

Alchatek

CASE STUDY
VOID REMEDIATION

SLAB FOUNDATION RESIDENCE ROSEVILLE, MICHIGAN

Void Remediation *Under Slab Foundation*

A geotechnical specialist addressed significant voids beneath a slab foundation residence caused by a compromised sewer line.

PLOW MARKERS USED AS PROBES
4 *ft*

PRODUCT
AP Lift 430

I · THE PROBLEM

CASE STUDY · 01

01 What made this job *difficult.*

SLAB FOUNDATION RESIDENCE
ROSEVILLE, MICHIGAN

Voids beneath a slab foundation residence were suspected to have been caused by a compromised sewer line under the bathroom shower, resulting in extended leakage affecting a substantial portion of the home's foundation. After plumbers discovered the issue, a local property restoration company managing the overall project engaged the geotechnical contractor.

KEY CONDITION

The situation required a solution that could effectively fill large voids, bond with both soil and concrete and perform well in wet environments.

THE CONSTRAINT

4 *ft*

PLOW MARKERS ALMOST ENTIRELY ENGULFED BY VOIDS

indicating severe foundation undermining

AT A GLANCE

4 ft
PLOW MARKERS
used as probes to assess void extent

1 day
COMPLETION TIME
all voids filled within a day

02 What was specified, *and how it went in.*

AP LIFT 430

The contractor proposed using Alchatek's AP Lift 430 for the void filling. This material was chosen for its high expansion rate, making it cost-effective for large voids. Its ability to bond with soil and concrete, perform in wet conditions, and displace residual moisture from the plumbing leak made it ideal for this application.

THE MATERIAL

AP Lift 430

AP LIFT 430

High expansion rate, bonds with soil and concrete, performs in wet conditions, displaces residual moisture.

THE METHOD

01	02	03
Drilled	**Employed**	**Filled**
a systematic grid pattern of holes throughout the residence	controlled injection shots to avoid excessive product usage and prevent lifting	carefully filled all voids without causing any lifting of the foundation

WHY AP LIFT 430

Its high expansion rate made it cost-effective for large voids.

It bonds with soil and concrete, performs in wet conditions, and displaces residual moisture from the plumbing leak.

NO LIFTING

Controlled injection shots filled all voids without causing any lifting of the foundation.

03 What the result was, *and what confirmed it.*

VOIDS FILLED

The project restored the foundation's integrity, filling all voids within a day. This efficient execution led to significant time and cost savings for all parties. The insurance company reduced relocation expenses, the restoration company delivered ahead of schedule, and the homeowners returned to their structurally sound homes earlier than expected.

VOIDS FILLED

1 *day*

The outcome satisfied all stakeholders, demonstrating the effectiveness of the chosen solution in addressing complex foundation issues promptly and efficiently.

EVERY STAKEHOLDER CAME OUT AHEAD

The Insurer

Reduced relocation expenses.

The Restoration Company

Delivered ahead of schedule.

The Homeowners

Returned to their structurally sound home earlier than expected.

HOW THE JOB CAME IN

After plumbers discovered the issue, the property restoration company managing the project engaged the geotechnical contractor.

START THE CONVERSATION

Send us the job.
We will send back an approach.

Send us the soil report or the failure photos and Technical Services will return a written approach within two business days.

ALCHATEK TECHNICAL SERVICES

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Alchatek

Alchatek manufactures polyurethane resins, chemical grouts, and injection equipment for infrastructure repair: leak sealing, soil stabilization, concrete lifting, and seawall repair. Headquarters in Tucker, Georgia, with a bonded warehouse in Reno, Nevada.

Information in this document is believed accurate at the date of publication. Product performance depends on site conditions and application; consult the current Technical Data Sheet, which is the controlling document.

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