

BRAND BOOK

THE LEADING BRAND
IN **CONSOLIDATING GROUND**
AND **FOUNDATIONS**

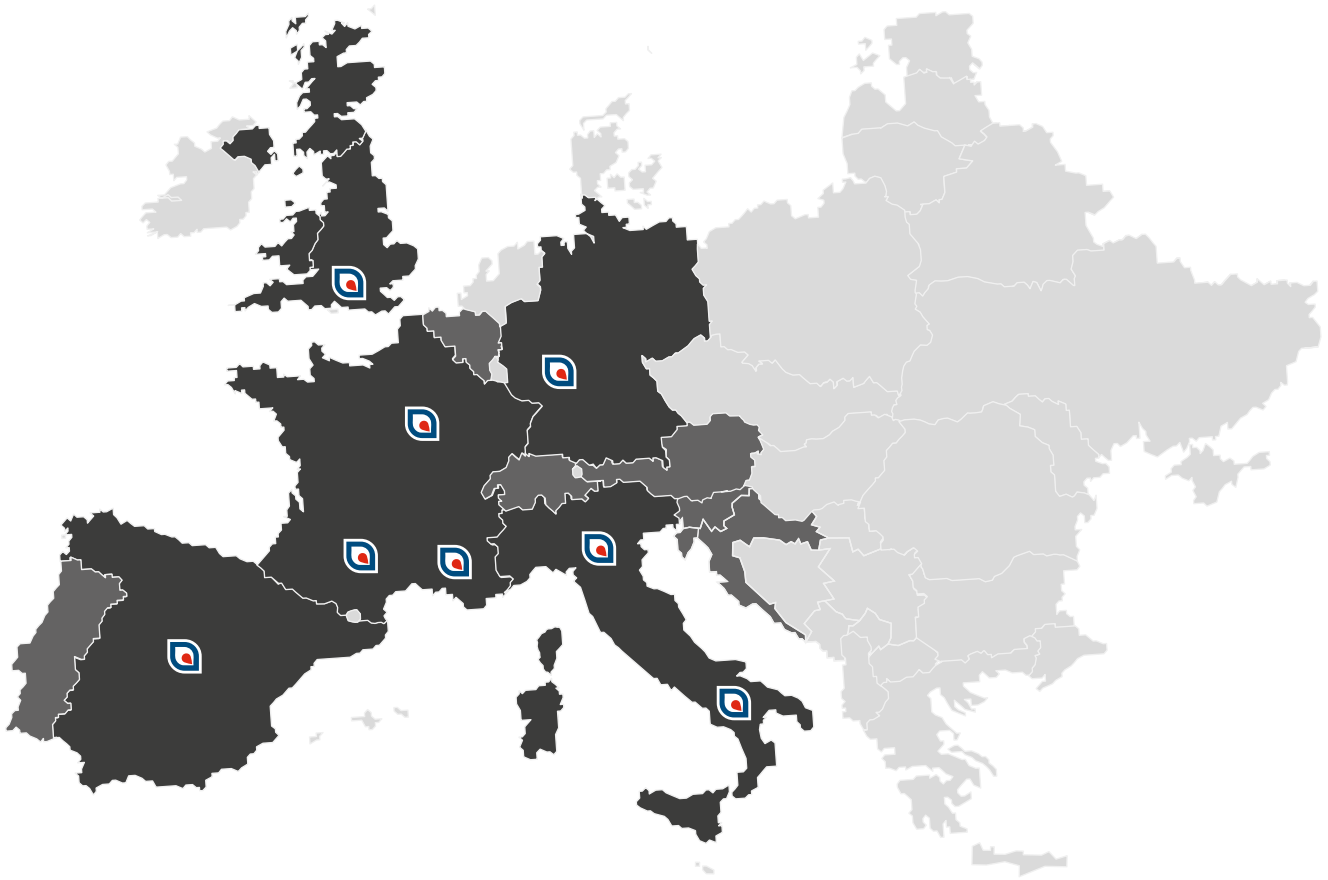
GEOSEC®

TECHNOLOGY
AT A HUMAN SCALE



GEOSEC
GROUND ENGINEERING

A European network with innovative DNA



GEOSEC Ground Engineering LTD
www.geosec.co.uk

GEOSEC FRANCE sas
www.geosec.fr

GEOSEC DEUTSCHLAND GmbH
www.geosecdeutschland.de

GEOSEC srl
www.geosec.it

GEOSEC ESPAÑA sl
www.geosec.es

Inventing the method Revolutionising the industry

GEOSEC® was established in the early 2000s with the goal of studying and comprehending how the ground responds to injections of expansive resin. In a short time, **GEOSEC®** technology has brought about significant changes in the industry, enhancing the quality and, most importantly, the efficacy of resin injections into the ground.

Experts in safety and respect for the environment

GEOSEC®, we prioritise safety and environmental sustainability in all our processes. Our team comprises experts who ensure our resin technology is applied safely and responsibly, maintaining the integrity of the surrounding ecosystem. Our resin becomes inert after application, posing no risk to groundwater or the wider environment.

20 years of experience

With two decades of hands-on experience, **GEOSEC®** is a well-established leader in the industry, providing dependable, long-term solutions. Our approach is grounded in technology, innovation, and research. Over the years, we've successfully completed thousands of projects, each one a testament to the quality and reliability of **GEOSEC®**.

Research and development

From our very beginning, technological innovation has been central to our operations. Our dedicated research and development department, coupled with our team of field professionals, has propelled us to become a leading authority in the European markets. We consistently aim to innovate and improve, setting new standards in the industry.

HISTORY

A PATH OF
CONSTANT
EVOLUTION



2003 ↓



SEE&SHOOT®
FILING OF
EUROPEAN PATENT
No. EP1914350
Soil consolidation and
stabilisation method.

2006 -



**ICMQ TECHNICAL
CERTIFICATION**
EN ISO / IEC 17020
SEE&SHOOT® and
SOIL STABILISATION
procedures

**ICMQ TECHNICAL
CERTIFICATION**
EN 12715
Specialised geotechnical
works - injections

2011 ↓



SEE&SHOOT® 2
FILING OF
EUROPEAN PATENT
No. EP2543769
Method for the consolidation
of the ground beneath
the foundation.





2014



2015

-

2017



**GEOSEC®
GERMANY**



10-YEAR GUARANTEE

The interventions carried out by **GEOSEC®** are covered by a 10-year guarantee.

SEISMIC DEFENDER® FILING OF EUROPEAN PATENT No. EP1956147

Method used for the evaluation of the mechanical properties of the ground.

SOCOTEC FRANCE

Technical survey of the SEE&SHOOT® and SOIL STABILISATION procedures.

ACTIVE DRIVE PILE GROUNDFIX®

the driven piles division was born.

ICMQ TECHNICAL NOTICE

EN 12699

- Execution of special geotechnical works
- Displacement piles

EN 1997

- Geotechnical calculation
- Part 1: guidelines

EN 1993-5

- Design of steel structures
- Part 5: piles and sheet piles

PATENTE LIQUEMIT®

A method that eliminates the risk of soil liquefaction.

ICMQ TECHNICAL QUALIFICATION

EN ISO/IEC 17020
SOIL STABILIZATION
quality standard.



2018



2019

-

2026



CSTB TECHNICAL NOTICE

Technical report on the
SEE&SHOOT® ground
reinforcement procedure.

Compliance with standards:
EN 12715, NF EN 1997-1
Eurocode 7



**GEOSEC®
UK**



**The GEOSEC® Group
enters the Portuguese
market.**

LIQUEMIT® FILING OF EUROPEAN PATENT No. EP3445915

Method used to mitigate
the risk of ground
liquefaction.

SWELMIT® FILING OF EUROPEAN PATENT No. EP23171424

Method for reducing
Shrink-Swell Risk.

ROBOPILE® FILING OF EUROPEAN PATENT No. EP4004293

Device for driving piles
into the ground.

Deutsches
Institut
für
Bautechnik

DIBt

DIBt TECHNICAL CERTIFICATION

Eco-compatible resins
formulated with water-based
expanding agents
that do not pollute the soil.

GROUND ENGINEERING

YOUR SAFETY
OUR MISSION



Teamworking: The strength of a winning group



Competent and qualified

Our team excels due to the individual skills and professionalism of each member. Maintaining regular collaboration between the operations teams and organisational departments is vital to our success. (Each person's contribution is appreciated and vital to our collective achievements.)



Experts in consolidation

Our team of professional architects, geologists, and engineers work closely with our clients to determine the best course of action. This involves conducting soil analysis, performing technical evaluations, consulting with various project stakeholders, and ultimately injecting resin as needed. Throughout each project, our team applies their scientific expertise in geotechnical engineering to ensure the most effective solutions are implemented.



Responsible and always present

We operate exclusively with technicians and workers with demonstrated experience and competence. We have decided AGAINST rented equipment, subcontracting external companies, and temporary staff. By choosing **GEOSEC®**, you will entrust the safety and stability of your building to a solid company formed by responsible, highly qualified, and always present individuals.

OUR PHILOSOPHY

HIGH-VALUE SOLUTIONS
FOR TODAY AND
TOMORROW

Our values our priorities



Innovation

The technological evolution in our market is our great revolution: we aim to be decisive in our proposals, choosing innovation in our approach in order to distinguish ourselves every day.



Organisation

It lies the foundation for our work, is at the core of our activities, and is the guarantee for reliability, efficiency, and quality in our daily work.



Professionalism

The engine that runs our company is our team of professionals who advise our clients and transform ideas and projects into long-lasting interventions.



Attention to the client

We pay close attention to the needs of our clients. We provide accurate, transparent, and truthful answers to their questions, proposing increasingly qualified and reliable solutions.



Quality Customer service

We use the best materials. Our resin is environmentally friendly, and we are recognised and certified for the quality of our methods both in the UK and in Europe.



THE RESULTS OF OUR COMMITMENT

FOR THE FINAL
CUSTOMER
SATISFACTION

GEOSEC in numbers

The **GEOSEC®** group employs its own team of expert professionals: engineers and geologists, trained and equipped to intervene with competence and availability in various sectors: on-site operations, research and development, training, and customer relations.

INTERVENTIONS

40,000+

completed projects

ORGANISATION

200+

employees

30+

worksite crews

BRANDS AND PATENTS

15

patents

20

brands

GEOLOGICAL SURVEYS AND TRIALS

22,000+

ERT Resistivity tomographies performed every year

15,000,000+

geological data acquired every year

PROFESSIONAL TRAINING

300+

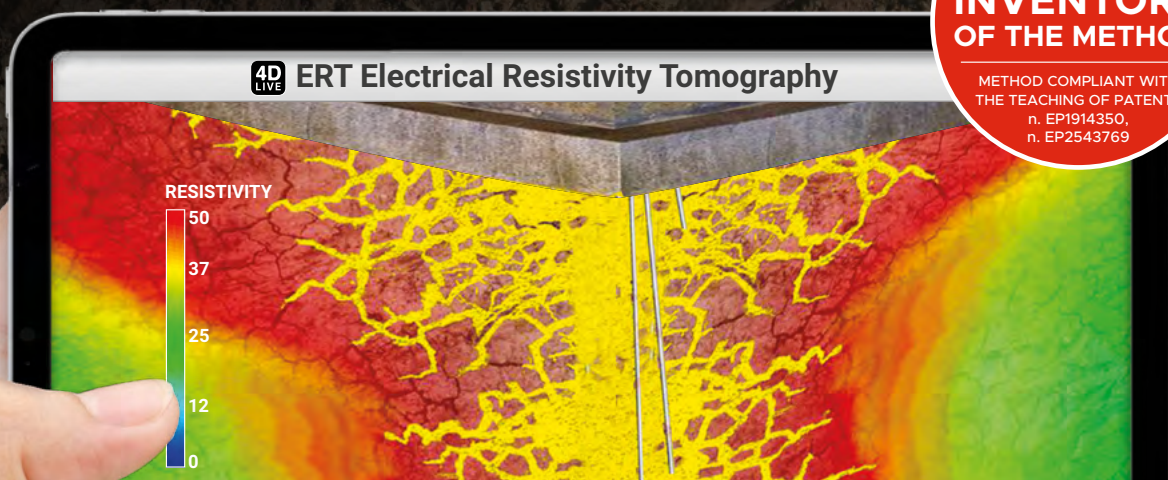
training events

13,000+

participating professionals

GEOSEC SOLUTIONS

CERTIFIED AND
RESOLVING METHODS



**INVENTORS
OF THE METHOD**

METHOD COMPLIANT WITH
THE TEACHING OF PATENTS
n. EP1914350,
n. EP2543769

With GEOSEC, safety and stability at all times



Consolidation of foundations

We remedy the differential settlements of underlying grounds beneath the foundation that may occur for reasons such as extreme drought or excessive fluid infiltration, vibrations from heavy vehicle traffic, or nearby deep excavations. Our solutions effectively stabilize the ground, ensuring the structural integrity of the buildings above.



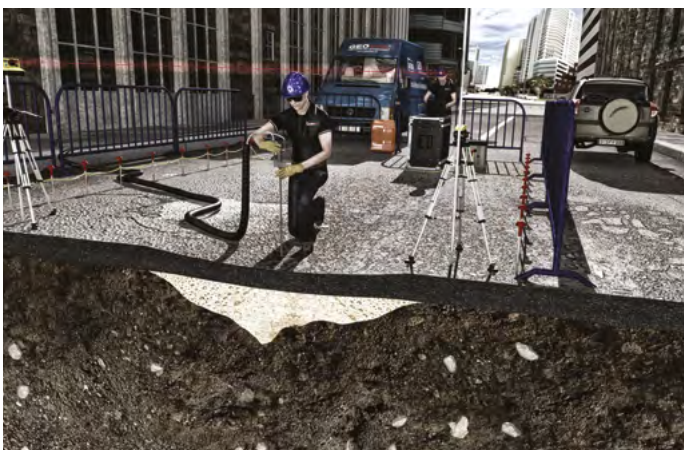
Consolidation of floors and floor slabs

We accurately and dependably repair defects in settled floors, industrial floor slabs, and airport pavements. This includes addressing issues like uneven settling, joint fractures, and other irregularities to ensure a level, stable surface.



Seismic improvement

Heterogeneous and deformable grounds with different stiffness can increase seismic movement. We solve seismic risk issues with patented methods aimed at seismic improvement and reducing the risk of liquefaction.





SEE&SHOOT®

THE INNOVATIVE METHOD THAT HAS REVOLUTIONISED FOUNDATION CONSOLIDATION WITH EXPANSIVE RESIN INJECTIONS.

GEOSEC® offers a patented, proprietary process specifically designed to rectify differential settlement of foundations.

This method is minimally invasive, quick, and precise, backed by advanced geophysical ground testing systems. It's a unique solution in its field, recognised with esteemed technical certifications. We stand by our work, providing a ten-year guarantee for our services.

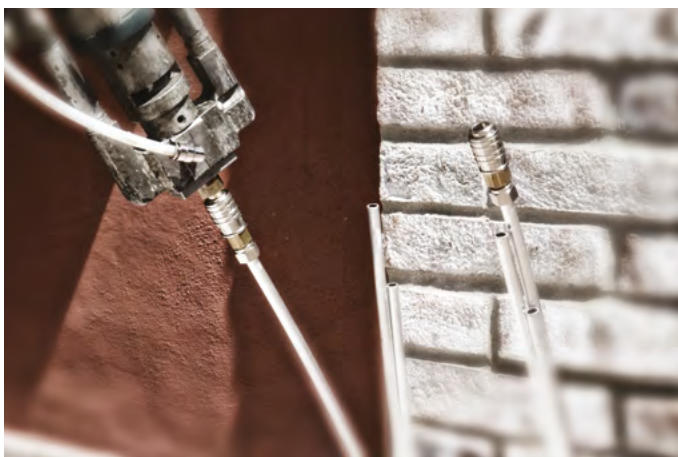
SARGAR®

METHOD TO REDUCE SHRINK-SWELL RISK IN CLAYEY SOILS

The **GEOSEC®** process (patent pending) is a treatment for soil stabilisation through the injection of two solutions: an expansive resin and a saline solution, following a specific methodology.

The effect of the combination of these two injected solution allows for a significant reduction in volumetric variations of expansive clays.

VISEGEO Project (Drought Geotechnical Vigilance).





GROUNDFIX

DRIVEN MICROPILES FOR DEEP FOUNDATION CONSOLIDATION

ICMQ TECHNICAL NOTICE

EN 12699

- Execution of special geotechnical works
- Piling with soil discharge

EN 1997

- Geotechnical calculation
- Part 1: guidelines

EN 1993-5

- Design of steel structures
- Part 5: piles and sheet piles

GROUNDFIX® is the technology whereby low-invasive active micropiles with special modular steel elements are driven into the ground using hydraulic jacks and fixed to the original foundation using anchors or high-strength cement.

GROUNDFIX® is the structural solution that aims to consolidate the foundation by transferring the loads to a substrate with a higher bearing capacity at depth.

The **GROUNDFIX®** micropile system complies with the design criteria established by **the guidelines of Imperial College London**.





ROBOPILE®

DEVICE FOR DRIVING PILES INTO THE GROUND.

AUTOMATED INSTALLATION OF MICROPILES IN REGULAR DISTRIBUTION GRIDS



EUROPEAN PATENT
EP4004293

ROBOPILE® is a modern technology with a high level of industrial automation, designed for the installation of steel micropiles for deep foundations of buildings and floor slabs.

The application is ideal for new and large-scale projects, as well as for existing structures.

More than 80 micropiles/day installed with a minimum diameter of 76 mm – more than 60 micropiles/day with a maximum diameter of 152 mm.

Greater safety on the work platform thanks to the significant reduction of manual handling activities on board the machine.





SOIL STABILISATION

CONSOLIDATION AND STABILISATION OF PAVEMENTS AND FLOORS WITH EXPANSIVE RESIN INJECTIONS

SOIL STABILISATION is a method used to restore various structures such as interior and exterior floors, pools, industrial facilities, airport runways, roads, and pavement slabs.

The process compacts the soil beneath the settled structure. It involves injecting expansive resin to solidify the underlying soil. If the structure permits, the process can also lift a settled foundation or pavement, restoring it to its original level.





SEISMIC DEFENDER®

SEISMIC IMPROVEMENT

Consolidation of underlying soil beneath the foundation by means of expansive resin injections. The intervention enhances the mechanical performance of the soil in order to reduce the effects of earthquakes on buildings.

LIQUEMIT®

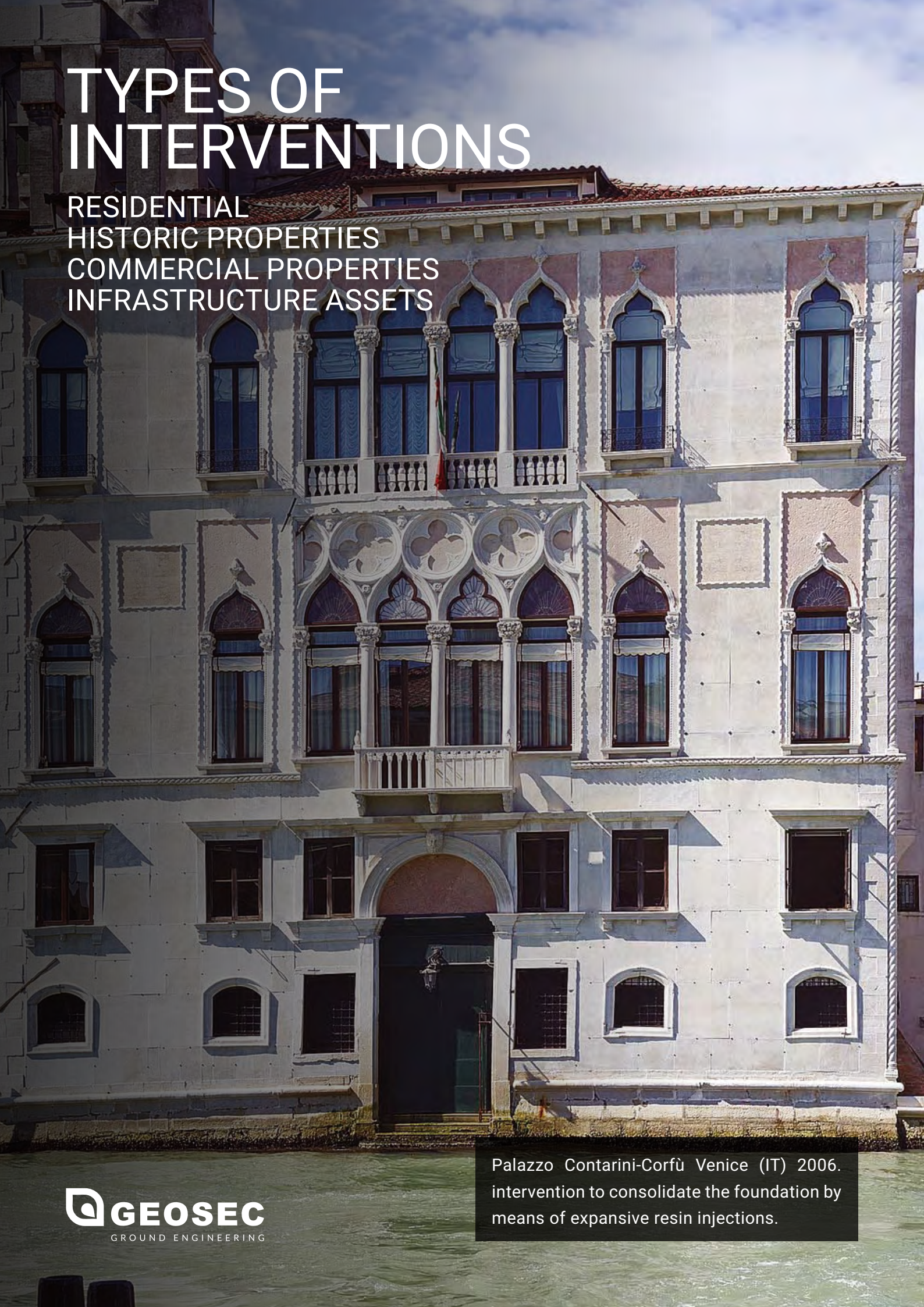
REDUCTION OF SOIL LIQUEFACTION RISK

A patented procedure which involves injections of a special resin capable of effectively consolidating liquefiable soils with complete safety and extreme speed.



TYPES OF INTERVENTIONS

RESIDENTIAL
HISTORIC PROPERTIES
COMMERCIAL PROPERTIES
INFRASTRUCTURE ASSETS



Palazzo Contarini-Corfu Venice (IT) 2006.
intervention to consolidate the foundation by
means of expansive resin injections.

We intervene in all types of buildings



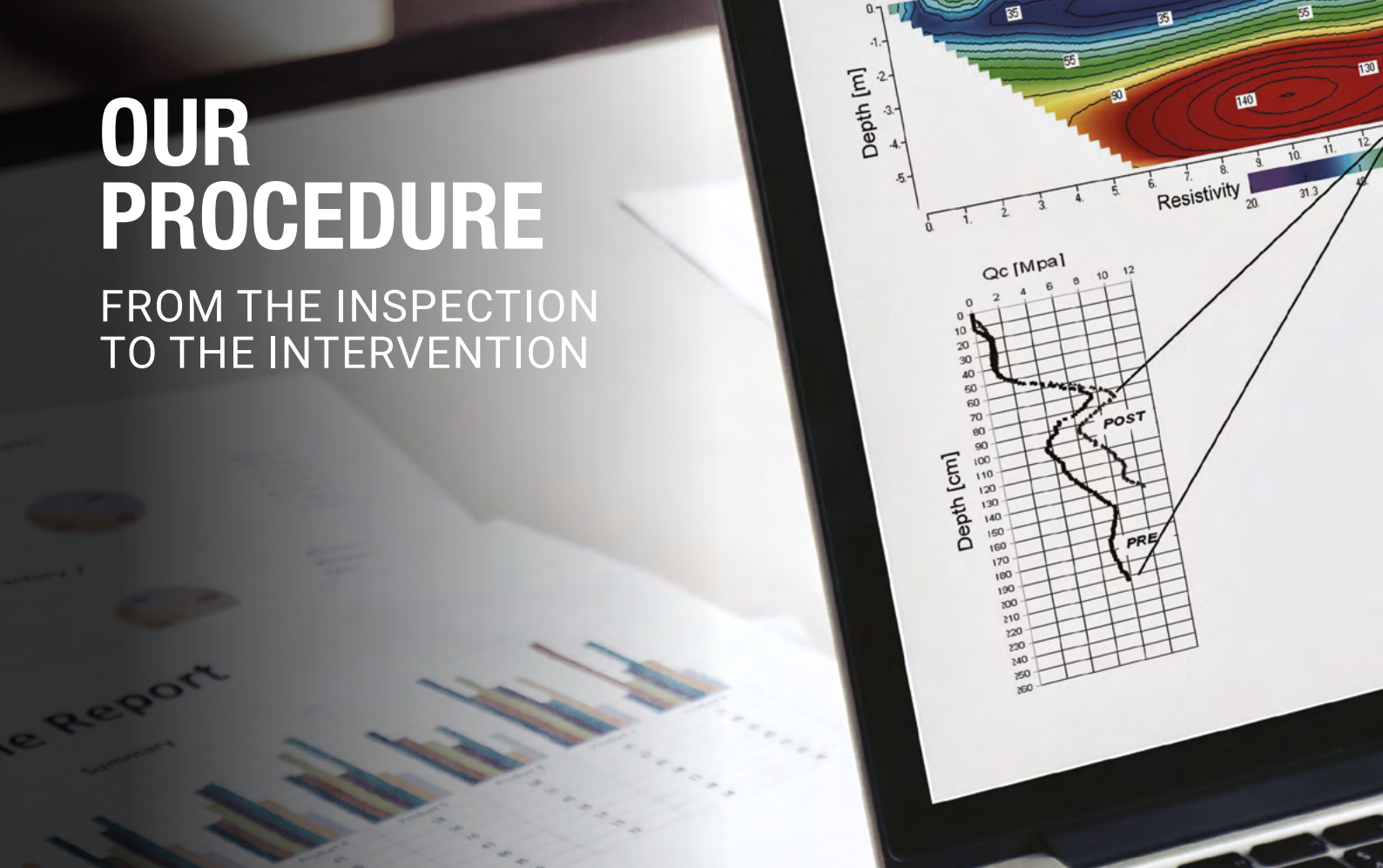
Our methods and technologies enable us to carry out successful and tailored interventions in all kinds of structures, ranging from single-family homes to large industrial warehouses.

We're committed to using our expertise responsibly to help maintain and preserve the value of various structures - from homes and schools to industries, monuments, and historic buildings - across the UK and Europe.



OUR PROCEDURE

FROM THE INSPECTION
TO THE INTERVENTION



1



Cracking and settlements?

Call our toll-free customer service number 0800 061 4477, and you will be put through to a specialised technician.

2



The first inspection

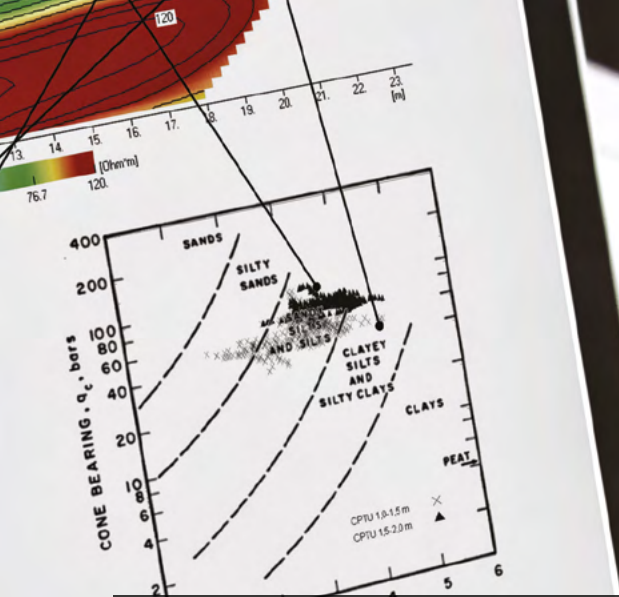
One of our engineers will carry out a free consultation with the aim of assessing the problem and the feasibility of our intervention.

3



Price Quotation

Following our consultation and carefully studying your property, we will develop a tailored design solution and a corresponding fee proposal to suit your specific needs.



Are you a home owner?

If your home is showing signs of settlement issues, such as cracks in the walls, we're here to help. Reach out to us to schedule a free technical inspection.

Our team of expert professionals is ready and available to assist you.



Are you a home owner?

Our technical department can help you evaluate the problem and provide guidance in drafting the project.

4



Research before, during, and after

GEOSEC® solutions include conducting tests and trials before, during, and at the end of the intervention, with clear advantages in terms of precision and guaranteed results.

5



Performing the work

As specialised contractors, we provide solutions that are minimally invasive and quick to implement, designed to achieve optimal results. Our methods cause minimal disruption and are carried out with a strong commitment to environmental sustainability.

6



GEOSEC warranties

With over 20 years of experience, a highly skilled and qualified team, and ten-year insurance-backed warranties, **GEOSEC®** has established itself as a trusted brand in the industry.

CARING FOR THE ENVIRONMENT[®]

CONSOLIDATING
WITHOUT CONTAMINATING



We take care of both humans and the environment, using resources in a controlled and responsible manner.

We develop solutions with low environmental impact, choosing safe and high-quality procedures and materials.

MAXIMA[®] PU-RESIN

The features of **Maxima**[®] resin



Without Contaminating

MAXIMA[®] comes from a special bi-component family of resins with a polyurethane structure, which allows it to remain completely inert after settling in and does not pollute the environment in which is located.

Innovative

As a result of constant innovation, this family of special resins has become over the years a true technological icon of incomparable reliability and quality. Several rigorous checks are in place to always ensure the highest standard of quality.

Stable

MAXIMA[®] is a product of advanced technology and superior resin quality. Its closed-cell structure delivers impressive chemical and physical performances, ensuring its stability and durability over time. This unique composition makes Maxima a reliable choice for various applications.

Fast

MAXIMA[®] is a product of advanced technology and superior resin quality. Its closed-cell structure delivers impressive chemical and physical performances, ensuring its stability and durability over time. This unique composition makes Maxima a reliable choice for various applications.

TECHNICAL CERTIFICATIONS AND QUALIFICATIONS

AWARDED BY INDEPENDENT
AND SPECIALISED TECHNICAL
ORGANISATIONS



A responsible and transparent commitment

GEOSEC®'s certificates have been awarded by independent technical organisations which assess the organisation and the work carried out. Our commitment is transparent and open, and our reliability is concrete, not just in words but in actions.



Geotechnical works – injections **Compliance with the** **EN 12715 standard**

The European technical standard, a benchmark in the field of consolidation, regulates all special geotechnical works involving injections in the ground.

Positive technical audit **Compliance with the** **EN ISO / IEC 17020 standard**

ICMQ, a technical institute specialised in the construction sector, has validated and certified **GEOSEC®**'s solutions for the consolidation of soils, floors, and pavements by means of the injection of expansive resins.

Without Contaminating – DIBt **(German Institute for Building** **Technology).**

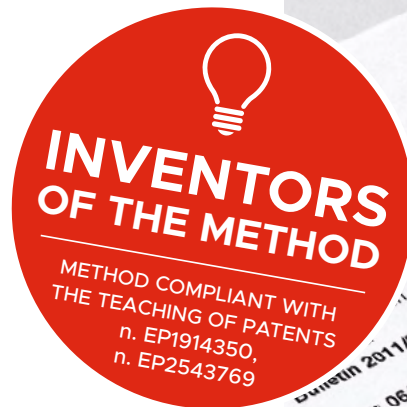
MAXIMA® PU resin meets the requirements for assessing the impact on soil and groundwater according to the "Principles for assessing the impact of construction products on soil and groundwater.

THE PATENTS

UNIQUE SOLUTIONS BASED
ON THE INVENTOR'S
EXPERIENCE.



Innovative unique and different

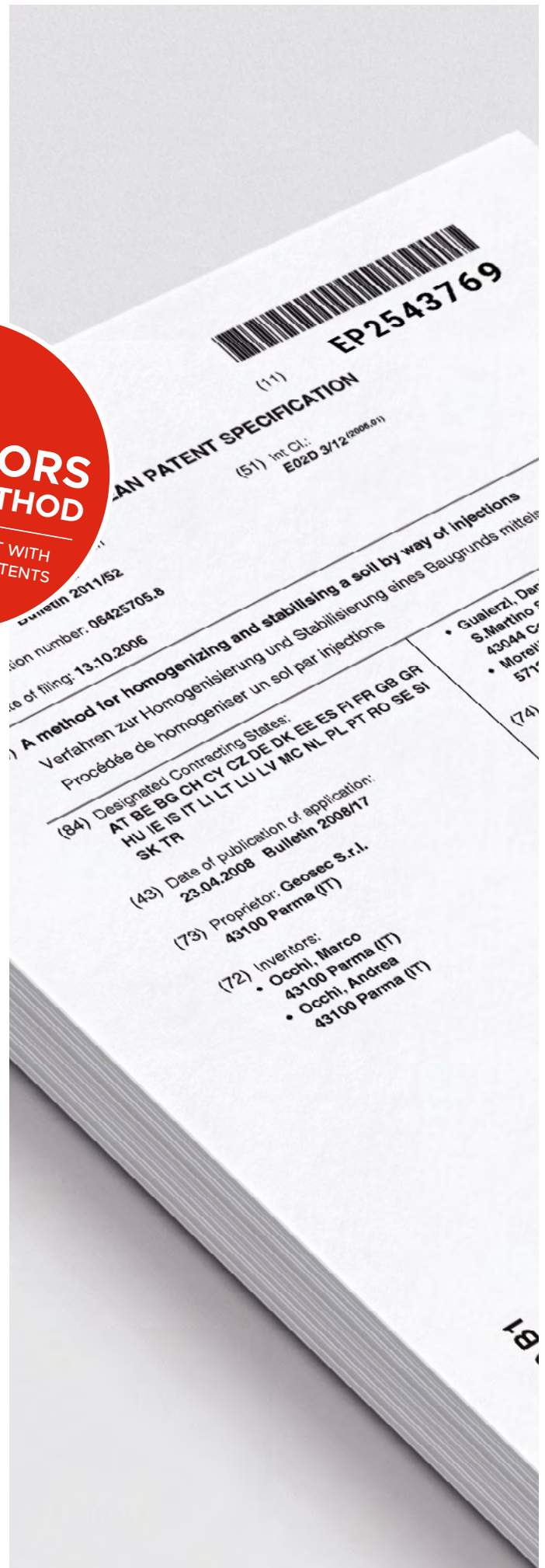


Our mission?

Contribute to the technological progress with the constant development of new ideas and cutting-edge solutions that can guide the market and maximise the satisfaction of all our customers.

IP intellectual property

Truly sets us apart in the industry. With 15 patents and 20 trademarks, we protect our dedication to technological development, company innovation, and research. It is through investing in IP that we ensure a high level of knowledge and technological proficiency for all of our customers.



WHO IS CHOOSING GEOSEC?

LARGE BRANDS
AND INSTITUTIONS
WHO ARE ALREADY
TRUSTING US

PRADA

RENAULT
ALPINE

AIRBUS.

LIDL

DECATHLON

FERROVIAL

COCCINELLE.

ACCIONA

INDITEX

CBRE

CARREFOUR

RCR GROUP

AUDI

OHLA

FCC

ELECNOR

LAND MOTORS

ESSO.



MADRID
ADOLFO SUAREZ
INTERNATIONAL
AIRPORT

MADRID
CITY COUNCIL

ROYAL PALACE
OF ARANJUEZ

EUROCOPTER

BARCELONA
CITY COUNCIL

OPERA HEBREW
TEMPLE OF FLOREN

ASTURIAS
INTERNATIONAL
AIRPORT

ROMA
CITY COUNCIL

CORDOBA
BULLFIGHTING
MUSEUM

INTERNACIONAL
AIRPORT FRIULI
VENEZIA GIULIA

SPANISH
MINISTRY OF DEFENCE

SPANISH MINISTRY OF
FINANCE AND PUBLIC
ADMINISTRATION

GURANTEED RELIABILITY

OUR INSURANCE POLICIES

Contract proposal

Comprised of:
I – Technical-economic offer, II – Special Conditions, III – General Conditions, IV – Preliminary Graphic Report of the Intervention.

Object of the contract:

This proposal is strictly intended to the recipient/s in regards to projects of consolidation and ground stabilisation by means of expanding resin injections operated by GEOSEC®.

Who we are:

A European network specialised in ground consolidation with targeted injection of expanding resins and active piling (hydraulic-pressed) Our certified model of organisation is operated across all our GEOSEC network, enabling us to guarantee a prompt response with expertise, efficiency and resolution.

To find out more about our qualifications and our references you can visit our website at this address:
<https://www.geosec.co.uk>

Date: 17/05/2023

Proposal Code: James SMITH AM 0593-23

Details

Client:

Address:
Date of inspection:
Suggested intervention

Mr. James SMITH

Church Street - Wolverhampton WV2 4HN
26 april 2023
Ground consolidation with SEE&SHOOT® method [European patent n. EP1914350, n. EP2543769 - Italian n. 0001368567]

GEOSEC engineer in charge of the preliminary inspection:

Engr. Oliver BROWN
Mobile: 07556478231 - E-mail: sales@geosec.co.uk
30 days.

Validity of the offer:

For the purposes required under Article 1, c. 43bis L. 234/2021 it is certified that the CCNL applied on the execution of the works is:
CONSTRUCTION AND INDUSTRIAL

Pag 1 to 11



GEOSEC Ground Engineering Ltd
Registered office: Linen Hall, Room 252-254, 162-168 Regent Street
London W1B 5TB, United Kingdom
Phone number: 02088341035
E-mail: info@geosec.co.uk Company registration number: 14834588

Double guarantee Double protection



Thanks to its experience and prestigious technical qualifications, **GEOSEC®** can offer a 10-year guarantee covering its interventions.



Furthermore, thanks to its proven reliability in the market, **GEOSEC®** has a ten-year insurance backed policy that it offers to cover its interventions for the consolidation of soils beneath foundations.

The strength of international insurance companies

We prioritise the security and peace of mind of our customers. To this end, we have provide a ten-year insurance-backed (IBG) policy for the benefit of our customers, which comes into effect upon completion of our soil stabilisation services. This warranty safeguards customers, covering any potential material damages to the property and damages to third parties.

The specific warranty policy is extended to all **GEOSEC®** customers and is underwritten by an international insurance company. This policy is a testament to the reliability that distinguishes us in the market and adds value to our services. Our customers trust us every day with the safety and stability of their homes, recognising **GEOSEC®** as a leading brand in soil and foundation stabilisation through the injection of expansive resins and minimally invasive micropiles.

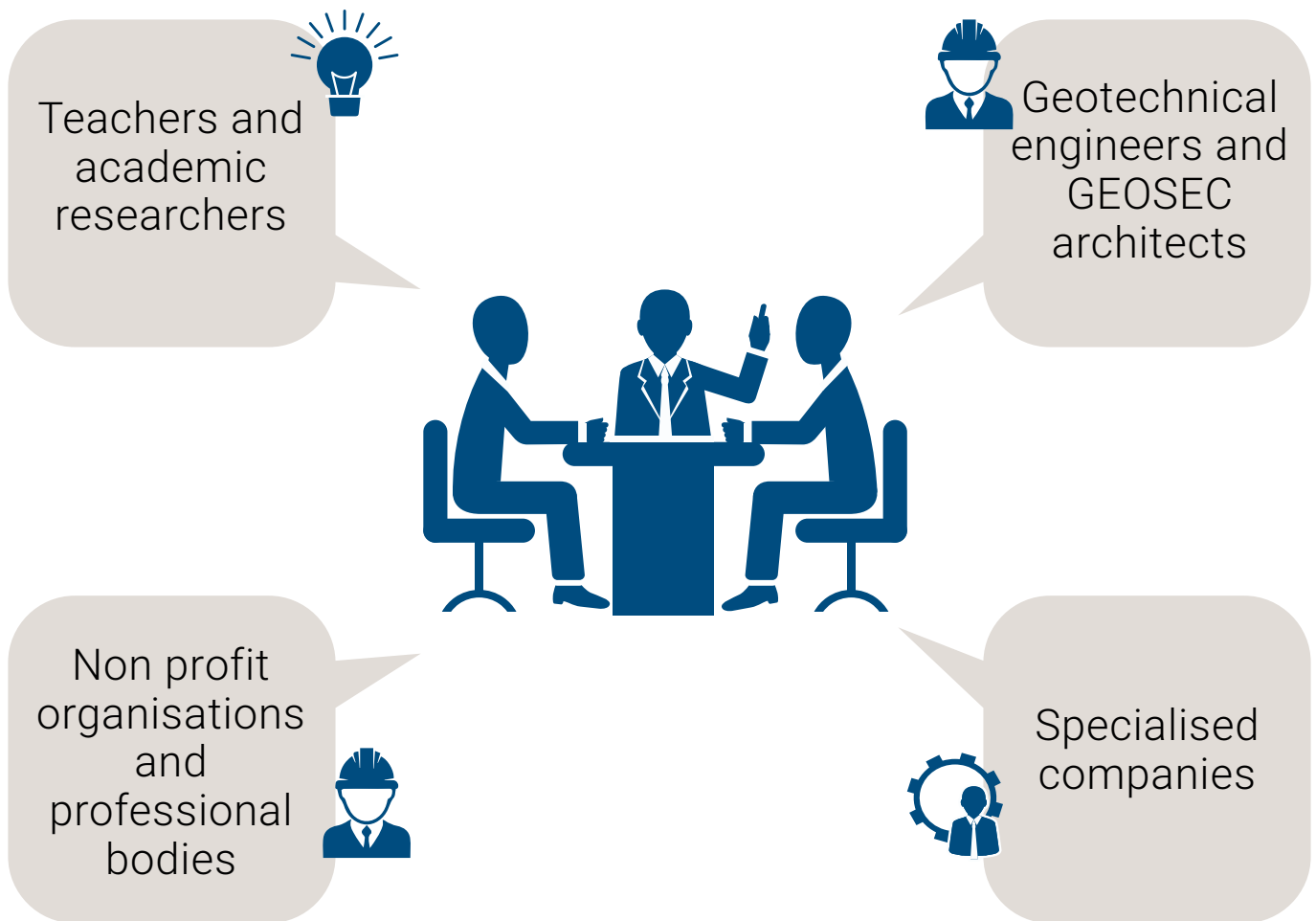
GEOSEC ACADEMIA

IN-DEPTH
SEMINARS AND
CONFERENCES

We have developed technical documentation aimed at professionals with the purpose of furthering the methodology of **GEOSEC®**. We stress the importance and need for an approach that combines resin injections and proper control through the use of geological surveying, highlighting the advantages in the application and the results obtained compared to traditional solutions.

Knowledge sharing

GEOSEC Academia embodies the commitment and desire to share and spread knowledge in the field of soil consolidation and foundations using minimally invasive technologies. The group consists of professionals who contribute to the field through research, development, technical article writing, running technical workshops and seminars in cooperation with professional associations, technical organisations, and universities.





WANT TO **KNOW** MORE?

FOR MORE INFORMATION, CONTACT US FOR A NO OBLIGATION CONSULTATION.
OUR ENGINEERS ARE AT YOUR SERVICE THROUGHOUT THE UK.



GEOSEC® Ground Engineering Ltd
Unit 7 Mundells Industrial Centre
Welwyn Garden City, Hertfordshire
AL7 1EW
info@geosec.co.uk

0800 061 4477 Get a **FREE** Quote
www.geosec.co.uk

 **GEOSEC**
GROUND ENGINEERING