

STRUCTURAL
WATERPROOFING,
DAMP PROOFING
& BUILDING
PRESERVATION
SOLUTIONS

tritonsystems.co.uk



SUPPORTING YOU WITH OUR EXPERTISE

At Triton Systems we specialise in the supply of structural waterproofing and damp proofing solutions, as well as a comprehensive range of products used in building preservation. Our approach is to ensure that the most appropriate system for your project is specified and installed correctly.

Our qualified technical team supports the provision, specification and use of our systems through project team meetings, advisory site visits, system specification guidance and specific detail drawings if needed. We also provide in-house training courses for architects and installers including RIBA approved CPD seminars.

Working with us from the outset of a structural waterproofing project means we provide the expert support recommended in BS 8102:2009, right from the start through to completion and handover. Sourcing all the elements of a structural waterproofing system from Triton means there are no non-compatibility issues when a combination of systems is used.



WE SUPPLY:

- BBA certified watertight concrete admix
- BBA certified cavity drain membranes
- Liquid applied waterproof coatings for terraces, podiums, light-wells and lift pits
- High performance timber preservation and damp proofing products
- Ground gas barriers, flooring systems, anti-condensation products
- Products for structural repair
- Drainage and water storage membranes for green roofs
- Ancillary products for use with all of the above

DOWNLOADABLE FROM OUR WEBSITE:

- Technical and material safety data sheets
- Detail drawings in .DWG and .PDF format
- Installation manuals
- Case studies
- Third party product certifications

GUARANTEES & WARRANTIES

Product warranties are a fundamental part of our service provision and are offered in varying options and combinations to suit your needs. Read more about these on page 11. Where appropriate, all Triton products carry the CE mark.

Triton is an ISO 9001:2015 Quality Assured Company.



Through our sister company, INK Technical Services Ltd, we can offer a fully P.I. insured, detailed waterproofing design service – expertly tailored to your project. This is undertaken by technical experts who understand the essential details that need to be incorporated into the design and who will ensure that nothing is overlooked. Please contact our office directly or speak to one of our Technical Representatives for further information.

inktechnicalservices.com



BS 8102:2009, the code of practice for the protection of below ground structures from water from the ground, defines three types of waterproofing systems – Type A, Type B and Type C. Any of these, or a combination of two or more systems, may be specified in a structural waterproofing project.



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TYPE A WATERPROOFING

Type A waterproofing comprises various categories of barrier system that are applied to vertical or horizontal concrete and masonry. Talk to us about which would be most appropriate for your project.



FULLY BONDED SYSTEMS

- Designed to waterproof and protect horizontal or vertical surfaces, BBA certified **Triton Bentonite Membrane** features a robust Bentonite-impregnated fibre layer that forms a tenacious mechanical bond to poured concrete while self-healing and actively keeping water out.
- **Triton TWS-EX100** is a self-adhesive, very effective sheet membrane with a unique selvedge for a fast and secure seal on all side edge laps. An easy to install water and water vapour barrier for use on foundations, basements, roofs, lift shafts and pits, car parks and balconies.
- **TWS-EX100 GM** is a highly efficient, dual solution, self adhesive waterproofing membrane that also acts as a barrier against Radon, Methane, Carbon Dioxide and other ground gases and contaminants.

LIQUID APPLIED SYSTEMS

- **Triton TT Vapour Membrane** is a versatile, ready-blended waterproof coating that also acts as a barrier against Methane and Carbon Dioxide. Apply it by airless spray, roller or brush to walls, floors and soffits.
- A solvent-free, two part epoxy resin coating, **Triton Triseal** is typically used as a surface damp proof membrane and a water vapour suppressant beneath raised access floors, in plant rooms and bunded areas.
- Elastomeric **Triton Fastcoat** guarantees total water-tightness and withstands building movements. Can be used as a base coat, reinforcing layer or top coat on terraces, balconies and podium decks. It can be used beneath paving on exterior surfaces.

CEMENTITIOUS SYSTEMS

- **Triton TT55** is a cement 'tanking' system and highly effective as a damp proof membrane for brickwork, concrete or any cementitious substrate.
- **Triton TT 55 ME** is a flexible waterproof coating for use where vibration or cracking is anticipated.
- **Triton TT Super** is an 'active' formulation that migrates into the concrete to form a waterproof barrier but still allows the concrete to breathe.

TYPE B WATERPROOFING

Type B protection, used for concrete waterproofing, is defined in BS 8102:2009 as where the structure itself is constructed as an integral water resistant shell. The water tightness of a Type B construction is reliant upon using a concrete of low permeability and appropriate joint detailing.



“ WHERE APPROPRIATE ALL PRODUCTS SHOULD HAVE 3RD PARTY ASSESSMENT AND/OR BBA APPROVAL AND WARRANTIES, AND GUARANTEES FOR THESE SHOULD BE PROVIDED BY THE MANUFACTURERS AND INSTALLING CONTRACTORS.

- Our BBA certified and unique **Triton TT Admix** is used at the time of batching. The chemicals react with fresh concrete to actively seal the concrete itself against the penetration of water or liquid and to protect it from harsh environmental conditions. Shrinkage cracks are constantly and automatically resealed during a life-long active protection system.
- Our waterstops are designed to seal construction joints and include **Triton CEMflex VB Plate Waterstop**, a weatherproof, galvanized steel plate that only reacts with the water within the concrete and is therefore ideal for use in ICF or twin wall installations; **Triton-Adcor 510S Waterbar**, a high performance and BBA certified, conformable, swellable polymer/butyl rubber waterstop; and **Triton TT Waterstop**, a hydrophilic, ready to use waterstop which swells up to 350% when in contact with water. **Triton TT Swellmastic S2**, a one-component hydro-reactive expansion sealant, is recommended to be used as an adhesive in conjunction with Triton's hydrophilic waterstops.
- **Triton Injection Tube System** is designed for multiple injection of suitable grouts and resins into construction joints and other areas that may require injection at a later date. Can be supplied in lengths of up to 30 metres.

TYPE C WATERPROOFING

Type C waterproofing is defined in BS 8102:2009 as 'drained protection' which is achieved by the incorporation of a drained cavity within the new or existing basement structure. Water is collected in the cavity between the external wall and the cavity drain membrane and diverted to a suitable drainage point. Cavity drain membranes are loose laid on floors and fixed to walls using special plugs and sealing materials. Used extensively in conservation projects and new build where a second form of waterproofing is required, there is often little or no preparation required to the substrate. Once the membrane has been fitted, wall surfaces can be dry lined or plastered directly. Floors can be screeded or a floating dry board system can be installed.

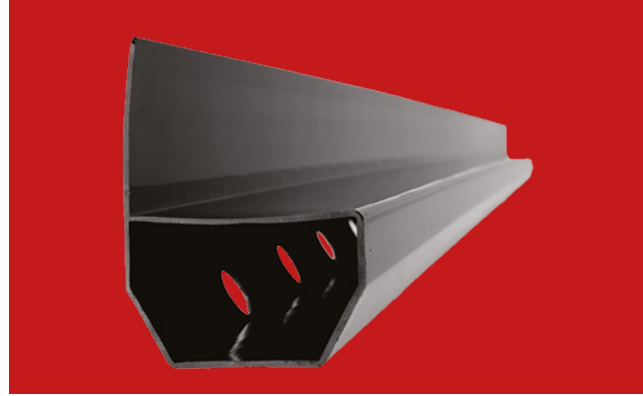


- BBA certified **Platon P8** is manufactured from tough, High Density Polyethylene and is impermeable to water, water vapour and Radon gas.
- BBA certified **Platon P20** is an easy to use, high capacity drainage membrane typically used within the basement floor build-up.
- **Platon Plaster Base** features a unique undercut stud design to create a mechanical key for direct plastering. There is no mesh or fabric layer on this BBA certified membrane.
- We supply two membranes featuring an integrated mesh layer for direct plastering – **Platon Plaster Mesh** (8mm stud) and **Platon PB2 Mesh** (3mm stud).
- For external use, **Platon Double Drain** is designed to protect external basement walls from backfill damage. The filter fabric layer ensures soil cannot enter membrane cavities to impede drainage therefore reducing external hydrostatic pressure.

 **ACCORDING TO
BS 8102:2009
A WATERPROOFING
EXPERT SHOULD
BE CONSULTED AT THE
OUTSET OF A STRUCTURAL
WATERPROOFING DESIGN.**

PUMPS & DRAINAGE

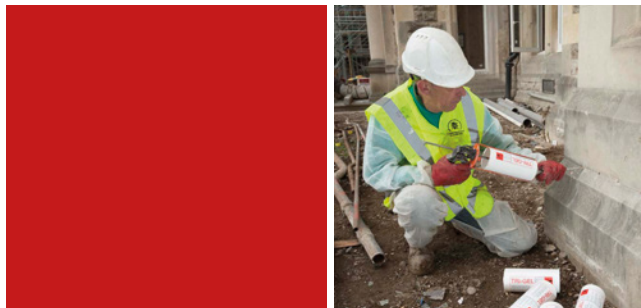
We provide an extensive range of pumps, sumps, drainage channels and alarms to provide effective mechanical drainage solutions for all below ground structures where a cavity drain system is being installed. Each is designed to be fully maintainable in accordance with BS 8102:2009.



- **Triton Aqua Channel** is a PVC drainage conduit fitted around the perimeter of the floor at the wall/floor junction and can be used in conjunction with our Platon cavity drain membranes. Water entering through the walls is controlled behind the Platon membrane and diverted down to the Aqua Channel at the base of the wall. The water enters the Aqua Channel through pre-drilled drainage holes and must then be diverted to a suitable drainage point, either natural, or a sump and mechanical pump.
- Primarily developed for the new build specification market, the **Aqua Pump Pro** system is designed to remove ground water from basement cavity drain systems and comprises a polyethylene sump, a galvanized, locking access cover and one mains powered, submersible pump. **Aqua Pump Pro Plus** is supplied with a second mains powered pump to provide back up to the first or extra capacity. The **Triton Aqua Pump Pro Battery Back Up** version comprises one mains powered and one 24v battery pump, providing further reassurance.
- The **Triton Aqua Pump XL** kit can be specified for where a greater ingress of water is anticipated, where there is a greater depth to the basement or to enable the number of pumps to be reduced. The kit can be supplied in either single or dual pump configuration with a choice of three pump types, which should be specified depending on the pump performance required.
- **Alarms and control panels:** we supply a full range of mains and battery powered high level water alarms as well as control and monitoring panels for all configurations of pump kit.

TIMBER & DAMP

Our range includes timber and masonry preservation systems, chemical damp proofing systems, external water repellents and epoxy based products for timber repair.



CHEMICAL DAMP PROOFING

- Key products in our range of injectable formulations to combat rising damp include BBA certified **Triton Tri-Gel**, a ready to use, water based gel that forms a water repellent silicone resin network within the capillaries of brick, stone and other substrates; **Triton Tri-Cream** silicone emulsion cream; and BBA approved **Triton Triject 3** fluid concentrate which reacts with Carbon Dioxide to form a permanent water repellent coating within the capillaries of the masonry. Water resistant mortars, additives and primers complement these products.

EXTERNAL WATER REPELLENTS

- Waterproof **Triton Triproof Cream** resists damp penetration, improves the thermal performance of walls and provides flood resilience.

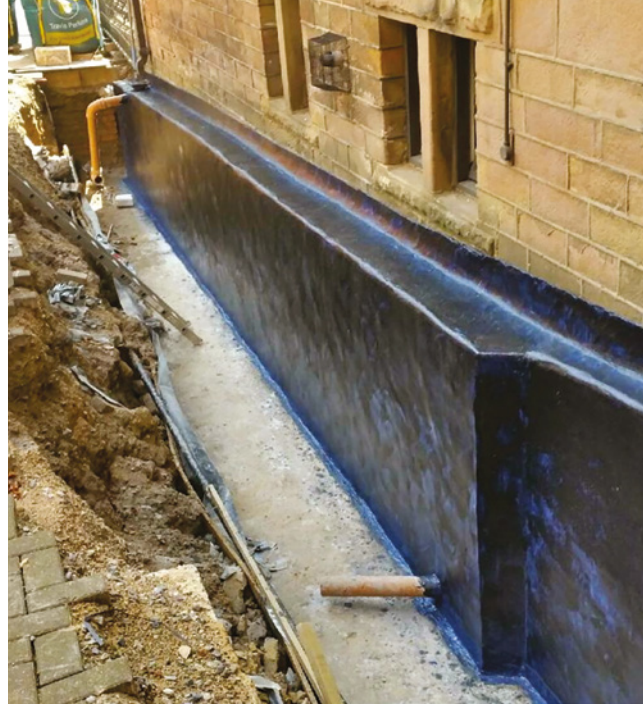
TIMBER & MASONRY PRESERVATION SYSTEMS

- For protection against wood boring insects and wood destroying fungi, choose **Tritec 60** and **Tritec 60 Plus** or boron based **Tribor 20** and **Tribor Ten**. **Triton Trisol 23** should be specified for the sterilization of masonry infected with Dry Rot fungus.

TIMBER REPAIR

- Triton's range of **epoxy based coatings, grouts, consolidants and adhesives** are designed for the repair of voids or bearing ends in timber affected by insect attack or rot. Our technical team can advise which of these systems will be most effective for your project and tell you which ancillaries you will need.

GROUND GAS BARRIERS, ANTI-CONDENSATION PRODUCTS, FLOORING & GREEN ROOF SYSTEMS

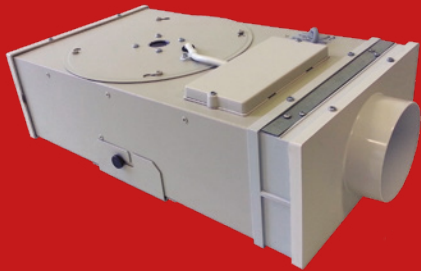


GROUND GAS BARRIERS

We supply a range of ground gas barrier systems including liquid applied, loose laid and self adhesive membranes as well as air movement solutions and ancillary products to protect buildings from the ingress of Radon, Methane, Carbon Dioxide, Hydrocarbon gases and VOCs. Their installation will help specifiers and installers conform to the requirements of BS 8485:2015 + A2:2019 – the Code of Practice for the design of protective measures for Methane and Carbon Dioxide ground gases for new buildings.

ANTI-CONDENSATION PRODUCTS

Condensation is the most common cause of dampness in buildings and affects properties of all types and ages. In particular it is directly associated with black mould growth. We offer a comprehensive range of products to control condensation including passive air vents, extractor fans, heat recovery ventilators and positive pressure units.



FLOORING

We supply a range of sheet membranes and liquid applied systems to waterproof all types of flooring substrates in existing and new building constructions. Speak to us about which products would be the most appropriate for your flooring project.

GREEN ROOFS

Green roofs deliver many benefits – particularly to urban areas. They insulate and protect roofing materials; clean the air and counteract climate change; provide microclimates for insects and bird life and create fabulous spaces for work and leisure. We supply membranes that deliver the water storage and drainage element within a green roof construction. Call our technical team for more information.



SHARING OUR EXPERTISE

We're committed to providing high quality support to all who specify or install our products and systems. Therefore we deliver a comprehensive range of training courses for specifiers, surveyors and technicians. Use the downloadable Training Course Booking Form at tritonsystems.co.uk to book your place/s.

We're also proud to be RIBA accredited CPD providers and offer six RIBA approved CPD seminars for architects, covering basement waterproofing in new build or existing structures, waterproofing concrete structures below ground and green roofs/living roofs. These can be booked via our website or at ribacpd.com

Alternatively, we can provide an early stage broad overview of potential Triton solutions for your project, just invite us in to discuss your requirements.



CASE STUDY

WATERPROOFING ONE OF THE LARGEST EVER ICF CONSTRUCTIONS

Structural waterproofing products from Triton Systems have been specified for one of the largest ICF construction dwellings ever built in the UK. The 2,500M² basement extends beyond the property where a blue-green roof will be created over a suspended podium deck to form part of the garden outside.

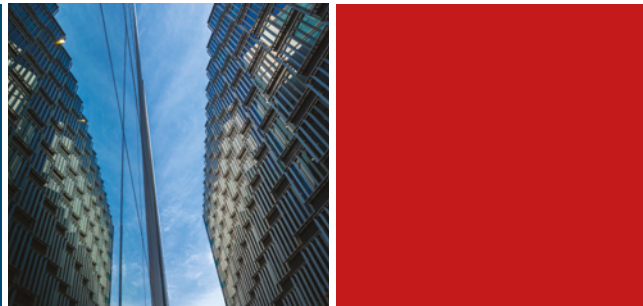
From the outset of the project, the Triton technical team worked closely with the waterproofing and blue-green roof design specialists, to create a waterproofing strategy using Type A, B and C systems from Triton's range and utilised a comprehensive Construction Quality Assurance protocol that was agreed between the two companies.

Read the full story and other case studies at tritonsystems.co.uk

GUARANTEES & WARRANTIES

PRODUCT PERFORMANCE

Product performance warranties are available as standard for all Triton products with performance data provided via data sheets and appropriate third party accreditations such as BBA certificates. Our priority is to operate a policy of continuous improvement which results in our being able to supply an ever evolving range of high performance products and systems.

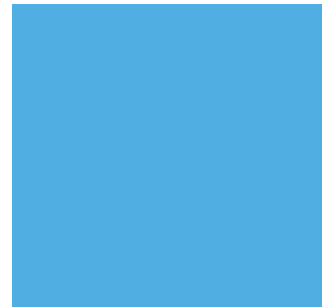


TUG INSTALLED WARRANTIES

Triton operates a network of approved installation contractors who have been extensively trained and assessed in the installation and application of our products. They can provide a warranty that will not only include product performance but will also extend to the installation, providing total peace of mind.

An independent insurance policy supporting the installing contractor (from TUG Guarantee Services Limited) is available to you via our approved contractors and covers unlikely situations where an approved contractor is unable to resolve any issues.





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