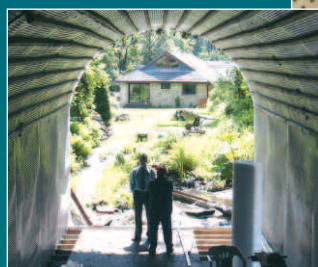
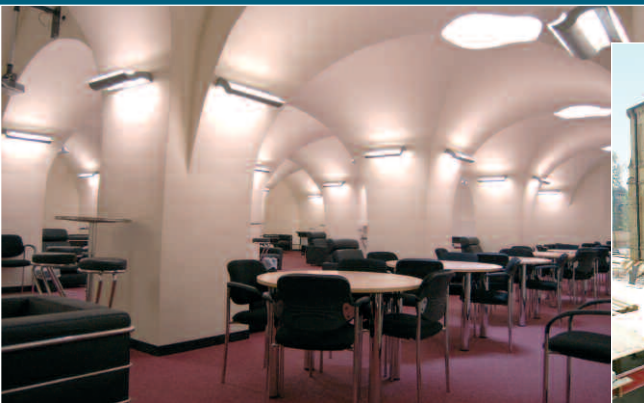


Proven waterproofing and damp control

Internal and external membrane systems,
for use above and below ground



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CI/SfB	
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JOHN NEWTON
& COMPANY LIMITED (EST. 1848)

Over 150 years of quality and innovation

John Newton and Company Limited



Above: The Thames rose four feet above ground level, but Newton 500 kept this boat house dry.

Below: Our in-house design service can provide assistance in the specification of your system, including autocad drawings.

Far right, top and bottom: Basement conversion during construction and completed.

Founded in 1848, John Newton & Co Ltd is the longest-established independent specialist in damp proofing, water control and drainage products in the UK. Our products are specified by architects and structural engineers for use across the construction spectrum – from new developments to historic buildings, including conversion, renovation and refurbishment.

Acknowledged leaders in our field, we pioneered the development and introduction of cavity drainage membrane technology in 1937 with the introduction of the revolutionary Newtonite pitch-impregnated fibre membrane. Over five million metres of this material has been used throughout the UK.

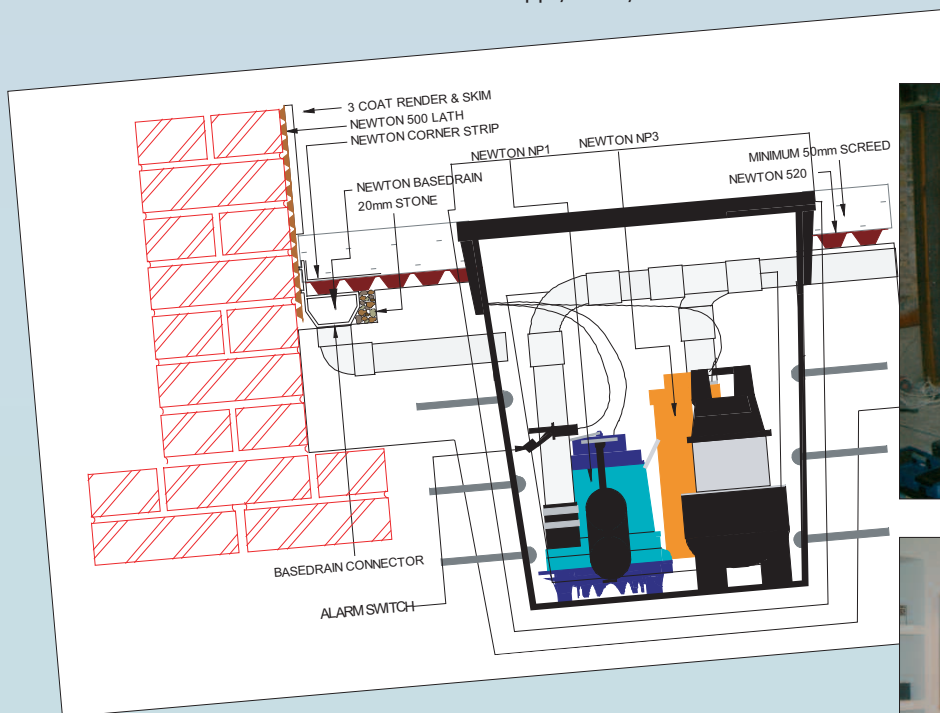
In 1984 we invented the Newlath meshed membrane which can be plastered or rendered – the precursor of the current generation of high density studded polypropylene/polyethylene membranes we supply today.

Product quality and effectiveness is complemented by full service and support. A network of registered contractors operates throughout the UK, and all registered contractors have been Newton trained to ensure consistently high quality installations – irrespective of the type of building project.

Newton membranes carry BBA approval and we recommend that all work, particularly below ground, is carried out by a registered contractor. This way, customers enjoy the peace of mind of insurance-backed guarantees as well as the standard 30 year product warranty.

For advice on all our products, or details of your nearest registered Newton contractor, contact us now on 020 7237 1217.

Detailed product information is available on our website, www.newton-membranes.co.uk



BBA certified and fully compliant to all the relevant British Standards

John Newton & Co. Ltd. product information is now listed within NBS Plus, part of the NBS industry standard specification software used by architects, building surveyors and other construction industry professionals. This means that the technical information and guidance for our products is presented to NBS subscribers, in NBS format, at the point in the specification appropriate to our products. Furthermore you will be able to access our website www.newton-membranes.co.uk through the direct link from NBS Plus to obtain further information. We can also provide guidance for the completion of NBS clauses upon request. Simply contact us at the address on the back cover. All information found within NBS Plus is updated four times a year ensuring that specifiers have access to our most recent product information.

Newlath 2000

Damp-proof polypropylene membrane for above-ground applications internally and externally

Building on the Newtonite ventilated membrane principle, Newlath 2000 uses polypropylene fixing plugs. This eliminates corrosion problems and provides a reliable plaster base that will last the lifetime of the building.

Damp is a problem in many buildings. Even low levels of penetration can cause discolouration to surface plaster and wallcoverings.

Newlath 2000 provides a firm key and an effective barrier on any damp or deteriorating surfaces where direct bonding is not possible, including timber frame buildings. Direct contact coatings depend on a sound surface for successful performance. Silicone injection can only be effective if the substrate is not subject to settlement cracks or is made up of various materials. Other sheet membranes will also fail if they are punctured, and bitumen coatings may break down over time.

The key advantage of Newlath 2000 is that it forms a physical barrier between the old surface and the new finish. It can also be punctured when wall fittings are needed, providing Newton Mastic is applied before fixing.

The air gap behind the Newlath 2000 membrane allows the wall to breathe and remain stable. Damp cannot accumulate to cause further deterioration, and residual dampness is vented.

The material

Newlath 2000 is made from 0.5mm thick high density translucent polypropylene, which is inherently stable, formed into a pattern of raised studs linked by reinforcing ribs. Polythene mesh is thermally welded to the surface on one side. The 5mm studs form a cavity on the wall side, and the mesh on the face provides a rot-proof key for plastering or rendering.

Newlath 2000 offers high resistance to water, alkalis, salt solutions, minerals and inorganic acids. It is also resistant to bacteria, fungi and other micro-organisms.

Easy installation

Newlath 2000 is light, clean and easy to handle. It can be easily cut and shaped with a sharp knife or shears. For a reliable long-term solution, the specially designed polypropylene plugs that are available with the material should be used. Newlath can be applied either vertically or horizontally from ceiling to floor and on ceilings or arches.

Walls can be finished using plaster or cement-based renders, and plasterboard can also be applied to Newlath 2000 for dry lining if required (dot and dab).

Newlath 2000 can also be used externally as a waterproof support for rendered finishes in exposed situations such as gable lends, or where external walls have deteriorated because of sea salts or wind corrosion.



Top: Newlath 2000 used externally at Alltwn School to cure penetrating damp..

Middle: Newlath 2000 with a plaster finish.

Bottom: Mastic being applied to the plug holes prior to receiving the fixing.

Left: Newlath 2000 used to combat penetrating damp before receiving a dry-lined finish.

A more detailed Newlath 2000 brochure is available in both printed and pdf formats via our website at:
www.newton-membranes.co.uk



Newton System 500

Reliable and effective waterproofing for underground and earth-retaining structures in accordance with BS8102



Even where penetrating water is a problem, Newton System 500 can allow wet areas such as basements, cellars or railway arches to be reclaimed as useful living or working space.

As well as renovating and extending existing homes, Newton System 500 products can also be used for new basements and cellars, making more room – and increasing the value of the property.

Newton System 500 also provides solutions for any other underground locations that may be subject to high water levels and flooding, such as vaults, passageways and other subterranean structures. Newton System 500 is not affected by thermal movement, shrinkage or vibration, so it offers major advantages compared with traditional cementitious tanking in locations such as Underground stations and tunnels.

Newton System 500 also protects against damage caused by other contaminants such as salts, oils, mould or chemicals.



Top: Newton 500 System used in the basements of a firm of solicitors.

Centre and bottom left and right: Newton 500 Lath used in the basements of the The British Museum.

Right: Newton 500 used in the refurbishment of a nightclub.

A more detailed Newton System 500 brochure is available in both printed and pdf formats via our website at: www.newton-membranes.co.uk

Insulation can be incorporated into the floor with all Newton flooring membranes.

These membranes must be used in conjunction with a range of drainage products:

- **Newton Basedrain** is an extruded drainage channel designed to be installed internally at the wall/floor junction where it creates a depressurisation space preventing water building up and coming to bear on the membranes.
- **Newton Baseboard** is an extruded trunking drainage system that is sealed to an internal wall/floor junction, where Basedrain cannot be used above the slab because of head height issues, or because the slab cannot be weakened.
- **Newton Titan** sump pumps remove accumulated excess water channelled to them by the membranes and drainage components.

Because very little substrate preparation is required, installation is quicker and easier than tanking products such as asphalt, dense renders and paint-on or sheet bituminous systems. No heating, mixing or torching is required. Newton System 500 installations are ideal for historic buildings, where preparation for conventional tanking would be harmful to the building fabric, and a reversible system may be required.

Any space either wholly or partially underground can be prone to water ingress, not just to damp. Newton's unique combination of membrane and drainage products creates a dry and waterproof environment.

Newton System 500 is deemed a maintainable cavity drain system in accordance with BS8102.

The products

Three types of membrane are available:

- **Newton 500** is a 0.7mm thick, high density translucent polypropylene roll with 8mm studs, which provides a drainage capacity of 5.5 litres per m² between the membrane and the wall being treated – the highest specification membrane on the market.
- **Newton 500 Lath** is the same 8mm stud profile, with a mesh bonded to the outer surface to allow direct application of plaster or render finishes.
- **Newton 520** is a heavy duty flooring membrane with a 20mm stud for an increased water flowrate.



Newton Geodrain

External drained waterproofing for new build basements

Waterproofing new build cellars and basements has always been a challenge. Unless it is 100% defect-free, conventional barrier tanking will never be a satisfactory solution.

Newton Geodrain is an ideal external cavity drain membrane system.

Filter fabric

Geodrain uses a 6mm stud cavity drain membrane which features Geotex, a filter fabric thermally welded to the studded face. This fabric allows water to pass into the cavity created by the studs, but filters out fine particles and sediment. Any water entering the cavity falls down to a perforated pipe (land drain or French drain) below internal slab level. The filter fabric should also continue around the pipe to prevent the entry of sediment.

Geodrain offers total protection if the recommended full installation is used. This has the Geodrain membrane under the floor slab and continuing up the retaining walls. With the full installation the perforated pipe is fully isolated behind the Geotex filter fabric.

Long life

Advanced production techniques ensure that Geotex is securely welded to the cavity membrane – ensuring long-term reliability of the material. The use of high quality polypropylene gives the product flexibility and durability.

Geodrain is also quick and easy to install. A large basement can be treated in a day. To give a neat and tidy finish to the installation, Newton Geoprofile caps the Geodrain at the top of the retaining wall.



Top: Newton Geodrain used in groundworks of a sports stadium.



Above: Newton Geodrain used externally on new build domestic basements.



Above and left: Newton Geodrain used in new build basement.

*A more detailed Geodrain brochure is available in both printed and pdf formats via our website at:
www.newton-membranes.co.uk*

Newton flooring

Flooring membrane



Above: Newton 300 used as a flooring membrane when part of Newton waterproofing system.

Right: Newton 300 laid beneath battens for solid timber floor.

Reliable protection

Newton flooring membranes protect against water (when used as part of the Newton 500 system) and vapour ingress, as well as any other chemical or biological contaminants that may be in the substrate. Ideal for new build and refurbishment projects, the membranes allow fast reinstatement of new floors.

Finishing

Most types of flooring can be applied direct to the membranes. The most common of these are particle board, laminated or solid wood flooring, or combination board such as Kingspan Thermafloor TF73.

Newton 300

Although this membrane provides a wide enough air gap for maximum water drainage and damp pressure equalisation, a low stud profile of 3mm minimises problems caused by raised floor levels.

Newton 300 provides a reliable, long-term solution compared with other types of damp-proofing and waterproofing treatment. It is guaranteed against deterioration for 30 years, and has a life expectancy of at least 50 years (DIN 9001:2000).

The membrane can also be used with Newton 500 products to provide a complete waterproofing solution fully compliant with BS8102. It can also be used with thermal insulation, sound proofing and most types of under-floor heating.



Newton Slimline

Newton Slimline is lightweight and easy to cut, shape and form, and minimal preparation is required. Surfaces need to be clean and free of loose material and any sharp objects. A unique channel design allows free passage of water vapour under the membrane, and waterproof joints. The material can also be easily cut, shaped and taped around irregular wall features.



Above and right: Newton Slimline flooring membrane used in the Russian Orthodox Church in London as part of the Newton System 500.



More detailed Newton 300 and Newton Slimline brochures are available in both printed and pdf formats via our website at: www.newton-membranes.co.uk

Pumps and drainage

Newton drainage products and accessories

The quality and effectiveness of John Newton membrane products is complemented by a range of proven drainage products and accessories. These range from simple drainage channels, to sump and pump products to control and remove water below ground.

NP400

A durable and reliable pump capable of pumping 185 litres/minute at 2m head. This pump will run in even the most demanding situations and in areas with high limescale.

Newton Titan

The UK's best selling specialist pumping system, the Newton Titan is acknowledged as the leading product in its class. Its key advantage is its versatility – it can be supplied with lids for side or top discharge. The dimensions of the sump chamber are designed for maximum efficiency of the pump.

Installation is easy, as pumps are simply placed in the basin, plumbed in and wired up. Pumps are designed to pass soft solids up to 35mm, and operate almost silently.

Newton Titan Plus

This features two pumps and a converter system – unique to John Newton – attached to a battery in case of power failure. Trickle charging of the battery ensures that it is always at full capacity. The vertical float switches are set at intervals so that in normal operation one pump is always available in case of

mechanical failure of the primary pump.

The Titan Plus system is recommended in all below ground situations. We recommend an annual maintenance contract with your installer to ensure the efficiency and longevity of the pump system.

Newton Basedrain

Basedrain is a drainage conduit that is designed to be installed at the junction between wall and floor (ie wall/floor junction internally). It is an integral part of the Newton 500 system enabling water ingressing the weakest point of the structure to be channelled to either adequate natural drainage or a Newton pump system.

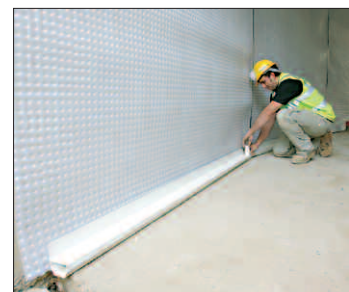
The special design of the channel enables insulated plasterboard to be used with the system, without fear of interstitial condensation. Jetting/rodding eyes are recommended for periodical maintenance.

Newton Baseboard

This is a drainage channel designed to remove water from the wall/floor junction where the slab cannot be damaged or where headroom constraints prevent the use of Basedrain above the slab. In certain circumstances it may be used without a wall membrane depending on the grade of waterproofing required.

It is recommended that all below ground work is carried out by a Newton specialist basement contractor.

Please note we recommend that all pumps are installed by a qualified electrician.



Top: Baseboard used in ministry building in Whitehall. Water is drained to the lowest level of the 5-level basement for removal.

Centre: Waterproofing of new basement using basedrain and 500 membrane.

Bottom: Newton Basedrain connector.

Left: Newton Titan Plus with battery back-up system.



A more detailed Pumps and Drainage brochure is available in both printed and pdf formats via our website at: www.newton-membranes.co.uk



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*Detailed information about all our products, accessories,
recommended procedures and finishes is available from our
Technical Support team. Call us now on 020 7237 1217.*