

STRESS

Integrity built-in

Structural repairs and specialist services

STRESS specialise in providing solutions to difficult construction problems. As one of the few companies officially licenced to provide an ASUC guarantee for foundation and structural repair works, you can be assured that integrity lies at the core of our business.

We offer excellent UK-wide coverage from our Thames Valley office, additional sites in Hong Kong and Abu Dhabi complete our team worldwide.

- Specialist services
- Masonry
- Steel

- Concrete
- Water
- Carbon 🗘
- Contact us







Specialist services

At the birth of the company in 1992, the provision of specialist services was always a fundamental part of the mission statement and provided the 'SS' in the name Stress.

Being 'innovative' has been the ethos of the firm's outlook and we always strive to look for new techniques and provide solutions to unusual problems. The theme of our service is to rehabilitate and strengthen with the least disturbance to either the structure, or in certain circumstances, the occupier.

Guaranteed systems for Geotechnical engineering

Stress is in a unique position of being able to offer ReFORCE and GeoFORCE ground stabilisation, strengthening and anchoring systems to insurance companies, commercial operators and domestic clients. These systems solve a range of subsidence and retaining wall problems with new levels of capacity, efficiency and economy.

- 12 year insurance backed, defects liability guarantee is available.
- Stabilisation for underwater excavation
- Swallow hole and mine shaft stabilisation.

A repair system for every structure – from heritage to new build

Stress carries out strengthening and repair for masonry tunnel, bridge, vaults and standard building opening supports such as flat and curved arch lintols whether listed status or otherwise. For bridge structures in particular the MARS strengthening system can be designed and installed by our sister company Goldhawk Bridge Restoration Ltd.

Water is often a contributing factor to the weakening of masonry arches. Together with Helifix and Normet, Stress UK pioneered the iGap System which provides the market with a highly efficient method of arch strengthening, consolidation and water control.

Insurance Contracts for subsidence, fire, flood and impact damage

Stress has in excess of 20 years experience in many types of insurance backed repairs and work for all the major loss adjusting practices and insurers.

Our <u>Heritage and Conservation</u>
Division combines many of these modern techniques and materials with traditional building skills using stone, brick, terracotta, lime mortars, timber, and concrete to preserve the countries old and treasured buildings and structures.

Visit our

Specialist Services section
online for case studies and
further information.



Soils

Subsidence

Commonly caused by shrinkable clays, compressible layers or washing out of fines from bearing strata, we provide a comprehensive service to insurers and private individuals with **ASUC Plus guaranteed** remedial foundation and structural repair schemes. Our geotechnical services include mass concrete and reinforced underpinning, screw piling, permeation piling and ground stabilisation

For buildings not requiring underpinning STRESS provides a **Helifix** 'design and install' service to repair structural cracking and strengthen masonry.

Ground Stabilisation

STRESS is established as a leading UK provider of ground stabilising solutions using a unique metered injection system for resins and grouts deep into suitable strata. The Foundation Rescue division provides a nationwide guaranteed service.

Retaining wall installation and repairs

In addition to foundation repair problems we also specialise in retaining wall installation, strengthening and repair. STRESS are approved for construction of Grass Concrete and Maccaferri block walls together with licenced installers of the ReFORCE ground anchor. Combined with Helifix masonry reinforcement unstable retaining walls can often be rehabilitated.

Permeation Piling

Stress offers the patented ReFORCE piling system for underpinning buildings and structures. For insurers and private clients, all ReFORCE work is covered by the 12 year ReFORCE Guarantee.

Screw Piling

Stress as an approved installer of Helifix products provides Dixie Screw piled solutions.





Visit our <u>Soils section</u> online for case studies and further information.





Visit our <u>Masonry section</u> online for case studies and further information.

Masonry

Brickwork and masonry

Fracturing of brickwork can be caused by foundation movement, thermal stresses, structural movement due to alteration. roof spread, lack of lateral tying and earth pressure. STRESS provides a first class design and repair service combining installation of Helifix masonry reinforcement products, resin bonding, course re-alignment and arch refurbishment to all types of structure from domestic dwellings, commercial buildings to bridges and tunnels. STRESS provides a heritage quality match pointing service using historic lime mortars and more recent cement based mixtures.

Stonework restoration

Commonly churches, historic buildings and bridges suffer from similar problems to brickwork. We provide structural solutions recognised and approved by the National Trust and English Heritage.

Arches - iGAP and MARS

Combining Helifix's DryFix ties and Normet TamPUR150 resin Stress UK are installers of the iGap system which provides strengthening and water control to masonry arches such as bridges, tunnels and culverts.

Masonry arches, bridges, viaducts and culverts can all be repaired,

restored and strengthened by
STRESS's Goldhawk division.
All arches can be structurally
analysed using unique
programmes and an economic
strengthening regime designed to
suit the client's requirements.

Steel

Mild steel framed structures

Mild steel framed buildings, bridges and structures require periodic maintenance and occasionally strengthening or alteration. STRESS provides a fabrication and installation service together with refurbishment including surface preparation and re-coating for weather protection

Architectural stainless steel

Stainless steel components for all types of construction and architecture from support elements to guard rails.

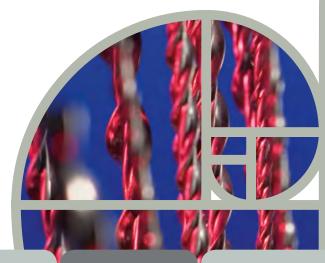
Structural arches

Goldhawk, our masonry bridge strengthening division provides analysis, design and installation of the patented MARS system.

Steel plate bonding

Steel reinforcement in concrete and structural strengthening of steel structures by the bonding of steel plates can provide clients with a very cost effective and space saving solution.

Visit our <u>Steel section</u> online for case studies and further information.









Visit our <u>Concrete section</u> online for case studies and further information.

Concrete

Analyse, test and report

We provide clients with a full structural analysis, testing, reporting and specification for structural concrete repair and strengthening.

Structural concrete repair

Conventional repair of R.C. structures using the latest techniques with cementitious and epoxy based products.

Concrete and corrosion

Halting and preventing corrosion of reinforcement in R.C. structures results in significantly reduced maintenance costs. STRESS provides corrosion inhibiting coatings together with implanting of capsules in the structure to protect the concrete reinforcement.

Structural strengthening

R.C. structural elements such as beams, slabs, floors and walls can be cost effectively strengthened using either steel or carbon plate bonding. Carbon wrap will strengthen columns whilst kevlar will increase impact resistance and glass fibre sheet bonding will increase flexural capacity.

Architectural GRC panels

As world leaders in the design and manufacture of architectural GRC façade panels and building systems CanBuild provides a full international design and supply service. As a member of the group STRESS provides a link for leading architectural practices such as Foster & Partners, Zahah Hadid, Heatherwick Studios, SOM and RS&H

Water

Structural leak sealing

STRESS employs specialist engineers and technicians highly trained in stemming leaking water into, out of and through structures. Bridges, tunnels, basement vaults, ducts, water treatment works, swimming pools and other civil and commercial structures.

Controlling water penetration

Careful injection of polyurethane and/or acrylic resin in masonry structures can provide a very cost effective method of controlling water penetration to prevent structural degradation.

Water damage repair

We provide the insurance market with a flood refurbishment service bringing water damaged properties back to life.

Structural waterproofing

STRESS can provide through DryTech's White Tank System a guaranteed waterproofing system to new build underground structures.

Repelling

Specialist coatings will prevent substrates becoming saturated with rain whilst allowing construction products such as stone, concrete and brickwork to breathe. This protection reduces the effects of air borne pollutants and prevents the build-up of deposits.





Visit our <u>Water section</u> online for case studies and further information.



Carbon

Structural Carbon fibre strengthening

Reinforced concrete structures can be strengthened cost effectively and rapidly using carbon fibre plate bonding for remedial building repair. Strategically placed carbon fibre strengthening plates in thicknesses from 2mm to 40mm are bonded to concrete elements to provide significant increases in carrying capacity and stiffness.

Carbon fibre strengthening UK case study

View our <u>case study</u> which demonstrates structural structural carbon fibre strengthening techniques used on the Brighton Pavilion a famous British historical building. Discover how we analysed the options before selecting carbon fibre wrap to complete the structural repair work, complete with images of the work in progress.

Our services include:

- pre-installation survey
- · design and installation service
- fire protection.

Visit our <u>Carbon section</u> online for case studies and further information.



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