



www.asrs.co.uk

ANDERTON



Anderton Structural Ltd
One Company, One Solution



The Complete Structural Service



- Insurance
- Industrial Properties
- Commercial Properties
- Retaining Walls
- Bridges And Culverts
- Houses

- Listed Buildings
- English Heritage
- Churches
- High Rise Buildings
- Rail Network Properties
- Bed Joint Reinforcement

- Bridge Repairs
- Cavity Wall Tie Replacement
- Sock Anchors
- Concrete/Stone Repair
- Crack Stitching
- Platipus Ground Anchors

- Masonry Restoration & Brick Tinting
- Mini Piling
- Movement Joints
- Repair Strategies
- Resin and Cementitious Injection

ANDERTON

Welcome

Anderton Structural Repair Services specialise in all forms of structural reinforcement and repair and are committed to providing cost effective solutions that are non-disruptive and installed to a high standard.

With bases in North and South England we are able to undertake projects throughout England and Wales. Our commitment to excellent service has resulted in a wide client base that

spans local and national government bodies, loss adjusters, estate managers, consulting engineers, large and small contractors and private building owners.

Our FREE survey and comprehensive specification and quotation, ensures we can meet your requirements on time, every time and within your budget.



The Company

Improvements to remedial systems and products are at the heart of modern repair strategies. Expertise in the latest structural repair and stabilisation techniques is key to the success of the project.

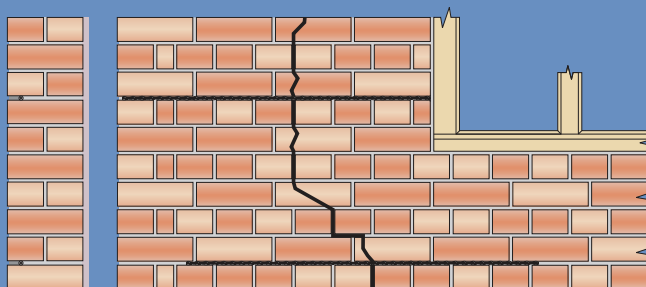
ASRS Ltd are at the forefront of the industry, operating to the requirements of ISO 9001:2008. We hold CHAS, SMAS and Construction Line accreditations.

We offer a complete package of services from consultation and diagnosis to design and implementation of the repair strategy. We provide guarantees, upon request.

Helifix

In situations where masonry has cracked and failed, as a result of ground movement, weathering or increased loads or stresses, the unique Helibeam System provides stress free horizontal bed-joint reinforcement which ties the masonry together while creating deep masonry beams which distribute the structural loads. Other ties and fixings provide lateral and vertical restraint to complete the system, which is applicable to all types of masonry structures.

For many situations the Helibeam System offers a structurally sound alternative, at significantly less cost than underpinning and other traditional repair methods. Overall disturbance to the ground, building and occupants are considerably reduced. After repointing and making good, the building is left virtually



unmarked. ASRS are approved installers of the Helibeam System and can offer Helifix insurance backed guarantees for most projects. We are also pleased to offer advice, make free site visits and propose structural programmes.

At the Forefront of Modern Repair



Micro Pile

The micro-pile system is simple but extremely effective. If you are suffering from foundation settlement then the Micro-pile solution together with superstructure works to repair the cracking is the best solution to use.

A 750mm x 750mm pit is dug to expose the bottom of the existing foundations, the pile is then screwed in to a predetermined depth using hand held equipment, whilst screwing the pile in the pile log will be filled out to make sure that bearing capacity is reached. An adjustable bracket is then attached to the pile which in turn is fixed to the foundations.

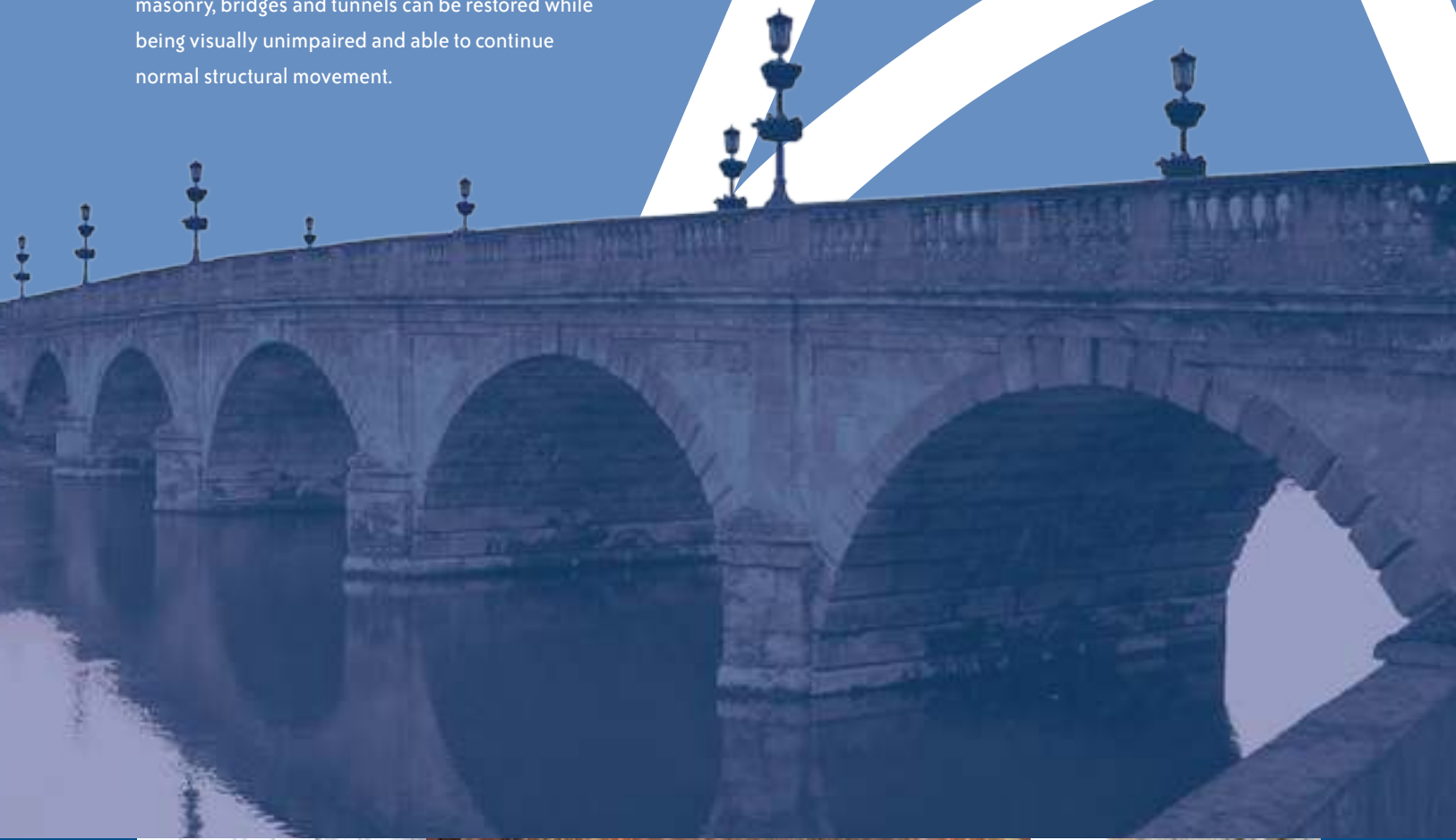
The micro-pile is a screw down pile that can typically achieve loads of up to 220KN per pile. A full survey with soil investigations and bore holes will determine what the cause of the foundation movement is, ASRS can then design a solution based on that information and propose a repair scheme.

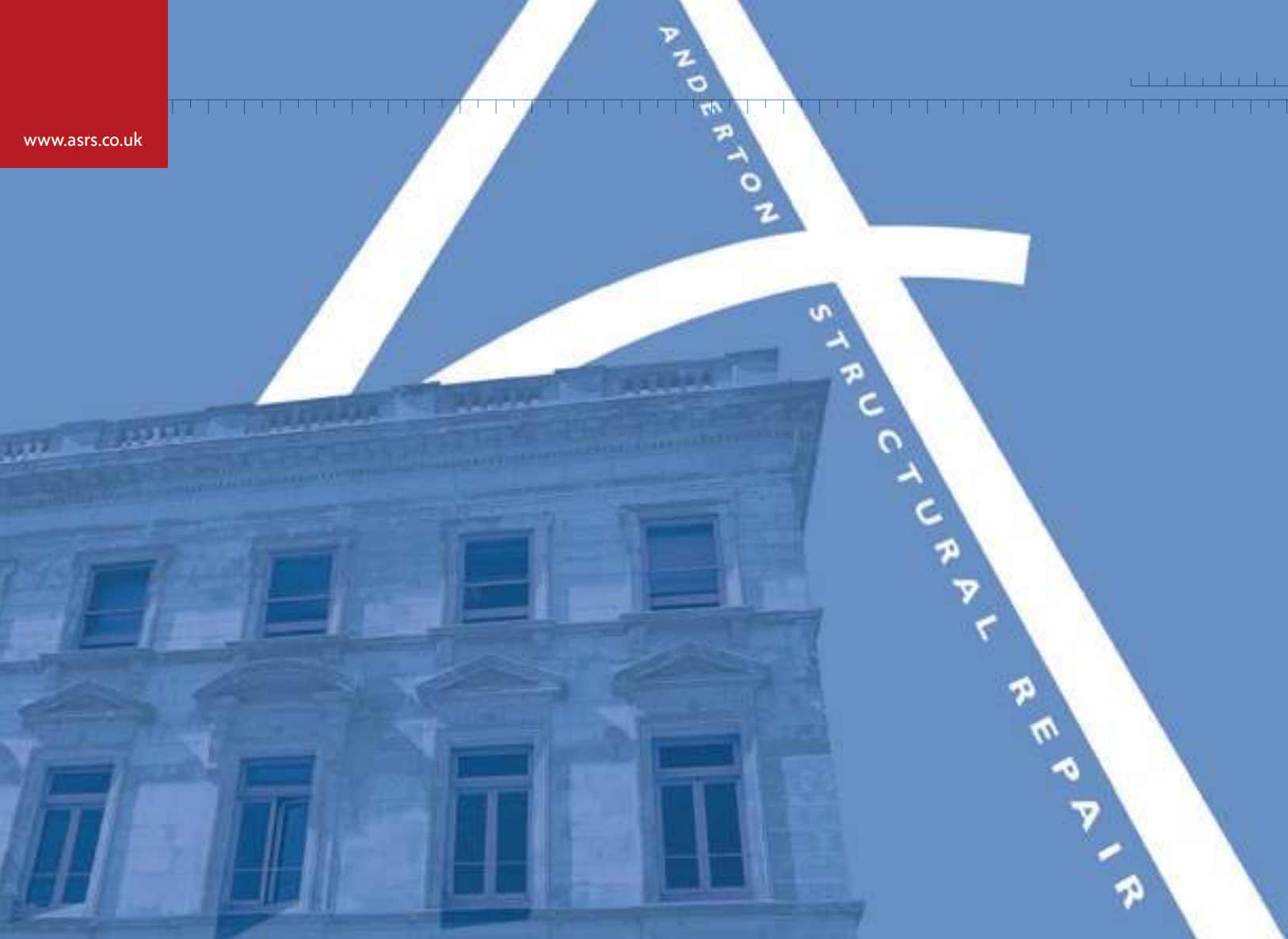
In most cases a 10 year insurance backed guarantee can be provided after installation.



Bridge Repairs

Using individually designed strategies of beaming and pinning in appropriate combinations, virtually all serious problems can be overcome. By designing individual repair strategies for specific bridges, the Helibeam System components, installed by ASRS, are able to secure masonry, stitch cracks, create masonry beams and redistribute the structural loads without the introduction of additional stresses. By installing a larger number of smaller components which work in a composite action with the masonry, bridges and tunnels can be restored while being visually unimpaired and able to continue normal structural movement.





Committed to Providing Solutions

Conventional Underpinning

If the building requires underpinning, we can offer solutions to stabilise the foundation using bored or displacement piles depending on the soil conditions. Wherever possible we will specify the works to be completed externally to minimise the risk of disruption and upheaval of the occupiers internally.

All our solutions comply with Building Regulations from the design to construction.



Concrete Repairs to Local Primary School

A local primary school close to our head office contacted ASRS to provide a specification and repair method to the concrete surrounds to a block of classrooms. Our surveyor met the local council on site and performed a hammer test to identify the worst areas of oxidisation.

The repair scheme for this project was specified due to oxidisation of the steelwork resulting in the concrete spalling and falling off, making it dangerous for the pupils if the repairs were not to take place.

ASRS specified hacking off the loose and spalling concrete, cleaning the exposed steelwork and applying a Zincrich primer to stop corrosion and then applying a high strength concrete repair mortar.



To do this we created shuttering around the area to allow the concrete mortar to cure in the correct place and shape, this was then painted afterwards using a waterproof coating system.



Concrete and Stone Repair

Modern concrete structures have not proved to be as durable as once anticipated. Even structures such as bridges and tunnels, built to modern standards with high strength concrete are not immune to deterioration in our increasingly aggressive environment. ASRS offers advanced systems which provide solutions for today's concrete repair problems. Structural integrity can be reinstated and future protection against carbonation, chloride attack, water ingress and freeze/thaw damage is assured.



Platipus Ground Anchors

The Platipus earth anchoring system is a unique, modern and versatile mechanical anchor that can be rapidly deployed in most soils. Apart from the significant cost benefits, the system requires no grout, no curing time and creates no mess or contamination. Anchors can be installed, proof loaded up to 200KN and fully operational within minutes, in most cases using conventional hand held equipment.

Platipus anchors can be used to provide permanent support to an existing retaining wall showing signs of distress. They

are perfect for historical structures that require all evidence of support to be concealed and are an ideal temporary solution that allows other structural work on a retaining wall to be completed.

Platipus anchors installed in conjunction with the Helibeam System for masonry applications, maximise levels of lateral restraint and offer concealed installation with no external plates if required.

ASRS can arrange a free in-house design service to assist consultants with specifications of works. Indemnified designs are available on request.



Platipus Ground Anchors and Helibeam Installed to Leaning Retaining Wall

ASRS Ltd were contacted to provide a specification to stabilise a retaining wall at a large commercial building, where cracking and leaning had occurred. We specified the installation of Platipus anchors in conjunction with the Helibeam system to reinstate the structural integrity of the long section and flank section of the wall.

Prior to starting the works we installed a test anchor to determine the suitability of the S08 Platipus anchor. We also required drainage and service plans behind the wall.

Long Section: We installed 9 No. Platipus S08 lateral restraint anchors with 8mm stainless steel wire tendon, driven to 4m or refusal, terminated onto 200mm dia square load plates with 8mm stainless steel wedge grip set on the face of the wall. In addition we also installed 4 No. twin bands of Helibar 60 stainless steel bed joint reinforcing, positioned horizontally to distribute the structural loads, returned to the right flank section of the wall.

Right flank wall section: We installed 5 No. Platipus S08 lateral restraint anchors with 8mm stainless steel wire tendon, driven to 4m or refusal, terminated onto 200mm dia square load plates with 8mm stainless steel wedge grip set on the face of the wall. We also installed 4 No. twin bands of Helibar 60 stainless steel bed joint reinforcing, positioned horizontally to distribute the structural loads, returned to the long section of the wall.

We finished by raking out all existing cracks and injecting with thixotropic cementitious grout. We made good all areas of mortar disturbed by our installation. We completed the repairs on time and within budget to the client's satisfaction.





Cementitious Sock Anchors

The cementitious sock anchor system is a versatile method of reinforcement, tailored to meet specific strengthening and repair requirements of individual projects. The system comprises of a grout-filled woven polyester based sock, that combines with a threaded bar in a composite action which expands to form a strong chemical/mechanical bond within the substrate.

The sock anchor is used in heavy duty, high load applications such as bridges, historic buildings, high rise buildings and harbour walls. Sock anchors are installed into the fabric of the building providing permanent, non disruptive repairs, retaining the buildings original appearance.



Providing an Excellent Service Across our Client Base

ASRS are able to undertake repairs on all types of structures from houses and tower blocks to listed properties, churches and bridges. We offer a complete service from diagnosis through to installation and deliver cost effective, non-disruptive solutions designed for all forms of masonry/concrete stabilisation. We always consider the aesthetic appearance of any remedial repair and pride ourselves on making good.

A Reputation Built on Success

Consultation/Design and Repair Programmes

Contact ASRS with your structural problems. We offer free site visits to assess the problem and propose the appropriate repair programme, tailored to suit the specific needs of the project. With the facility for in-house design, ASRS will design and submit calculations for the specified repair programme. Our associate Structural Engineers are on hand to assist and advise.

Implementation

Our skilled installation teams are highly trained and experienced in all aspects of installation, even the most challenging projects. ASRS staff and operatives are CSCS card holders. We aim to deliver cost effective, non-disruptive and concealed solutions to all aspects of masonry/concrete and stone structures.





Castle Repaired Using Micro Piles

The Challenge

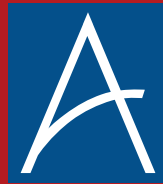
ASRS were called in to provide a specification and repair scheme to part of a castle that was suffering from subsidence. The cause of the problem could not be ascertained until a full soil investigation had been completed.

ASRS carried out 2 No trial pit and 2 No bore hole inspections to obtain an accurate site investigation to enable ASRS to specify the precise solution for this project. The soil investigation showed that tree roots were present along with insufficient foundations to the affected area. Our engineer used the patented Helicap programme to design a repair solution.

The Solution

The repair proposal that was designed, restored the structural integrity of the masonry where cracking and downward movement had occurred by the introduction of Helifix masonry beams installed laterally to distribute the structural loads. Also within the specification we prepared a scheme for installation of Chance screw down micro piles to the sub-structure. Works comprised of the installation of 11 No. Chance piles. Each pile had 203mm and 254mm diameter helices to provide the bearing capacity and screwed in to a depth of 3m. With the capability to complete on site load testing every half meter we were able to reach the required loads for each pile.





Anderton Structural Ltd
One company, One solution



Head Office

ASRS Ltd
Building 45
Old Sparrow Works, Martock
Somerset, TA12 6LG
Tel: 01935 822788

London Office

ASRS Ltd
Crusader House
145-147 St Johns Street
London, EC1V 4PW
Tel: 02087 640049

Worcester Office

ASRS Ltd
Restdale House
32/33 Foregate Street
Worcester, WR1 1EE
Tel: 01905 315601

Devon Office

ASRS Ltd
10 Station Road,
South Brent
Devon, TQ10 9BE
Tel: 01364 430101

Bristol Office

ASRS Ltd
9 Station Road
Warmley
Bristol, BS30 8XH
Tel: 01179 696999

South Wales Office

ASRS Ltd
62 Claude Road
Cardiff
CF24 3QB
Tel: 02922 168801

info@asrs.co.uk
www.asrs.co.uk

