

# ELASTO-DECK 5000 H.T.

WATERPROOF POLYURETHANE COATING SYSTEM FOR VEHICULAR AND PEDESTRIAN TRAFFIC

# **TECHNICAL DATA SHEET**

# **PRODUCT DESCRIPTION:**

**Pacific Polymers<sup>®</sup> Elasto-Deck 5000 H.T.** is Liquid applied, seamless, slip resistant, polyurethane, waterproof deck coating system.

**Composition**: Liquid-applied, single component, moisture-cured, polyurethane deck covering system. System consists of ELASTO-DECK 5001HT BASE COAT and INTERMEDIATE COAT, and ELASTOGLAZE 6001AL-HT TOPCOAT sealer, 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:

**PERMATHANE<sup>®</sup> SM7120 PU** a one-part gun grade, non-staining, polyurethane sealant Mfg. by Holcim Solutions and Products LLC.

- ELASTO-POXY PRIMER WB 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 5001HT Coating. A one-part, self-leveling, VOC Compliant, Moisture Cured 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, VOC Compliant, moisture-cured, aliphatic polyurethane abrasion resistant sealer which protects the ELASTODECK 5000 HT from U.V exposure.
- AGGREGATE 20 mesh GILLIBRAND SILVER 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 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 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.
- Verify that only sodium silicate-based curing compounds have been used to cure concrete in areas to be coated.
- 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 substrate shall be primed with Metal Primer available.
- Commencement of coating installation implies acceptance of that surface area, as it regards the suitability of the surface to accept the coating systems.

Standards: Complies with ASTM C957 2017 Los Angeles City Building Code. Los Angeles Research Report RR-24208 Standard color: Concrete Grev

# 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:

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 grinding or shotblasting.

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- Rout or saw cut all cracks exceeding 1/16" (.16cm) in width and caulk with PERMATHANE<sup>®</sup>SM7120 PU.
- Caulk all expansion, control, and construction joints to be over coated by deck coating with PERMATHANE<sup>®</sup>SM7120
   PU 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 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 pre-cured sheet flashing or reinforce coating with one layer of uncoated, woven fiberglass cloth. Where sheet flashings are used, they shall be free or un-bonded to the substrate within 2" (5.08 cm) on vertical surface and 4" (10.16 cm) on horizontal surface. Do not use pre-cured sheet flashings over expansion joints in horizontal surfaces.
- 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® SM7120 PU. 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 250-300 sq.ft. per gallon (7.36m2/liter). Mix only enough for use over a 2-hour period (max.). Allow a minimum dry time of 2 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:**

#### Medium and Heavy-Duty Decks:

- Step (1) ELASTO-DECK 5001HT 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 (0.63 mm). 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
   5001HT 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 GILLIBRAND SILVER SAND, or equivalent, uniformly into the wet coating, per 100 sq.ft. (2.45 m2/liter). Assure that the coating is back rolled 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 5001HT.
- 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.

Note: Topcoat must be the same color as the preceding sand coat.

# \*For heavy-duty traffic areas.

# Light Duty Pedestrian Decks:

- Step (1) ELASTO-DECK 5001HT shall be applied to the primed concrete at a rate of 60 square feet per gallon (1.57m2/liter) resulting in a film thickness of 25 mils (0.63 mm). Application must be made uniformly to avoid thin spots and care must be taken to avoid pinholes and repair them should they occur. Allow an overnight cure.
- Step (2) Apply ELASTO-GLAZE 6001AL-HT at 110 square feet per gallon (2.70 m2/liter) or 16 (0.4mm) wet mils. Immediately broadcast 1 gallon of 20 mesh GILLIBRAND SILVER SAND, or equivalent, uniformly into the wet coating, per 100 sq.ft (9.29 m2). Assure that the coating is back rolled for even distribution of the sand. Allow an overnight cure before permitting light traffic.

# **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 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.

# **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, priming with ELASTO-POXY PRIMER VOC and recoating with the ELASTO-DECK 5000 H.T. system. (See Maintenance Manual)

#### **TECHNICAL SERVICE**

All of the latest updates to product data and specifications are available at <u>holcimpacpoly.com</u>. 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.

> PRIOR TO USE OF THIS MATERIAL, READ ALL APPROPRIATE SAFETY DATA SHEETS

> > US, LLC

#### PRODUCT WARRANTY:

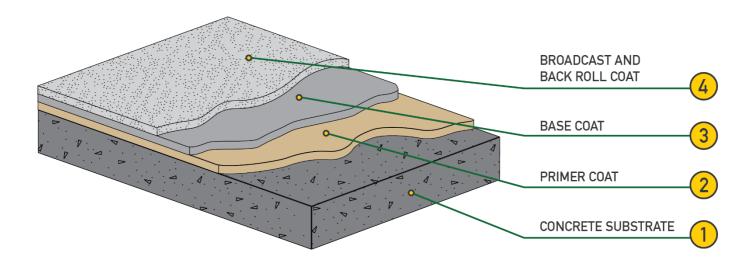
INSTALL AS DIRECTED ON PACIFIC POLYMERS® PRODUCT DATA SHEET. USER DETERMINES SUITABILITY FOR INTENDED USE AND ASSUMES ALL RISK AND LIABILITY. THIS PRODUCT IS SOLD "AS IS." EXCEPT AS REQUIRED BY LAW, THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IF TERMS ARE NOT ACCEPTABLE, RETURN UNOPENED PRODUCT TO PLACE OF PURCHASE. DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THESE PRODUCTS.

> Complete technical information is available from Holcim Solutions and Products US, LLC

# **TYPICAL PROPERTIES: ELASTO-DECK 5000HT**

PROPERTY	TEST METHOD	ELASTO-DECK 5001 H.T BASE COAT AND INTERMEDIATE COAT	ELASTO-GLAZE 6001 AL-HT TOPCOAT SEALER
Shore "A" Hardness:	ASTM D-2240	75 ± 5	95 ± 5%
Ultimate Tensile Strength:	ASTM D-412	1500 P.S.I. ± 10% (10.34mpa)	2780 P.S.I. ± 10% (19.3mpa)
Ultimate Elongation:	ASTM D-412	400% ± 10%	200% ± 10%
Adhesive Peel Strength on Concrete:	ASTM D-903	150 P.L.I. ± 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 Pass	System Pass
Abrasion Resistance:	ASTM D4060 mil DFT on 4"x4" metal CS17 wheel, 1000 rev, 1000 gram weight	N/A	0.029
Tear Resistance:	ASTM D-624	260 P.L.I. ± 10% (40.50 n/mm)	520 P.L.I. ± 10% (91 n/mm)
Moisture Vapor Transmission	ASTM E96	1.5 ± 0.4 perms	N/A
ASTM E-108/UL790/Class A Concrete substrate	ASTM E-108/UL790	System Passed	System Passed
Weatherometer:	ASTM D-1499 & G23 ASTM G154	1000 hours Slight Chalking	2000 hours No crazing, cracking, spalling or softening
Weight per Gallon:		10.8 ± 0.3 lbs. (4.9 ± 0.13 kg)	9.45-9.90 lbs. (4.53 ± 0.13kg)
Specific Gravity:		1.30	1.20
Solid Content: Weight: Volume	ASTM D2369	83% ± 2% 78% ± 2%	80% ± 2% 78% ± 2%
Viscosity:	Brookfield Viscometer	50 poises (Thixotropic)	30 + 5 poises
Flash Point:		120°F (49°C)	120°F (49°C)
Resistance to Gasoline:		Slight Swelling	Slight Swelling
Resistance to Diesel Fuel:		Slight Swelling	No Effect
Resistance to Anti-Freeze:		No Effect	No Effect
Resistance to Motor Oil:		No Effect	No Effect
Resistance to Water:		No Effect	No Effect
V.O.C. (Minus exempt solvent) (Meets SCAQMD requirement)	Calculated	80g/L	90g/L
Shelf Life (when stored indoors at 77°F (25°C) in unopened containers)		6 months	6 months

# ELASTO-DECK 5000 H.T.-LIGHT DUTY



ELASTO-DECK 5000 H.T.-HEAVY DUTY

