



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



**CONTRACTORS SHOULD INCLUDE A COPY OF THIS SPECIFICATION
WITH THEIR QUOTATION TO THE CLIENT**

GENERAL CONDITIONS OF ISSUE

Specifications are based on the information provided from non-disruptive assessments and remain valid for three months from date of issue. The advice given for walls and floors is for the suitability of that substrate to receive a Hey'di tanking or Sovereign Cavity Membrane systems. This report must not be regarded as a substitute for a structural survey and is also exempt from the provisions of the Contracts (Rights of Third Parties) Act 1999 (paragraph 1(2) refers), i.e. it is not intended for use by Third Parties without our prior consent.

The specification is only applicable to the areas stipulated in the Specification Request Form for the conditions found at that time. Contracts should not commence if there has been a radical change to ground conditions and a new specification will be provided. Alterations are only permissible through the Technical Department.

Except where instructed by the client, the onus remains with the company carrying out the contract in deciding upon the suitability and extent to which the system will be used,

Limitations of Guarantee and Specification

1. Liability will not be accepted where the treatment has been punctured, or similarly interfered with, or where the lack of external maintenance results in internal water ingress, as opposed to penetrating damp which the system and specification was designed to resolve.

Advice or assistance from Sovereign Salesman, for whatever reason, does not constitute "supervision"

DD101010-PP

Park Road, Barrow-in-Furness, Cumbria. LA14 4EQ.
e-mail labs@sovchem.co.uk Fax: 01229 840870
Technical Advice Line: 0845 603 0722

SPECIFICATION NO ----- DD101010-PP
 CUSTOMERS NAME ----- A SMITH
 CUSTOMERS ADDRESS ----- 55 THE AVENUE, BARROW IN FURNESS, CUMBRIA
 CUSTOMERS ACCOUNT NO ----- 10101010
 CONTRACT ADDRESS ----- 66 THE ROAD, BARROW IN FURNESS, CUMBRIA
 CONTRACT REQUIREMENTS ----- SOVDRAIN CDM APPLICATION TO BASEMENT
 INSPECTION DATE ----- 101010
 DATE RECEIVED IN TECHNICAL DEPARTMENT ----- 101010
 SPECIFICATION DESPATCHED ----- 101010

INSPECTION DETAILS

The building concerned is a terraced property of stone and brick construction. There is a basement area, which is to be converted into living accommodation. However being earth retaining, this building is subject to the potential of lateral damp penetration given the probability of a hydrostatic head of water externally. Therefore, the intention is to suitably prepare the area and then to provide, a damp proofing system to the interior of this structure.

Therefore, the intention is to provide a damp proofing system to the interior of these structures and using the Sovereign Membrane System is considered a practical option.

This specification is for applying Sovereign CDM8 Lath Membrane onto walls, and laying Sovereign CDM8 across the floor of the vaults, and creating a sealed system.

The Sovereign Membrane System will allow any ingressing water to percolate down behind the membrane and then be collected in a suitable drainage system that can then be discharged away.

The drainage facility must be designed and created prior to installing the system, and must drain water away to prevent any hydrostatic pressure build up. This can be achieved by various methods as described in BS8301, including channels cut into the floor, perimeter channels, soak aways and mechanical pumps for example.

Using Sovereign products, drainage is normally achieved by using Sovereign Channel, which is bedded into a preformed channel at the floor/wall junctures. Holes in the channel will allow water to ingress at these points and drain away to a discharge facility. Alternatively Sovereign Aquaduct can be used for this. Sovereign Aquaduct is a perforated pipe with a geotextile outer that can also be used in a similar way to drain water away to the outlet/collection point(s).

Should there be an existing drain then it may be possible to utilise this for such purposes, and to take water away, and this should be investigated further.

However, should it be impossible to create a suitable drainage system by using natural falls and existing or new drains then it would be necessary to control and discharge water by mechanical means such as the installation of a sump and pump operation.

In any event there must be a definite drainage system and outlet point(s) and this must be used to prevent standing/collecting water.

Note 1: A minimum of 20mm stones/shingle must be used to fill in any preformed channels.

Note 2: A drainage facility should be laid either at least level or ideally with a 1 in 100 fall.

Additionally, a flood test must always be carried out to ensure that water collects and is then discharged, before continuing and laying the floor membrane.

After fixing the Sovereign Lath membrane onto the ceiling and walls, place the CDM8 across the floor and effectively seal around the perimeter and at all junctions/joints.

Once sealed the floor can then be covered with the desired finish, such as a floating floor or screed for example.

For using Sovereign CDM8 Lath on the walls and ceiling, the transparent sheet will enable fixings to be made into the brickwork rather than the mortar bed joints. The use of a highlighter spray paint is beneficial if the visibility of the background is impaired.

If any walls are above ground level then the system may be vented in the cavity behind the membrane via an airbrick or passive vent for example. Airbricks should only be on one elevation to prevent cross ventilation behind the system, and preferably on the sheltered side of the building.

Upon completion the walls can then be plastered using Sovereign Whitewall Plaster.

CONTRACT DETAILS

- 1. Is there hydrostatic water ----- Potentially
- 2. Construction of the area ----- Brick/stone walls & concrete floor
- 3. Is the area rendered ----- Yes
- 4. Type of cleaning ----- General
- 5. Are there salts ----- Yes
- 6. Previously tanked ----- No
- 7. Are pipes passing through ----- Yes
- 8. Fixings to be attached ----- Yes
- 9. System specified ----- Sovereign CDM8 LATH for walls and Sovereign CDM8 for floor

SPECIAL REQUIREMENTS OF THE CONTRACT

The Sovereign Systems specified is designed to cope with capillary held moisture, but not water ingress unless the Sovereign Plugs incorporate a Sovereign Rope Seal. Under the circumstances we would recommend using the Sovereign Rope Seal to all areas of fixing.

The CDM8 membrane is not fixed on the floor.

When fixing the System to ceilings or soffits, ensure that there is a fall to create proper drainage and prevent ponding, i.e. in a roofing tile manner. Also any sagging of the membrane between fixing points should not be great enough for ponding to take place.

Sumps and Pumps (only required when natural drainage cannot be utilised).

For the contracts that require a sump and pump we would recommend using the Sovereign Single Pump Sump (CDM040) However, if the volume of water ingress is unknown it would be prudent to incorporate an High water level Alarm Kit (CDM 045), that would indicate whether the system was coping or needed to be updated.

Sovereign Ultra Pump and Sump (CDM 046) has a standard pump and a DC back up Pump this is idea for in areas e.g. remote country areas, where there is more potential for longer lasting power cuts or where there is a requirement for an additional pumping capacity when required. A high water level alarm is included.

GENERAL PREPARATION

1. All timber fixtures and other organic material must be removed to prevent the risk of fungal or bacterial growth behind the system, e.g. skirting boards, timber plates, old wallpaper etc.
2. All gypsum based materials to be fully removed.
3. All loose materials to be fully removed.
4. If there is evidence of dry rot (*Serpula lacrymans*) exists then this must be dealt with by a specialist contractor prior to installation of the System.
5. *Where the walls are uneven or areas have deteriorated, then any large depressions should be levelled and made good to ensure a solid fixing.
6. The floor should also be made as flat and even as possible.

WALL APPLICATION USING SOVEREIGNCDM 8 LATH

Sovereign CDM 8 Lath is placed against the wall either vertically, or horizontally with the overlap section at the bottom, so the domes are in contact with it (ie) with an air gap between the membrane and the wall). Fixings are made through the domes into 8 mm holes drilled into the substrate. Sovereign PT Lath Plugs are inserted into the holes and tapped flush with the membrane creating an effective seal with the Sovereign Rope.

Fixings are made at **maximum** 250 mm for internal plastered or dry-lined situations. Where necessary, end or side laps are made using the membrane's mesh-free area, overlapping by at least 100 mm, and fixings are made through both membranes into the substrate.

Overlaps must be sealed effectively. To minimise the need for laps, the membrane should be folded at the corners of the room and the installation continued on the adjacent wall.

Where butt joints cannot be avoided between sections of the membrane, a strip of heavy-duty polythene at least 200mm wide must be inserted and sealed behind the joint. The joint is sealed using Sovereign membrane Mastic.

The installation is conducted over features, such as windows, power points, light switches and later the membrane is cut away to expose them. Heavy-duty polythene is inserted behind the cut-away section to maintain the weatherproof seal, and the gap filled with a flexible polymer-based sealant.

Where there is access to an external wall, the cavity behind the membrane may be vented via an airbrick or passive vent. In this case the internal gaps are unnecessary.

Sealing of CDM8 Lath Membrane should be achieved at the unmeshed edge of sheet. This is done by fitting sealing rope between the back of the studs of the overlapping sheet, and pressing into place. Line up the studs to keep the joint as flat as possible.

DOOR OPENINGS

When you fit the CDM8 Lath to the wall with the door openings, please bear in mind that you will have to fit a section of membrane around the door head and lapped down the sides by approximately 100mm. You can then wrap the wall membrane around the sides, maintaining the correct drainage detail and forming an overlap. This application detail will produce a small gap on the angle of the door opening. This should be sealed using Corner Strip and expanding foam to fill void at corner, this will also divert any water ingress, should it occur.

Where service pipes, electrical wiring or other intrusions occur overhead or around the arch, these should be re-sited to a vertical surface where they can be better sealed and re-situated on the dry side of the system.

FLOOR APPLICATION USING SOVEREIGN CDM8 CLEAR

FLOORS

Where a floor application is required in this situation, which is common practice in this type of specification, it is laid as per our standard floor installation and sealed to the walls using rope or tape according to the type of joint.

INSTALLATION

Start at one side of the room and unroll the Sovereign Membrane with the studs down and the flanged edge against the wall. Turn the membrane up the wall a minimum of five rows of studs or by a sufficient amount to protect the floor finishes. For corners see the section on Sealing Instructions. Where the membrane meets a wall you must allow an up-turn as above.

All joints must be sealed effectively – for further information, please contact our Technical Department.

The next membrane width is rolled out so that the flange edge overlaps onto the studded edge of the last width. Clean both edges. Sovereign Tape is then applied to the studded edge of the membrane over the second row of studs with the backing paper still intact. Check the two widths for alignment, with the flange covering the backing paper. Starting from the middle of the joint, remove the backing paper and press down the joint sealing the two sections together. This process is repeated until all areas are covered.

When a stud to stud joint occurs, this should be overlapped and sealed with sealing rope as per our joint instructions, or this can be oversealed using Sovereign Corner Strip.

All joints must be sealed effectively –. At all wall/floor junctions where CDM 8 lath/ CDM8 meets, the two membranes must be thoroughly sealed using Sovereign Fleeceband or Sovereign Membrane Mastic. If there are any services up through the floor, the membrane can be cut and trimmed around them, and the gap filled and sealed using the Sovereign range of adhesives. If necessary, a patch of membrane or plain DPC (PVC) is laid over and sealed to the service with sealing rope, and around its perimeter with Sovereign Tape or Sovereign Rope, depending on the type of joint.

OVERHEAD INTRUSIONS

Where service pipes, electrical wiring or other intrusions occur overhead or around the arch, these should be re-sited to a vertical surface where they can be better sealed and re-situated on the dry side of the system. Most services can be concealed between the battens.

SERVICE THROUGH THE FLOORS AND WALLS

Occasionally, service pipes and other intrusions will interrupt a continuous application of the membrane. In this instance the membrane should be trimmed neatly around the service and sealed using the Sovereign Rope or Sovereign Mastic, whichever is applicable.

If necessary, a patch of membrane or plain (plastic type) can be overlaid and sealed to the service around the perimeter using the Sovereign range of products.

Where pipework and electrical cable run vertically then they should be re-sited, if possible, on the dry side of the system.

GENERAL

In all cases, but particularly in sealed applications, ensure that membrane overlaps are made which provide continuous drainage behind the System. Avoid making laps that would allow water to drain onto the joints.

VENTILATION

Suitable and adequate ventilation, to be installed in the cellar.

MAINTENANCE

Generally speaking, Sovereign Membrane Systems are maintenance free. However, there are a number of points you should be aware of, and indeed your client should also be made aware of.

CHECKS PRIOR TO FINISHES

During the installation of the System any repairs that are required should be carried out as they occur. This will save time later, and reduce the risk of overlooking a potential problem.

Once the System is installed, but before the finishes are applied, the membrane should be checked for damaged areas and repaired as necessary. Also joints and seals should be checked to make sure they are adequate. Any repairs found necessary should be carried out as required, retaining the watertight integrity of the system.

ALTERATIONS

Sovereign Membrane Systems are flexible high density Polyethylene membranes. Our systems, like other waterproofing systems should not be pierced in any way.

If works are proposed in the basement area which are likely to penetrate or disturb the membrane, advice must be sought from the specialist installing company or Sovereign Chemicals Limited prior to such work being carried out.

Even if minor modifications are proposed to the waterproofed areas, such as shelves, cupboards, etc. The specialists should be contacted so that they can advise on the correct fixing methods.

MATERIALS REQUIRED

" Contractors must verify all material requirements on site prior to undertaking the project"

Walls = 197m²
Floor = 83m²

Sovereign CDM8 Lath 2.0m x 20m	CDM002	6 x rolls
Sovereign CDM8 2.4 x 20m	CDM007	2 x rolls
Sovereign Tape	CDM 012	8 x rolls
Sovereign Rope	CDM 011	22 x rolls
Sovereign CDM Lath Plugs	CMS015	17 x boxes of 250
Sovereign Corner Strip	CDM020	1 x rolls
Sovereign Fleeceband	CDM019	7 x rolls
Sovereign Aquaduct	CDM085	1 x 150m x 60mm

Should you require to discuss this further, please contact eitheron mobile
or our Technical Department on: 0845 603 0722.

TECHNICAL OFFICER

SPECIMEN