

POWERFUL POLYMERS  
PAINLESS PROCEDURES  
RAPID RESULTS

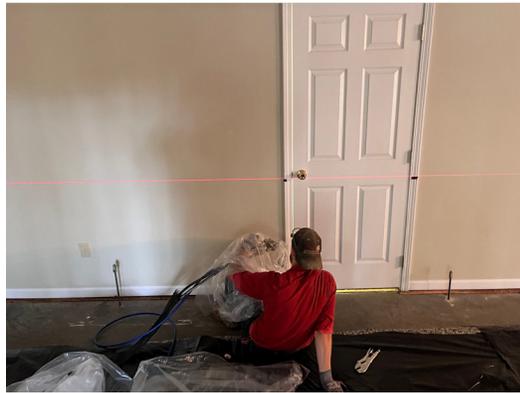
## Deep Soil Stabilization at Residential Property

The residents of a house in Columbia, Missouri noticed the floor in their finished basement was settling. The slab was beginning to sink along the base of a load-bearing wall. It turned out that there was no structural support beneath that area of the floor. They reached out to a local geotechnical contractor. An Alchemy-Spetec technical service professional was invited by the contractor to consult on the job as well.

### POWERFUL POLYMER

AP Lift 430 is a two-component, high-strength, high-density, hydro-insensitive structural polyurethane foam. This very reliable and consistent material was selected because it is ideal for strengthening and compacting soil.

This high-strength closed cell polyurethane bonds with soil and concrete. After installation, the site is often traffic ready in as soon as 15 minutes. AP Lift 430 is also certified to NSF/ANSI/ CAN 61 (approved for contact with drinking water).



### Physical Properties - Cured

AP LIFT 430			
Compressive Strength	(ASTM D-1621)	50 p.s.i. or 7,200 p.s.f.	3,447 millibar
Tensile Strength	(ASTM D-638)	88 p.s.i.	6,067 millibar
Expansion	(Unconfined)	22-26 times	-
Density	(ASTM-D 1622)	2.75 to 3.25 lb/ft3	44.05 to 52.06 kg/m3

Properties will vary depending on application conditions.

## **PAINLESS PROCEDURE**

The Alchemy-Spetec technical consultant worked closely with the geotech contractor to develop the injection plan. The crew removed the carpet and then drilled holes every three feet along the length of the affected area. Next, they drove injection tubing through each drill hole, four feet deep into the soil beneath the slab. A technician then injected about 20-40 lbs of AP Lift 430 per tube. The crew monitored for lift during this process. The slab was raised about 1/8 - 1/4 of an inch to ensure that the soil was fully compacted. Next, they injected additional material just beneath the slab (a.k.a. shallow injections) to fill any remaining voids. Finally, they removed the tubes and cleaned up the site.

## **RAPID RESULT**

After only a few hours, the job was completed, and the site was completely cleaned up. The customer was able to conduct her previously scheduled dance class on that same floor later that day.

## **About Alchemy-Spetec**

### **The Leak Seal Division**

The Alchemy-Spetec Leak Seal Product Line combines a full-system offering of polymer chemical grouts and equipment with perhaps the most experienced technical team in the industry. For any concrete leak seal application, lean on the Alchemy-Spetec team for phone, field, or engineering support. Our growing network of Regional Managers, Independent Representation, and Nationwide Distribution offers industry professionals many levels of opportunity worth discussing with our team. Consultants at Alchemy-Spetec pride themselves on rapid, powerful, and painless scheduling of field and technical support. We invite you to inquire about our bi-annual factory training held at the Tucker, GA-based manufacturing facility where they can learn from the 20+ year average industry experience of our Regional Management and Technical Team.

### **The Geotech Division**

The Alchemy-Spetec Geotech Product Line offers industry-leading quality, full chemical grout lifting rig training and support, and unmatched contractor support in the field and with sales and marketing. Contact us today to learn about the tangible benefits of joining the Alchemy-Spetec network of geotech contractors. The Alchemy-Spetec MixMaster Pro Gun is a maintenance and production cost-saver for any lifting contractor, while the flagship lifting foams have helped many contractors reduce volume usage while eliminating call-backs. From the Polybadger machine that fits into a pickup truck, to custom boxtruck and trailer rig buildouts, Alchemy-Spetec is widely considered the premier geotechnical chemical grout & equipment supplier. With the additions of ground penetrating radar and penetrometer equipment and support, Alchemy-Spetec is truly on the cutting-edge of the chemical grouting industry.