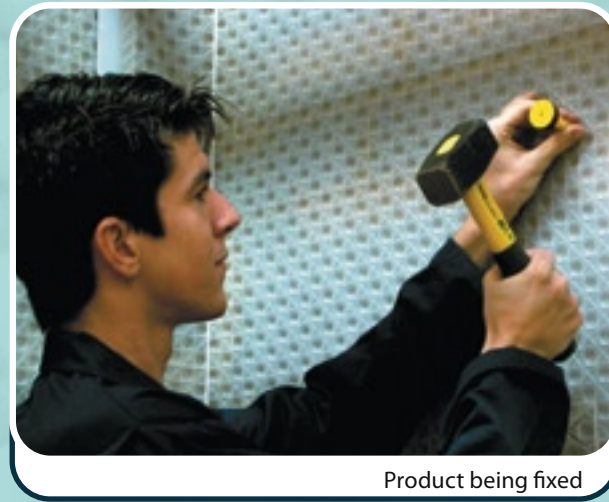


Introduction

We offer an extensive range of membrane products and auxiliaries for all types of below and above ground water proofing. These can also be used for the protection of salts damage caused by continuous / intermittent penetrating dampness.

All earth retaining walls could be subject to some water ingress at some time. These systems give you many options of control either from outside or from within the property.

There are many options and considerations to decide before applying these products, but almost always first is the question of - where will the water and dampness go when the contractor has completed his installation? The water needs to be controlled and discharged from the property to a drain - this can be carried out using drainage systems such as 'Aquadrain' alongside a sump pump if deemed necessary.



Product being fixed

Installation Details

In basements and vaults with soil retaining walls a sealed system is most often used. Sealing rope and tape is used to seal all joints, fixings, service entries etc. Usually drainage will be incorporated with or without a pump.

Above ground or where no running water is expected a ventilated system can be used i.e. an air gap at the top and the bottom of the installation. This allows the original walls to remain intact, but prevents any salt contamination or dampness.

Flooring can also be upgraded using our membrane to give various flooring options including screeds, both conventional and fast drying or timber floating floors.

As well as being used for cellars/vaults these products are used regularly in the following situations:-

- Barn conversions where salt contamination is a problem.
- Turf covered roofs.
- Tunnels / shafts.
- To protect damage from ground contaminated with Radon or Methane gas.

Various sizes of dimple are available for a cross section of needs and water flow, from almost flat flooring up to 20mm dimples on the P20.



Transform this...



...into this

Walls

For areas below the ground such as basements and vaults, the membrane is used as a sealed system whereby all membrane junctions, fixing points and service entries are sealed with plugs, tape and rope to form a watertight seal.

Preparation is fast and easy as the painstaking processes needed before using other tanking systems are not required.

Simply brush down the wall area and remove any sharp protrusions.

Plaster membrane is easily manoeuvred into place and attached to the substrate with plaster plugs. The membrane selected will depend on the required finish and the anticipated flow rate (if applicable).

After drilling a suitable hole, the plugs are hammered into place after forming a butyl ring around the base of the plug to provide a watertight seal on the membrane.

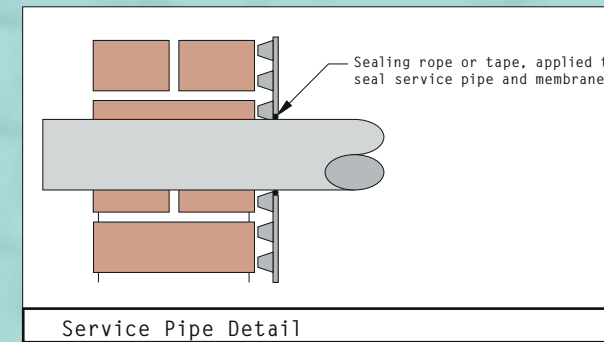
The flange at the end of the membrane provides a flat surface for sealing with tape, whilst stud-to-stud fixing is accomplished by using the sealing rope.

Where active ground water is expected or already in evidence, a drainage system should be incorporated into the specification (see Pumps & drainage section).

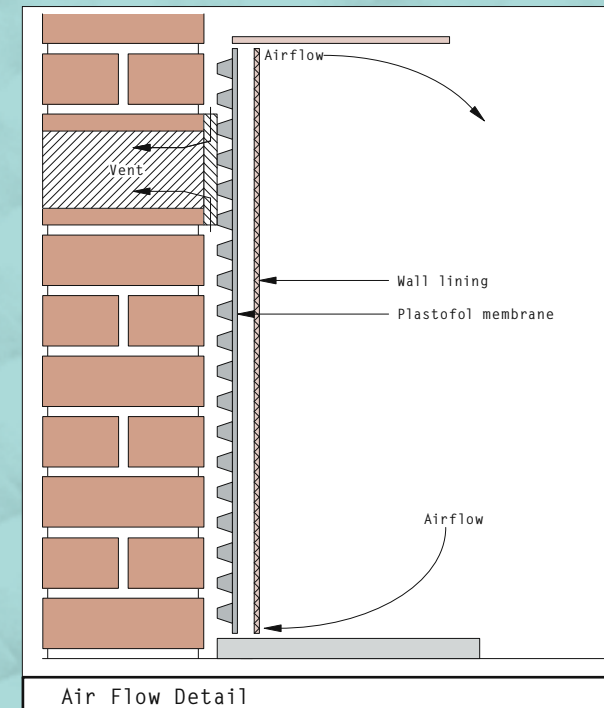
In situations above ground level where no free running water is expected, for example salt contaminated or damp walls, a ventilation system can be used. An overlap of approx. 10cm with an air gap at the top and bottom is usually sufficient in these circumstances.

This Method is often used as a general damp proofing system in heritage properties / listed buildings where a sympathetic approach is essential.

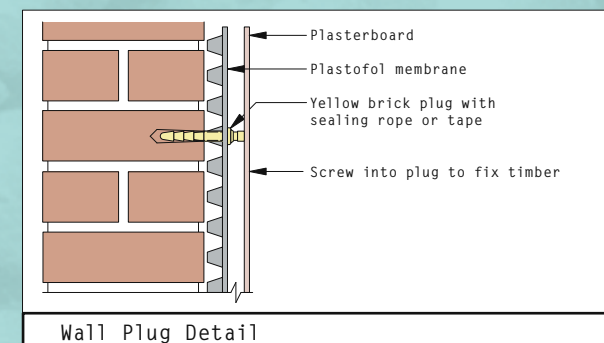
The fabric of the building stays the same but the new internal surfaces are dry and contamination free. Either dry lining or direct plaster finishes can be applied to the membrane.



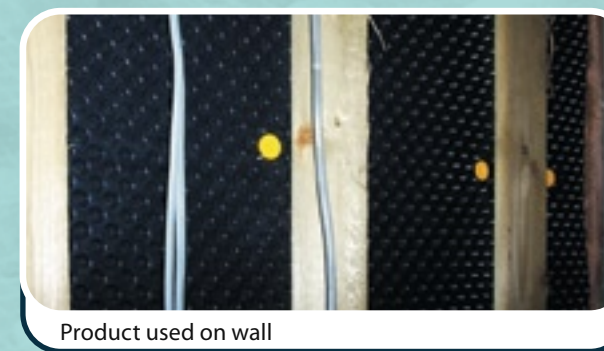
Service Pipe Detail



Air Flow Detail



Wall Plug Detail



Product used on wall

Floors

During refurbishment to protect a damp or contaminated floor, the membrane is simply laid out on top of the existing floor surface (after first removing loose material and sharp objects) creating a barrier against damp.

The floor type of your choice i.e. concrete, screed, timber, T&G or laminate can then be laid directly on top.

The membrane is extremely durable, rot-proof and impervious to root penetration and the close dimple spacing provides high compressive strength and stability.

The membranes are quick and easy to install, causing minimum delays in any subsequent building work to be carried out.

An addition to our extensive range of dimpled membrane systems is a specialist 'low profile' flooring membrane, which can be utilised where lack of space (i.e. limited ceiling height) is an issue or greater flexibility is required.

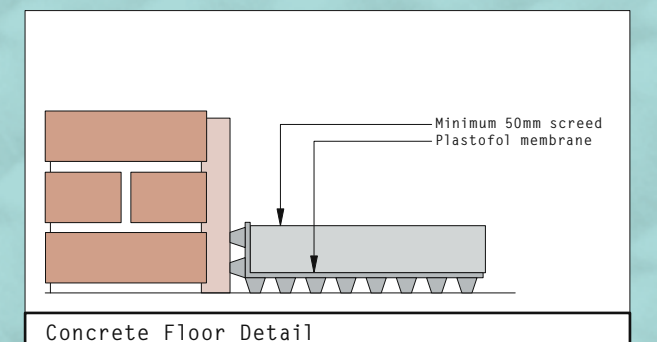
In new build situations where floor slabs are to be laid, the use of membranes can allow the fast-track installation of floor finishes while the floor slab is still drying down, allowing faster completion of projects.

Other Applications

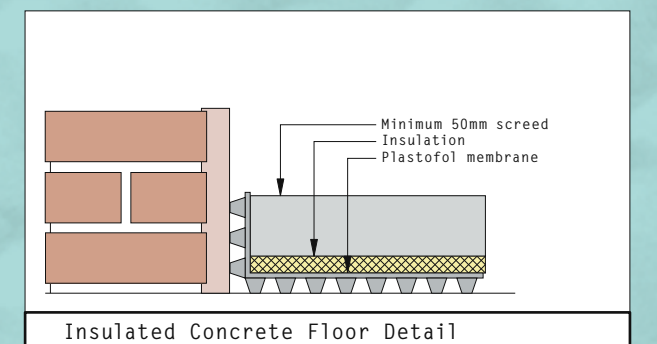
Our membrane systems are very versatile and in addition to their original use on walls and floors in damp cellars, there has been a large increase in use within period properties, barn conversions, new-build basements, tunnels and arches.

A common problem encountered when treating rising damp in period properties is the need to re-plaster using hard sand / cement render. Conservationists prefer less heavy renders to be used, however these types of plaster are not usually capable of holding back the salts contained in the wall. This is where a plaster membrane can be used to cover the damp wall and a more suitable plaster applied to the special mesh on the membrane.

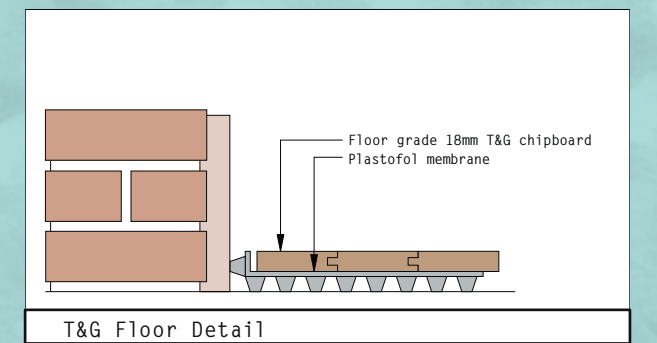
This solution is also useful when damp-proofing in barn conversion projects, where the walls are often held together by non-silicacious materials that are difficult to damp-proof using traditional injection techniques and a high salt content is present.



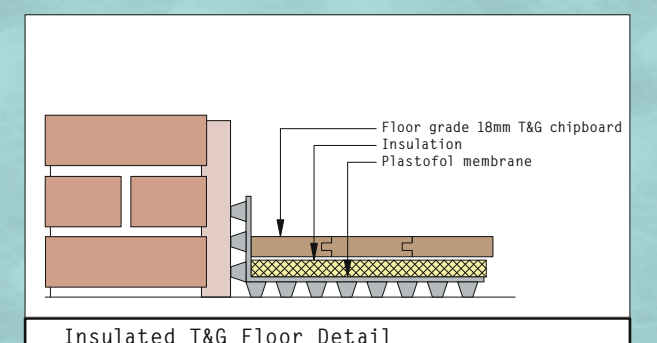
Concrete Floor Detail



Insulated Concrete Floor Detail



T&G Floor Detail



Insulated T&G Floor Detail



Product used on floor

Pumps and Drainage

Controlling and removing water / moisture from the building structure is achieved by creating drainage channels within the slab leading to a sump pump (such as the one shown right), which discharges the water to a drain.

Suitable for both new-build and remedial works to existing structures, Aquadrain (also shown right) is an ingenious drainage conduit designed to sit in the floor at the junction with the wall – the point of ingress for most structures.

When water enters the structure at this critical point, it is intercepted immediately by the Aquadrain, ensuring that the water is diverted to available drainage or a pumping system.

The water is moved below the finished floor level, enabling a complete system to be installed without adding to the original floor height.

We have a number of different pumping systems available for your specific needs and Aquadrain is available in packs of 6 x 2m lengths.

The Aquadrain system also includes jetting eyes and connecting joints with pre-fixed angle joints to make installation as simple as possible.

It is useful to distinguish between the different areas of membrane usage, a useful guide is that membranes are used as a watertight sealing system below ground level (waterproofing) and as a ventilated system above the ground (damp-proofing).



Aqua Pump



Aqua Drain

Accessories and Usage



White plugs with seals



Yellow plug with washer



Cob plug

Rolls of Membrane (No of 2 metre rolls)	Brick Plugs (No of Packs)	Sealing Tape (No of Rolls)	Sealing Rope (No of Rolls)
1	2	2	3
2	3	3	5
3	4	4	8
4	5	5	10
5	6	6	13
6	8	8	15

*Please note - If using Yellow Brick Plugs with seal, it is not necessary to use Sealing Rope



Sealing rope



Overseal tape



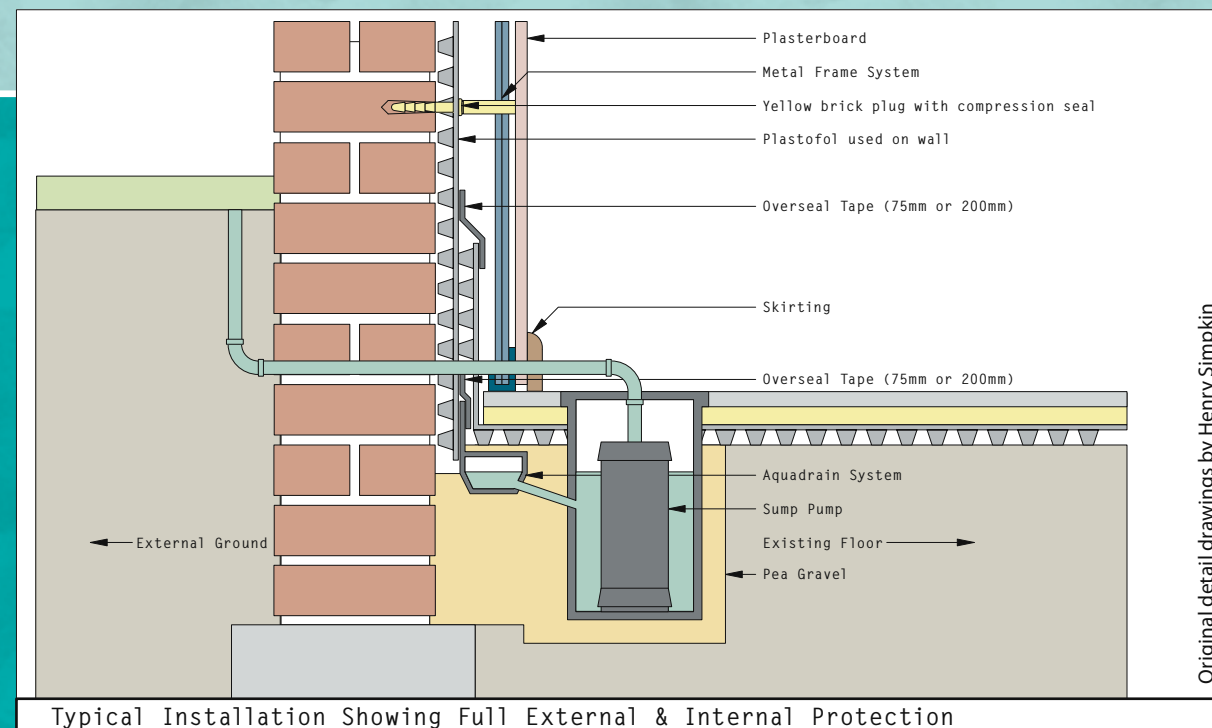
Wide tape

Technical visits are available on request and we can recommend approved contractors for specific locations

Transform this...



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Original detail drawings by Henry Simpkin

For further information on how to ensure that your property is waterproofed properly - contact your local approved contractor

Registered Office

Unit 3 | 18 Hanford Way | Loughborough
Leicestershire | LE11 1LS

T | 01509 217750
F | 01509 262228
E | sales@restorationuk.freemove.co.uk
W | www.restorationuk.com

Authorised supplier / contractor stamp

Restoration UK Waterproof Membrane Systems

