

POLYGUARD DECK REHABILITATION SYSTEM

In recent years, there has been an increasing amount of deck rehabilitation work. Often, these projects are characterized by rough or cracked structural deck surface and failed or substandard waterproofing systems, which had been originally applied.

POLYGUARD DECK REHABILITATION SYSTEM was developed for this application. It consists of:

POLYGUARD LIQUID MEMBRANE 85-SELF LEVELING (LM 85 SL), a self-leveling, two component, pourable asphalt modified urethane base coating. This material serves simultaneously as a crack filler, surface primer, and surface leveler.

POLYGUARD 650 WATERPROOFING MEMBRANE, a fully adhered rubberized asphalt membrane used worldwide since 1972 for both horizontal and vertical waterproofing. **POLYGUARD 650** has a high strength, puncture resistant, cross-laminated polyethylene film backing laminated to a rubberized asphalt- waterproofing element.

Since the **DECK REHABILITATION** is cold applied, rapid curing, and solvent free, "fast track" rehabilitation projects will not be delayed, and nearby occupied space should experience minimal disruption.

APPLICATION INSTRUCTIONS:

The concrete substrate should be prepared to a clean, dry, debris free condition. All non-adhered waterproofing coating should be removed by scraping and/or water blasting. If any questions arise concerning compatibility of the old waterproofing system with the **POLYGUARD DECK REHABILITATION SYSTEM**, contact Polyguard Products technical support personnel. Compatibility problems are unusual, since Polyguard formulations are compatible with most asphalt based materials, and with most aged coal tar residual materials. Polyguard's lab can perform compatibility evaluations if customers or specifiers have any uncertainty about compatibility.

Application should not be done unless surface and ambient conditions are over 25°F (-4°C) and rising. There should be no frost on the concrete substrate.

POLYGUARD LM 85-SL should be stored in a warm area prior to application (*approximately 70°F*). Part B activator should never be allowed to freeze.

LM 85-SL should be mixed on the jobsite according to label instructions. Note that the "pot life" of this material is limited, averaging 45 minutes at 70°F., depending upon temperature and humidity conditions. After this period the material will become too hard to apply and should be discarded.

Concrete should not be primed prior to application of **LM 85-SL**. **LM 85-SL** should average 60 mils thickness or 25 ft² (2.3 m²) per gallon coverage, depending upon job and surface conditions. **LM 85-SL** should be applied to vertical flashing areas by roller or brush, and to horizontal areas by squeegee.

The base coat of **LM 85-SL** should be allowed to cure overnight. The material will act as a temporary waterproofing membrane once cured.

POLYGUARD 650 WATERPROOFING MEMBRANE should be applied over the cured base coat of **LM-85-SL**. The base coat should be dry, clean, and debris free. No primer or conditioner is necessary. At inside corners, a fillet of **POLYGUARD LM 95 LIQUID MEMBRANE** should be applied. Otherwise, normal application procedures for **POLYGUARD 650** should be followed.

After installation of **650 WATERPROOFING MEMBRANE**, protection and drainage systems should be installed as soon as possible.

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This Information is based on our best knowledge, but POLYGUARD cannot guarantee the results to be obtained.

POLYGUARD PRODUCTS, INC • ENNIS, TEXAS 75120-0755

PH: 214-515-5000 • 800-541-4994 • FAX: 972-875-9425

Web Site: www.polyguardproducts.com



TECHNICAL DATA:

LIQUID MEMBRANE 85 SELF LEVELING PROPERTIES

PROPERTY/UNIT		TEST METHOD	TYPICAL VALUE
Color	Component A Component B Component Mixture		Black Brown Black
Solids Content		ASTM D 1644	100%
VOC Content			0
Elongation		ASTM D 412	100%
Adhesion to Concrete		ASTM C 794	5 lb./in. width min. (880 N/M)
Low Temperature Flexibility		ASTM D 1970	Unaffected at -25°F (-32°C)
Viscosity	Component A	Brookfield viscosity, spindle #7, 20 rpm, 80°F	4-7 cps
Chemical Composition			Asphalt Modified Urethane

POLYGUARD 650 MEMBRANE PROPERTIES

PROPERTY/UNIT		TEST METHOD	TYPICAL VALUE
Film Color			White
Membrane Thickness			60 mils
Tensile Strength - Membrane - (psi)		ASTM D-412 (modified Die C)	325
Tensile Strength, Film (psi)		ASTM D-882	6500
Elongation, ultimate failure of rubberized asphalt		ASTM D-412	600%
Permeance, (grains/sq.ft./hr/in.Hg)		ASTM E-96 (Method B)	.05
Cycling Over Crack, @ -15°F		ASTM C-836	No Effect
Peel Adhesion (lbs./in. width)		ASTM D-1000	10.0
Overlap Bond (lbs./in. width)		ASTM D-1000	8.0
Pliability - 180° bend over 1" mandrel @ -25°F (650 LT) and -15°F (650 P)		ASTM D-146	No Effect
Puncture Resistance - Membrane - (Blunt instrument) lbs.		ASTM E-154	40
Resistance to Hydrostatic Head (Head ft. of water)		Following Procedure of Draft 4 ASTM Subcommittee D08.22 on Waterproofing Systems	250
Exposure to Fungi in Soil - 16 Weeks		GSA-PBS 07115	No Effect
Water Absorption - % by weight		ASTM D-570	.1