

Alderprufe Aquadrain System

Total impermeable waterproofing and drainage system for the protection of structures below ground

Two technically advanced products singularly

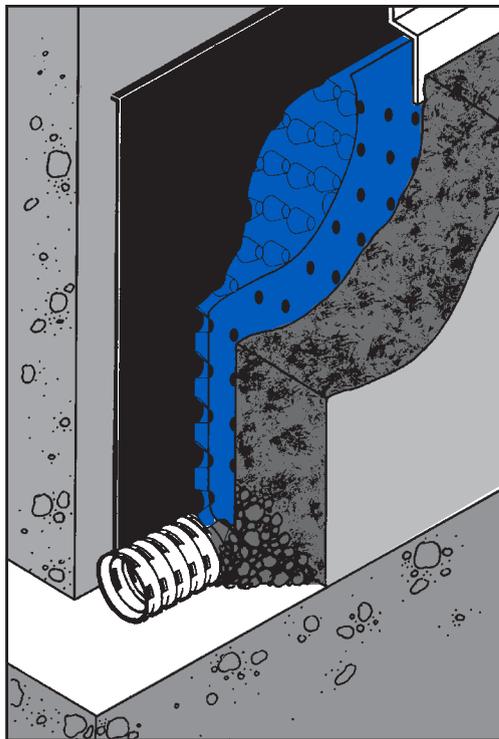
Combined, provides a unique three stage system without compromise

Simple, quick installation

Isolates structure from surrounding ground conditions

Unique fixing method allows for any subsequent backfill settlement without danger of damage to waterproofing layer

Drainage system replaces need for protection boards reducing material cost more efficient use of labour



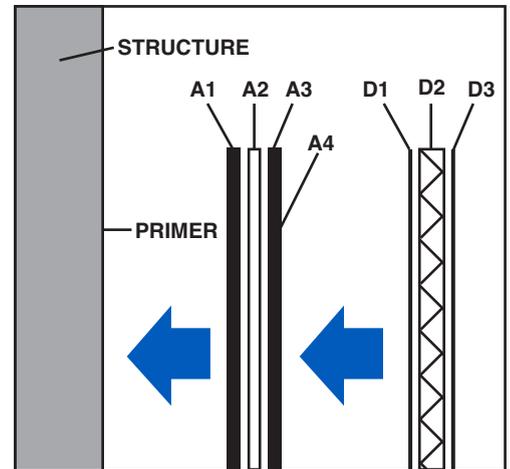
There are many systems available for waterproofing structures and controlling drainage.

The Alderprufe Aquadrain system solves both these problems in joint application in a unique way. Combining technically improved waterproofing, protection and drainage capacity. Isolating structures from surrounding ground conditions in a single joint application without compromising on installation.

Alderprufe 20K and Alderprufe Aquadrain are both technically advanced products designed to solve specific problems and are independently specified.

For full individual product data please refer to relevant data sheet.

When combined they provide the ideal solution to a specification requiring waterproofing and drainage control. A unique system giving the best of both fields.



Alderprufe Membrane 20K is a waterproofing membrane with unique properties because of its sandwich construction.

- A1** - 1mm thick Self-Adhesive compound protected by a siliconised release paper prior to application.
- A2** - Cross-Laminated rubberised polyethylene waterproof membrane.
- A3** - 1mm thick Adhesive compound.
- A4** - Thin polyethylene film protecting A3, heat removed to expose A3 prior to lapping membrane and applying Alderprufe Aqua-Geo-Drain.

Alderprufe Aquadrain - A two layer sheet drainage system - high impact resistance high drainage capacity.

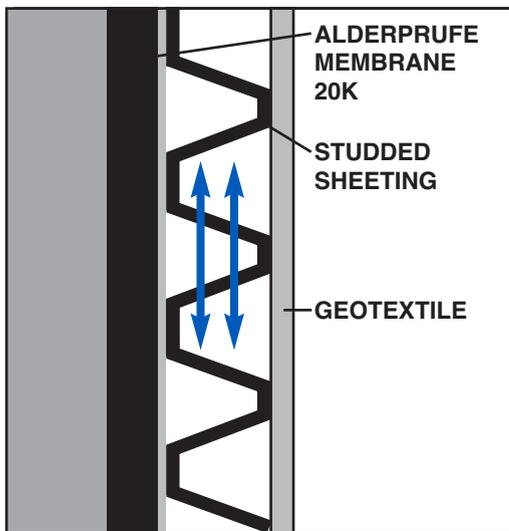
- D1** - Studded sheet providing drainage channel
- D2** - Non-woven Geo textile membrane forming filter layer to prevent clogging of drain channels

Application

Alderprufe Membrane 20K is applied as per instructions - see separate data sheet.

The Alderprufe Aquadrain is cut to length - to be applied vertically in 1 metre wide strips.

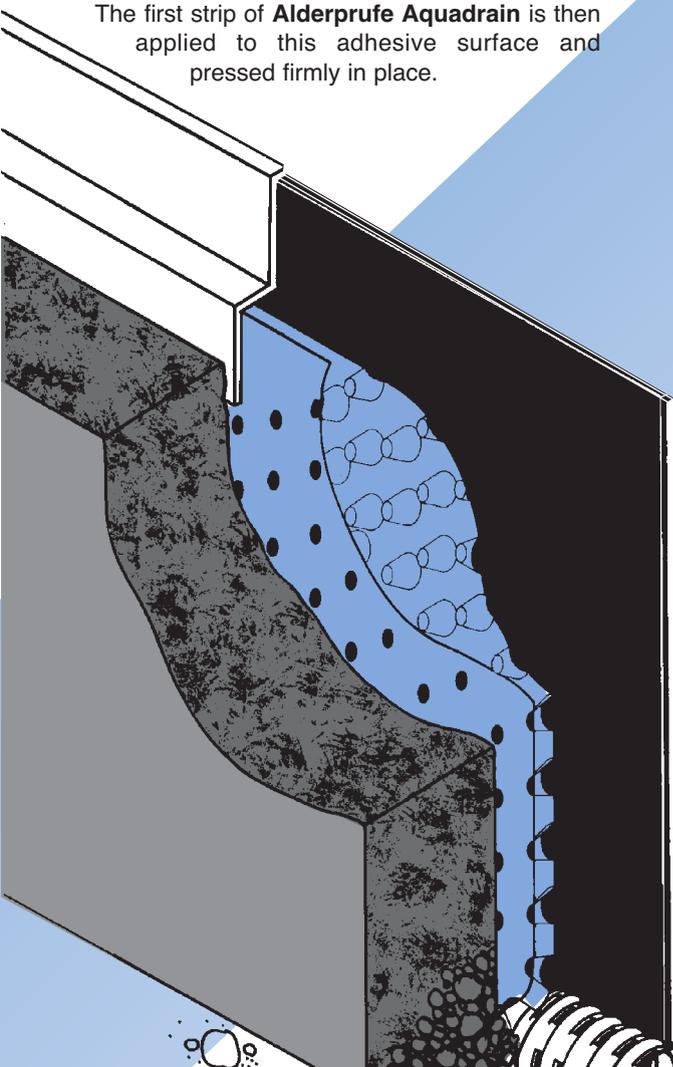
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With the gentle application of heat either from a gas torch or hot air gun the protective layer of polyethylene A4 on the outer surface of the membrane 20K is removed in a 1 Metre wide strip vertically.

This exposes the top layer of modified adhesive bitumen compound A3.

The first strip of **Alderprufe Aquadrain** is then applied to this adhesive surface and pressed firmly in place.



The second 1 metre wide strip of Alderprufe is then exposed and the **Alderprufe Aquadrain** is then applied in exactly the same way, taking care to tightly butt joint the core and overlap of the geotextile.

If terminating the **Alderprufe Aquadrain** before ground level care must be taken when applying the Aqua profile strip. Multi-stick double sided tape applied between the profile and the membrane 20K top surface being the ideal solution. If terminating above membrane, mechanically fix at top edge and finish with Aqua profile.

The **Alderprufe Aquadrain** must terminate over the top of the land drainage pipe installed in a suitable filter bed to allow water to be discharged into the drainage system.

Once in place backfilling with excavated material can be carried out, saving on graded material.

The **Alderprufe Aquadrain** acts as a protective layer when backfilling and minor settlement is accommodated by the unique sliding film allowing the drainage system to move with the settlement without fear of drag on the waterproofing membrane.

Two technically advanced products working independently and in perfect harmony to create possibly the best water control system available to isolate structures below ground.

Specification

Waterproofing and drainage control to be **Alderprufe Aquadrain System** applied and fixed strictly in accordance with manufacturers instructions as supplied by Alderburgh Ltd., Sladen Mill, Halifax Rd., Littleborough. Tel: 01706 374416

Health and Safety

There are no known safety hazards associated with the products used in this system. For further information please refer to separate Health and Safety Data.

Technical Service

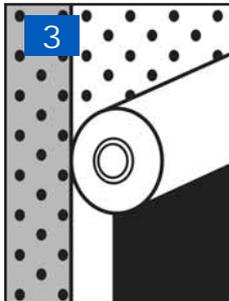
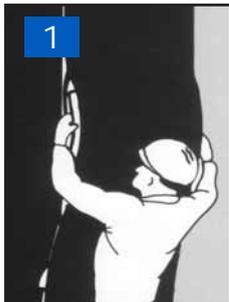
Technical Staff are available to advise and assist the use of these products from drawing stage to site application. A list of approved applicators is also available from our sales office.

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Precautions

If the system once applied is to be left exposed for any length of time before backfilling, the whole system must be temporarily supported.

Only expose enough of the top layer (A3 in diagram) of adhesive compound as you intend covering with the **Alderprufe Aquadrain** in the same work period.



- 1 Applying membrane 20K as per specification sheet
- 2 Aquadrain applied to exposed top surface of membrane 20K
- 3 This procedure is repeated overlapping Aquadrain on the 14cm flat edge.



Membrane 20K

SELF ADHESIVE WATERPROOF MEMBRANE

Technical Data

Bitumen thickness	2.00mm
Polyethylene core thickness	0.09mm
Elongation at break	in excess of 600°
Roll width	1mt
Roll length	15mt
Roll weight	36kg
Overlap	100mm

Mechanical Properties

Tensile strength of joints tested to MOAT 27.

Unaged membrane	110
Heat aged	85
Water soak	100

Water vapour transmission rate and transmission resistance at 75% RH and 25°C are as follows:

W.V. Transmission rate	0.30 (GM ² d ⁻¹)
W.V. Resistance	684 (MNsg ¹)
Puncture resistance (Max load [N])	122
Durability:	At least the life of the building in which is installed.

Aquadrain DRAINAGE SYSTEM

Product Description:	Aquadrain
Material Of Studded Sheeting:	High density Polyethylene
Material Of Geotextile:	Polypropylene
Stud Height:	app. 10mm
Roll size:	1mt x 25 mts
Pressure Resistance:	app. 400 KN/m ²
Drainage-capacity:	app. 7lts/m ² /sec
Air Volume between studs:	app. 7.9 l/m ² /sec
Temperature resistance:	-30°C to + 80°C
Chemical properties:	resistant to chemicals resistant against root penetration, rot proof neutral to ground water