

**PRODUCT DESCRIPTION**

**Polyflex 57** is a high performance elastomeric polyurethane coating that was specifically designed in order to provide durability to floors by manual methods of application. It will also provide excellent waterproofing properties.

**PRODUCT FEATURES**

- Low odor
- Excellent hardening at low temperature
- Good elasticity and flexibility
- High film build in one coat (up to 30 mils on horizontal surfaces)
- Excellent waterproofing of concrete
- Can be used as full coating or as a concrete block filler
- Applied by brush, roller or squeegee
- Great coverage
- Provide a seamless high build durable coating
- Cures temperatures down to - 10°C (15°F)
- Excellent impact resistance

**TYPICAL USES**

- Showrooms
- Auditoriums
- Warehouse
- Parking Deck
- Locker rooms
- Amusement park and zoo
- Manufacturing plant

**TECHNICAL DATA**

<b>Colors available:</b>	Any color
<b>Gloss:</b>	High Gloss (80°+)
<b>* Solids by volume:</b>	92 - 96 %
<b>* Solids by Weight:</b>	94 - 98 %
<b>Theoretical Coverage of 1 mil:</b>	1508 ft <sup>2</sup> / U.S gallon
<b>D.F.T. at 25 microns:</b>	139 m <sup>2</sup> / 3.78 liters
<b>Recommended WFT</b>	21 - 32 mils <b>depend on the application</b>
<b>Dry film thickness</b>	20 - 30 mils <b>depend on the application</b>
<b>Kit Viscosity:</b>	90 - 110 ku
<b>*Kit Specific gravity</b>	1.1 - 1.3 kg/l
<b>Flash Point:</b>	≥38°C (≥100°F)
<b>V.O.C.:</b>	50 grams/liter 0.42 lbs / US gal.

\* Data may vary for different colors

**Drying times (20°C) (on 20 mils / 0.5 mm) DFT**

<b>Tack free :</b>	1 ½ hours
<b>To recoat:</b>	4 hours
<b>Hard:</b>	8 hours
<b>Pot Life:</b>	50 - 60 minutes
<b>Reduction solvent</b>	Not necessary
<b>Catalyst:</b>	Catalyst 597C
<b>Mixing Ratio:</b>	1:1 by volume
<b>Shelf life:</b>	24 months @ 25° C unopened
<b>Packaging: Base</b>	3.78L (1 US gallon)
<b>Catalyst</b>	3.78L (1 US gallon)

Keep in cool and dry area

**APPLICATION GUIDE**

**SURFACE PREPARATION**

The substrate must be dry, oil free, grease-free, and dust-free. Stone particles or other debris must be removed. Wax substrates or residue or very contaminated substrates must be cleaned with a sand-blasting machine, a grinding machine or a high pressure washing machine.

Apply Polyval moisture cure primer (Xyguard/Mono Ferro PUR), epoxy Polyrock 448 or Polyflex 111 before application of Polyflex 57.

(Refer to correspondent TDS for that product)

**MIXING AND THINNING**

First, power mix the base portion Polyflex 57 until it becomes homogenous. Secondly, add catalyst 597C slowly with continued agitation until both base & catalyst parts are well mixed together. Then product is ready for immediate use.

Concrete block filler mixture should be used following the ratio by volume:

Polyflex 57 Base : 1 part

Polyflex 57 Catalyst : 1 part

Filler 000102 (Nicron 604) : 3 parts

**APPLICATION PROCESS**

			** RECOATING TIME	
Substrate temperature	Dust free	Hard	Minimum	Maximum
29 - 35°C (84 - 95°F)	1 hour	6 hours	2 hours	6 hours
16 - 28°C (61 - 83°F)	1½ - 2 hours	8 hours	4 hours	24 hours
5 - 15°C (41 - 60°F)	8 - 10 hours	24 - 30 hours	8 hours	72 hours

**\*\* Abrade slightly after recoat has lapsed, or Polyflex solvent surface activator 101645 should be used.**

The coating is applied using a trowel, a doctor blade or a squeegee. Over rolling with a spiked roller over it to avoid bubbles forming of the coating and promotes further leveling.

Vapor transmission test should be performed before applying this product.

**Recommended coating systems:**

Concrete Substrate

1<sup>st</sup> coat / Xyguard : 4-6 mils DFT (102-152 microns DFT) / Mono Ferro PUR : 3-4 mils DFT (76-102 microns DFT) / epoxy Polyrock 448 : 10-15 mils DFT (254-381 microns DFT) / Polyflex 111: 8-10 mils DFT (203-254 microns DFT)2<sup>nd</sup> coat / Polyflex 57: 20-30 mils DFT (508-762 microns DFT)

Steel Substrate

1<sup>st</sup> coat (optional) / Xyguard : 4-6 mils DFT (102-152 microns DFT) / Mono Ferro PUR : 3-4 mils DFT (76-102 microns DFT) / epoxy Polyrock 448 : 10-15 mils DFT (254-381 microns DFT)2<sup>nd</sup> coat / Polyflex 57: 20-30 mils DFT (508-762 microns DFT)**PHYSICAL PROPERTIES****Properties under tension:**

(ASTM D 412-C) Ultimate elongation = 195%

(ASTM D 412-C) Tensile Strength = 9.25 N/mm<sup>2</sup> (1341 PSI)**Adhesion by pull-off strength:**(ASTM D 4541) Xyguard, Mono Ferro PUR, epoxy Polyrock 448 or Polyflex 111 = 7.5 N/mm<sup>2</sup> (1088 PSI)**Indication of hardness:**

(ASTM D 2240) 80 Shore A / 35 Shore D

**Taber abrasion resistance:**

(ASTM D 4060) 1000 cycles, 1000g load, CS-17 wheel : 97 mg

(ASTM D 4060) 1000 cycles, 1000g load, H-18 wheel : 316 mg

**Impact resistance:**

(ASTM D 2794) Direct @ 77°F (25°C): 160 in-lb (18.0 joules)

Indirect @ 77°F (25°C): 160 in-lb (18.0 joules)

**SPECIAL INSTRUCTIONS & PRODUCT LIMITATIONS**

Do not store below 0°C (32°F) and above 35°C (95°F).

The area coated must be free of all traffic for a period of about 24 hours to dry.

Full curing to the core of the product should be complete after seven days following application.

Do not apply above 80% relative humidity.

Surface temperature must be at 3°C (5°F) above the dew point during application

Aromatic Polyurethane – color and gloss will be affected by UV exposure

**See the material safety data sheet and product label for complete safety and precaution requirements.****DISCLAIMER:**

"The following is made in lieu of all warranties, expressed or implied: Manufacturer's obligation shall be to replace such quantity of the product proven to be defective. The manufacturer shall not be liable for any injury, loss or damage, direct or incidental or consequential, arising out of the use of or the inability to use the product. Before using, the user shall determine the suitability of the product for the intended use and the user assumes all risk and liability whatsoever in connection therewith. All values shown are approximations. Values indicated are for guide purposes only, as actual values can change due to application conditions, application methods, environmental conditions etc. The information contained herein is subject to change without notice. Consult your representative for a current data sheet. The foregoing may not be altered except by an agreement signed by the officers of the manufacturer."