



## TWO COMPONENT DEEP PENETRATING PRIMER

### GENERAL PRODUCT DESCRIPTION

PetraFlex 900 is an advanced high performance, 100% solids polyurethane membrane. It is a flexible two-component overlayment and ideally suited for outdoor applications and is generally applied at 30-125 mils nominal thickness with an anti-slip finish. Its flexibility makes it ideal for bridging cracks that would cause cracking in epoxy systems. It has good chemical resistance and its design features provide for the harshest applicational demands. PetraFlex 900 is made to be applied over PetraFlex Primer. PetraFlex 900 is available in gray only. Advantages:

- Flexible and elastomeric (900% elongation)
- Provides thermal cycle protection
- VOC Compliant - 100% Solids
- Nonporous
- Seamless flooring system
- Essentially odorless
- Withstands vehicular traffic
- Chemically resistant
- Can be applied over ten day old concrete

### WATERPROOFING MEMBRANE

PetraFlex 900 is ideally suited as a waterproofing membrane. Many applications require protection from water penetration which is a key benefit of PetraFlex 900. Whether it is a new slab or an existing old slab that is damaged, cracked, and in need of waterproofing, PetraFlex 900 is ideal. The system is suitable for both outdoor and indoor applications and in varying climates.

### PHYSICAL PROPERTIES

PROPERTY	VALUE	REFERENCE
Elongation	900%	ASTM D 412
Tensile Strength	1000 psi	ASTM D 412
Bond to Concrete	350 psi concrete fails at this point	ASTM D 4541
Coefficient of Friction	0.6 minimum	ASTM D 2047
Flash Point	>200°F	ASTM D 93

### PRODUCT DATA

Volumetric Ratio:	3.6 to 1
Solids:	100%
Coverage:	100 S/F per gal. at 16 mils
Application Temperature:	40-90°F and 5° above the dew point
Thinning:	Not required
Pot Life:	20-25 minutes
Working time on floor:	25-30 minutes
Cure Time:	1-2 hours (walking) 6 hours (traffic)
Critical recoat time:	24 hours
Shelf life:	12 months
USDA Food and Beverage:	Meets requirements

### APPLICATIONS

- Flexible base coat for other Petra products
- Parking garages
- Plywood substrates
- Decking
- Crack control
- Pool decks
- Pedestrian walkways
- Schools
- Hospitals

### CONCRETE PREPARATION

Before the coating is applied, the concrete must be:  
 Clean-- Contaminants removed  
 Profiled-- Surface etched  
 Sound--Cracks repaired

Mechanical preparation is the preferred method of preparing concrete for coating application. Shot-blasting, diamond grinding, scarifying, and scabbling are all acceptable methods. The concrete profile should be approximately 40-60 grit sandpaper after preparation.

### PACKAGING

PetraFlex 900 is available in two different kit sizes:

	Part A	Part B
4.6 Gallon Kit	3.6 gal.	1 gal.
46 Gallon Kit	36 gal.	10 gal.

# PETRAFlex 900

## COVERAGE

PetraFlex 900 is generally applied over a sealed surface of Petra-Flex Primer. The Petra Flex 900 is then applied at 32 SF per gallon to produce a 50 mil membrane.

Option 1. Over 50 mil system, apply Petra Thane RCU at 300 SF per gallon and lightly broadcast 90 mesh white aluminum oxide and backroll. This would yield a total 60-65 mil system.

Option 2. For a thicker, heavier duty, and more anti-slip finish as compared to the above 50 mils, apply another coat of Petra Flex 900 at a rate of 100 SF per gallon and broadcast 20 or 30 mesh silica to refusal. After it cures, apply Petra Flex 900 at 100 SF per gallon as a glaze coat. Any PetraThane urethane system can be applied as a finish coat for UV, stain, and yellowing resistance. This would yield a 100-125 mil system.

## APPLICATION PROCESS

Petra Flex 900 is made to be applied over Petra Flex Primer once it is tack free.

1. Always apply in descending temperatures. It is safer to apply coatings in the late afternoon, especially for exterior applications. Optimum ambient temperature should be between 40-90°F during application.
2. Mix kit using above mixing instructions.
3. Apply approximately 32 SF per gallon by immediately pouring out on surface in a ribbon, while walking and pouring at the same time until bucket is empty.
4. Using a 1/4" V notched rubber squeegee, spread Petra Flex 900 on floor at 32 SF per gallon.
5. Using a 3/8" paint roller with phenolic core, roll coating forward and backward.
6. Lastly, backroll from left to right.

## OPTIONAL GLAZE COAT

Xtra Kote TC, or PetraThane RCU or CRU may be used as a glaze coat. Refer to those data sheets for application methods.

## PRODUCT LIMITATIONS

Ground level concrete slabs emit moisture vapor. The allowable moisture emissions for concrete is 3 lbs. / 1000 S/F over a twenty-four hour period. If moisture is above this level, then blistering and delamination of coating may occur. A calcium chloride test should be performed to determine concrete moisture level. If moisture levels exceed the 3 lb. limit, a concrete moisture vapor control system should be used prior to applying a coating system. Please contact Petra technical department for approved systems.

Coating systems are susceptible to cracking if the concrete moves or separates below the coating. Hence, joint and crack treatment should be reviewed prior to coating application. As a general rule, control joints (saw cuts) and random cracks should be saw cut or chased first then filled with Petra Patch or similar approved hard epoxy product. Construction joints (two slabs which meet and hence move) should be treated. After the coating has been applied and cured, saw cut through the coating over construction joints and apply an elastomeric caulking or leave open.

## CLEANUP

PetraFlex 900, while in an unreacted state, may be cleaned up with water and degreaser. Isopropyl alcohol or acetone may be needed once the resin begins hardening.

## WARRANTY

Petra Industrial Polymers products are warranted for one year after date of application. Please refer to the Petra Industrial Polymer's Limited Material Warranty for additional clarification.

## SAFETY

Consult PetraFlex 900 material safety data sheet. Avoid PetraFlex 900 contact with skin. Some individuals may be allergic to epoxy resin. Protective gloves and clothing are recommended. This product contains flammable solvents. All electrical equipments should be grounded in accordance to the National Guard Code.

Information expressed in this data sheet is correct to the best of our knowledge. The technical data sheet does not constitute a warranty, expressed or implied as to the performance of this product. The use and application of this product is beyond our control. Warranty and liability therefore is limited to the replacement only for defective materials. Technical information is subjected to change without cause.

