



Identifying The Correct Solution

John Newton & Company is the UK's leading independent supplier of structural waterproofing systems, water control and drainage products. Newton System 500 is a maintainable basement waterproofing solution for below ground applications, while Newton System 800 damp proofing membranes are ideal for treating damp walls above ground level. For further information ring 01732 360 095 or visit www.newton-membranes.co.uk

### Damp Proofing or Waterproofing – Identifying The Correct Solution

We are often asked to explain the difference between waterproofing and damp proofing and why one solution would be more suitable than an other. In order to confirm the correct solution, correct diagnosis of the problem is required.

There are many possible reasons why your property is damp. The moisture noted to the wall or wall finishes could have arrived there in a variety of ways and the correct identification of how and why the property is damp is recommended. If however, the dampness is showing in a property with external ground levels that are higher than the internal floor level, the moisture resident in the external ground is not only a contributing factor for the dampness already identified, but the high ground could also be saturated enough for water to bear against the structure, creating a risk of water ingress also.

Where high ground levels exist, it should be assumed that water ingress is a possibility and so a waterproofing system is required. Where there are no high ground levels a damp proofing solution is required.

**Does the damp area have earth bearing against external walls?** *In this instance a full waterproofing system is required* 

Are all ground levels below the internal floor level? Here, a damp proofing application would be suitable

## Implications of BS8102 Waterproofing Regulations

In situations where the external ground is higher then the internal floor, we are governed by BS8102:2009 (*Code of Practice for The Protection* 

of Structures Against Water from the Ground). BS8102 is a design document used to inform the designer of the various methods of waterproofing available and to assist in the correct specification of those systems.

Principle considerations are listed in BS8102 in order to develop a robust design for protecting a structure against groundwater. The overall general principle is to assess the risk of water reaching the structure and then to select a waterproofing system capable of achieving the required internal environment.





Whether a property has earth bearing against it is a key factor



In basements, a full waterproofing system like Newton System 500 is essential



Newton System 500 is fully compliant with BS8102:2009

### Newton Systems for Damp Proofing and Waterproofing

To summarise: if the external ground levels are higher than the internal floor levels a waterproofing system that can deal with running water is required. In this instance we would recommend **Newton System 500 – Type A Cavity Drain System for Basement Waterproofing** which collects the ingressing water and then safely removes it from the structure. If the external ground levels are lower, or can be reduced to be lower than internal levels, a damp proofing solution that deals with capillary held moisture can be applied to the walls and floors. For this our **Newton System 800 – Damp Proofing** membranes are ideal. If the floor is also affected by dampness, **Newton System 600 flooring membranes** should be considered.

**Newton System 800 - Damp Proofing** for the treatment of damp walls where the external ground level is lower than the internal floor

**Newton System 500 - Basement Waterproofing** is the solution for below ground areas like basements and cellars

## A Word of Caution

With the above in mind comes a word of warning: it is common for people to question why they should have a full waterproofing system if they only have slightly high ground levels and/or there is no running water present at the time. Whilst we understand their reticence, BS8102:2009 states that regardless of conditions at the time of survey, one should consider that water ingress will occur at some time in the future, and also suggests that as well as water within saturated ground we must consider the following as potential sources of water ingress:

- fluctuating water tables
- the future effects of climate change
- temporary pockets of water
- perched water tables
- burst water mains

The consequences of installing a damp proofing system where a waterproofing system should have been installed can be serious, with a high probability of water ingress and flooding. The resulting consequential loss can be devastating.

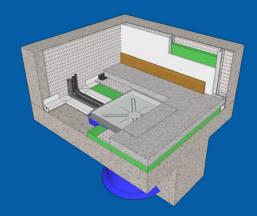
We are always delighted to advise on any waterproofing or damp proofing projects, please call 01732 360 095 to speak with our technical team who will be only to pleased to assist.



Newton 805 Newlath is the industry leading damp proofing membrane



Properties susceptible to flooding require a full waterproofing system



Newton System 500 is a fully maintainable basement waterproofing system

## Newton System 800 - The Solution For Damp Proofing

Newton System 800 is a range of BBA approved damp proof membranes and ancillaries which are quick and clean to install and offer a permanent solution for damp proofing walls. Newton 805 Newlath and Newton 803 Newtonite meshed membranes provide a firm key and impermeable barrier on any damp or deteriorating surface ready for plaster, render or dot and dab plasterboard. The un-meshed Newton 803 is used where insulation requirements dictate the use of a timber or steel frame ready for plasterboard. Newton damp proof membranes are the ideal solution for listed buildings as they are deemed 'reversible'.

Newton damp proof membranes are ideal for accommodating a number of finishes including:



#### 1: NEWTON 803

With battens
2: NEWTON 803
With metal frame
3: NEWTON 803 NEWTONITE or 805 NEWLATH

With dot and dab

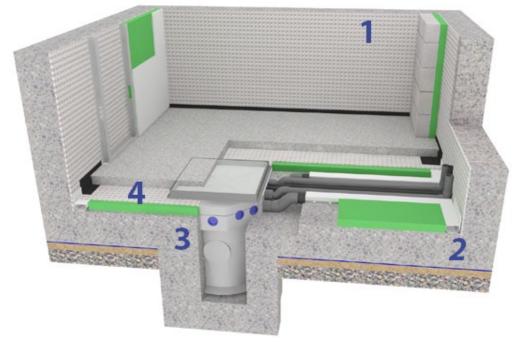
#### 4: NEWTON 803 NEWTONITE or 805 NEWLATH

With plaster/lime plaster/render

"As a homeowner I would strongly recommend that anyone thinking of waterproofing or damp proofing their property look no further than Newtons - their products are excellent and this is coupled with first class service" - G Palazzo, London

### Newton System 500 - The Solution For Waterproofing

Newton System 500 is not only the safest form of waterproofing available, but one of the easiest to understand and specify. A guaranteed dry basement or cellar is just four easy steps away. The image below shows Newton System 500 to a new-build concrete construction but the system is equally effective when applied to existing properties. It is a maintainable system, so complies with BS8102 requirements.



#### **STEP 1: WALL MEMBRANE**

Chose an appropriate wall membrane to suit your wall finish. In this example, Newton 508 has been chosen for the walls and is shown with both independent metal frame dry-lining and concrete block wall coverings.

#### **STEP 2: DRAINAGE SYSTEM**

Choose your preferred method of water collection. Here Newton Basedrain is sat above the slab adjacent to a spacer of 50mm of closed cell flooring grade insulation.

#### **STEP 3: PUMP SYSTEM AND PUMPS**

Choose the correct method of removal of the water. A Titan-Pro White sump system collects water from the Basedrain drainage system via two connections of Newton Floordrain. The pumps (not shown) would be chosen depending on factors such as the pumping head and the type of water collected.

#### **STEP 4: FLOOR MEMBRANE**

Choose the correct floor membrane for your finishes and floor loadings. Newton 508 is shown here with a 65mm screed above.

"We would strongly recommend that anyone looking for a cavity membrane product saves themselves the time of researching that market and go directly to John Newton Membranes – you will not be disappointed" - Richard Clist, Clist Properties Ltd

For technical advice or product literature, please ring 01732 360 095 and we would be delighted to assist

## **Guaranteed Installation With Our Registered Contractors**

Newton Specialist Basement Contractors are an elite group of professional basement waterproofing contractors who work in partnership with John Newton to provide the specifier and their clients with the highest quality products, design and installation available in all aspects of domestic and commercial basement waterproofing.



All members of the scheme adhere to very strict membership criteria and they are required to demonstrate quality workmanship resulting in a meaningful

scheme where all members provide a level superior technical excellence unsurpassed within the industry. For an NSBC in your area, please ring 01732 360 095 or fill out our online form Request List of Registered Installers.

## Damp Proofing Case Study - St George's Hall, Liverpool

St George's Hall, Liverpool suffered from visible dampness and mineral deposits leeching from the surface of the brickwork. Any remedial solution had to conform to strict Listed Building requirements, and had to work with the convoluted shape of the walls.

Newton System 800 damp proofing membranes were the ideal solution as they are deemed 'reversible' making them acceptable for conservation requirements, and they could be applied to follow the contours of the structure, as shown in the images below.



Newton 803 Newtonite skilfully applied to fit the contours of the walls



Plaster has been applied directly to the meshed membrane to form a new wall surface

## Basement Waterproofing Case Study - Residential Property, Surrey

The owner of this stunning Grade 2 Listed property in rural Surrey was looking to make use of an existing basement which was unusable due to severe damp problems. The owner consulted his conservation architect and was advised to use a system which was sympathetic to the structure and one that is reversible to comply with Listed Building requirements.

A Newton Specialist Basement Contractor (NSBC) designed and installed Newton System 500. The contractor was tasked to convert the three distinctive areas in this property into a top-spec cinema room, gymnasium and wine store.



Newton Baseboard was used as a means of moving the water that entered the Newton System out into an open elevation in the structure. Baseboard, a "hollow skirting board" drainage channel is unique to Newtons in the United Kingdom and is an excellent way of draining the cavity drain system where no internal head height can be added or the floor is structural and so prevents the forming of drainage channels.

The structural waterproofing was completed without any need damaging preparation of the original substrate and was finished with need of wet trades or drying out times, meaning minimal disruption and a highly cost effective basement waterproofing solution. The Newton Specialist Basement Contractor was able to take the project from design and installation to conclusion offering full PI on the design and an insured backed guarantee, the highest level of waterproofing guarantee available in the United Kingdom.



Application of Newton 508 cavity drain membrane to all retaining walls



The dry basement has now been converted into a home cinema

#### Advice and Product Literature

For further advice and product information, please contact us on 01732 360 095 or info@newton-membranes.co.uk