



By Appointment to H. M. The Queen
Building Material Manufacturers
Sovereign Chemicals Ltd
Barrow-in-Furness

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CI/SfB	993	X	(L34)



Sovereign
the gold standard in building products

SOVDRAIN

Cavity
Drainage
Membrane
Systems

**FOR STRUCTURAL WATERPROOFING
AND DAMP PROOFING**

BASEMENTS

Extra space inside without losing the outside.....

Most householders yearn for more useable space within their homes, an increasing requirement of today's modern living.

In general the initial reaction is to consider moving to a larger and more expensive property or extending the current home by traditional loft conversion or ground floor extension which can significantly reduce external space. So, whether it is to provide extra living space, a home office or simply dry storage/utility area, converting an existing basement is often the preferred option.



Design it **in** - same footprint, more space....



More and more designers are now opting to incorporate a basement level within new build development which can often overcome local building limitations while still meeting the remit of the client. Designed basements can provide dry, light and warm living spaces which greatly enhance the modern lifestyle of today's householder.



STANDARDS TO MEET



Substructure waterproofing design guidance is given in BS8102:2009 Code of practice for protection of below ground structures against water from the ground.

It recommends that a Waterproofing Specialist should be included as part of the Design Team so that an Integrated Waterproofing Solution is created



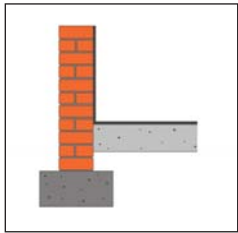
Sovereign *Meets The Standard*

the gold standard in building products

With their successful, long established and unrivalled specification service whereby upon request an individual specification will be drawn up for any structural waterproofing contract, however big or small. This service, forming an integral part of any basement conversion or new build development is provided free of charge by the specialists at Sovereign

The Code of practice for protection of below ground structures against water from the ground categorises the following types of waterproofing protection;

Type A (Barrier) Protection



which is dependent on a separate barrier system applied to the structure, and this is often referred to as "Tanking".

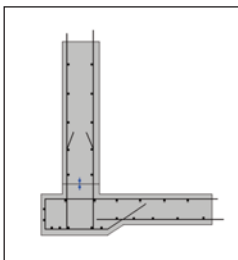
The Sovereign Hey'di K11 Tanking System provides Type A protection in accordance with BS8102.

BBA Certification Nos 91/2608

See separate literature for K11 System



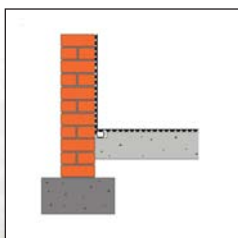
Type B (Structurally Integral) Protection



this is where the structure itself provides the waterproofing protection. Usually constructed using specifically designed steel reinforced concrete, the success of Type B generally relies on the mass concrete and efficacy of integral waterstops incorporated during construction.



Type C (Drained) Protection



which is provided by the incorporation of an appropriate internal water management system. The Sovereign SovDrain Cavity Drainage Membrane Systems provide Type C protection in accordance with BS8102.
BBA Certification Pending



Waterproofing measures should be designed on the basis of water to the full height of the retained ground at some time during the structure's life

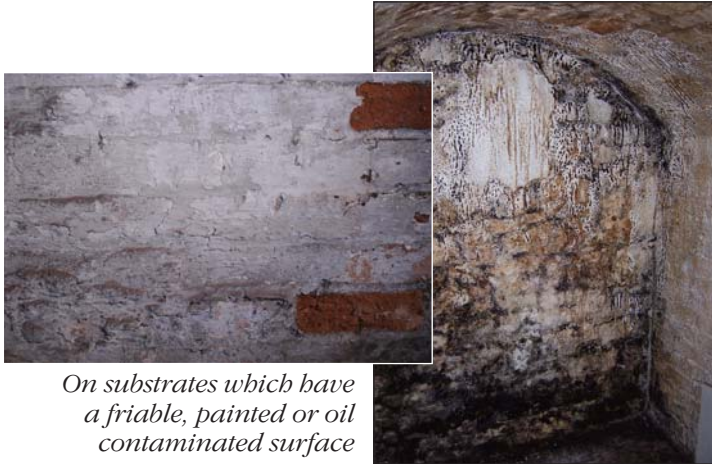
Similarly, the need for continuity in waterproofing protection should also be considered when designing the appropriate system

SovDrain Cavity Drainage Membrane System

The Sovereign SovDrain Cavity Drainage Membrane (CDM) System is a damp proofing and waterproofing system based on a range of cavity drain membranes, ancillary fixing and jointing materials, and drainage and pumping systems.

At the centre of this system is the range of cavity drainage membranes. These are supplied as rolls of high density polyethylene (HDPE), moulded to form a studded drainage core.

The Sovereign SovDrain CDM System is suitable for providing a water and vapour barrier in a variety of both above and below ground situations including :-



On substrates which have a friable, painted or oil contaminated surface



Basement and cellar walls and floors where the area is below ground/earth retaining which may be subject to high ground water levels and lateral damp penetration



Below ground areas with vaulted/arched ceilings which could be subject to dampness and/or water ingress



Where it is necessary to complete an installation and finishes quickly whilst the background is still damp



In flood remediation work

Over backgrounds that may be subject to vibration



Where rising damp is encountered and in association with a remedial damp proof course (dpc) system and/or where the walls have a high salt content

SovDrain CDM System Used Below Ground

Cavity drainage membrane systems, unlike conventional tanking systems, are not designed to hold water back. Instead, the CDM system works by applying the membranes against elements of the structure thus forming a permanent cavity between the structure and waterproof interior. Any ingressing water is allowed to enter the cavity, be collected in a drainage facility and suitably diverted out of the property.

A successful CDM system installation can be achieved in several straightforward stages

Preparation

The substrate(s) must be clean, sound and structurally stable.

Lightweight/gypsum plasters, loose, friable and any organic materials need to be removed. Surfaces should be as flat and even as possible, and areas affected by mould, moss, lichen and algae must be treated using Sovereign Masonry Sterilising Wash.



Application of wall membrane

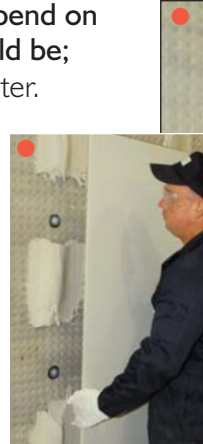


The appropriate membrane used will depend on the chosen wall finish which typically could be;

- Directly applied Sovereign Whitewall Plaster.
- Plasterboard dry lining onto dot and dab.
- Plasterboard dry lining onto timber battens.
- Dry lining onto an independent framework.
- Inner lining wall.

● SovDrain CDM 8

● SovDrain CDM 8 Latb



Installation of drainage facility

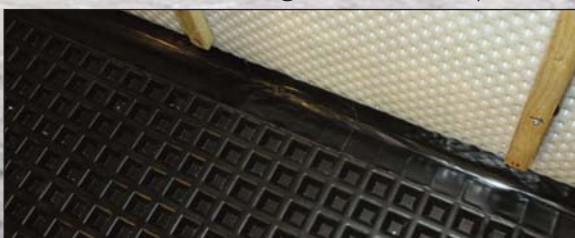
There are two principal forms of drainage, natural (using gravity) and mechanical (using sumps and pumps). The drainage facility must be designed and created prior to installing the membrane system. Generally drainage is achieved using either Sovereign Channel or Sovereign Aquaduct which is fitted around the perimeter of the structure in a preformed channel/void at the vulnerable floor/wall juncture, and leading to a natural or mechanical facility where water can be discharged.



Pump and Sump Chamber

Floor Membrane

The appropriate floor membrane is laid across the floor area and effectively joined and sealed at all junctions to provide a continuous waterproof barrier. The floor could be finished with a screed or floating floor for example.



SovDrain Cavity Drainage Membrane System

This image shows The Sovereign SovDrain Cavity Drainage Membrane System installed in an existing structure. However, this system is similarly appropriate in new build structures also.



Natural or Mechanical drainage

Natural drainage using gravity may be possible utilising existing live drains within the property or to a point(s) of exit to adequately low levels out of the property. Where this is not possible, mechanical drainage must be employed. A Sovereign sump and pump system collects water from the Sovereign Channel or Aquaduct system, and discharges water out of the structure.



Cutaway of Sump showing Pump



Cutaway of Pump

Sovereign also provides a range of Sumps and Pumping Systems, including accessories such as Power Backup and Alarms for use with the Sovereign SovDrain Cavity Drainage Membrane System, where a safe form of natural drainage is not available

Plastering

Sovereign Whitewall Plaster

is specifically designed and recommended for use on SovDrain Lath Membranes.



Ventilation

Below ground areas are particularly prone to condensation and consideration must be given for its control.

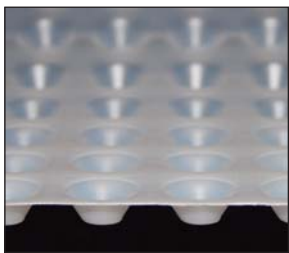
The Sovereign ConCure 20/20 wall mounted unit is recommended.

This is a state of the art home ventilation and condensation control unit which gently ventilates the area and assists in re-distributing heat from a central location in the basement.

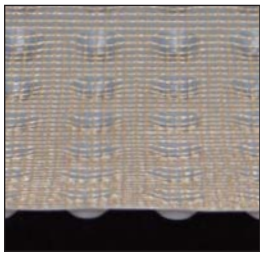


Major Components of Sovereign SovDrain Cavity Drainage Membrane System

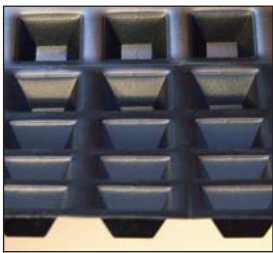
Membranes



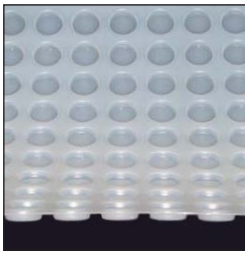
SovDrain CDM 8
For use on Walls and Floors



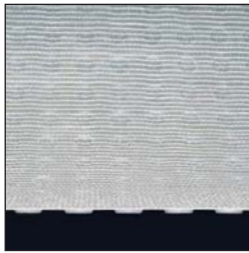
SovDrain CDM 8 Lath
For use on Walls



SovDrain CDM 20
For use on Floors



SovDrain CDM 3
For use on Walls and Floors



SovDrain CDM 3 Lath
For use on Walls

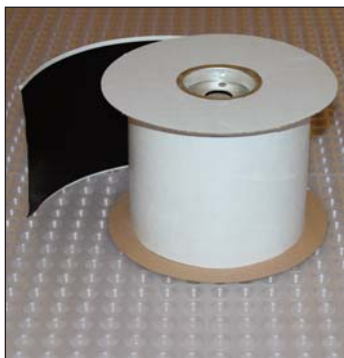
Membrane Joint Sealing



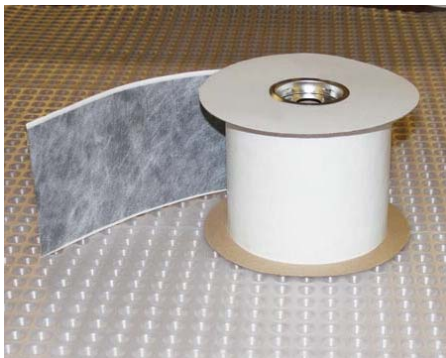
SovDrain Sealing Tape



SovDrain Sealing Rope



SovDrain Corner Strip



SovDrain Fleeceband

Membrane Fixings



SovDrain Membrane Plug



SovDrain Membrane Plug Washer Seal
For use above ground



SovDrain Membrane Lath Plug

Drainage Products



SovDrain Channel



SovDrain Channel Outlet



SovDrain Channel End Outlet



SovDrain Channel Jetting Eye



SovDrain Aquaduct



Change your life without
changing your address



Sovereign

the gold standard in building products

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