



# MOLD FLEX



**Mold Flex** a high performance urethane elastomer specifically designed for high build applications. When fully cured, Mold Flex forms an extremely tough, abrasive resistant rubber, especially suited for applications requiring protection from impact, abrasion or corrosion on metal, wood or concrete surfaces. The system has added UV stabilizers and provides corrosion, weather, and abrasion resistance to various surfaces. **Mold Flex** elastomeric is recommended for exterior exposure in severe environments.

Typical applications include molding stay cable anchorage/transition pipe, protective layers for pipes, tanks, wood, flexible foams, concrete and other industrial surfaces.

Property	B Component	A Component
Appearance at 25°C	Dark Gray	Clear Liquid
Specific Gravity at 25°C	1.09	1.07
Viscosity at 25°C, Cps	550	250
Flash Point, PMCC, °F	>200	>400
VOC,%	0	0

Property	ASTM Test Method	Unit	Value
Specific Gravity	D792		1.083
Density	D792	lb/ft3	67.5
Hardness	D2240	Shore A	85
Taber Abrasion H-18 Wheel, 1000-g Load, 1,000 Cycles	D4060	mg/loss	190
Tensile Strength:	D412	lb/in2	1500
Ultimate Elongation	D412	%	400
Tear Strength			
Die C	D624	lbf/in	330
Split	D1938	lbf/in	140
Water Absorption: 30 Days	Pilgrim	%	1.0
Crack Bridging 1000 Cycles	C 957	-	passes
Elongation Recovery	C 957	%	passes

## **Surface Preparation:**

**General:** Surfaces to be coated must be clean and dry.

**Previously Applied Mold Flex:** Mold Flex can be applied to previously applied Mold Flex. Primer not generally required. If additional application of Mold Flex is required it is recommended to abrade the previously applied coating surface with an abrasive pad such as 3M Scotch Brite or 150 grit sandpaper. If re application is within one hour no surface preparation is required. Surface must be clean of all foreign materials. Blow surface with clean dry air before application.

**Concrete:** Concrete must be cured a minimum of 28 days and be free of release agents, curing compounds, oils and free from loose dust or debris. **Oils and Grease:** Chemical cleaning with detergents, caustic soda solutions or trisodium phosphate is necessary to remove oil and grease. A vigorous scrubbing action should be carried out during the washing procedure. It is important to thoroughly flush the surface of the concrete with water to remove all traces of the loosened substances as well as the cleaning solution itself. If either residue remains it will interfere with the bond of the barrier material. Sandblasting is the most effective method of cleaning concrete surfaces. Sometimes environmental restrictions preclude the use of dry sandblasting. Water blasting with low pressure (3,200 psi) is effective to remove laitance and provide a profile of sufficient depth for B2 Primer, a high penetrating low viscosity epoxy primer. B2 Primer (two-component epoxy primer) applied as a primer to water blasted concrete provides an excellent bonding primer for Mold Flex .

**Steel:** Immersion Service - SSPC-SP10 Near White Blast. Non-Immersion service - SSPC-SP6 Commercial Blast or mechanical cleaning.

**Wood:** Surface must be dry. B2 Primer is recommended to minimize outgassing.  
Previous Coating: Remove all loose or poorly adhered coatings. Solvent clean before application of Mold Flex.

## **Mixing & Application:**

Material is packaged in 2 and 10 gallon units.

Mix Ratio: 1:1 by volume.

Thoroughly mix the B Component (Gray) before combining with the Part A (ISO). Measure into a (mix and measure) container one volume of Part A followed by 1 volume of the B Component. Mix material for 30 seconds with a Jiffy Mixer attached to a low rpm (300-600) drill motor. Apply mixed Mold Flex immediately. Mix only amount that can be placed within limit of Mold Flex pot life.

## **Cleanup:**

Pilgrim #5 Cleaner is an effective solvent for clean uncured material.

Cleanup solvent contains flammable solvents. Consult #5 Cleaner MSDS for Safety & Handling.

## **Caution:**

This product is moisture sensitive and needs to be protected from high humidity, dew and direct moisture contact until cured. Application and/or curing in high humidity or exposure to moisture from rain or dew may result in a loss of gloss, micro bubbling, and/or blistering of the product.

**Storage Temperature:** 60-90°F (16-32°C)

# Mold Flex

Mold Flex components are shipped in sealed containers that are purged with dry nitrogen.

The containers should be kept tightly sealed and stored in a cool dry area.

Storage temperatures should not exceed 90°F. Shelf life stored under these conditions is 6 months.

Tightly reseal containers immediately after dispensing components.

## Typical Reaction Profile

Application Temperature Range Temperature	
32°-95°F (0-35°C)	
Gel Time	4-8 min
Tack-Free	30 min
Re-Coat	1 hr.

## Cure Schedule

35°F (2°C)	2.5 -3hrs
50°F (10°C)	1.5 - 2 hr
75°F (24°C)	60-75 min