



PACIFIC POLYMERS ELASTO-DECK 5000 FR

FIRE RESISTANT POLYURETHANE DECK COVERING FOR WATERPROOFING

1. NAME

ELASTO-DECK 5000FR WALKING DECK SYSTEM

ELASTO-DECK 5000FR DECK SYSTEM is an fire resistant, elastomeric coating system for walking decks, balconies, patios, roofs, etc., where an absolutely waterproof coating is crucial, such as above living quarters or any other occupied areas.

2. MANUFACTURER

ER SYSTEMS (An ITW Company)
12271 Monarch Street
Garden Grove, CA 92841
714/898-0025
FAX (714) 898-5687

3. PRODUCT DESCRIPTION

Composition: Liquid-applied, moisture-cured, fire resistant polyurethane deck covering system. The **ELASTO-DECK 5000FR** system consists of a Fire Retardant Powder packaged separately, ELASTO-POXY PRIMER (WB), ELASTO-DECK 5001 Membrane, ELASTO-GLAZE 6001AR and ELASTO-GLAZE 6001AR sealer coat. Elasto-Glaze 6001AL topcoat sealer coat is available in various colors as ready to use for the seal coat or as a color-pak added to a neutral base. The Fire Retardant must be mixed into the primer, basecoat, aggregate coat, and AR topcoat.

Basic Uses: For waterproofing patios, sundecks, stairways, balconies, roofs, etc. **ELASTO-DECK 5000 FR** 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 and plywood 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.

Shelf Life: 6 months at 77°F (25°C)

Standard Colors: Base coat and AR top coat Concrete Gray, Final top coat Concrete Gray, Tan or Color-Pak.

Base coats 5001 and top coat 6001AR with FR additive 2.5-gallon Kits, final top coat 1-gallon and 5-gallon pails.

Standards: International Code Council AC39 Criteria.

ESR Number-2697

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 3)

5. INSTALLATION

Surface Preparation: All surfaces, which are to receive ELASTO-DECK 5000 FR, 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 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 ELASTO-DECK 5001 mixed with Fire Retardant and taped with 6oz Glass Cloth Tape. All surfaces, where necessary, must be primed with Fire Retardant mixed ELASTO-POXY PRIMER (WB) prior to application of the coating system at a rate of 250 square feet per gallon.

All seams between plywood sheets and those between metal flashing and the plywood deck must be reinforced by imbedding a 4-inch (10 cm) minimum wide strip of glass cloth tape in wet Fire Retardant Mixed Elasto-Deck 5001, which is tooled 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 basecoat can subsequently be made immediately over the entire area, including the taped areas.

Application: ELASTO-DECK 5000FR system shall be applied as follows:

Step #1: Apply ELASTO-POXY PRIMER (WB) mixed with Fire Retardant ADDITIVE FR-WB at 250 to 300 sq.ft per gallon. Allow to cure until it tacks. Seal the joints and cracks using Fire Retardant mixed ELASTO-DECK 5001 basecoat. Reinforce the joints and cracks by embedding Glass Cloth tape. Proceed to next step after waiting for at least 30 minutes.

Step #2: Mix Fire Retardant ADDITIVE FR-PU in to ELASTO-DECK 5001. Apply the mixed ELASTO-DECK 5001 basecoat at a rate of 50 - 53 sq. ft. per gallon that would result to 25 +/- 1 mils dry film thickness. Allow the basecoat to cure overnight.

Step #3: Apply aggregate coat. Apply Fire Retardant ADDITIVE FR-PU mixed ELASTO-DECK 5001 basecoat at a rate of 50 – 53 sq. ft. per gallon to yield 30 - 32 wet mils. Immediately broadcast the aggregate (12 to 20 mesh size) into the wet coating to refusal. The aggregate must be Monterey sand and dry. Allow to cure overnight.

Step #4: Sweep excess aggregate from the application. Mix Fire Retardant ADDITIVE FR-PU in ELASTO-GLAZE 6001AR TOPCOAT. Apply at a rate of 100 - 110 sq.ft per gallon to yield 10 - 12 dry film thickness. Allow to cure the topcoat overnight. Note: Coverage of the topcoat will vary depending on the size of aggregate used.

Step #5: Apply ELASTO-GLAZE 6001AL Seal Coat. Prior to application shake and mix the container of the ELASTO-GLAZE 6001AL to get a homogeneous mixture. Do not mix at high speed. Use Jiffy Mixing and low speed drill. Always scrape the container wall to get proper mix. Apply the seal coat at a rate of 120 – 130 sq. ft. per gallon to achieve 7 to 10 mil dry film thickness.

Allow 48 hours cure time before permitting any light traffic on the finished system. Heavy traffic must be permitted after at least 96 hours cure time.

6. AVAILABILITY AND COST

Products used for **ELASTO-DECK 5000FR Deck System** are 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 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 accept damage 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 5000FR** is damaged, it can be repaired by cleaning the surface with M.E.K. and recoating it with **ELASTO-DECK 5000FR** system.

Technical assistance can be obtained by contacting:
 ER SYSTEMS (An ITW Company)
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 Garden Grove, CA 92841
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9. TECHNICAL SERVICES

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 DATA

<u>Required Test</u>	<u>Reference Standard</u>	<u>Test Method</u>	<u>Condition of Acceptance</u>	<u>Test Results</u>
Weather-O-Meter	AC-39 (Section 4.1)	ASTM D-1499	No crazing, cracking, spalling or softening	No crazing, cracking, spalling or softening
Accelerated Aging	AC-39 (Section 4.2)	ASTM D-756	Must undergo bond strength Test	See bond strength results
Fire Retardant Roof Covering	AC-39 (Section 4.3)	ASTM E-108	Minimum Class "C"	Class "A"
Tensile Strength	AC-39 (Section 4.4)	ASTM D-751	Evaluated case by case	Control = 354 psi Weathered = 284 psi Aged = 310 psi
Tensile Elongation	AC-39 (Section 4.4)	ASTM D-751	Loss in elongation limited to 55%	Weathered (loss) = 30% Aged = 12%
Bond Strength (Control)	AC-39 (Section 4.5)	ASTM C-297	10 psi minimum	Plywood: 66 psi Concrete: 87 psi
Bond Strength (Aged)	AC-39 (Section 4.5)	ASTM C-297	10 psi minimum	Plywood: 54 psi Concrete: 81 psi
Bond Strength (Freeze-Thaw)	AC-39 (Section 4.5)	ASTM C-297	10 psi minimum	Plywood: 52 psi Concrete: 67 psi
Abrasion	AC-39 (Section 4.6)	ASTM D-1242	0.020 inch maximum	0.017 inch
Percolation	AC-39 (Section 4.7)	AC-39 (Section 4.7)	0.5 inch maximum	0.10 inch
Water Absorption	AC-39 (Section 4.8)	ASTM D-570	15% maximum	1%
Chemical Resistance	AC-39 (Section 4.9)	ASTM D-2299	No crazing, softening delamination or spalling	No crazing, softening delamination or spalling
Freeze Thaw	AC-39 (Section 4.10)	ASTM C-67	<1% weight loss (max)	0.05% weight loss
Low Temperature Flexibility	AC-39 (Section 4.11)	AC-39 (Section 4.11)	No Crazing or cracking	No crazing or cracking

Concentrated Load	AC-39 (Section 4.12)	AC-39 (Section 4.12)	Condition of the surface noted	0.005" Permanent Set No crazing or cracking
Wind Uplift	AC-39 (Section 4.13)	FM I-52	No cracking, spalling, tearing, delamination or Failures of fasteners	Bonded System Exceeds 10 psi, Therefore – Unlimited

Note: Chemical Resistance Required Reagents Tested:

- a) Industrial Detergent Solution (20% by volume)
- b) Ammonia Solution (5% by Volume)
- c) Salt Solution (20% by volume)
- d) Muriatic Acid (10% by Volume)
- e) Chlorine Solution (10% by Volume)
- f) Ethylene Glycol Anti-Freeze, Kerosene, Turpentine, and Paint Thinner.