Corrosion and waterproofing protection with POLYFLEX®

Polyflex® can be applied over a variety of different substrates (concrete, metals, wood and many more) in a wide range of temperatures and humidity environments. Like all protective coatings, proper surface preparation is required before applying Polyflex®. Polyval Coatings offers a free polyurea training course with our technical experts. Our in-house chemists give extensive support. Polyval also offers a wide variety of compatible primers that will provide you an excellent long-lasting durable system.

Polyflex® products are protective coatings commonly used for:
- Corrosion protection
- Waterproofing
- Chemical, environmental or atmospheric resistance
- Abrasion resistance
- Aesthetics
- Structural enhancement

The Polyflex® system is a fast-set application which returns an area to service much faster than any other traditional coatings in the industry. This allows the facility to be back in use and reduces the downtime and loss of revenue.

Above is an example of a Polyflex® project. These reservoirs were covered with the Polyflex® 202 system and provided an excellent waterproofing, corrosion resistance, and long-lasting durable protection.
What is Polyflex®?

The Polyflex® product line combines extraordinary technology and vision and is being used successfully for many different applications today. The markets and applications are ever-evolving. Polyflex future uses are limited only to the imagination! Polyflex membranes are formulated to maximize the benefits of Polyurea. Instant curing, thick film in a single application and high flexibility are some of the basic characteristics of Polyurea technology. The Polyflex lines takes these benefits and builds on them to create a range of products with the intention of customizing solutions for specific markets and application needs. Chemical resistance for the petroleum industry, extra high flexibility for cold temperatures, and an NSF approved membrane for potable water are some examples of our customized technologies.

Polyflex® Advantages and Benefits

- Zero VOC’s
- Some Systems are NSF approved for potable water
- High flexibility: Crack bridging
- Excellent resistance to climate season variations
- Waterproof, seamless and resilient
- 100% solids by weight and volume
- Weather Tolerant: Cures at -32ºC (-25ºF) to >149ºC (300ºF) even in high humidity
- Unlimited film thickness in one application
- Extremely versatile preventing corrosion, abrasion and waterproofing problems
- Excellent bond strengths to properly prepared substrates
- Resistant to various solvents, caustics and mild acids
- Available in several colors
- Greater resistance to de-icing salt, UV rays, & other chemical products
- Low permeability, excellent sustainability

Markets and Applications for Polyflex®

Polyurea is an outstanding technology with a range of uses limited only by your imagination. As with any coating system, proper surface preparation, correct application equipment and the use of compatible primers are required (we offer many high-performance primers). Our Polyflex® polyureas are being successfully used around the globe. Typical applications include but are not limited to:

- Aquarium lining
- Marine
- Bridge coating
- Pipeline coatings and linings
- Flooring and parking decks
- Fuel storage and containment
- Joint fill / caulk
- Water containment
- Line marking
- Manhole and sewer linings
- Waste water treatment linings

Available Products

Polyflex 201 IMPERMEABLE: is a high performance, Polyurea membrane. It provides excellent waterproofing, corrosion and abrasion resistance and can be used in a great variety of different climatic conditions. It provides excellent protection and durability in continuous water immersion.

Polyflex 202 HIGH-CHEM: is a high performance Polyurea membrane with high chemical resistance. Polyflex has both high hardness and good flexibility to provide long-term durability. It is specially designed for continuous immersion in petroleum products.

Polyflex 204 REPAIR-KIT: is a high performance manual repair kit or for a full application Polyurea membranes. It is flexible, self-leveling and high in solids. Due to its aliphatic nature this product is suitable for interior and exterior applications. Generally, applications are applied by brush, squeegee or spatula.

Polyflex 301 GENERAL PURPOSE: is a high performance general purpose Polyurea membrane. It is designed for general industrial application where abrasion resistance and waterproofing is needed.

Polyflex 401 HIGH-ELONGATION: is a high performance aromatic Polyurea membrane. It provides excellent abrasion and shock absorbing resistance and can be used in a great variety of different climatic conditions. It provides excellent protection especially when service conditions require flexibility and protection in cold temperatures below freezing point.

Polyflex 402 SLOW SET: is a high performance Polyurea membrane. Due to its slow gel time, it provides a better leveling especially for industrial flooring applications. It provides excellent abrasion, tear resistance and waterproofing protection.

Polyflex PW: is a NSF 61 listed high performance Polyurea coating / lining for both steel and concrete tanks. Polyflex PW offers superior service life in a variety of climatic conditions for potable water.

Polyurea Done Right!

Polyurea is applied with a Plural Component Proportioning systems machine. This machine is a state-of-the-art proportioning system that gives you superior performance, control and accuracy. It is designed to apply Polyurea and other fast-set materials that require accurate temperatures and pressures necessary to achieve ultimate results.

* To find out more about Polyval Coatings Solutions, call 450.430.6780 / TOLL FREE 1.800.465.0905 or visit www.polyvalcoatings.com