

# ELASTO-DECK 5000 X2 POLYURETHANE COATING

SYSTEM FOR PEDESTRIAN TRAFFIC

## **TECHNICAL DATA SHEET**

## **PRODUCT DESCRIPTION:**

**Pacific Polymers<sup>®</sup> 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, sundecks, stairways, balconies, etc. **ELASTO-DECK 5000 X2** can be used on all decks where a waterproof skidresistant, 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<sup>®</sup>SM7120 PU a one-part gun grade, non-staining, polyurethane sealant Mfg. by HOLCIM SOLUTIONS AND PRODUCTS US, LLC.
- 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 ELASTODECK 5000 X2 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.
   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: Complies with ASTM C957

2017 Los Angeles City Building Code. Los Angeles Research Report RR-24208 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. Except for non-moving shrinkage cracks, all other cracks and

Holcim Solutions and Products US, LLC 800-878-7876 holcimpacpoly.com joints must be sealed with SM7120 PU, a single-component, moisturecured polyurethane sealant. 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<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 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<sup>®</sup>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. 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 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 GILLIBRAND SILVER SAND or equal.
- 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 Manuel)

#### **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

PRODUCT WARRANTY:

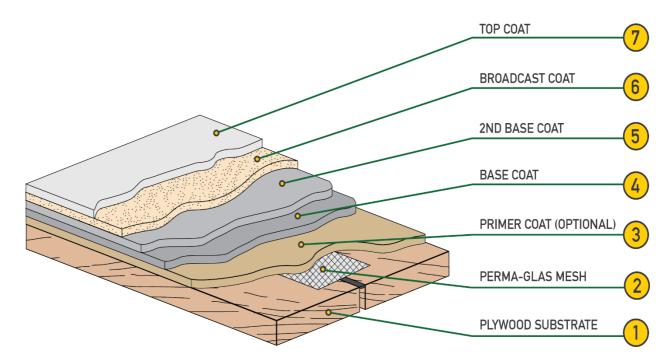
INSTALL AS DIRECTED ON PACIFIC POLYMERS® PRODUCT DATA SHEET. USER DETERMINES SUITABILITY FOR INTENDED USE AND ASSUMES ALL RISK AND LIABILITY. THIS PRODUCT IS SOLD "AS IS." EXCEPT AS REQUIRED BY LAW, THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY 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 5000 X2

PROPERTY	TEST METHOD	ELASTO-DECK 5001NG	ELASTO-GLAZE 6001 ALHT
Shore "A" Hardness:		BASE COAT	TOPCOAT SEALER
Ultimate Tensile Strength:	ASTM D-2240 ASTM D-412	50A-55A 430 P.S.I. ± 10%	95A ± 5% (40D) 2780 P.S.I. ± 10% (19.3mpa)
Ultimate Elongation:	ASTM D-412 ASTM D-412	700% ± 10%	2780 P.S.I. ± 10% (19.511pa) 200% ± 10%
•	A31WI 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 (Ib./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

# ELASTO-DECK 5000X2-PLYWOOD



## ELASTO-DECK 5000X2-CONCRETE

