

Damp **TREAT**

WORCESTER

Damp and Plastering Specialists

Cellar / Basement Conversions Water Management Systems Explained



**Tel 01905 700248
www.damptreat.co.uk**

About Us

We are a small to medium sized family run company whose directors have worked together over many years having a combined experience of over 50 yrs in the plastering, damp treatment and general building areas.

Our most senior director David has been working in the damp, timber treatment and plastering industry all his working life. He has been joined in the company by his eldest son Daniel. Daniel holds a recognised health & safety qualification alongside his skills in damp treatments and plastering.

Peter is the third member of the team he has worked with David in one capacity or another since leaving university. Peter is a qualified structural waterproofing surveyor. Peter's father and mother are also involved in the administration side of the company.

We pride ourselves on the quality of our work and aim to promote the best possible customer relations.

We keep up to date with new techniques and treatments whilst still maintaining the traditional skills sometimes required in period property restoration

All three company Directors have had recent clean CRB checks .

All our work carries a company guarantee and we carry public liability insurance.

References are available for all areas of our work.

The Directors
(On the job team leaders)



David Chesham



Daniel Chesham



Peter Knight

A Local and Reliable Family Run Company

Quality and Reliability

**Certified Surveyor
in Structural
Waterproofing**

One of our directors is a certified surveyor in structural Waterproofing (CSSW). This is an essential qualification for those involved in advising on the design and specification of water management systems in cellars / basements



The Property Care Association is a national trade association which represents specialists in the structural waterproofing, wood preservation, damp-proofing, flood remediation and structural maintenance industries in the UK.

It aims to ensure high standards of professionalism among its members, who must be qualified to an approved level in the area in which they work. Their surveys and remedial work must be carried out according to its codes of practice. Other criteria for membership include customer service, health and safety and environmental protection requirements.



TrustMark is an initiative supported by the Government, the building industry and consumer groups to help consumers find reliable and trustworthy trades people to make improvements and repairs to their homes. If a firm displays the TrustMark logo consumers can be assured that it has been checked against a set of standards set by the Government by a TrustMark approved body.



Damp Treat Ltd is a member of the Worcestershire Trading Standards Register and we take our obligations under this scheme very seriously. Look us up on the trading standards web site



Wherever appropriate Damp Treat Ltd use British Board of Agrément (BBA) certified products. The BBA is the UK's major authority offering assessment, testing, approval and certification of products and systems for the construction industry against national requirements, internationally recognised standards or other relevant technical specifications



Damp Treat Ltd operates independently of any supply company. However over the past few years we have used Wykamol as our regular supplier. For 70 years, Wykamol Group has been the market leader in the provision and development of products for the remedial treatment industry. Their products are tried and tested and they provide excellent back-up support. However we will always seek to use the best product for the job no matter who the supplier and keep our ear to the ground for new developments and products within the industry. Should you have a preference for a particular product we will of course discuss this with you and incorporate it where appropriate.

Introduction

With the use of a correct water management system most cellars and basements can be turned into dry living spaces giving you extra room and adding value to a property.



Preventing the penetration of ground water into earth retaining structures such as cellars can be challenging and has seen many developments over recent years. We are often called to see cellars where previous water proofing attempts with bitumens, specialist paints and cement renders have failed.

However by using a company with appropriately qualified personnel and an excellent understanding of the causes of dampness and water ingress into underground structures most cellars/basements even those prone to flooding can be converted into dry habitable living space. Providing additional accommodation within the home.

There are many factors to consider in choosing the most appropriate way to control dampness and water ingress into a cellar/ basement, including water tables, compliance with building regulations, the condition of the walls, head heights, natural lighting as well as the final use to which the area is going to be put.

Selection of a competent contractor is therefore crucial to the success of the project.

There are two main ways to waterproof an existing, underground basement. The first, and the one dealt with in this leaflet and favoured by Damp Treat Ltd is done by lining the basement with waterproof membranes as part of a full water management system the other is cementitious systems not usually recommended by our company .



What is meant by a water Management System?

A Water management system is made up of 3 basic components:

Cavity drain membranes applied to the floor and walls

A perimeter drainage system

A sump and pump

All of these components are linked into one another to take ground water away from the structure and direct it into a suitable external drainage system.

More on the sump and pump

The sump is sunk into the floor of the basement/cellar and houses the pump. The perimeter drainage channel drains into the sump and when the level of water in the sump reaches a certain level a switch is operated to activate the pump. The water is then pumped via outlet pipes to a suitable external drain.



In some cases it may be advisable to install a second back-up pump within the sump. This gives added security in case of primary pump break down.

Alarms of varying sophistication can be fitted to the sump which will alert the householder to sump which has been allowed to overflow because of pump breakdown or an interruption in power supply.

More on Cavity Drain Membranes

Polythene Cavity Drain Membranes when used as part of a water management system are almost always the best solution to cellar/basement waterproofing. Cavity Drain membranes provide an air gap between the membrane and the wall, which allows any free water to run behind it and find its way into the perimeter drainage channel.

There is a range of membrane types available designed for different demands and situations, from shallow slim-line profiles to deep cavity products. This allows a wide variety of situations to be dealt with providing tailored solutions.



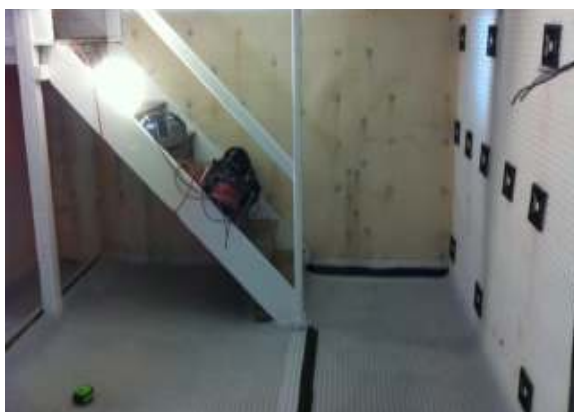
Why use Cavity Drainage Membranes

Since their development cavity drain membranes have become one of the most popular methods of structural waterproofing because of their reliability and the versatility they provide in achieving a polished decorative finish to the newly created living space.

The British Standard, BS 8102 for waterproofing structures below ground supports their use and has given waterproofing companies a guideline as to the level of protection they should be providing further promoting the use of these reliable and long lasting membranes.



Water management systems using cavity drain membranes provide the solution to the full range of dampness issues found in cellars and basements from flooding to general dampness or problems with surface salts. As well as being completely waterproof the membranes are impervious to salts present in the groundwater guarding internal decorated surfaces from staining. Other uses of these membranes include turf covered roofs and barn conversions.

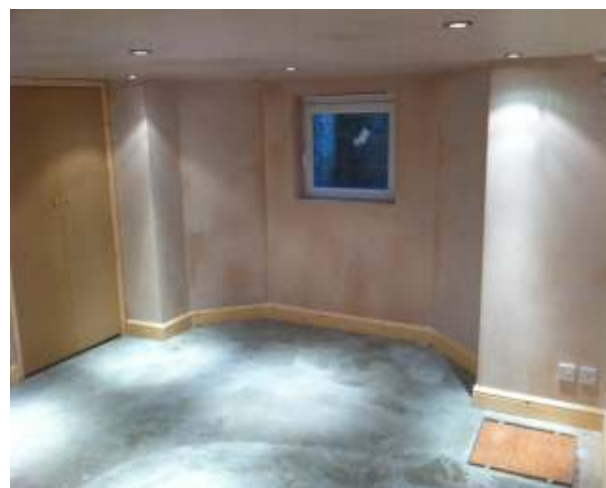


The membrane is fixed to the wall surfaces using special plugs. Edges and joins of the membranes are sealed using specialist tapes which creates a waterproof envelope within the room. This means that any ground water is prevented from penetrating through onto internal surfaces and runs freely in the cavity created by the studded design of the membrane. It is then immediately directed into perimeter drainage channels from where

it enters a sump and is then pumped away to an external appropriate drainage system. This means there is no pressure brought to bear on the structure by water trapped behind the waterproofing system. This gives a cavity drain membrane system a distinct advantage over water retaining cement based tanking systems where the pressure of the ground water inflicts stresses on the structure.

These cementitious type of waterproofing systems will only have a limited life .

Correctly installed and maintained water management system using cavity drain membranes should last for the life of the structure giving many years of problem free use of additional useable space within your home.



Other Factors to Consider

Building Regulations

If you intend to convert your cellar/basement to habitable living space rather than a storage space the work will be subject to building regulations. This simply means that a building notice has to be submitted to your local building control department. This alerts the building inspector to the start of work and he/she will then make several visits to the site whilst work is in progress to ensure that all the regulations are met. Unfortunately this is a fee attached to this process. Damp Treat Ltd are well used to working with building regulations and building inspectors and is able to fully assist you with the process of submitting a building notice. More information can be found on your local council web site.

Head Height

Many cellars have limited head height which can be a problem particularly if you are going for a full conversion into a habitable living space. It is often possible to dig out the floor to increase the head height but this is governed by the footings of the structure and is one of the aspects which will be carefully looked at by a building inspector as part of the building regulations. We can advise you on the possibilities of how far we are likely to be able to dig down when we first examine the cellar but it may be necessary to dig a test hole to gain a more accurate picture.

Ventilation

By its very nature of being an underground or partially underground structure a basement or cellar will have limited ventilation. It is important to install some form of mechanical ventilation to prevent problems with condensation. This is a wide range of ventilation units on the market ranging from simple extractor fans to positive input heat exchanger units. Damp Treat Ltd will be able to advise you on the right one for your cellar/basement

British Standard 8102

BS 8102 is the British Standard for waterproofing below ground structures such as cellars and basements.

It is not a compulsory document but compliance with it ensures:

- ◆ That work carried out is of a consistently high standard
- ◆ A more successful outcome to any cellar/basement waterproofing project minimising the risk of a waterproofing failure

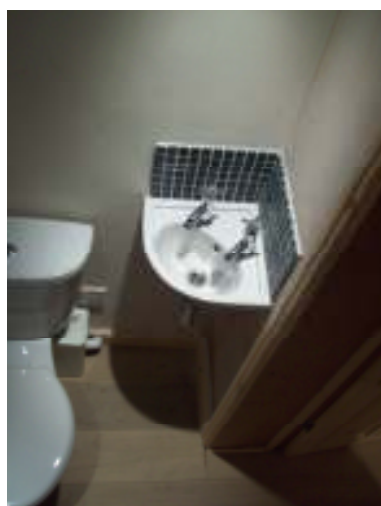
Damp Treat will always choose to work to BS 8102 unless the customer specifically requests deviation.

Work in Progress



Finishing touches

If all you want is a dry storage area you may choose to leave your cellar/basement at the membrane stage. From there on up various levels of finish are available from basic plasterboarding through to a finished room with, a smooth plastered finish, skirting boards, lighting, power points, aerial points, heating, wood flooring etc . In some larger cellars/basements it is possible to divide the area into different rooms providing for example a toilet or a utility area.

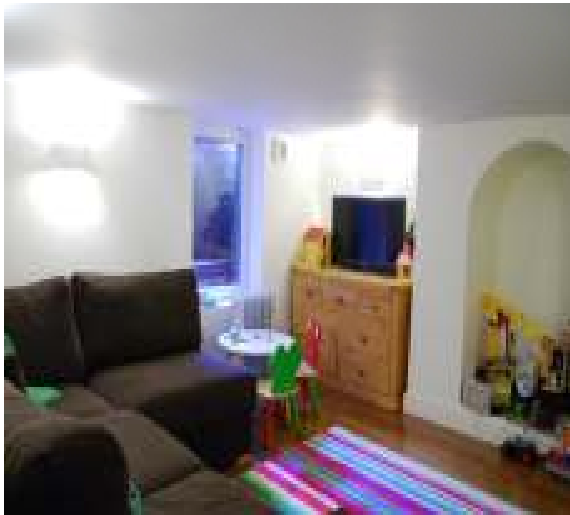
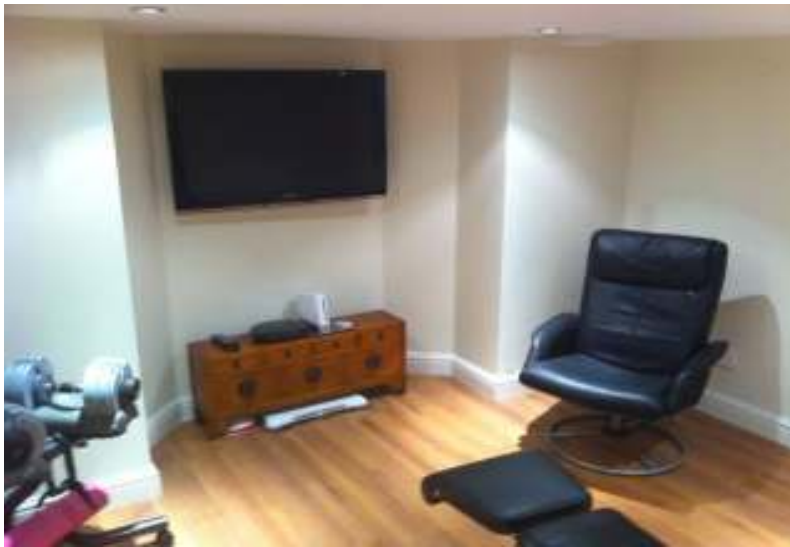


All pictures genuine Damp Treat Ltd projects



Whether you want a basic finish or a fully converted room Damp Treat Ltd will manage the project for you from start to finish. Unlike many other companies we have in house plasterers and see to these elements entirely ourselves. Plumbing and electrics are done by qualified experts who are well known to us under a sub-contracting arrangement.

The End Result



All pictures genuine
Damp Treat Ltd projects

After Sales Service and Guarantees

All of our water management systems carry a guarantee unless you have specifically requested a solution not recommended by us.

Where a full system has been installed compliant with BS 8102 we would normally give a 10 Year guarantee. This does however exclude the pump. As manufacturers only give a 12-month guarantee and the working life of a pump averages 4 years it is impossible to include them in the 10 Year guarantee. They will however be covered for 12 months as standard. In addition Damp Treat Ltd offer a service contract which if taken out will include an extended company guarantee on the pump and the fitting of a new pump every 4 years for the primary pump and every 5 years for a back-up pump at no additional cost. The service contract will also include a full check of the system alongside services of the pump and cleaning and flushing out of the sump and drainage channels.

Should you have any problem with your water management system within the guarantee period whether you have taken out a service contract or not you will find that Damp Treat Ltd will respond quickly and conscientiously.



What people say about us

After every completed job Damp Treat Ltd send out a Customer Satisfaction Questionnaire to every customer. We also send out a questionnaire to clients who did not take up our estimate. This allows us to receive feedback on how we can improve our service. Over recent years we have introduced new systems and made changes in response to this customer feedback. Virtually all of the customer feedback is positive, honestly! and below are some of the comments customers have included in their feedback.

"Job done quickly and on time"

A quote on what we needed doing, other companies added extras which we didn't need"

"Felt more confident and preferred local company"

" Prompt quote received, very friendly, courteous and trustworthy service"

"Individually tailored service"

"Kept to time, Came on time"

"We are thrilled to bits with our cellar and cannot thank Dan & Paul enough for putting up with our 3 year old Archie"

"Friendly and very helpful, especially when we came across problems"

"On time no mess left, very satisfied"

"All members of staff courteous and professional"

"Very prompt and provide an excellent service"

"Good confident knowledge of treatment sound advice"

"We found the builders polite and considerate and the work done was well within our time limit"

"Excellent plaster job, tidy worker"

All of our returned questionnaires are available for inspection on request. We are also able to supply contact details of recent customers who have agreed to provide references.