

Curtain Wall Grouting at a Shopping Mall

At Krog Street Market in Atlanta, a shop about five feet below grade had water infiltration issues during heavy rains. The foundation wall was leaking, causing problems for the shop owner. To address this issue, leak seal experts Lift It Rite were called in to implement a solution. Their approach involved creating a curtain wall to waterproof the affected areas. This waterproofing method is particularly effective for structures below ground level, where traditional methods may not suffice.

Powerful Polymers

The technicians chose Spetec PUR HighFoamer for this project due to its extraordinary expansion rate. Moreover, Spetec PUR HighFoamer can quickly stop leaks across large areas. After injection, it follows the infiltration path and effectively seals leaks off. As a result, this material was ideal for addressing the shop's water infiltration problem. This versatility makes it an excellent choice for various waterproofing applications, especially in challenging underground environments.



SPETEC® PUR HIGHFOAMER Uncured (Appearance brown liquid)		
Viscosity at 77°F (25°C)	(ASTM D4878-98)	± 251 cP (± 215 mPa.s)
Density	(ASTM D3505-96 [2000])	± 65.9 lbs/ft³ (± 1.12 kg/dm³)
SPETEC® Gen Acc, Accelerator for SPETEC® PUR HIGHFOAMER (Appearance: yellow - orange liquid)		
Viscosity at 77°F (25°C)	(ASTM D4878-98)	± 75 cP (± 75 mPa.s)
Flash point	(ASTM D1310-86)	313°F (156°C)
Density	(ASTM D3505-96 [2000])	± 65.5 lbs/ft³ (± 1.05 kg/dm³)

Painless Procedures

The repair process began with driving injection rods down the outside of the wall. These rods were inserted to a depth of five feet, reaching the footing. The rods were spaced two feet apart along about 30 feet of wall to ensure thorough coverage. Next, the material was injected through each rod at one gallon per vertical foot. This method created a curtain wall, completely waterproofing the leaking areas. The precise spacing of the injection rods and the carefully calculated injection rate were crucial factors in achieving a uniform and effective waterproof barrier.

Rapid Results

This one-day exploratory grouting project provided the contractor with a very accurate understanding of the type of problem and soil conditions they were dealing in the basements. The contractor and church administrators subsequently agreed upon a long-term maintenance plan based on the church's budget that calls for periodic curtain grouting over the next few years to address the many remaining basement floor defects in both buildings.



Case Study - Curtain Wall Grouting at a Shopping Mall

About Alchatek

Alchatek is an international leader in the manufacture and supply of chemical grouts and construction products for Geotechnical, Leak Seal, and Seawall Repair applications. Providing solutions from its headquarters in Tucker, Georgia and its manufacturing facility in Reno, Nevada, Alchatek specializes in advanced construction technologies for sealing leaks, stabilizing soils, lifting concrete, and protecting infrastructure and seawall structures. To best serve its customers, Alchatek is organized onto three divisions:

The Leak Seal Division combines a full system offering of polymer chemical grouts and equipment with perhaps the most experienced technical team in the industry. It specializes in preventing water ingress through concrete infrastructure including parking garages, culverts, basements and foundations, and sewer manholes.

The Geotechnical Division offers a complete line of single component products for soil stabilization as well as two component polyurethane foams for concrete lifting, void filling, and stabilization of infrastructure. This includes lifting sunken structures such as warehouse floors, back into place.

Seawall Repair Network® is the only national network of certified contractors in the repair, preservation, and protection of Seawalls waterfront barriers. Its proprietary methods and materials are environmentally friendly and safe for use in all marine environments and provide a non-destructive solution for seawall repair at 80% less than the cost of replacement.

Tech Support: 404-618-0438 www.Alchatek.com

