

# Curtain Injection In Pictures

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Water intrusion is a persistent challenge for below-grade concrete structures, where traditional patching and surface sealers often fall short. The failures of these surface-applied remedies—such as patches, liquid sealers, and membrane applications—stem from their inability to address the root causes of leaks. These methods provide only temporary relief, leaving structures vulnerable to recurring hydrostatic pressure and ongoing water damage.

Curtain wall grouting, including advanced techniques like curtain and bladder injections, offers a reliable, long-term solution to these challenges. Unlike surface treatments, these methods work by creating a robust waterproof membrane and water barrier behind the structure. This approach not only seals cracks and cold joints from within but also fortifies the structure against future water intrusion.

By injecting specialized grouts through the structure to form a protective layer on the positive side, curtain injection ensures a comprehensive and lasting seal. Whether applied through stage grouting or other targeted injection methods, this professional approach delivers durable protection, minimizing service interruptions and maximizing cost-effectiveness in the long run.

## **Curtain / Bladder Injection is the Reliable Way to Waterproof Your Below Grade Concrete Structure Permanently**

### **Why Patches and Liquid Sealers Often Don't Stand the Test of Time**

Experiencing the frustration of failing patches and paint applications on damp, actively leaking, below-grade structures is something many of us can relate to.

*These are typically failed attempts to block hydrostatic water intrusion using surface-applied remedies that serve as temporary solutions at best.*

Interior patches and membrane applications, while seemingly addressing the problem, often don't tackle the root cause and rarely provide a lasting waterproofing resolution.

### **A Professional Approach to Curtain Injection:**

Sealing Cracks Permanently and Establishing a Waterproof Membrane and Water Barrier behind the Structure

*Water leakage via cold joints, cracks, and other irregularities in concrete can frequently only be effectively and permanently sealed using advanced injection techniques, such as curtain, bladder, and stage grouting injection methods.*

The SealBoss Injection Product offers a professional solution to these issues, filling and sealing the cracks from the inside out. This product is injected through the structure, forming a membrane on the structure's positive side, thus providing a more effective and lasting waterproofing solution.

### **The Art of Stage Grouting Technique**

In complex grouting scenarios, the stage grouting technique is often the favored approach. This process entails a strategic series of injections carried out in a staged manner, utilizing lower volumes of product in each application.

Each stage of this meticulous process is allowed sufficient time to react, allowing the grout to solidify and establish a natural barrier before proceeding with the subsequent stage of grouting. This carefully phased and controlled deployment not only elevates the overall efficacy of the grouting operation but also ensures thorough and consistent coverage along the exterior of the wall.

### **Comparative Cost Analysis of Injection Grouting Sealing Methods**

Understanding the financial impact of various sealing techniques is essential for making cost-effective decisions. Below is a comparison.

#### **Crack Injection**

**Direct Costs:** Moderate for materials and labor, product is injected directly into the cracks, joints, and voids. Low for equipment.

**Indirect Costs:** Minimal, as the method is fastest and causes little service interruption.

#### **Curtain Grouting**

**Direct Costs:** Higher for materials and labor, product is injected through the structure into the substrate behind, which results in higher material consumption. Packers are set in distinctive patterns. Moderate for equipment.

**Indirect Costs:** Higher, due to the lengthier process of preparation and product pumping, which can lead to more significant service disruptions.

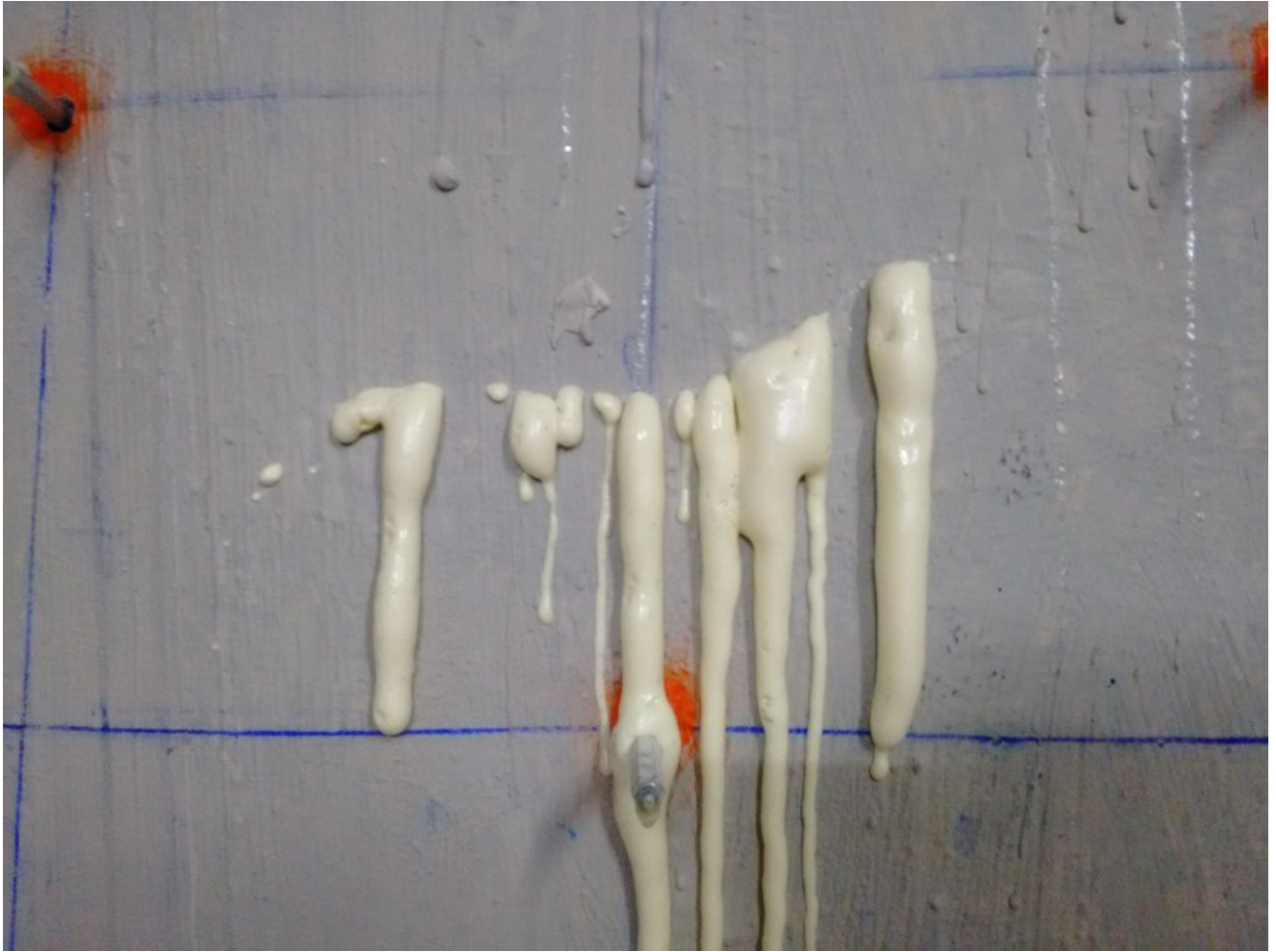
## Links



Curtain Injection Grid Pattern



Packer Installation in a Grid Pattern



Excellent Hairline Crack Penetration



Bladder Injection Process