

Putzerei Plachy

Graz, Austria

Combining jet grouting and decontamination



The project

Structural support for a construction pit combined with decontamination ready for residential premises.

The challenge

For several decades Rittergasse in Graz was home to the Putzerei Plachy – a former clothes dyeing and later dry-cleaning and launderette business. Over many years, the cleaning agent tetrachloroethylene had seeped into the ground, leading to heavy subsoil contamination.

Originally the plan was to use bored piling and then dispose of and treat the excavated material off-site. However, the site was too small for a bored piling rig. Also some contaminated areas were under the street and nearby buildings where no excavation was possible, and other treatment difficult.

The solution

Keller used HaloCrete®, an innovative process which involves adding a chemical reactant to the jet grouting slurry mix, strengthening the ground with Soilcrete® columns while degrading the contaminant in situ. Analysis showed that Keller was successful in lowering the contamination concentration by a factor of more than 1,000. While this project used cement, if HaloCrete® is used purely for remediation, we can use another sand, bentonite or another filler with a lower CO2 impact.

Project facts

Owner(s)

Mag. Claus Tüchler

Keller business unit(s)

South-East Europe and Nordics

Main contractor(s)

Steirerhaus

Teubl & Teubl BaugesmbH

Solutions

Remediation

Markets

Residential

Techniques

Jet grouting