

## Highways & Bridges

- Maintenance & Repair
- Underground Construction
- Coatings, Overlays & Waterproofing
- Expansion Joints



# About Us



FPT Infrastructure manufactures and markets a portfolio of integrated solutions that expertly restore existing structures and maximize the life of new construction. Serving bridge and highway, tunnel, rail, aviation, transit, water and power market segments, FPT Infrastructure supports, fills, coats, reinforces, seals, and protects the vital infrastructure that moves and connects us.

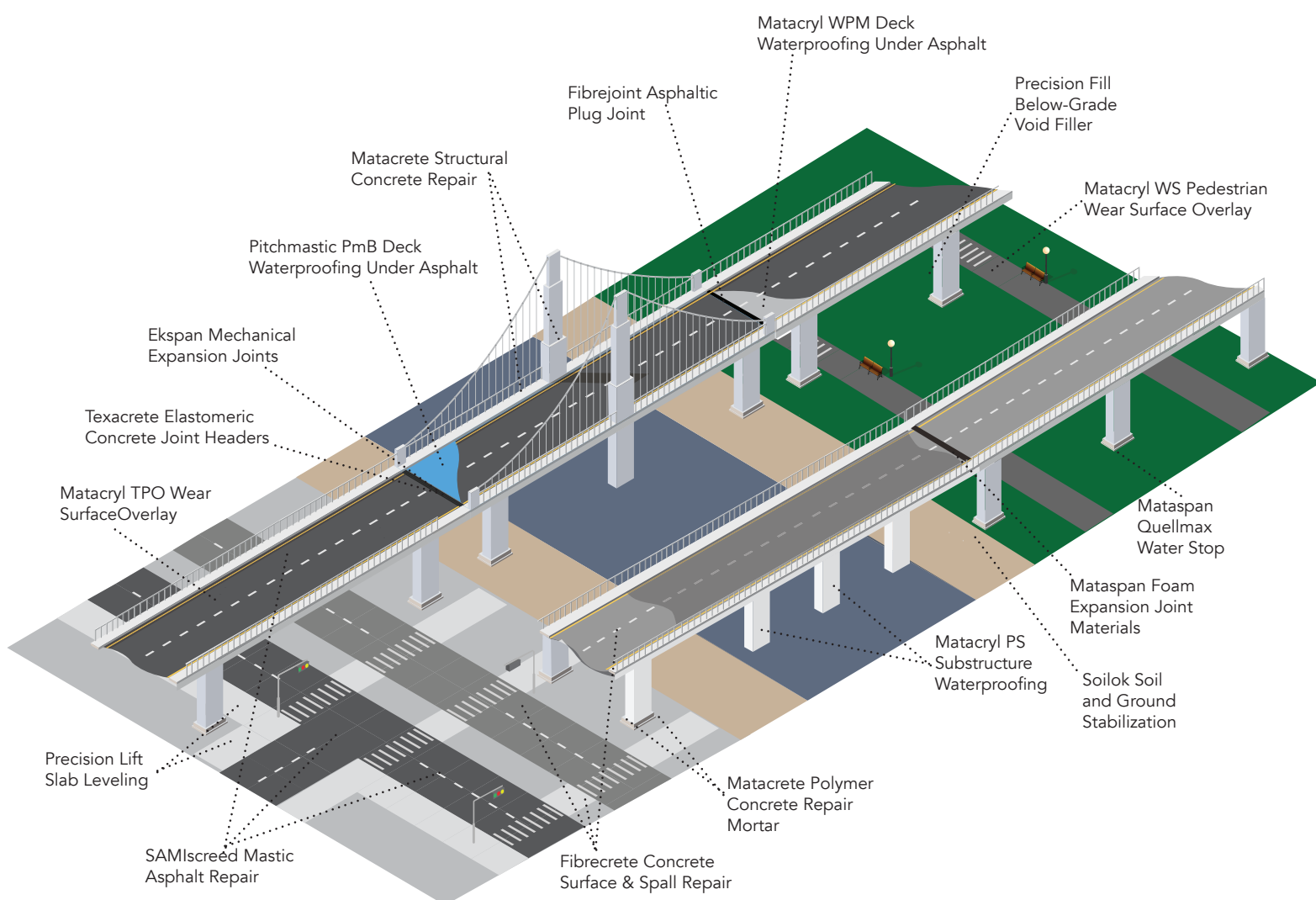
Integration is key. Our solutions are designed to work together for efficient application and seamless system performance. Our products are used in every climate and temperature zone in North America and perform under the most extreme conditions — from blistering heat in Laredo, Texas, to winter in Thunder Bay, Ontario, and everything in between.

FPT Infrastructure partners with infrastructure owners and civil engineering experts across North America to design new materials and systems to meet their unique needs. With an abundance of global installations, our professionals possess the material expertise and application experience to deliver value and performance on every project.

# Highway & Bridge Solutions

Millions of miles of highways and hundreds of thousands of bridges span North America. FPT Infrastructure offers a comprehensive portfolio of solutions to protect, restore and sustain these vital elements of transportation. While we constantly adapt our products and systems for new applications, our most prevalent are shown below and include:

- Hot-applied concrete repair materials and asphalt mastic repair materials for spalls, cracks and surface defects - pages 4 - 6
- Soil and ground stabilization, levelling and void-filling polymers and grouts - page 7
- Cold-applied polymer and cementitious concrete repair materials for horizontal, vertical and overhead structures - pages 8 - 9
- Membrane waterproofing and joint sealing for underground construction - pages 10 - 11
- Liquid-applied waterproofing, coatings and wear surface overlays for bridge decks and structures - pages 12 - 16
- Mechanical and foam expansion joint systems and joint header materials - pages 17 - 19





# Maintenance & Repair

## Fibrecrete G:

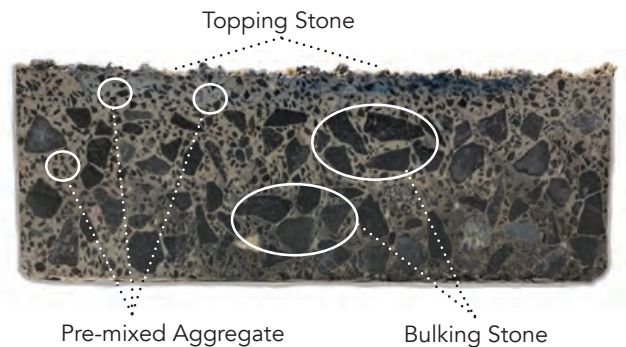
Fibrecrete G is a hot-applied, flexible material for partial and full-depth concrete repair. It is formulated with polymer-modified resins, fiberglass, mineral fillers and high-quality aggregate. In addition to concrete paving repair, Fibrecrete G is ideal for pedestrian surface, tarmac, bridge deck, expansion joint and concrete fixture repair.

Fibrecrete G replaces traditional cementitious repairs that fail due to their stiffness. It is a load-transferring repair with superior tensile strength and flexibility compared to rigid concrete repairs. This allows Fibrecrete G to accommodate movement due to thermal expansion and contraction, and vibratory movements, making the repair a long-term solution for highway maintenance projects.

### Key performance features:

- Cures in one hour or less for fast return to service, even at low temperatures
- Resistant to water intrusion and a broad range of deicing salts, bases and organic materials
- Alternative to costly, full-panel concrete replacement to extend road service life
- Bulking stone adds flexibility to repair and speeds cooling; topping stone adds UV resistance and non-skid surface

**Fibrecrete Repair Cross Section**



### Interstate 20

**Owner:** Georgia Department of Transportation

**Solution:** I-20 is the main east/west highway from Atlanta to Augusta. Fibrecrete G was applied to longitudinal cracks in drive lanes, exit and entrance ramps of the concrete slab road surface. The department avoided weeks of lane closure time and saved thousands of dollars in slab replacement costs.



# Maintenance & Repair

## SAMIscreed

SAMIscreed is a hot-applied, flexible repair mastic for asphalt pavement defects. It is a highly-modified asphalt binder that is premixed with small aggregates, graded filler, steel fibers and recycled tire rubber. The factory-blended mixture provides more structural integrity than traditional hot-pour crack sealers. Due to its flexibility, it is less likely to crack under the stress of freeze-thaw cycles than HMA repairs and cold mixes. SAMIscreed is a one-part, screed-applied system, suitable for all types of bituminous applications, including surfacing. Its skid resistance is designed to meet or exceed the surrounding surface. High-friction grades are also available.

SAMIscreed applications include cracks larger than 1.5" wide, joint reflection where the width varies from cracking to spalling, cold joint raveling, pavement delamination where mobilizing a paving crew is too expensive, highway shoulder joint separation, transition joints, potholes and rumble strip remediation. With no application temperature restrictions, SAMIscreed can be used throughout the winter to maintain safe driving surfaces on roads.

### Key performance features:

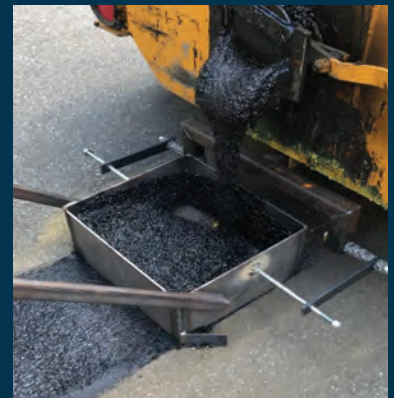
- Rapid curing for traffic reopen as soon as 30 minutes after application
- Application throughout the year subject only to dry surface conditions
- Effective sealing properties to stop ingress of water
- Cost effective - extends the service life of asphalt and reduces maintenance expenses
- Less preparation and smaller installation crews compared to traditional repair methods



### US Route 271

**Owner:** Texas Department of Transportation

**Solution:** Converting highway shoulders to driving lanes often involves milling and repaving at substantial material cost, labor expense and road closure time. In this application, SAMIscreed was hot applied to rumble strips, creating a level, skid-resistant driving surface for new right turn lanes on Route 271.





# Maintenance & Repair

## Fibrecrete 6690G Joint and Crack Sealant

Fibrecrete 6690G is a grey, hot-applied, single component material used to seal joints and fill cracks in portland cement concrete pavements. Its grey color makes it aesthetically suited for highly-oxidized, asphalt surface crack fill as well. Fibrecrete 6690G is made from polymer-modified resins, fibers and high-quality fillers. Supplied in 30 lb meltable bags, it can be heated and applied from standard crack seal kettles.

### Key performance features:

- Independently tested to meet all requirements of ASTM D6690 Type II Standard Specification for Hot-Applied Joint and Crack Sealants
- Water-tight and resistant to UV exposure, deicing salts, bases and organic materials for long service life
- Installs in variable temperature conditions, requiring only a dry surface for application and cure
- Flexible with strong adhesion to maintain durability in freeze-thaw cycles
- Does not require detack or curing solvents to maintain its grey color
- Melttable packaging speeds up installation and eliminates packaging waste

### Interstate 20 Atlanta, Georgia

**Owner:** Georgia Department of Transportation

**Solution:** I-20, a metro Atlanta concrete panel highway, has an average daily traffic volume of 283,000. Transverse and longitudinal cracking created uneven riding surfaces, and the potential for water ingress and further deterioration of the highway. Fibrecrete 6690G was chosen for its color match to concrete, and installed to mitigate cracks and seal the drive surface.



# Maintenance & Repair

## Slab Lifting and Soil Stabilization

Injecting structural polyurethane foam into the voids beneath concrete slabs can stabilize them without excavation or the added weight of cement, which can aggravate an existing soil settlement issue. FPT Infrastructure offers Prime Resins® Precision Lift® polyurethane foams that lift and support slabs, stairs, footings, or foundations, putting them back to their original position. Precision Lift foams are ideal for infrastructure applications where access to the site is difficult and rapid return to service is needed. Precision Fill™ may be used in conjunction with Precision Lift to fill voids below the concrete slab before lifting occurs. It is a two-component, low viscosity foam with slow and steady reaction time. With high expansion and high strength characteristics, it bonds to both soil and concrete to stabilize foundations and mitigate the cause of uneven settlement.

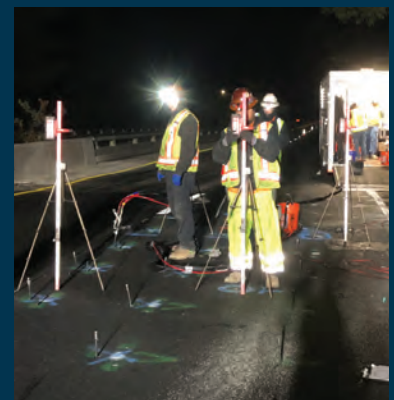
For large scale soil stabilization, FPT Infrastructure offers Soilok®, with strength-adding, water-tight encapsulation capabilities. Over time, decomposing soils, erosion, freeze-thaw cycles and groundwater migration can alter concrete foundations and cause instability. Soilok is a super low viscosity grout that penetrates fine silts, sands, coarse sands and top soil to the desired depth, then reacts to bind together whatever it contacts. Soilok is an economical option to polyurethane grouts for stabilization projects on earthen dams and levees, bridge, highway and rail embankments, tunnelling operations and curtain grouting.



### Old Redwood Highway - US101

**Owner:** Caltrans

**Solution:** Uneven slabs on US101 in Healdsburg were bumpy and noisy for commuters. Drops up to 2" deep were mitigated with Precision Lift. Adjacent panels were leveled to within 1/8" of each other. The speed of application and curing meant only one lane each of the north and south bound highway needed to close at a time.





# Maintenance & Repair

## Matacrete™ Ready Rep

Ready Rep is a rapid cure, ultra high-strength, MMA-based concrete patch, repair and re-profiling mortar. The kit includes a resin binder and a dry mix of specially-graded quartz aggregate and powder additives. Ready Rep is preferred by contractors, structure owners and civil engineers for new construction and restoration projects including vehicular and pedestrian surface restoration, spall repair, and anchoring or setting of steel components.

### Key performance features:

- Cold-applied and non-sensitive to extreme hot or cold temperatures
- Cures in one hour or less for fast return to service; requires no curing compounds or methods
- Two temperature grades allows for installation in extreme temperatures, even below freezing: Ready Rep LT -4 to 32 °F (-20 to 0 °C) and Ready Rep N 32 to 86 °F (0 to 32 °C)
- Achieves compressive strength of over 11,000 psi in one hour; over 14,000 psi in 7 days
- Bonds to Matacryl waterproofing and overlay systems for seamless integration of repairs and full deck structure restoration
- High-friction surface capable with suitable aggregate broadcast
- May be extended with fine quartz sand or larger quartz aggregate for full-depth repairs

### Quebec Bridge

**Owner:** Province of Quebec

**Solution:** The Department of Roads chose Matacrete Ready Rep for the repair of expansion joint headers on the Quebec Bridge. With daily traffic volume over 90,000 vehicles, Ready Rep's rapid cure time and ultra-high compressive strength met the strict requirements of the repair. Lanes were closed to traffic at dusk and reopened before sunrise, one and half hours after the completion of the second expansion joint.





# Maintenance & Repair

## Matacrete™ Cementitious Repair Mortars

FPT Infrastructure offers a variety of concrete repair solutions with Matacrete cementitious products. Type of repair, application conditions, return to service and structure use will determine which products are best for your project.

**Matacrete Bedding Mortar** is a single-component, rapid-setting repair mortar for use on concrete and masonry surfaces including curbs, gutters, columns and piers, precast panels and overhead patching. It is resistant to freeze-thaw cycles and deicing salts.

**Matacrete Rapid Set** is a single-component, rapid-hardening, low-shrink, micro-fiber reinforced repair mortar for projects that require quick return to traffic or a non-breathable coating within hours. Typical applications include trafficable repairs on bridges, loading docks, roads and highways, and vertical and overhead form and pour applications.

**Matacrete HB Mortar** is a single-component, quick-setting, low-shrink repair mortar formulated with unique polymers and fiber reinforcement for damaged and deteriorating vertical and overhead concrete repairs. Its integral corrosion inhibitor and low permeability help protect rebar.

**Matacrete PM Mortar** is a polymer-modified, cement-based mortar formulated for repairing defects in concrete and masonry surfaces from featheredge up to 1". It may be used for the repair of small holes, honeycomb and spalled areas on interior and exterior applications.

**Matacrete HP Concrete** is a versatile, single-component, microsilica-modified repair mortar that contains an integral corrosion inhibitor for concrete repair projects of all types. It is a high-strength material with excellent freeze-thaw resistance for high-performance.

**Matacrete Flowable Concrete** is a flowable, single-component, polymer-modified, cementitious repair mortar containing silica fume and an integral corrosion inhibitor, capable of full-depth repairs on, above, and below grade repairs on walkways, bridges, tunnels, dams, columns, and piers.

**Matacrete Sprayable Concrete** is a single-component repair mortar applied by low-pressure spray or hand trowel for structural concrete repairs. Its formulation of portland cement, graded aggregates, unique fibers and polymers increase adhesion, strength and sprayability. Sprayable Concrete is used for vertical and overhead repairs on bridges, tunnels, and waste water structures like manholes, pipelines and dams.



| Matacrete Product  | Chemistry                                  | Repair Type                                   | Placement               | Thickness                       | Application Temperature | Cure Time | Compressive Strength (28 day) |
|--------------------|--|---|-------------------------|---------------------------------|-------------------------|-----------|-------------------------------|
| Bedding Mortar     | Cementitious                               | Vertical / Overhead / Horizontal (light-duty) | Hand-applied            | Up to 4" extended               | > 45°F / 7°C            | 20 min    | 5,500 psi                     |
| Rapid Set          | Fiber-reinforced, cementitious             | Horizontal                                    | Hand-applied            | Up to 6" extended               | > 35°F / 2°C            | 20-40 min | 10,500 psi                    |
| HB Mortar          | Fiber-reinforced, corrosion inhibiting     | Vertical / Overhead                           | Trowel-applied          | Up to 4" or 6" extended         | > 45°F / 7°C            | 35 min    | 6,000 psi                     |
| PM Mortar          | Polymer-modified, cementitious             | Horizontal                                    | Hand-applied            | Featheredge to 1" depth         | > 40°F / 4°C            | 1-2 hours | 3,500 psi                     |
| HP Concrete        | Microsilica-modified, corrosion inhibiting | Horizontal / Vertical / Overhead              | Pour or pump            | Up to 6" or full-depth extended | > 45°F / 7°C            | 4 hours   | 8,800 psi                     |
| Flowable Concrete  | Polymer-modified, corrosion inhibiting     | Horizontal / Vertical / Overhead              | Pour or pump            | Up to 3" or 6" extended         | > 40°F / 4°C            | 6-7 hours | 7,800 psi                     |
| Sprayable Concrete | Fiber-reinforced, NSF approved             | Vertical / Overhead                           | Spray or trowel-applied | Up to 2" depth                  | > 40°F / 4°C            | 2 hours   | 8,500 psi                     |

# Underground Construction

## Mataproof™ Membranes

Mataproof composite waterproofing membranes are used in applications to protect reinforced concrete structures from ground water and ground contaminants. The various product configurations are suitable for waterproofing tunnels, retaining walls, foundations, buried utility vaults and other below grade/underground structures.

**Mataproof DualProof** consists of a non-woven, PP-fleece co-extruded with a flexible, PVC membrane that prevents any lateral water movement between the membrane and concrete. Product variations include a transparent membrane, DualProof T that allows for inspection of concrete for defects and imperfections, and DualProof S, a membrane co-extruded with polymer-impregnated, water-absorbing fleece.

### Key performance features:

- Easy installation with heat-welded or adhesive-bonded overlaps
- Highly-flexible waterproofing and crack-bridging guard against concrete cracking from shrinkage; fleece forms a mechanical bond with freshly poured concrete
- Self-healing properties of DualProof S membranes offer reliable protection as a post-applied membrane
- Favorable aging-resistance provides a durable barrier against mechanical stresses, water pressure and gas intrusion
- Installs at a working temperatures from 22 to 120 °F (-5 to 50 °C)

**Mataproof SilverSeal** is an active waterproofing membrane specially designed for use in structural waterproofing. It consists of a needle-punched, PP-non-woven, geotextile impregnated with a super-absorbent, water-activated swelling polymer co-extruded with a high-density PE membrane. The lightweight, self-healing membrane seals small cracks in the concrete from the pressure of swelling polymers.

### Key performance features:

- Two sealing functions: PE-membrane and swelling polymers
- Lightweight and easy to install - 450 g/m<sup>2</sup>
- May be installed in every season; no temperature or weather condition limitations
- Two meter long rolls reduce overlapping waste; overlaps sealed with adhesive
- Tough and tear resistant with high compound shear strength
- Replaces traditional materials such as bituminous liners, coatings and synthetic membranes



**Mataproof DualProof T**



**Mataproof SilverSeal**

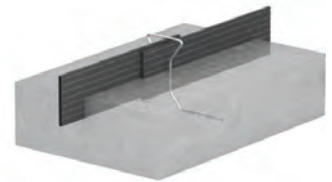


# Underground Construction

## Mataproof™ Joint Sealing

Mataproof concrete joint sealing systems are designed to seal joints in structural concrete and precast concrete elements. Our innovative portfolio offers active sealing options to protect joints from water intrusion, expansion and contraction, and deformations.

**Mataproof CEMflex®** water stop consists of a galvanized steel plate encapsulated in a special patented, active coating which reacts with water and moisture when embedded in concrete. It provides both an active and passive barrier to water transmission in horizontal and vertical cold joints in 'in situ' reinforced concrete.



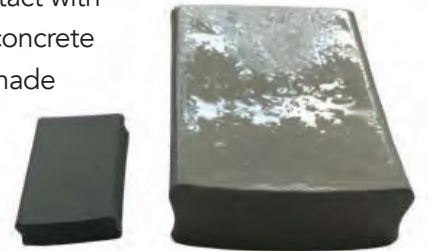
### Key performance features:

- Active coating with crystallization properties performs infinite sealing cycles under water pressure up to 8 bar
- Can be used in conjunction with other water stop systems: PVC water stops for movement joints, injectable hose systems or hydrophilic water stops
- No collapse or displacement of the water stop when subjected to the weight of concrete poured from above
- Bonding of overlaps is not required; overlapping of 5 cm is held in place with easily installed clips



**Mataproof CEMflex in fresh concrete**

**Mataproof CEMswell** is an expanding joint seal profile that swells when in contact with water, but remains dimensionally stable. It is primarily used for sealing precast concrete structures in basements, tunnels and mine shafts. It is a TPE-based compound made from rubber, hydrophilic resin, polyethylene, silicone and special admixtures.



**Mataproof CEMswell pre and post expansion**

### Key performance features:

- Expansion volume up to 400% and is fully reversible
- Stops water ingress up to 5 bar hydrostatic pressure
- Reliably seals on contact with water by controlled expansion under confinement in the joint

**Mataproof Quellmax®** bentonite water stop tapes are designed to stop water ingress through non-movement joints in reinforced concrete structures. It expands up to 500% upon contact with water, forming a durable seal through sintering and free lime formation.

### Key performance features:

- Tested up to 7 bar hydrostatic pressure and approved for use in both continuous water immersion and changing water tables (wet/dry cycles)
- Self-injecting properties seal and fill even the smallest voids and cracks in concrete
- Swelling and shrinking processes are infinitely repeatable due to the high sodium bentonite content



**Mataproof Quellmax**

# Coatings , Overlays & Waterproofing

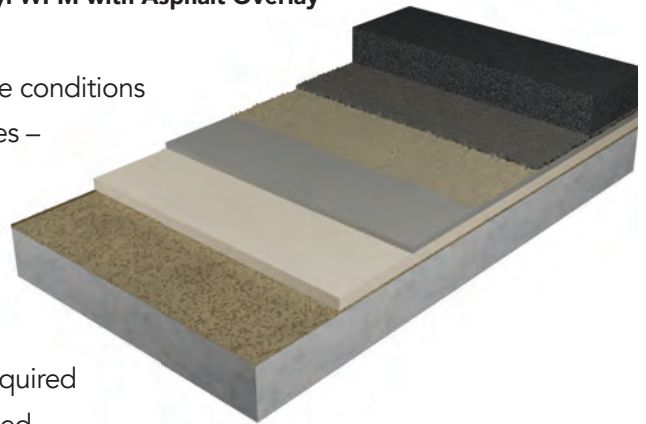
## Matacryl® WPM

Matacryl WPM is a cold-applied, liquid membrane system for use under asphalt overlays to provide heavy-duty waterproofing, corrosion inhibition and tenacious bond to asphalt. The chemistry is based on polyurethane methyl methacrylate (PUMA) hybrid polymer technology, and exceeds the performance of traditional MMA as well as conventional epoxy and polyurea resins. The adhesive quality of the polymer ensures tenacious adhesion to the substrate and an exceptional chemical bond between layers. Matacryl delivers superior, long-term performance by protecting the substrate from the extreme weather, chlorides, deicing salts, chemicals, gasoline and oils.

**Matacryl WPM with Asphalt Overlay**

### Key performance features:

- Available in spray and manually-applied grades to suit job site conditions
- Installs at a wide range of ambient and substrate temperatures – -4 to 95 °F (-20 to 35 °C) – to extend the construction season
- Chemically inert; does not require hazmat precautions for disposal once cured
- Rapid cure time promotes fast installation, lower labor costs and efficient handover to next construction phase
- Cold liquid-applied; no heating or conditioning of resins is required
- Matacryl systems are only installed by authorized and approved contractors trained by FPT Infrastructure



### **Burgoyne Bridge**

**Owner:** Ministry of Transportation of Ontario

**Location:** St. Catharines, Ontario

**Area:** 83,960 ft<sup>2</sup> (7,800 m<sup>2</sup>)

**Solution:** Erected over two years, the Burgoyne Bridge in the Region of Niagara spans Welland Canal. The 2,830-ton steel superstructure includes Matacryl WPM under vehicular and sidewalk paving to contribute to achieving the bridge's more than 80-year design life.



# Coatings , Overlays & Waterproofing

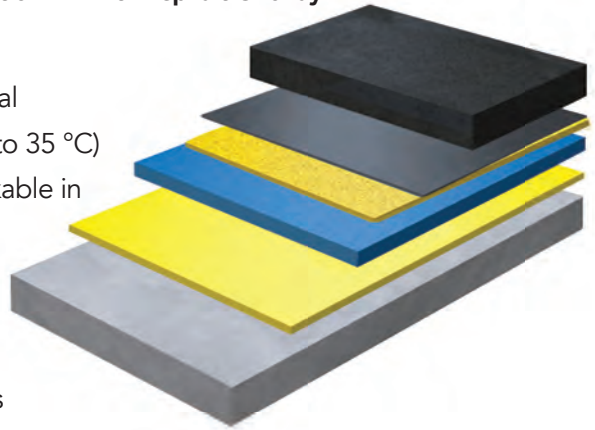
## Pitchmastic PmB®

The PmB bridge deck waterproofing system contains the technically advanced PmB membrane, a two-part, spray-applied, durable protection and waterproof coating that offers ultimate crack bridging capabilities. The high-performance membrane is 100% polyurethane, containing no fillers or additives, and is VOC-free. PmB is spray-applied in single or multiple layers using a two-component spray pump, with parts A and B mixing at the spray gun for application to the primed substrate. Once applied, PmB has exceptional bond strength and elastomeric capability.

**Pitchmastic PmB with Asphalt Overlay**

### Key performance features:

- Seamless installation providing a homogenous, water-tight seal
- Installs at ambient and substrate temperatures 32 to 95 °F (0 to 35 °C)
- Rapid setting: 5-8 second gel time, tack free in 1 minute, walkable in 10 minutes, elastomeric in 45 minutes
- High abrasion and chemical resistance
- Sanded key coat and hot melt tack coat layers provide adhesion point for asphalt overlay
- Blue tint of membrane helps ensure consistent coverage rates



### Linden Boulevard Street Bridge

**Owner:** New York City Department of Transportation

**Location:** Bronx, NY

**Area:** 10,000 ft<sup>2</sup> (930 m<sup>2</sup>)

**Solution:** NYC DOT commissioned a project to rehabilitate several structures in Brooklyn and the Bronx as part of the city's maintenance program. The heavily trafficked Linden Boulevard street bridge was waterproofed with Pitchmastic PmB and finished with an asphalt overlay.



### Nouvelle Autoroute 30

**Owner:** Quebec Ministry of Transport

**Location:** Montreal, Quebec

**Area:** 1,600,000 ft<sup>2</sup> (148,640m<sup>2</sup>)

**Solution:** In a recent extension of the Montreal bypass, Pitchmastic PmB was used to waterproof both bridge decks and structural components of the Beauharnois Canal Bridge, the St. Lawrence River Bridge and the Soulanges Tunnel.



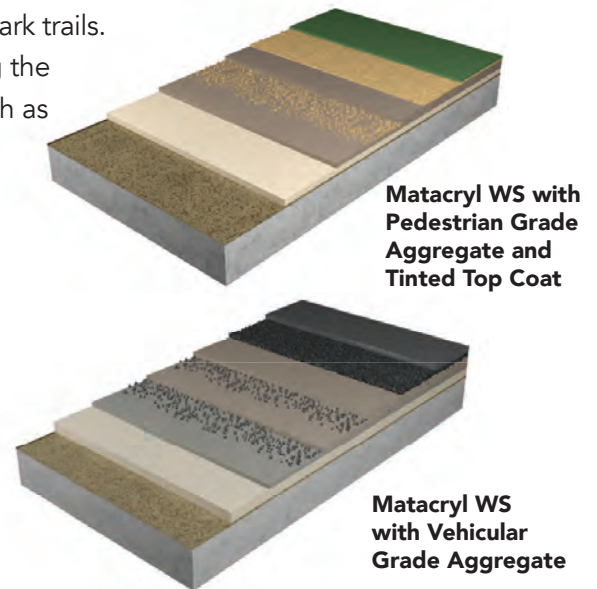
# Coatings , Overlays & Waterproofing

## Matacryn<sup>®</sup> WS

Matacryn WS provides a sealed wear layer in combination with a PUMA-based flexible, crack-bridging barrier membrane and surface friction suited to the bridge use. In addition to application on concrete and steel substrates, Matacryn WS can be used as a wear surface on fiberglass-reinforced panel (FRP) bridges and structures. Applications include new bridge construction, routine maintenance and bridge restoration as well as unique applications such as bike lanes, transit station pedestrian areas and park trails. Matacryn WS delivers superior, long-term performance by protecting the substrate from the effects of extreme weather and contaminants such as chlorides, deicing salts, chemicals, gasoline and oils.

### Key performance features:

- Available in spray and manually-applied grades to suit job site conditions; no heating or conditioning of resins is required
- Installs at a wide range of ambient and substrate temperatures -4 to 95 °F (-20 to 35 °C) to extend the construction season
- Customizable to the characteristics of the project by adjusting layer thicknesses, aggregate size and color, and top coat color
- Rapid set time promotes fast installation, lower labor costs and efficient handover to next construction phase



### Rt. Hon. Herb Gray Parkway

**Owner:** Ministry of Transportation of Ontario

**Location:** Windsor, Ontario

**Area:** 107,640 ft<sup>2</sup> (10,000 m<sup>2</sup>)

**Solution:** The \$1.4 billion, massive infrastructure project included highway extensions and park trailways to improve traffic and pedestrian flow in the Winsor-Essex region of Ontario. Matacryn WS was installed on a pedestrian bridge spanning a highway access road and connecting two land bridge and trailway extensions.



# Coatings , Overlays & Waterproofing

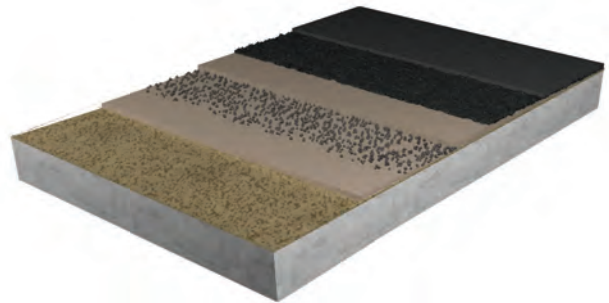
## Matacryl® TPO

Matacryl TPO is a 3/8" thick overlay consisting of primer, a multi-layer aggregated wear coat and seal coat. Utilizing PUMA/MMA chemistry, Matacryl TPO systems cure faster than alternative epoxy-based systems, supporting tight completion schedules and lowering overall application labor costs. A tenacious bond and interlayer adhesion prevent thinning and peeling of layers, effectively preventing the intrusion of water and chemicals that cause concrete deterioration and corrosion. Thin polymer overlays are cost-effective, bridge deck and road surface preservation options designed to fill cracks and provide a skid-resistant surface.

### Key performance features:

- Multi-layer system offers greater durability than traditional "chip-seal" single-layer systems
- Aggregates can be varied to provide appropriate traction and skid resistance for vehicular or pedestrian bridges, roadways, or walking and bike paths
- Interlayer adhesion and chemical bond allow for Matacril TPO systems to be recoated
- System may be installed at below freezing temperatures, allowing for a longer construction season

**Matacril TPO with Pedestrian Grade Aggregate**



### Highway 11 Overpass Bridge

**Owner:** Government of Saskatchewan

**Location:** Warman, Saskatchewan

**Area:** 6,500 ft<sup>2</sup> (605 m<sup>2</sup>)

**Solution:** The Highway 11 southbound overpass bridge that crosses the CN Railway near Warman was resurfaced with a Matacril TPO system as part of a \$52 million upgrade plan to replace or extend bridges and culverts in the province. The system was finished with vehicular grade aggregate offering skid resistance for both fair and icy weather conditions.

# Coatings , Overlays & Waterproofing

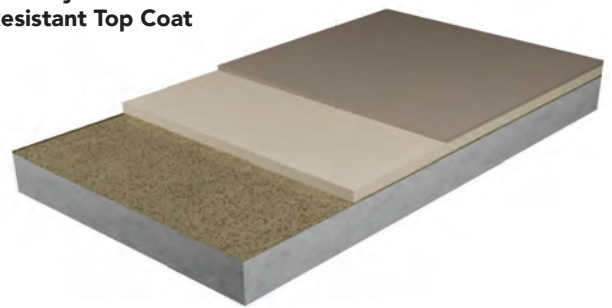
## Matacryn<sup>®</sup> PS

Matacryn PS is a waterproof coating system utilizing PUMA membrane technology to protect concrete substructures, both exposed and covered or backfilled. Relevant applications include cut and cover tunnel structures, precast and cast-in-place concrete bridge components, and earth-filled overpass bridges. Matacryn PS consists of a primer base with a Matacryn membrane layer for waterproofing and impact protection. On applications where the surface will be left exposed, Matacryn STC may be used for protection against UV degradation.

### Key performance features:

- Spray application option for vertical and overhead applications
- Rapid setting, even in extreme conditions allows for in-plant or field application in all climates, seasons and geographies
- High abrasion and chemical resistance protects substrates in dry, damp and wet conditions
- Matacryn PS seamlessly integrates with other Matacryn bridge deck, vehicular and pedestrian overlays and systems for a monolithic waterproofing solution

**Matacryn PS with UV  
Resistant Top Coat**



### REM Substructure

**Owner:** CDPQ Infra

**Location:** Montreal, Quebec

**Solution:** Réseau express métropolitain (REM) is the largest public transit project in Quebec in the last fifty years. Matacryn PS with a UV-stable top coat was applied to columns supporting the elevated light rail line. Matacryn PS waterproofs and protects the substructure's concrete and steel reinforcing.



### Precast Pedestrian Tunnel

**Owner:** City of Vaudreuil-Dorion

**Location:** Vaudreuil-Dorion, Quebec

**Solution:** A precast structure was used for a pedestrian and cycling tunnel to accelerate construction. Matacryn PS was spray-applied to the exterior surfaces of the tunnel sections to provide waterproofing and corrosion-resistance and ensure the 75 year service life of the structure running under the Exo light rail line in the Montreal suburb.



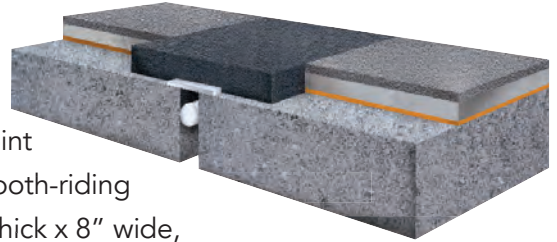


# Expansion Joints

FPT Infrastructure provides safe, efficient and economical expansion joint systems for bridges and roads that are subject to varying degrees of movement. Our expansion joint systems meet joint movement requirement capabilities up to 78.7 inches with mechanical, armored and armorless material options.

## Fibrejoint Asphaltic Plug Joint

Fibrejoint material is a hot-applied, polymer-modified asphalt binder and specific aggregates placed into a prepared expansion joint block out to provide a flexible, water-resistant joint with a quiet, smooth-riding surface. It utilizes a high-temperature tolerant backer rod and 1/4" thick x 8" wide, steel bridge deflection plate.



- Aggregate has a high PSV value and is a double-washed, dried granite
- Joint extends across the full length of the roadway and into verges
- Layer of crushed topping stone provides a tack free surface and compaction of the joint



## Texacrete Elastomeric Concrete

Texacrete is a two-part, polyurethane-based elastomeric concrete used as expansion joint header filler. It can also be used for pothole and concrete spall repair. Texacrete is resistant to UV, solvents and other chemicals, mixes easily, and sets fast for an economical repair option on expansion joint headers.

- Flexible, non-shrink and tolerant to damp surfaces
- High bond strength to a variety of materials including steel, art stone, natural stone and concrete
- Hard wearing with inherent flexibility for long service life



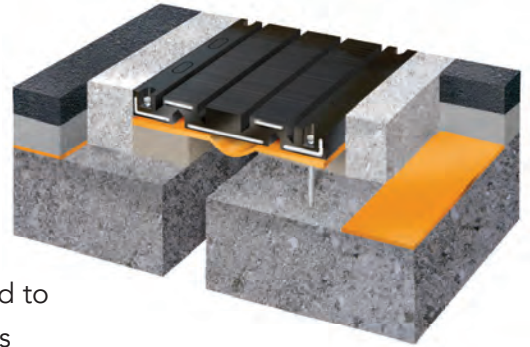
# Expansion Joints

## Ekspan Transflex Joint

The Transflex Expansion Joint consists of molded steel-reinforced rubber modules for smooth transit between two separate surfaces on the same plane, absorbing expansion, contraction, translation and rotational movements up to 330 mm (13 inches). Supplied in specified lengths to accommodate joint span, the sides are anchored to the structural joint. Transflex can be manufactured with special pieces for curbs, walkways, skew correction and other contours so the continuity of the seal is maintained.

Key performance features:

- Substantially waterproof joint with a smooth riding surface
- Corrosion-resistant elastomer casing
- Customized, factory-fabricated units for customized curb and return angles
- Rebond profiles available for reinstating the end configuration on field cut sections



## Ekspan T-Mat Joint

The T-Mat Expansion Joint consists of a solid, armored expansion mat made of a high-quality chloroprene with metal reinforcements. The design of the expansion joint allows for horizontal movement on either side of the joint in addition to transverse and vertical relative movements of adjacent bridge decks. The joint sits flush with surrounding surfaces, making it extremely pedestrian-friendly and hazard-free during cycle movement.

Key performance features:

- Five pre-configured sizes accommodate longitudinal movements from +/- .59 to 5.1 inches
- Chloroprene material is resistant to UV, chlorides, oil and other contaminants
- Mats can be heat welded on-site to create a continuous seal spanning the joint
- Impervious to deep standing water
- Low noise during operation, making it ideal for residential area applications





# Expansion Joints

## Mataspan™ Foam Expansion Joints

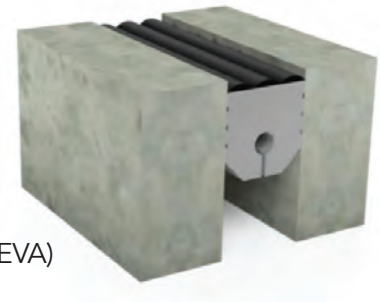
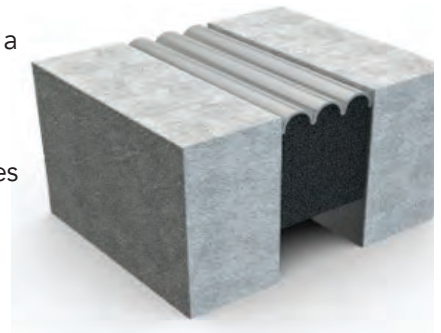
Mataspan's best-in-class, pre-compressed and acrylic-impregnated foam products for horizontal joint applications are specifically engineered for infrastructure projects. Our expansion joints provide optimal waterproofing and adhesion to meet global performance standards and feature superior durability, excellent movement capabilities, and streamlined installation. Mataspan expansion joints coupled with Matacryl deck systems provide full surface solutions for infrastructure applications.

Mataspan OC2000 is a pre-compressed, self-expanding foam joint sealant with a traffic-grade silicone coating engineered for horizontal applications subject to solvents and fuels, such as those found in road and bridge joints and airport runways. Mataspan OC2000 is designed to provide a maximum seal in structures with shear and rapid movement. It is made from a foundation of super-resilient, micro-cell, cross-linked polyurethane foam with a hydrophobic acrylic emulsion.

- Allows for up to 100% (+/- 50%) movement from mean joint size
- Monolithic foam with no unbonded laminations
- Designated as a dual expansion joint seal
- Advanced polymer impregnation without heavy fillers

Mataspan CC4000 is a preformed, compressible system that is impermeable to moisture and provides a watertight seal. It meets all applicable standards for compressible sealants and performs under extreme conditions including bridge and highway expansion joints. It provides a watertight, dustproof, airtight, UV-stable, chemical-resistant, soundproof, and insulated seal. Mataspan CC4000 is made from durable, low density closed-cell, cross-linked ethylene vinyl acetate (EVA) co-polymer foam.

- Unique profile for easier installation and less tension
- Closed-cell foam provides excellent compression, tension and shear capabilities
- Monolithic foam won't delaminate like multi-layer products
- CC4000C has a traffic grade silicone skin on exposed face





FPT Infrastructure offers a wide range of infrastructure products from companies within USL Group including:

**Ekspan®  
Bridge Bearings**



**Visul® Systems  
Tactile Paving Tiles**



**Ekspan®  
Expansion Joints**



**Prime Resins®  
Stabilizing and Leak-Sealing Grouts**



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