

Case Study - Industrial Warehouse Ground Stabilisation with Independent Verification

Targeted resin injection for a 70-metre warehouse elevation affected by subsidence in the West Midlands.

Project Industrial unit, West Midlands	Issue Subsidence affecting a 70-metre warehouse elevation
Survey method Independent Electrical Resistivity Tomography (ERT)	Outcome Targeted treatment, reduced resin volume and verified results

The challenge

A 70-metre warehouse elevation was affected by subsidence. Rather than assuming a standard injection grid, RFR needed to understand where the ground anomalies were and at what depth before treatment began.

The approach

RFR commissioned or worked alongside independent geophysical specialists using Electrical Resistivity Tomography (ERT). The pre-injection survey mapped the specific zones requiring treatment, allowing the resin injection programme to be designed around the ground data.

Targeted injection

The resin was injected only where the survey evidence showed it was needed. This reduced unnecessary material use, helped control cost and focused the treatment on the areas most likely to influence the structural outcome.

Independent verification

A post-treatment survey was then used to confirm the result. The independent report was prepared and signed off by two Chartered Geologists registered with the Geological Society of London.

"This process of prior and post surveys greatly reduced the required resin and targeted the key areas."

Why this matters

Ground stabilisation is most effective when the injection design is led by evidence. For complex or commercial sites, independent survey data can help RFR reduce resin waste, avoid standardised treatment patterns and provide clearer verification for professional teams.