ± 10% | 2780 P.S.I. ± 10% (19.3mpa) |
| Ultimate Elongation: | ASTM D-412 | 700% ± 10% | 200% ± 10% |
| Bond Strength on primed Concrete: | ASTM D-4541 | 300 psi | N/A |
| Bond Strength on plywood | ASTM D-4541 | 185 ps1 | N/A |
| Peel Strength on Plywood: | ASTM D-903 | 14 P.L.I. ± 10% (5.25 n/mm) | N/A |
| Crack Bridging: | ASTM C-836 | System Pass | System Pass |
| Tabor Abrasion: | ASTM D4060 mil DFT on 4"x4" metal CS17 wheel, 1000 rev, 1000 gram weight | N/A | 0.029 |
| Tear Strength (lb./in) | ASTM D-624 | 58 | 280 |
| ASTM E-108/UL790/Class A Concrete substrate | ASTM E-108/UL790 | System passed | System passed |
| Weatherometer: | ASTM D-1499 | N/A | 2000 hours No crazing, cracking, spalling or softening |
| Water Absorption | ASTM D570 | < 3.5% | < 1.52% |
| Moisture Vapor Transmission | ASTM E-96 | 1.5 ± 0.4 perms | N/A |
| Weight per Gallon: | | 9.65 ± 0.10 lbs.(4.38 ± 0.13 kg) | 9.45-9.90 lbs. (4.53 ± 0.13kg) |
| Solid Content (%) Weight % Volume % | ASTM D 2369 | 91 ± 2 88 ± 2 | 80 ± 2 78± 2 |
| Viscosity: | Brookfield Viscometer | 60 ± 10 poises (Thixotropic) | 30 ± 5 poises |
| Flash Point: | | 120°F (49°C) | 120°F (49°C) |
| V.O.C. (Minus exempt solvent) (Meets SCAQMD requirement) | Calculated | 82g/L | 90g/L |
| Shelf Life (when stored indoors at 77°F (25°C) in unopened containers) | | 6 months | 6 months |
| Chemical Resistance | ASTM D 2299 | N/A | No cracks, spalls, softening. [Industrial Detergent Solution (20% Vol.) Ammonia Solution (5% by Vol.) Salt Solution (20% by Vol.) Muriatic Acid (10% by Vol.) Chlorine Solution (10% by Vol.) Ethylene Glycol Anti-Freeze Kerosene, Turpentine, Paint Thinner] |
| Temperature Service Range | | -50° F to +180° F (-45°C to +82.2°C | -50° F to +180° F (-45°C to +82.2°C |