Superior
Est. 1983

THE UNDERGROUND AUTHORITY





Superior Specialty Grouting
A PERFORMANCE COMPANY





Solving a variety of geotechnical issues for new and remedial construction.

WELCOME TO SUPERIOR

Superior Grouting is a premier provider of geotechnical pressure, cellular, compaction and polyurethane grouting solutions for soil stabilization and lifting applications. Serving a wide array of non-residential commercial, industrial and infrastructure sectors in our 35+ year history, we have earned the reputation as the "go-to" for demanding applications where safety, quality, responsiveness and reliability are an absolute necessity.



PRESSURE GROUTING

"Superior is a performance oriented company that works with engineering firms and general contractors"

Pressure Grouting is the generic name applied to a number of applications requiring the pumping and injection of any number of variable grout mixtures.

Pressure Grouting is used primarily by the commercial and industrial sectors to fill voids under slab structures, as a backfill for ground modification projects, as a filler for the abandonment of underground pipes and when securing the annular spaces within underground utility structures.

Abandonment Pressure Grouting Service

Excavation and removal of abandoned underground pipes can be extremely expensive and abandoned pipes often cannot simply be left as is. In certain cases the law now requires that any abandoned pipe be removed or adequately grouted so that it will not collapse and create voids that could cause settlement to the top soil or roadbed.

Annular Spaces Pressure Grouting Service

Annular space grouting is the process of filling the area between a host pipe and liner pipe in re-lining applications or casing with conduits on electrical duct banks projects. When grouting an annular space, it is important to do it right the first time, since there is no second chance. In addition, pressure grouting annular space poses additional challenges, due to the small void space and length of runs encountered on these types of projects. Our company has mastered annular space grouting with over three decades of experience. We have extensive experience in placing cementitious and cellular grout mix designs.

Void Fill Pressure Grouting Service

Using this process, grout is pumped under pressure into a void beneath a structure. The cavity might have been caused by a water supply or drainage line break where the adjacent soils have been washed away. The service of void filling and/or soil stabilization is often viewed as a preventive treatment. Concrete areas that feel/sound hollow, flood plain areas subject to erosion, and poorly-compacted soils around foundations, abutments, and retaining walls are just some of the common areas in need of void filling with a calibrated cement grout.



CELLULAR CONCRETE

1,424,346 LF
& COUNTING OF LINE GROUTED

Every cellular concrete project involves its own unique set of challenges. Superior Grouting Services, Inc. works with owners, engineers, and contractors to develop project solutions using light weight cellular concrete. We will come to your project location and set up a production station to create cellular grout or cellular concrete at the production rate needed.

Our experienced staff can provide the mix design or follow the design provided by the engineers. Superior will test and maintain the cellular material at the density required by the project engineer throughout the entire project. We supply the mix design, foaming equipment, foaming agent, and trained certified personnel.

Compared to heavier grouts, cellular concrete is lightweight and highly fluid, resulting in the following advantages:

> Ability to pump for long distances
> Minimal shrinkage
> Low hydrostatic and buoyant forces acting on carrier pipes
> Virtually eliminates risk of incomplete filling or plugging of void spaces
> Extremely flowable and pumpable
> Stability and strength with only minimal weight
> Lower pumping pressures. Reduces the risk of damage to pipe or structure
> Requires fewer access points because it can be pumped over 5,000 feet, resulting in lower costs and less disruption
> Load reduction (vertical and lateral)
> Minimizes future settlement

Superior Low Density (LD) cellular (foam) concentrate offers significant advantages in projects that require lightweight fill. Densities can be varied from 25 to 110 PCF and its compressive strength can be varied to meet the specific job requirements.

CELLULAR CONCRETE APPLICATIONS

> Pipeline Abandonment
> Annular Space Grouting
> Tunnel Backfill
> Load Reducing Backfill



Safely and effectively filling underground lines and structures involves a variety of factors. Superior has the experience and knowledge to offer complete solutions.



Superior Grouting Services has extensive experience with the mixing and injecting of non-bleeding, cellular concrete.





COMPACTION GROUTING

Compaction grouting, also known as 'Low Mobility Grouting', is a grouting technique developed in the 1950's as a remedial measure for the correcting of building settlement. The grout displaces and densifies loose granular soils, reinforces fine grained soils and stabilizes subsurface voids or sinkholes.

Grouting is accomplished by the multi-step injections of low-slump, low mobility grout. The soil becomes increasingly dense as water and/or air are forced out and soil particles are rearranged by the incoming grout. If lift is a desired result, the process can be continued on a controlled basis until lift requirements have been achieved.

Our company has used compaction grouting in many situations from stabilizing soils beneath railway beds to soil stabilization of settling structures, lifting of large structures, to remediation of sinkholes. With this method all types of soil can be improved, however the degree of effectiveness will vary depending on the soil conditions. Compaction grouting requires coordination and a plan to be successful and our company's plan is second to none.

Understanding soil type, grout type and consistency and having the equipment capabilities are instrumental to having a successful compaction grouting operation. Whatever your project size, Superior Grouting is up for the task!



TYPICAL APPLICATIONS

> Pre-construction Site Improvement

> Loosened or Collapsible Soils

> Arresting Foundation Settlement

> Lifting and leveling structures

> Rubble Fill

> Poorly Placed Fills

> Sinkholes

UPSTAGE COMPACTION GROUTING STEPS

STEP 1

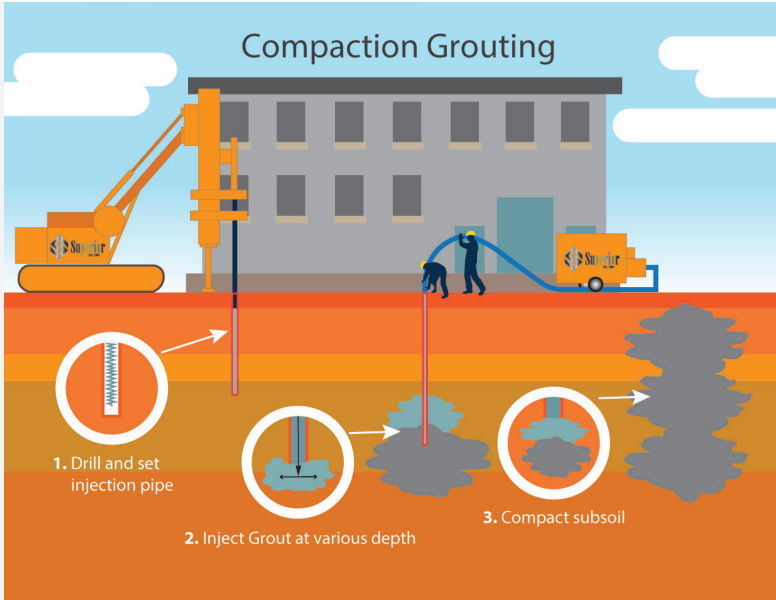
Advancing an injection pipe into the maximum treatment depth.

STEP 2

The grout is injected as the pipe is slowly extracted in lifts, creating a column of overlapping grout bulbs.

STEP 3

Displacement of surrounding soils by the expansion of the low mobility grout bulbs.





POLYURETHANE INJECTION

Superior Grouting is a leader in foundation remediation, concrete lifting and slab realignment. The SUPERIOR Polylift™ method provides a fast, non-disruptive, noninvasive, environmentally friendly solution to your subsurface problems.

The PolyLift™ System is a state-of-the-art approach to repairing sinking concrete. PolyLift™ takes the original concept of mudjacking and combines it with modern knowledge and technology. Rather than using a mixture of cement and topsoil, this method utilizes high density polymers to raise slabs back to a desired level. This is done by drilling small holes (smaller than a dime) in the slab and then specially designed equipment is used to inject structural grade polymers into the void. After the void is filled, the expansion of the polyurethane allows for a precise lift and stabilizes the slab.

Superior Polylift method of foam leveling and void fill utilizes a two-part closed cell polymer expanding foam injected through a hole typically 5/8", the size of a dime. Although the material is injected at a higher psi rate than traditional cementious grouts, the pressure is not what causes the lifting. The expansion of the injected material below the slab surface performs the actual lifting action. Material injected below a slab to be lifted will first find weak soils, expanding into them in such a manner as to consolidate and cause sub-soils to become denser and fill any voids below the slab.

One inherent property of expanding foams is that they will follow the path of least resistance, expanding in all directions. Another inherent property includes reaching a hydro-insensitive or hydrophobic state when cured with 100% cure times as little as 20 minutes. Closed cell polymer foams offer benefits which go beyond the goal of leveling hard surfaces. They will not retain moisture. They are not subject to erosion once in place. Their fast cure time allows for immediate use when application is complete. Their light weight, 3 to 8 lbs. per cubic ft. vs. 100 to 120 lbs. per cubic ft. for cementious grout will not cause further settlement. Foams will retain their cured shape and volume indefinitely reducing the possibility of new voids forming below grade to nearly zero unless acted upon by some outside cause. Some closed cell polymer foams have baseline lifting capabilities of 6,000 lbs. per sq. ft.

Advantages of PolyLift™ include:

> **Smaller holes** than other repair options. Holes in the slab are virtually invisible once complete. Plus, there is no mismatching concrete colors.

> **Quick Cure Time**. PolyLift™ can be driven on within 15 minutes after installation.

> **High capacity lifting strength**. Typically lifting force ranges from 2,000 to 4,000 pounds per square foot. In other words, it can lift very heavy structures.

> **Economical**. Can cost just ½ of what you would pay to demolish and reconstruct a sunken slab.

> **Clean/Non-Invasive**. There's no mess, no demolition noise and no heavy equipment to harm your lawn or landscape.

> **Environmentally Friendly**. Material will not rot or deteriorate underground.

> **Lightweight**. Less than 4 lbs. per cubic foot compared to 120 lbs. for concrete or mudjacking.

> **Material** is waterproof and will not wash out beneath the slab in the future, it also prevents water infiltration.

> Reduces trip hazards and restores property values.

Applications include:

> Airport, railroad and infrastructure repairs

> Leveling interior and exterior industrial commercial building slabs

> Municipal infrastructure repairs

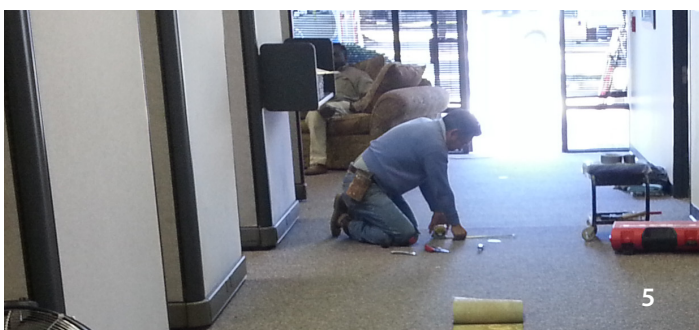
> Pipeline trench breakers

> Bridge approach and departure slabs

> Warehouse floors

> Office floors

> Commercial, industrial and distribution center parking lots and drives



TRENCH BREAKERS

One of the most important elements needing to be addressed during pipeline construction is ensuring that appropriate water control measures are in place.

Prior to backfilling the trench, PolyLift™ trench breakers, or water stops, should be installed to control excessive amounts of water from flowing through the porous soil material and compromising the stability of the pipeline.

These breakers also prevent erosion and washout of the soils within the trench, which is valuable when protecting native soils and sediment that would otherwise be washed out by the trench.

PolyLift™ Trench Break Foam offers many advantages over other options such as sandbags and imported clay. Those benefits include:

Safety - PolyLift™ foam can be installed from grade level, eliminating the need to work within the trench.

Efficiency - Several trench breaks can be installed using PolyLift™ foam in the same amount of time it takes to create one trench break by other methods.

Performance - Superior adhesion properties of PolyLift™ foam allows the material to contour with the shape of the trench and pipeline, creating a watertight seal that eliminates the probability of soil erosion occurring.

Cost Effective - With quick installation allowing the trench to be backfilled within 15 minutes after application and less labor needed for installation, PolyLift™ trench breakers can offer significant cost savings over alternatives and deliver superior long-term performance.

Durability - PolyLift™ foam is specifically engineered to produce an extremely low exothermic reaction, allowing it to be installed quickly in deep trenches without breaking down.

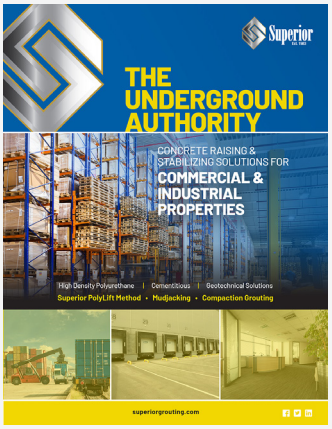


PolyLift™ trench breakers or water stops control water flow through porous soil material and improve pipeline stability.

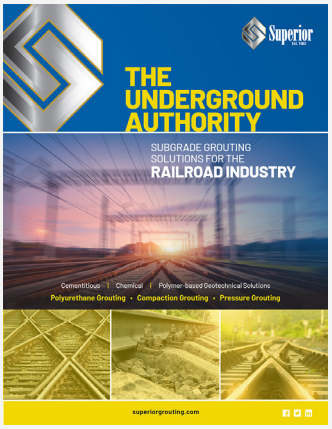
> *PolyLift™ trench breakers, or water stops, should be installed to control excessive amounts of water from flowing through the porous soil material and compromising pipeline stability.*

Request your free brochure today!

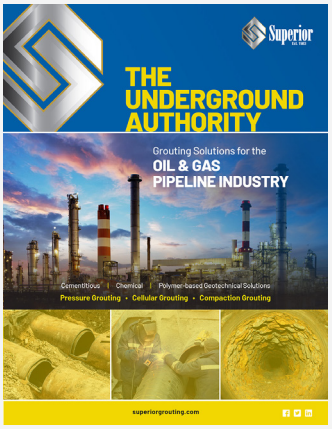
SEGMENT BROCHURES



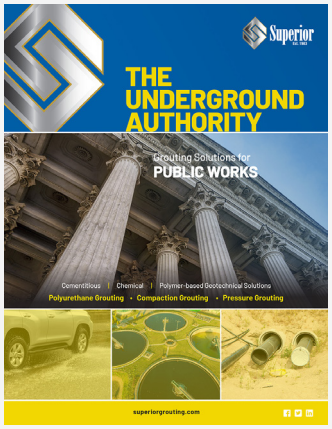
Commercial-Industrial Properties



Railroads

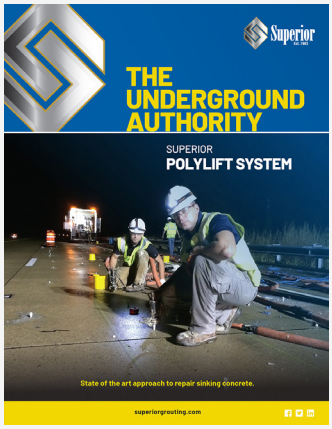


Oil & Gas

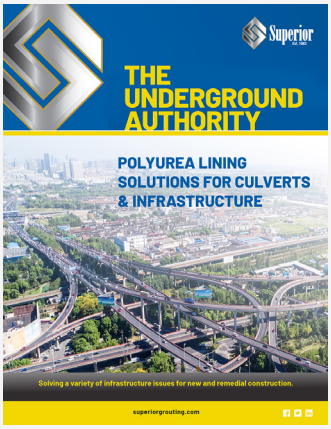


Public Works

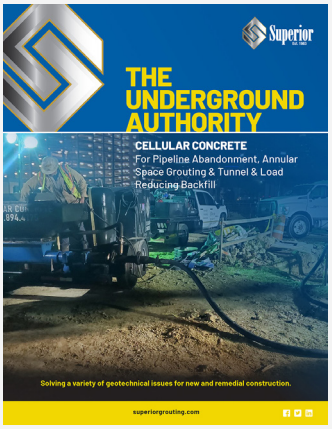
APPLICATIONS BROCHURES



PolyLift



Polyurea



Cellular

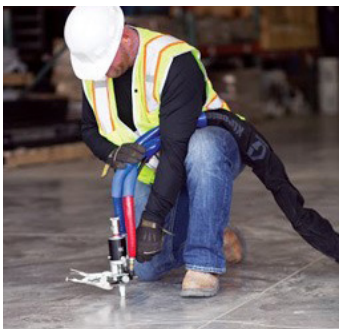
COMMERCIAL & INDUSTRIAL PROPERTIES

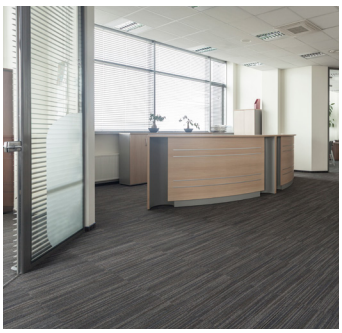
CONCRETE RAISING & REALIGNMENT

The injection of High-Density Polyurethane is a state-of-the-art approach to repairing sinking concrete. Superior Grouting's PolyLift™ Method takes the original concept of mudjacking and combines it with modern knowledge and technology.

Rather than using a mixture of portland cement and topsoil, this method utilizes high-density polymers to raise slabs back to a desired level. We perform that service by drilling small holes (smaller than a dime) in the slab and then injecting structural grade polymers into the void using specially designed equipment.

After the void is filled, the polyurethane's expansion allows for a precise lift and stabilizes the slab.







OIL & GAS

With more than 2.6 million miles of oil and gas pipeline spanning America, maintenance is a critical necessity to ensure ground stability and surface safety. Superior Grouting works with industry firms to provide geotechnical and remedial grouting services to the Oil & Gas Pipeline Industry with the most common being Pressure Grouting. Pressure Grouting is the generic name applied to several applications requiring the pumping and injection of any number of variable cementitious grout mixtures.

Excavation and removal of underground pipes can be extremely expensive but abandoned pipes often cannot simply be left as is. In fact, in certain cases the law now requires that any abandoned pipe be removed or adequately grouted so that it will not collapse in the future and create voids that could cause settlement of the ground surface, roadways or overlaying structure.





MARKETS WE SERVE

RAILROADS

With more than 160,000 miles of track spanning America, maintenance is essential to ensure passengers and cargo reach their destinations safely. As a member of **ASLRRA** & **AREMA**, Superior Grouting works with industry firms to provide geotechnical and remedial grouting services to the Railroad Industry including Soil Stabilization to correct subgrade settlement beneath ballasts and lifting solutions for track crossings, joints and switchovers with a focus on maintaining railway uptime.

Member of

ASLRRA

AREMA
AMERICAN RAILWAY ENGINEERING AND MAINTENANCE-OF-WAY ASSOCIATION

SAFETY QUALIFICATIONS

- **EMR RATING (2019) .90 (2020) .89 (2021) .91**
- **E-Rail Safe**
- **Member of the Houston Area Safety Council**
- **TWIC Cards**



PUBLIC WORKS

With more than 4.1 million miles of streets and highways, 19 million miles of underground utility lines and more than 16,000 wastewater treatment plants across America, ongoing maintenance is required to ensure below-grade stability and above-surface safety are sustained. Superior Grouting works with Federal, State and Local government agencies to provide geotechnical and remedial grouting services, including Polyurethane and Pressure Grouting.

Our pavement lifting, trenchless infrastructure and culvert rehabilitation services are ideal for public works managers, engineers, municipalities and state agencies.

At Superior, our goal is to solve your infrastructure issues by focusing on solutions that resolve issues for the long-term instead of just offering short-term repairs.







Established in 1983, Superior Grouting Services, Inc. is one of the best known and most reliable industry names in Greater Houston and the Texas Gulf Coast Region.

Our History

We are a family owned business established in 1983 to provide small line grouting services to general contractors serving the underground utilities, oil & gas, commercial & industrial properties, railroad and public works markets.

Coming from the concrete boom pumping industry in the 70's and early 80's, the owner had extensive experience in the concrete pumping world. Having placed over one million cubic yards in the Houston market he saw a segment in the industry that needed a specialty contractor with the knowledge and expertise to execute conventional and non-conventional projects, thus Superior was born.

Starting with one MaycoC30 small line grout pump and a 1969 Chevy Truck, the owner sold and completed each and every job. Over the years, Superior has successfully completed a wide range of critical projects ranging from injecting non-shrink grout 500 feet in the air to increase load bearing requirements on existing cell phone towers, 5,000 feet horizontally to abandon pipelines that run under



a body of water, 50 feet below grade into the earth on ground modification projects, and many, many more scenarios.

Challenging projects are our specialty. Superior is a performance oriented company that works with engineering firms and general contractors and continues to evolve into becoming the exceptional specialty grouting company that it is today.

The owner, Ron Rumpza, has diligently worked to grow the company through his persistence and dedication by providing excellent customer service with a quality finished product on time and on budget.

The broad experiences of our principal employees combined with unique construction methods and materials, has made Superior an authority in the fields of pressure grouting, compaction grouting, chemical grouting and polyurethane.

Superior
Est. 1983

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