

MPB Waterproofing LTD.

Polyurea Coatings.

Polyurea is a remarkable 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 is required. Read on to see where and how polyurea are being used successfully around the globe.

Services

Flat Roofing Waterproof membrane.

External Type A Waterproofing.

Bridge decks membrane.

Water retaining pond lining .

Internal tank lining and protection.

Waterproof Floor coatings including nonslip flooring for commercial and industrial premises.

Chemical resistant coating for tank lining and bund lining.

Swimming Pool lining.

Encapsulation of Hazardous materials such as asbestos.

Car park decking

Garage floors

Polyurea

Fast curing, being able to take foot traffic in seconds

Strong with high mechanical and abrasion resistance.

High elasticity, allowing movement without leaking.

100% Waterproof membrane.

High chemical resistance suitable for oils, petrol, acids and many other liquid chemicals.

Fast hardening, allowing rapid application and minimal downtime.

Very good adhesion on both concrete and metals, even when damp.

Vertical and horizontal application using spray application.

Hydrophobic and therefore unaffected by damp substrates when creating non-bonded waterproof liners.

Can be sprayed at temperatures as low as -30° C with minimal effect on tack free time.

Can be built up to any thickness in one application including vertical and overhead applications.

The cured elastomer has a high thermal stability with constant working temperatures up to 130° C and intermittent temperatures up to 160°

Uses

Pipe / Pipeline Coatings & Linings

Polyurea Coatings and linings are increasingly being used to protect steel pipes from corrosion. Polyurea has demonstrated its ability to last longer than paint and maintenance services and costs are reduced. Polyurea is a great protective coating system for pipes that are insulated with polyurethane foam. Polyurea are also being used to line the inside of water and sewer pipes for infrastructure rehabilitation work.

Bridge Coating

Polyurea's ability to outlast paint and fight off corrosion is a major reason these systems are being specified for bridge deck and structure coating . The most common applications of polyurea coatings on bridges are over steel and concrete.

Joint Fill / Caulk

Polyurea is being successfully used as a multi-purpose joint fill, caulking and sealant material. It can provide a flexible, durable, weather-tight and traffic resistant seal for all types of building joints, such as expansion joints and control joints in masonry floors, perimeter joints, panels and doors, water reservoirs, etc. It has excellent crack-bridging properties with high elongation and tensile strength. The fast cure time and insensitivity to moisture allows for a quicker installation with a wider application window. Proper surface preparation and substrate condition is always necessary.

Tank Coatings

Polyurea coatings protect steel tanks from corrosion, chemicals, and other natural weather and jobsite elements. With proper surface preparation, substrate condition, formulation choice, primers, and installation procedures, polyurea goes on fast and stays on long. Polyureas are great for extending the life of older tanks and can offer limited structural characteristics as well. These systems can be applied during primary construction or in a retrofit environment. With their fast cure times they are ideal for retrofit since down time is significantly minimised compared to some competing materials.

Tank Linings

Polyurea linings are resistant to many chemicals and industrial liquids. With their fast application advantages and ability to adhere to properly prepared substrates, polyurea are ideal for new storage tank primary lining and rehabilitation projects.

Marine

Above the water line and below, polyurea can be very effective in protecting steel, aluminium, and fiberglass in a variety of water sport and commercial marine applications. From sound attenuation for fishing canoes, to fish hold liners, to hull protection and bilge liners, polyureas are used in many abrasion, chemical and corrosion resistant marine applications.

Roof Coating

Polyurea coatings make an excellent protective covering for polyurethane foam roofs. Polyurea can be formulated to meet specific performance requirements due the wide range of physical properties that can be formulated. These reflective coatings can help reduce the amount energy consumption buildings use for heating and cooling. The fast cure time and insensitivity to moisture allows for a quicker installation with a wider application window. Proper surface preparation and substrate condition is always necessary.

Waste Water Treatment Linings

Fast cure, chemical and abrasion resistant, concrete primary and secondary containment linings. What more can you say about Polyurea applications for the Wastewater Treatment industry?

Manhole & Sewer Linings

Polyurea manhole lining is a rapidly growing market due to polyurea's ability to solve many current issues with groundwater infiltration and installation speed. Many municipal and private water systems are in great need of lining and structural repair. With proper surface preparation and substrate conditions, primers and Polyurea can be applied fast to return the cavity to service faster than most competitive systems. Polyurea's ability to form a monolithic, durable liner protects the cavity from sediment and groundwater infiltration into municipal wastewater systems.

Truck Liners

Polyurea truck bed liners form a durable, water and air-tight, permanent liner for the exterior of pick up trucks, dump trucks and steel containers. These durable, easy to clean and abrasion resistant liners protect utility trucks from their harsh duty environments. They also protect against rust and corrosion from damaging trucks and containers. Polyurea liners can also be applied in varied thickness to meet any specific application demand. Sprayed on truck bed liners are available in many colors and can be wrapped over the top edge of the truck bed to provide added protection from impact and abrasion.

Flooring and Parking Decks

Polyurea flooring systems are most popular for their rapid turnaround installation capabilities. Other benefits are available with polyurea flooring systems as well. Polyureas are very durable and great for use in areas of high traffic. They are used in clean/dirty rooms as a waterproofing and protective coating from daily pressure cleaning operations. Polyurea can be formulated to be flexible and resilient allowing the flooring system to protect objects that may fall upon them.

Aquarium Lining

Aquariums have also found benefits with polyurea. The ability to form to properly prepared custom shaped walls and themed ornaments make this system desirable. A spray applied, water resistant liner, available in a variety of colours with rapid return to service installation is why facility owners are turning to polyurea.

Landscape & Water Containment

Landscape designers and contractors have found similar benefits with polyurea. Polyurea is often used to contain water for ponds and pool decorations to form a primary containment liner. Use of geotextile material is common when applying polyurea over dirt. Proper surface condition is vital when applying over concrete and most other substrates.

Architectural Design

Polyurea has much the same uses in architectural design as it does in theme park applications. Polyurea is used as a protective coating over foam, EPS and other structures to create ornamental building fascia, themed characters, artificial rocks, pools and environments. There are many uses for movie set and theater stage design as well.

Line Striping

Polyurea is a very fast set material, which makes it ideal for use in line striping and pavement marking. It can be returned to service for traffic and pedestrian use in only a few minutes (depends on formulation) after application.

Polyurea is much more durable than paint and typically lasts much longer between maintenance cycles. Polyurea is the clear choice when it comes to cost/performance payback and operation.

Fuel Storage & Containment

Polyurea is resistant to many fuels and chemicals. It is commonly used in fuel pits and pipeline secondary containment. Polyurea is not resistant to all chemicals and necessary compatibility tests and surface preparation are always required.

We offer a full prep and floor coatings service to new and existing floors. Our fast set spray applied polyurea floor coating systems offer many benefits over conventional paints and epoxies.

With set times of less than 10 seconds and back to service within minutes our polyurea coatings are an easy choice when shut down time really counts.

Our high build floor coatings offer properties not possible from paints and epoxy. With elongation of up to 200%, resistant to high impact and abrasion as well as offering high levels of anti-skid.

Some common uses include:

- High impact areas
- Fork lift areas
- Over lay systems
- Corridors
- Balcony's
- Vehicle flooring
- Loading bays
- Ramps
- Parking areas

With any colour available and a wide range of physical properties there is always a product to suit your needs.

If you would like more information please feel free to get in touch.