

ELASTO-DECK 5000 H.T.

Waterproof Polyurethane Coating System For Vehicular and Pedestrian Traffic

1. PRODUCT NAME ELASTO-DECK 5000HT

Liquid applied, seamless, slip resistant, polyurethane, waterproof deck coating.

2. MANUFACTURER PACIFIC POLYMERS, INC.

12271 Monarch Street Garden Grove, CA 92841 Tel: 714/898-0025 Fax: 714/898-5687

3. PRODUCT DESCRIPTION

Composition: Liquid-applied, single component, moisture-cured, polyurethane deck covering system.

System consists of ELASTO-DECK 5001HT BASE COAT and INTERMEDIATE COAT, and ELASTO-GLAZE 6001AL-HT TOP COAT, and a primer, where necessary. ELASTO-DECK 5000 HT system is available in concrete grey and tan.

Basic Uses: For waterproofing parking decks and concrete roof decks. ELASTO-DECK 5000 HT can be used on all decks where a skid-resistant, long lasting, wear-resistant surface is required. It may be used on new decks as well as on existing 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.

Limitations: All materials shall be delivered to the job site in unopened containers clearly marked and labeled. Containers that have been opened must be used up within one or two days since it is a moisture-reactive material. The material will cure 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:

ELASTO-THANE 230 is a one part, self-leveling or gungrade, non-staining, 8polyurethane sealant which

cures at ambient temperature to a firm, flexible tearresistant rubber. It is highly resilient and has excellent recovery characteristics after extended periods of compression or elongation.

ELASTO-POXY PRIMER. A two-component, solvent based epoxy primer for use on concrete or metal surfaces.

ELASTO-DECK 5001 HT Coating. A one-part, self-leveling, polyurethane coating used as the elastomeric waterproof membrane of the system, and also to lock in the aggregate.

ELASTO-GLAZE 6001AL-HT Coating. A one-part, moisture-cured, aliphatic polyurethane topcoat which protects the **ELASTO-DECK 5000 HT** 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:

A. Before coating work is commenced, surface shall be reinspected 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 paragraph requires a "mat test" which is accomplished by placing a $2' \times 2'$ (0.6m \times 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.

- B. 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.
- C. Verify that only sodium silicate based curing compounds have been used to cure concrete in areas to be coated.

- D. <u>Metal surfaces</u> 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.
- E. Commencement of coating installation implies acceptance of that surface area, as it regards the suitability of the surface to accept the coating systems.

Standards: A.S.T.M. C-957

Shelf Life: 6 months minimum, when stored indoors

at 77°F (25°C).

Colors: Concrete Grey, Tan

WARNINGS AND HAZARDS:

Before using the products, always refer to MSDS 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.

4. TECHNICAL DATA (See Chart on Page 4)

5. INSTALLATION

PREPARATION:

- A. Thoroughly clean all surfaces to receive coating materials in strict compliance with Manufacturer's written instructions and recommendations. Remove oil and grease with a commercial grade alkaline cleaner; thoroughly rinse and dry. Prepare all concrete surfaces by sandblasting, shot-blasting, or acid etching with a 10-15% solution of muriatic acid. Flush all acid with clean water and allow to dry.
- **B.** Rout or sawcut all cracks exceeding 1/16" (.16cm) in width and caulk with ELASTO-THANE 230 or ELASTO-THANE 227.
- **C.** Caulk all expansion, control and construction joints to be overcoated by deck coating with ELASTO-THANE 230.
- **D.** Protect adjacent surfaces with drop cloths or masking as required.

FLASHINGS

- **A.** Provide fluid applied flashings at all locations where a horizontal surface abutts a vertical surface and at all deck penetration as specified.
- **B.** At locations of potential high movement such as wall/slab intersections which are not structurally

- and rigidly connected, provide 10" (25.4 cm) min. width of precured sheet flashing or reinforce coating with one layer of uncoated, woven fiberglass cloth. Where sheet flashings are used, they shall be free or unbonded to the substrate within 2" (5.08 cm) on vertical surface and 4" (10.16 cm) on horizontal surface. Do not use precured sheet flashings over expansion joints in horizontal surfaces.
- C. 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 ELASTOTHANE 230. Tool sealant to form a cove and allow to cure before overcoating.

PRIMER AND DETAIL WORK

- A. Primer: Prime all concrete, masonry and metal surfaces, except for waiver in writing from manufacturer. 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** shall be applied at the rate of 300 sq.ft. per gallon (7.36m²/liter). Mix only enough for use over a 2 hour period (max.). Allow a minimum dry time of 1 hour. Install deck coating base coat on the same day.
- **B.** 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.
- C. 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) pominal width and/or any

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.

D. Apply 25 mil (0.63) 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:

A. Medium and heavy duty decks.

Step (1) ELASTO-DECK 5001 HT shall be applied to the primed concrete at a rate of 64 square feet per gallon (1.57m²/liter) resulting in a film thickness of 25 mils (.63 cm). Application must be made uniformly to avoid thin spots and care

must be taken to avoid pinholes and repair them should they occur.

Step (2) Following an overnight cure, apply **ELASTO-DECK 5001 HT** at a rate of 100 square feet per gallon (2.45m²/liter) for a thickness of 16 mils (0.4 mm). It is preferable to use a heavy duty roller for even distribution.

Step (3) Immediately broadcast 1 gallon (3.785 liters) of 20 mesh Monterey sand, or equivalent, uniformly into the wet coating, per 100 sq.ft. (2.45 m^2/liter). Assure that the coating is <u>backrolled</u> for even distribution of the sand. Do not broadcast to refusal. Allow to cure overnight.

*Step (4) Repeat Steps 2 and 3, where needed, as advised by the manufacturer. Allow an overnight cure of ELASTO-DECK 5001 HT.

Step (5) Apply **ELASTO-GLAZE 6001AL-HT** by roller, brush or spray at 150 sq.ft. per gallon (3.68 m²/liter) to equal 10 mils (0.25mm). Allow 72 hours for complete cure of the system.

Top coat must be the same color as the preceding sand coat.

*For heavy-duty traffic areas.

B. Light duty pedestrian decks.

Step (1) As under A. Allow an overnight cure.

Step (2) Apply ELASTO-GLAZE 6001AL-HT at 100 square feet per gallon (2.45 m²/liter) or 16 (0.4mm) wet mils. Immediately broadcast 1 gallon of 20 mesh Monterey sand, or equivalent, uniformly into the wet coating, per 100 sq.ft (9.29 m²). Assure that the coating is backrolled for even distribution of the sand. Allow an overnight cure before permitting light traffic.

6. AVAILABILITY AND COST

ELASTO-DECK 5000 H.T. 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.

7. 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 users 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.

8. 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 H.T.** is damaged, it can be repaired by cleaning the surface and recoating it with **ELASTO-DECK 5000 H.T.**

9. TECHNICAL SERVICES

All of the latest updates to product data and specifications are available at the Pacific Polymers International, Inc. website at www.pacpoly.com. Since product data and specifications change, it is the users responsibility to make certain the most current versions of product data and specifications are being used.

Technical assistance can be obtained by contacting: PACIFIC POLYMERS INTERNATIONAL, INC. 12271 Monarch Street Garden Grove, CA 92841 714/898-0025 FAX (714) 898-5687

4. TECHNICAL DATA – ELASTO-DECK 5000 H.T.

PROPERTY	MEASURING STANDARDS AND CONDITIONS	ELASTO-DECK 5001 HT BASE COAT AND INTERMEDIATE COAT COAT	ELASTO-GLAZE 6001AL-HT TOP COAT
	A CITIA D. 22.12	75.15	05 + 50/
Shore "A" Hardness	ASTM D-2240	75 <u>+</u> 5	95 <u>+</u> 5%
Ultimate Tensile Strength	ASTM D-412	1500 P.S.I. <u>+</u> 10% (10.34mpa)	2,800 P.S.I. <u>+</u> 10% (19.3mpa)
Ultimate Elongation	ASTM D-412	400% <u>+</u> 10%	160% <u>+</u> 10%
Adhesive Peel Strength on Concrete	ASTM D-903	150 P.L.I. <u>+</u> 10% (26.3 n/mm)	N/A
Peel Strength on Plywood	ASTM D-903	30 P.L.I. ± 10% (5.25 n/mm)	N/A
Crack Bridging	ASTM C-836	System Passes	System Passes
Abrasion Resistance	ASTM C-501-62T30 mil DFT on 4" x 4" metal CS17 wheel, 1000 rev, 1000 gram weight	N/A	0.029
Tear Resistance	ASTM D-624	260 P.L.I. ± 10% (45.50 n/mm)	520 P.L.I. ± 10% (91 n/mm)
Weatherometer	ASTM D-1499 & G23	1,000 hours	2,000 hours
		Slight Chalking	No Change
Weight per Gallon		10.65 lbs. (4.83 kg)	9.39 lbs. (4.26 kg)
Specific Gravity		1.28	1.13
Viscosity	Brookfield	70 <u>+</u> 10 poises	25 <u>+</u> 5 poises
Flash Point		120F (49C)	120F (49C)
Resistance to: Gasoline Diesel Fuel Anti-Freeze Motor Oil Water V.O.C.		Slight Swelling Slight Swelling No Effect No Effect No Effect 210 gr./litre	Slight Swelling No Effect No Effect No Effect No Effect 250 gr./litre