Our Solutions

www.primeresins.com
The Prime Resins Difference

Prime Resins is a leading manufacturer of chemical grouts, foams, adhesives and coatings for infrastructure repair & protection. We provide solutions for problems in leak sealing, soil stabilization, slab lifting, structural repair and coatings/secondary containment.

What sets us apart?

**Technical expertise:** We were the first in our field to offer 24/7 technical support.

**Turnaround time:** We have the fastest turnaround in the industry. Many shipments go out same business day as the order.

**Training:** We provide on-site training, application assistance, project consultations, and training seminars at our Head Quarters.

**Great value:** We offer the best combination of product performance, expertise, and experience.

**Solutions focus:** We work as partners with our clients to determine causes and to find remedies for your challenges. We are available before and after a purchase to answer questions and support our clients. This approach is in the DNA of the company.
Prime Resins offers chemical grouts for sealing leaks in a variety of structures. Our combination of superior product performance and top notch technical support are unmatched in the industry.

All leaks are not the same...

There are many types of leaks, and we offer different solutions to address each of them. We have a full range of products to seal leaks of all types and sizes. These products range from cutting-edge acrylate resins to hydrophilic and hydrophobic polyurethane grouts. Let us maximize your efficiency: one of our technical consultants can advise you on the best product and approach for your particular application.

Project Considerations

There are several factors to consider when choosing how to seal a leak, including:

- Volume of leak, weeping or gushing
- Size of crack or defect
- Accessibility of the site
- Environmental conditions
- Expansion rate, set time, and viscosity of the grout
- Physical properties of reacted grout

Applications

- Treatment Plants
- Manholes
- Culverts
- Leaking Dams
- Underground Walls
- Parking Garages

Several Prime Resins products have been independently tested and verified to meet NSF/ANSI Standard 61 for contact with drinking water, making them ideal for water treatment, transport, and storage structures. The eco-friendly designation also makes these a great choice for work on seawalls and near wetlands or other environmentally sensitive areas.
Soil Stabilization

Well-compacted soils provide a foundation upon which concrete structures perform. Decomposing soils, erosion, freeze-thaw cycles, and groundwater migration can break this foundation. This is the root cause for the damage or failure of structures from buildings to highways.

Stabilizing soil can be done without major excavation. Injecting polyurethane chemical grouts and acrylate resins and gels into loose or less dense soils, voids, pores and fissures will strengthen the earthen substrate and provide watertight encapsulation.

Prime Resins has been providing soil stabilization solutions for more than 30 years with our Prime Flex polyurethane foams and gels. We now have acrylate resins to add to your repertoire of options.

The alternative solution is often repair or replacement that can be expensive and might not be feasible because excavation is impossible or too disruptive.

Benefits of using chemical grouts vs substrate replacement or excavation repair:

- Faster
- Less disruption
- Safer
- Stops water migration
- Minimal area needed to stage equipment and material
- Usually less expensive
- Less environmental impact
- Permanent

Examples of typical structures requiring soil stabilization include:

- Roads/Highways
- Elevator pits
- Tunnels
- Catch basins
- Bridges
- Storm sewer pipes
- Dams
- Patios, porches & walkways
- Seawalls & pools
- Culverts
- Airport runways
- Driveways
- Tanks
- Foundations
- Railroad tracks
- Warehouses
Slab Lifting

Concrete lifting has been done for decades with a technique called mudjacking or slabjacking, traditionally done by pumping a cementitious material through holes drilled in the slab. While this method is sometimes the right choice, there are factors that often make slab lifting with polyurethane foams a better option.

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. Our Precision Lift™ products are polyurethane foams that lift and support slabs, stairs, footings, or foundations, putting them back to their original position.

Precision Lift™ foams are the best option when:

- Access to the site is difficult
- Added weight of concrete would further compact the soil
- Added weight of concrete would stress surrounding below-grade structures
- Rapid return to service is needed
- Smaller job size is not economically viable for mudjacking contractor
- Maintaining uniform aesthetic appearance of the concrete is wanted or needed - only dime-sized holes are needed to inject Precision Lift™ foams
Waterproofing

Waterproof Pitchmastic PmB and DeckProtect+™ coatings for various applications.

Our Pitchmastic PmB Bridge Deck Waterproofing System is a high quality elastomeric system to be used either at the construction phase to achieve dramatically enhanced life-cycle efficiencies or as a rehabilitation measure to prevent future water penetration and concrete deterioration.

The Pitchmastic PmB Structural Waterproofing System is a two-part, hybrid polyurethane elastomer for waterproofing. The spray-applied membrane gels in seconds to provide a seamless, fully adhered barrier to ingress of water and contaminants. Applications include plaza decks, roofs, balconies, stairs, tunnels, walls and more.

The DeckProtect+™ Car Deck Protection Systems are a comprehensive range of hybrid cold liquid applied systems that use the most effective technologies in parking garage protection today.

All DeckProtect+ systems are designed by Pitchmastic PmB chemists to be safe and user friendly. These are available for exposed parking as well as covered decks and basement parking areas.

Applications
- Bridges & Culverts
- Tunnels
- Parking Garages
- Roofs
- Pools & Balconies
Prime Resins makes a full suite of products that provide superior protection.

Protecting concrete usually means shielding it from the elements of nature or from harsh manmade chemicals. But it’s not just concrete that needs such protection. Corrugated metal pipe, steel surfaces, material hoppers, rail cars and masonry all can come in contact with corrosive or abrasive materials or harsh conditions.

We have products that:

- Waterproof and protect structures
- Provide primary and secondary containment of solvents and other harsh chemicals
- Protect floors/walls of concrete and most building materials and bond aggregate materials to concrete
- Prime concrete, wood and steel prior to applying epoxy, polyurethane or polyuria coatings
- Protect concrete, masonry, corrugated metal pipe, steel surfaces, wood, stone etc.
- Provide seamless surface protection of concrete and metal
- Protect surfaces that come in contact with food
- Protect Surfaces from resin and epoxy stains
Floor Repair & Joint Protection

Shutting down a busy warehouse or production line is not an option for most industries. When repairs are required, they must be carried out without the need for costly shutdowns. For this reason, Prime Resins developed a line of durable chemical grouts and epoxies that cure in minutes. These products allow repair crews to quickly stabilize and repair broken and spalled joint with minimal disruption to the facility.

Floor Repair

Spalled concrete is concrete that is chipped, cracked, and deteriorating. This often happens at a joint. The best way to provide concrete crack repair is with an epoxy or polyurethane mortar. The fastest way to repair a spall is to use Floor Fix polymer resin and a mortar made with resin and oven dried sand. This material is traffic ready in 10 minutes. Prime Bond 3000 and Prime Bond 3000 Fast also make fantastic mortars if you have time for the material to cure (usually overnight).

Joint Protection

If the slabs are not moving, the solution to prevent further damage is our Joint Shield line of epoxy and polyuria joint fillers. The materials will support the sidewalls of the joints and bridge the gap that currently allows the traffic to beat up the joint edge.

It is important not to confuse these materials with typical joints sealers that are only on the surface. These are full depth materials that are strong and flexible enough to withstand continuous traffic, but not so rigid as to weld the joint together. Joint Shield 5500 polyurea provides faster turnaround and the ability to shave the joint flush.
Seawall Repair

Repair a seawall or bulkhead with Prime Resins chemical grouts. Fill voids, stabilize loose soils & seal leaks at a fraction of the cost of wall replacement.

The symptoms are clear
A property owner is plagued by a failing seawall. Soil washes away with every wave or tidal cycle through gaps in or under the wall. Maybe the wall joints are failing. Perhaps the footer no longer meets a solid foundation.

The ground is caving in behind the wall. Voids are visible. Sinkholes are forming. These symptoms are caused by erosion of the ground behind the wall. Over time that ground will settle or will get saturated and mushy. Either will result in voids and erosion, undermining the integrity and effectiveness of the wall.

Seawall Repair Options
A cementitious fill won’t remove the cause of erosion or settlement. You could replace the wall in a major construction project that is highly disruptive. This could mean an extensive (and expensive) permitting process, delaying remedy by weeks or months. Depending on the location, you could be looking at needing to use a barge or crane to do the construction. There are indeed times when replacement is the best or only option. That is often not the case.

What if you could seal the failing joints in a wall, stabilize loose, and saturated soils, fill voids behind the wall without adding huge weight to a weak substrate, and create a watertight barrier behind and under a wall, all without excavation? And what if you could do all of that with eco-friendly material that it is certified for contact with drinking water?

Yes, you can
You can do all these things with polyurethane injection resins from Prime Resins. For 35 years, our products have been used to stabilize soil, seal leaks, and repair concrete - including more than 200 seawalls and bulkheads globally.
The need for crack repair in concrete structures can be caused by many different factors. Damage can occur to the concrete in situations where direct impact puts stress on one area of the structure. Causes include freeze / thaw cycles, mechanical overload, improper pouring during installation, damage during transport of prefabricated sections, faulty foundations, or standing water due to improper drainage, adding unsafe weight to the concrete structure.

**Repairing Concrete Structures**

Structural crack repair can be accomplished by pressure injection of our Prime Rez series of epoxy injection resins. There are many ways to accomplish this, but the basics are consistent. For cracks that are extremely tight (less than \( \frac{1}{32}'' \)) or subject to shock and vibration, use our Prime Rez 1200 Low Mod LV. If you need the absolute highest strength, use our Prime Rez 1000 High Mod.

**Bonding & Anchoring**

Prime Resins is the premier manufacturer of epoxy resins and gels for bonding concrete and anchoring construction materials. Our products were developed directly out of an affiliated contracting business: We know the many kinds of products you need to get your jobs done. It is critical to the success of any project to select the correct product when bonding and anchoring. Our technical consultants, with decades of hands-on experience among them, can help you decide which products best suit your needs.

**Bonding Concrete**

Bonding concrete can add many years to the life of a structure, but it has to be done correctly. When pouring new concrete on top of old concrete, it is critical to achieve the right bond between the two pours. **Prime Bond 3000 High Mod** is our workhorse product for this application. In hot climates, **Prime Bond 3900 High Mod LPL** is an excellent choice due to the longer working time. Oven dried sand can be added to the Prime Bond resins to create an epoxy mortar for patching and repairing expansion joint nosings.

**Anchoring Steel**

Anchoring steel into concrete is a pretty straightforward process; however, selecting the correct adhesive is important. Dowel bars, anchor bolts, and pins are used for different construction applications, and the correct adhesive is critical to a successful install. **Prime Gel 2000 High Mod** is our top selling product for all of these applications. Quick Mix cartridges make applying the product a breeze. For cold weather, try our **Prime Gel 2500 Quick Bond**.
Prime Resins products can be used in many varied applications, but here are a few markets where we can provide multiple solutions.

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<th>Market Sectors</th>
<th>Description</th>
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| Storm & Waste Water Systems     | • Seal leaks on laterals using packers and our PR10 ACLM acrylamide.  
• Seal sewer main joints and repair leaks on main lines.  
• Seal leaking joints, stop gushing leaks and fill voids behind manholes.  
• Protect water treatment plant tanks from corrosion with coatings and seal leaks. |
| Marine and Waterways            | • Seal leaks, stabilize soils and fill voids behind seawalls and bulkheads.  
• Seal leaks, stabilize soils, fill voids and repair joints on culverts.  
• Apply waterproof coatings under water features. |
| Parking Garages                 | • Apply waterproof coatings, seal leaks, seal joints, or inject structural repair epoxies for covered parking as well as exposed parking decks.  
• Seal leaks, fill voids or stabilize soils behind underground structures including elevator service pits.  
• Apply waterproofing membranes to roofs, even those with above-ground pools. |
| Transportation                  | • Waterproof bridge decks, stabilize soils on approach slabs, lift and level concrete bridge panels.  
• Stabilize soils beneath concrete panels, lift and level slabs on airport runways.  
• Waterproof, seal active leaks, and fill voids behind tunnels and culverts. |
| Industrial                      | • Repair cracks and spalls in floors, repair joints, and provide secondary containment coatings for warehouse floors.  
• Provide protective coatings and seal leaks around chemical plants.  
• Fill voids and level slabs in parking lots and around loading docks. |
| Residential                     | • Waterproof basements  
• Lift and level concrete slabs as well as fill voids underneath driveways and sidewalks.  
• Waterproof and seal leaks surrounding swimming pools.  
• Fill voids as well as lift and level concrete panels surrounding swimming pools. |

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