



ELASTO-DECK 5000 M.R.

POLYURETHANE COATING SYSTEM FOR MECHANICAL EQUIPMENT ROOM FLOORS

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION:

Pacific Polymers® ELASTO-DECK 5000 M.R. is an elastomeric coating system which provides a waterproof, foot traffic bearing deck coating, based on polyurethane elastomers.

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** Topcoat, primer where necessary and an aggregate if desired for slip resistance.

Basic Uses: System provides a waterproof, elastomeric, traffic bearing deck coating. It is a monolithic system that incorporates excellent adhesion, flexibility, impact, abrasion resistance and chemical resistance. Physical stresses imposed by vibration of equipment will not cause delamination or rupture of the coating. The elastic properties of all system components enable the complete system to give and work with all but the most unusual movement of the floor or deck.

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 it is a moisture-reactive material. It sets up when exposed to air. Concrete surfaces must be completely free of foreign matter and primed with **ELASTO-POXY PRIMER (VOC or WB)** or **DECKTHANE Primer**.
Metal/Flashing: Prime with ELASTO-POXY PRIMER VOC.

MATERIALS:

Recommended materials and their uses are as follows:

PERMATHANE®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 **ELASTO-DECK 5000 M.R.** from U.V exposure and is the wear surface.
- **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 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.
- **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 and Tan.

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.

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 shot-blasting or grinding.
- Rout or saw cut all cracks exceeding 1/16" (.16cm) in width and caulk with **PERMATHANE®SM7120 PU**.
- Caulk all expansion, control, and construction joints to be over coated by deck coating with **PERMATHANE®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®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 covers 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 primed surface at a rate of 45 square feet per gallon (1.0-1.1 m²/liter) resulting in a 30 dry mil (.76mm) thickness.
- After an overnight cure (16-24 hours), **ELASTO-GLAZE 6001AL-HT** shall be applied at the rate of 115 feet per gallon (3.0 m²/liter), resulting in a 10 dry mil (.25mm) thickness. The aggregate (No. 20 mesh) is broadcast into the **ELASTO-GLAZE 6001AL-HT** sealant at the desired rate, and back rolled, if any slip resistance is needed.
- The completed coating system shall not be subject to any pedestrian traffic during the first 48 hours after the application has been completed, nor to any heavy traffic of pedestrians during the first four days after application.

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 M.R.: 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 M.R.** is damaged, it can be repaired by cleaning the surface, priming with **Elasto-Poxy Primer VOC** and recoating with the **ELASTO-DECK 5000 M.R.** system.
(See Maintenance Manual)

TECHNICAL SERVICE:

All of the latest updates to product data and specifications are available at holcimpacpoly.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.

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 M.R.

(INDIVIDUAL SYSTEM PRODUCTS)

| PROPERTY | TEST METHOD | ELASTO-DECK 5001NG BASE COAT | ELASTO-GLAZE 6001 AL-HT TOPCOAT 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 (%) | ASTM D 2369 | | |
| Weight % | | 91 ± 2 | 80 ± 2 |
| Volume % | | 88 ± 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 5000 MR

