

The Sealed System

In Soil retaining situations such as basements and vaults etc, the **NuLife** sealed system is recommended. The membrane selection depends on the required finish and flow rate, if applicable. All membrane junctions, fixing points, service entries and other protrusions are sealed with the **NuLife** Seal range of sealing products. Where active ground water is evident or expected, drainage of one form or another should be incorporated into the specification. Our Technical staff are available to give advice in this respect.

The Ventilated System

In above ground situations or in areas where no free running water is expected, for example where external pavements have been built up, the ventilated system can be used. The ventilated system with air gap at top and bottom does not require sealed joints or fixings, a 100mm overlap is sufficient in this

situation. This method is seen as a sympathetic solution in Heritage type properties as a general damp proofing system. The fabric of the building remains unchanged but the new internal surfaces are 'dry' and are salt and contamination free. Both dry lining or plaster direct finishes are available on the ventilated system.

Floors

As well as being a complete waterproofing and damp proofing, **NuLife** system is also used to upgrade damp and defective floors. With excellent crush resistance, the system lends itself to a variety of different finishes which include conventional screeds, thin layer fast-drying screeds and wood based floating floors. Insulation can also be used in conjunction with the system where required. The system can be linked to the D.P.C. constructed within a new wall or to an existing or chemical D.P.C.

Preparation

As the membrane systems are mechanically fixed, there is no reliance on the ability of the product to bond to the substrate. The **NuLife** system can be applied to a variety of different substrates, for example over existing renders or broken down bitumen coatings, etc.

This can be easily achieved without detriment to the integrity of the system.

Damp Pressure Equalisation

The studded structure of the membrane allows the dampness behind the membrane to move in all directions unhindered, therefore the whole of the wall or floor surface takes the damp loading. Break down created by weak



points are eliminated. The product does not divert the problem to other areas.

Flexibility

In structures where movement or vibration can be a problem, examples being under street vaults, railway arches, and buildings constructed with movement joints, the **NuLife** system can cope. The **NuLife** membrane has an elongation break of greater than 50%.

Speed

As there is little or no preparation required, the system is by comparison quick to install. When dry finishes are used the system is a 'fast track' solution.



Decoration does not need to be delayed as there is no drying process. The Alderprufe brand has a track record approaching three decades. The **NuLife** systems have been used successfully in many situations in the U.K. From small domestic basements up to major waterproofing of London Underground stations, there is rarely a dampness or water ingress problem that falls outside the scope of the capabilities of the **NuLife** system.

What are NuLife Systems

With the introduction of the latest British Standard 8102 (1990) 'for Protection of structures against water from the ground', the use of cavity membranes has been generally accepted in the U.K. **NuLife** Systems are a complete range of products which are used together



to solve many of today's problems in both new and old construction. **NuLife** Systems can easily deal with aggressive ground water conditions, where basements are liable to flooding, or indeed where simple



dampness, contamination or salting problems are prevalent. Other more diverse applications include Turf covered roofs, barn conversions, tunnel linings or even as a barrier against radon gas.

The main components of the system are the membranes themselves. These are manufactured from virgin high density polyethylene which is thermally and alkaline stabilised. The stud heights vary between 8mm for **NuLife 500** and Original Lath to 20mm for **NuLife MS20**. The cavity created by the membrane contains between 5 and 10 Litres of space respectively. This is known as either the 'Air gap' or the 'Drained Cavity', in wet situations.

The Membranes

NuLife 500

(Known as 'System 500'). This membrane is used on both wall and floors with an 'Air gap' of 5.3 Litres of space per m². Available in 2.4m x 20m (48m²), this

membrane is used for light water ingress situations. This membrane is also available in a clear version/ 2m x 20m (40m²) for walls. This aids the selection of good fixing points in the more difficult application i.e. Random stone and friable brickwork. The sealed **NuLife** fixing is used to secure System 500. The centre shank of this fixing is also used for subsequent dry lining applications.

ORIGINAL LATH

This membrane has a mesh incorporated on the internal face which is attached by a thermic welding process at the time of manufacture. The sealed **NuLife** fixing plug is used to secure the membrane at 250mm horizontal and vertical centres. The welded



mesh and fixing plugs allow for direct render 1.1.6.

(cement/lime/sand) or plasters:

Tilcon Whitewall, Carlite

Bonding, or dab fixed plaster-board for internal applications.

When this grade is used for external above ground protection, S.R.P. plain or decorative renders can be used as a finish. These renders are polymer modified and also have reinforcing fibres incorporated for added strength and durability. This grade is available in 1.5m x 10m (15m²) rolls.

NuLife MS 20

This is a heavy gauge version of System 500 with deep 20mm studs. This is used where extra drainage capacity is required, for example on deeper structures, or where a larger flow rate is required. MS 20 can also be used as a 'cavity former' for many types of new construction. The rolls are a full 2 metre width by 20 metres in length (40m²).



External Protection

Aquadrain

Structures that are earth retaining can be damaged by moisture penetration from the outside or by water under hydrostatic

pressure. **AquaDrain**

Membranes are available as geocomposites to deal with such problems. They act as a water-proof drainage layer, and quickly remove the water to suitable drainage around the structure.

They prevent the build-up of hydrostatic pressure on the structure and filter the water via an integral polypropylene filter layer. This prevents the fine ground particles from blocking the drainage facility and avoids destabilising the soil.

Guarantee

NuLife membrane systems come with a thirty year guarantee. The guarantee covers the membrane and all other system components. Based on experience, accelerated ageing tests and a quality manufacturing system to ISO 9001, the **NuLife** range can also be guaranteed with confidence. Staff are available to visit site to give advice on particularly difficult or in unusual situations, where appropriate specifications are prepared to assist in the correct use of the system. We believe our technical staff to be

second to none and certainly the most experienced in the U.K. Market. This service is open to Property owners, Architects, Surveyors and specialist companies.

Who Installs NuLife Systems

Although **NuLife** systems are by comparison, easy to install, it must be recognised that correct diagnosis of the problem is essential so that **NuLife** systems can be designed and tailored to the needs of the building, to give

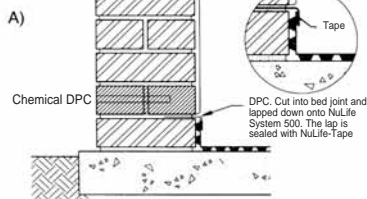


the best possible performance. It is therefore recommended that only competent specialist contractors who understand dampness and the associated problems be employed to survey the site or install the system and thereby ensure the best possible performance of the **NuLife** system.



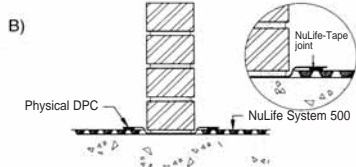
NuLife System 500 Existing Solid Wall Detail

NuLife System 500 floor application sealed at DPC level. The DPC can be a chemical DPC (as shown) or a physical DPC can be cut in and sealed to NuLife System 500



New Internal Solid Wall Detail

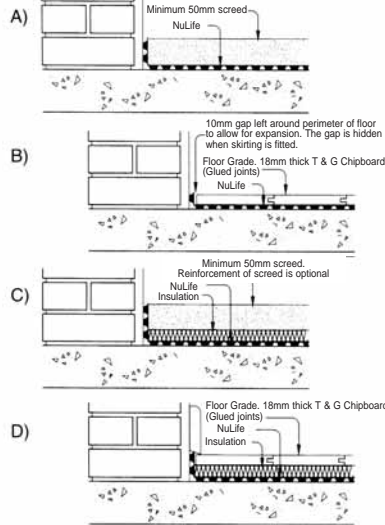
Providing continuous membrane across floor under new dividing walls.



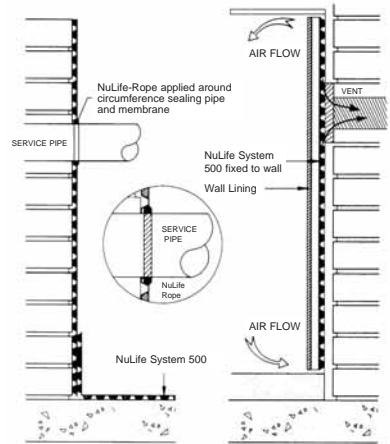
A continuation of the floor membrane can be achieved by extending the physical DPC. Beyond the new wall to overlap onto NuLife System 500. This is then sealed with NuLife-Tape.

NuLife System 500 Typical Floor Finishes

The following options apply to the 8mm or 20mm stud design



NuLife System 500

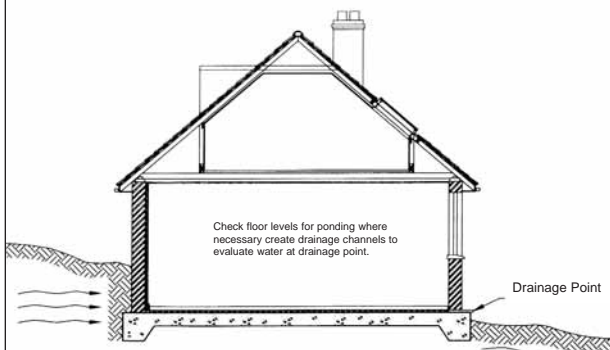


Detail around service pipe

Ventilated system

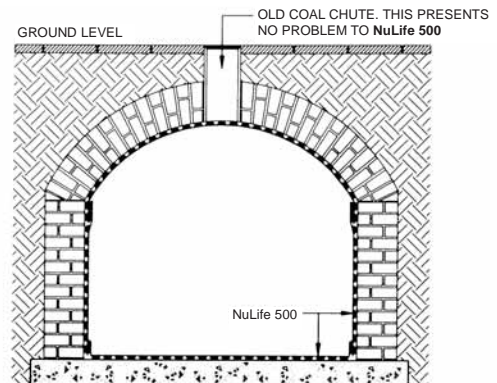
* As an option, the damp pressure can also be released externally via an air vent

NuLife System 500



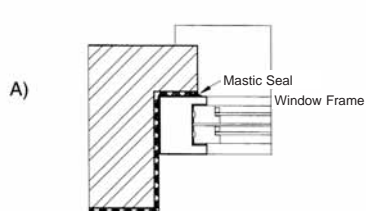
NuLife System 500 can be installed to the earth retaining elevations and floor of the property. This allows the water to be controlled behind the system, bypassing the property and carrying on down the natural incline of the hill. The internal surfaces remain dry.

EARTH RETAINING VAULT

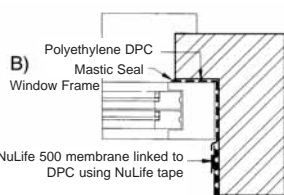


Vaults can be completely sealed against water ingress. Even running water problems can be controlled with minor modifications to the specification. The system can be dry lined to a decorative finish. The floor can be screeded or finished into wood based sheets. Where a plastered finish is required, NuLife PT can be used. (Please refer to our technical department.)

NuLife System 500



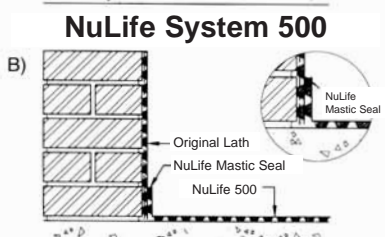
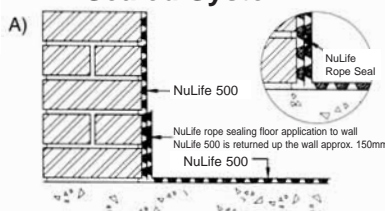
NuLife System 500



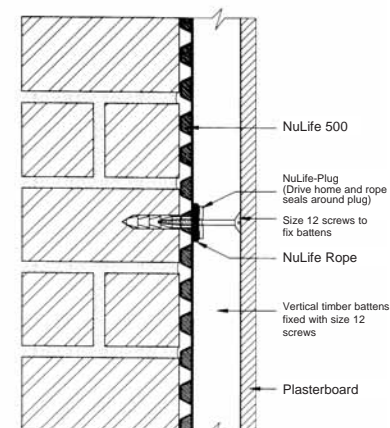
When Original Lath is used in this situation the DPC should continue behind the membrane and can be sealed with NuLife Mastic or rope.

Window Reveal Details

Wall/Floor details on Sealed System



NuLife 500 incorporating Original Lath on the walls



Section showing fixing detail

Pre-treated battens can be fixed into NuLife-Plugs using size 12 screws. The Drill bit size for this plug is 11mm