

DURAFLEX.



PROCESSING & HANDLING INFORMATION

For additional information, please contact
your Genyk Sales Representative

GENYK 
POLYURETHANE

A black and white photograph of a person wearing a full-body white protective suit and a respirator mask. The person is holding a spray gun connected to hoses and is spraying a substance onto a surface. The background is a blurred industrial or laboratory setting with various equipment and shelves.

ABOUT DURAFLEX

Duraflex is a fast set spray polyurea product line. This document will guide you with the processing information to achieve the highest performance level. Duraflex is a plural spray system, consisting of a resin (B side) and an isocyanate (A Side). Please refer to the safety data sheet for full details before handling these liquids. Safety glasses, rubber gloves, protective clothing, organic vapor, or fresh air respirator is recommended.

Processing equipment

Plural Pump

Graco: EXP-1, EXP-2, EXP-3, HXP-2, HXP-3

Gusmer: FF2500, FF3500, H-20/35

GlasCraft: MX, MXII, MH, MHII, MHIII

Gama: Evolution G-250H

PMC: PMC GH-40

Spray Gun

Graco: Fusion AP, Fusion MP, GX7, GX8, Probler, Probler P2

Gusmer : GX7, GX7-400, GX8, GAP Pro

GlasCraft: Probler, Probler P2

Gama: GDI

PMC: PMC A-P2

Mix Chamber

4242 and smaller is recommended in order to help keeping the pressure higher than 2 000PSI during spray application.

Pump set-up

Processing temperature:

135 – 160°F (Hose, A and B side)

Processing pressure:

2 000 – 2 500 PSI (optimum) 1 800 PSI min. and 3 500 PSI max.

Inlet strainer screen:

30 mesh

Gun filter screen:

40 mesh

Storage Conditions

A-Side : 60°F min., keep dry and store indoor. Keep away from freezing. Use dry air desiccant for intake vent on drum.

B-Side: 50°F min. Keep dry and store indoor. Mix well with mixer to re-disperse any settled pigment to achieve uniform color.



Surface preparation

Concrete

Green concrete should dry for 28 days before being coated for immersion service. When only one side of the concrete is being coated and the other side is exposed to air (like foundation), this delay can be reduced to between 7 to 14 days based on the drying condition.

Surfaces contamination can be removed by SSPC-SP1 solvent cleaning, dry air or vacuum. Water pressure wash or abrasive blasting is recommended to remove the laitance of new concrete and creating a surface profile between ICRI CSP-3 to CSP-5. Dry film thickness of 60 to 120 mils is recommended over concrete.

Voids, bug holes and imperfection of the concrete surface need to be repair before being coated. A porous substrate like concrete is normally prime before applying the Duraflex to help reducing and eliminating the formation of pinhole. Standard recoating time is from 4h to 24h between the primer and the Duraflex. Please refer to the TDS of the primer.

Steel

Surfaces contamination can be removed by SSPC-SP1 solvent cleaning, dry air, vacuum or water pressure wash. Abrasive blasting as per SSPC-SP-10 creating an angular surface profile of 3 to 4 mils is recommended when applied directly to metal. It is possible to use a steel primer to improve the anti-corrosion properties of the system. Dry film thickness between 40 to 100 mils is normally recommended for steel substrate.

Soluble salts

For immersion service, check for soluble salts on the surface to be coated with the appropriate test. Maximum amounts of soluble salts are 5 micrograms per square centimeter for the chlorides and nitrates and 10 micrograms per square centimeter for the sulfates. Washing the surface with Chlor*Rid or Holdtight 102 salt remover to be within the recommended range.

Dew point

Substrate temperature must be 3°C (5°F) above the dew point and rising before applying the Duraflex. Substrates need to be dry and not frozen to optimize the adhesion.

Termination

The membrane termination needs to be addressed to insure it is securely bond to the substrate and not expose to mechanical damage. Based on the service condition, the membrane termination can be protected with a flat bar, a layer of Sikaflex 1A or can be buried in a saw cut if the substrate is concrete.

Restriction

Aromatic polyurea will change color upon exposure to sunlight. The color change is normal and will not negatively affect the service life of the coatings. An aliphatic polyurethane topcoat can be use when the aesthetic color is important.

Recommendations

Recommended concrete repair:

- Sikaflex A1: Moisture cure polyurethane sealant
- Sikabond Construction Adhesive: Moisture cure polyurethane caulking
- Sikatop 121 Plus: Thin film cementitious mortar
- Sikatop 123 Plus: cementitious mortar

Recommended primer:

- Polyamide epoxy like:
 - Synguard EPS 22525 from PEPIN Paint
 - Synguard EPS 42525 from PEPIN Paint
- 2K Polyurethane primer
- 1K MCU Polyurethane primer

Recommended aliphatic polyurethane topcoat:

- Flexible acrylic polyurethane like Synthane PU 58XX

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