AQUAGARD PITCH POLYMER DPC SYSTEM BY MARLEY WATERPROOFING

INTRODUCTION

Aquagard damp proof course system offers both the Specifier and Contractor a total solution to damp proof course and cavity tray situations.

Aquagard Pitch Polymer DPC system is suitable for inclusion in brick, block, stonework or concrete walls of both solid and cavity construction.

The DPC system incorporates a 1.25mm pitch polymer DPC, 1.9mm pre-formed pitch polymer cloaks, solvent weld and contact adhesives.

INDEPENDENT APPROVAL

Aquagard Pitch Polymer DPC has been independently approved by the British Board of Agrément. A copy of the relevant certificate, number 06/4353 is available on request.

DESCRIPTION

Aquagard is an extremely versatile, high performance, pitch polymer, damp proof course. When used alone or in conjunction with Marley Waterproofing's Dampseal self adhesive waterproof membrane, a continuous barrier against water and water vapour can be formed. The special formulation of Aquagard gives the product its high performance characteristics.

PERFORMANCE BENEFITS

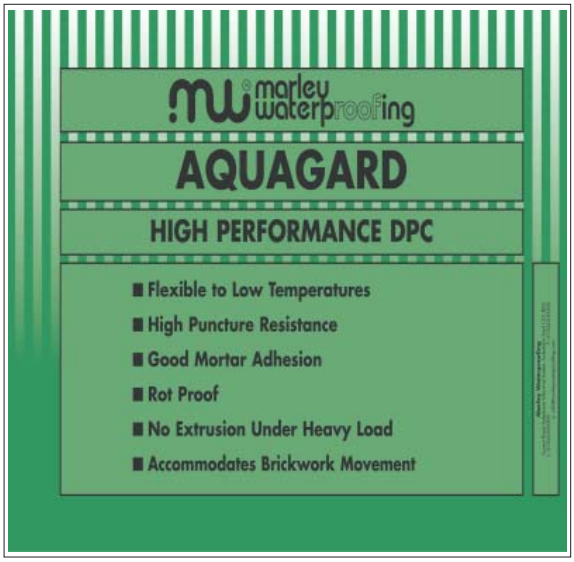
- **High thermal stability -** Ensures that the product remains flexible at low temperatures and will not become tacky, even at 60ºC eliminating the problems associated with bitumen products of cracking in cold weather and oozing soft bitumen in hot weather.

- **High puncture resistance -** The use of synthetic fibres and polymers within the product structure gives improved puncture resistance, making Aquagard suitable for use in cavity tray situations.

- **High flexural bond strength -** Aquagard, as part of the production process, undergoes surface heat treatment to promote better mortar adhesion. Independent tests by the British Ceramic Research Association show that Aquagard has a flexural bond strength of 0.52N/mm^2.

- **No extrusion under load -** Independent tests show that Aquagard will not extrude under load, up to the point of the compressive failure of the wall itself.

- **Accommodates brickwork movement -** Aquagard will accommodate considerable movement of the wall and is unlikely to be impaired by any of the movements normally occurring up to the point of failure of the wall itself.



- **Durability -** Aquagard is completely rot resistant and when used in an orthodox manner, as a water resistant barrier, in wall structures, will remain effective during the lifetime of the building.

- **Physical barrier against radon -** Radon can enter a building through gaps and cracks in the walls or floors, wall cavities and construction joints. When installed correctly in wall structures and in conjunction with a continuous across the floor waterproofing system, Aquagard will be effctive as a physical barrier reducing the transmission of radon into the building.

MANUFACTURE

Aquagard is manufactured under a quality system which satisfies the requirements of ISO 9001. The product wrapper indicates the product name, the Agrément certificate number, batch code and product code.

USES

For use as a DPC in brick, block, stonework and concrete walls of both solid and cavity constructions, in horizontal, vertical stepped and cavity tray situations, as well as in beam and block flooring.

COMPATIBILITY

Aquagard is compatible with most materials with which it will be in contact in normal constructions, except for timber preservative treatments, based on creosote or tar oils.

It is unaffected by timber preservatives which are aqueous solutions of salts or by acids and alkalis normally encountered in construction work.

Aquagard should not be bonded to surfaces which have been treated or painted with liquid waterproofing treatments, or lapped with bituminous DPC's.

Aquagard is compatible with Dampseal self-adhesive waterproofing membrane, offering the specifier a total high performance waterproofing solution.

If in doubt, consult the Marley Waterproofing's Technical Department.

AQUAGARD DPC		
Roll Length	**Weight/m²**	**Thickness**
20m	1.55kg minimum	1.25mm nominal

TYPICAL TEST VALUES	
Typical average values achieved from random testing	
Tensile Strength (Test Method BS 2782:Part 3:1976 Method 320A-320F) Longitudinal Transverse	 8.58MN/m² 6.82MN/m²
Elongation (Test Method BS 2782:Part 3:1976 Method 320A-320F) Longitudinal Transverse	 260% 225%
Tear Strength (Test Method BS 2782:Part 3:Method 360C:1991) Longitudinal Transverse	 33.65kN/m 29.8kN/m
Flexural Bond Strength (Test Method BS 5628:1992 Appendix A3)	0.52N/mm²
Water Absorption (% pick-up after immersion in water for 5 days at 25°C)	0.5%
Water Vapour Permeability (Test Method BS 3177:1995 Temperature Conditions)	1.4g/m²/day
Cold Flex Temperature (Test Method BS 2782:1976 150B)	-25°C
Colour	Black

SQUARE METRES OF MATERIAL PER ROLL		
Width (mm)	**m² per roll**	**Product Code**
100	2.00	323210
112.5	2.25	323211
125	2.50	323212
150	3.00	323215
225	4.50	323222
300	6.00	323230
337.5	6.75	323233
450	9.00	323245
600	12.00	323260
1000	20.00	323200

SITE HANDLING

Rolls of Aquagard must be stored on end, on a flat surface, kept under cover and protected from mechanical damage, in accordance with good site procedure.

AQUAGARD PRE-FORMED CLOAKS DESCRIPTION

Aquagard Pre-Formed Cloaks are high performance, pitch polymer, factory produced 3-dimensional shapes, normally required in cavity tray situations.

Aquagard Pre-Formed Cloaks are manufactured from 1.9mm pitch polymer material. This is 50% thicker than standard Aquagard material (1.25mm).

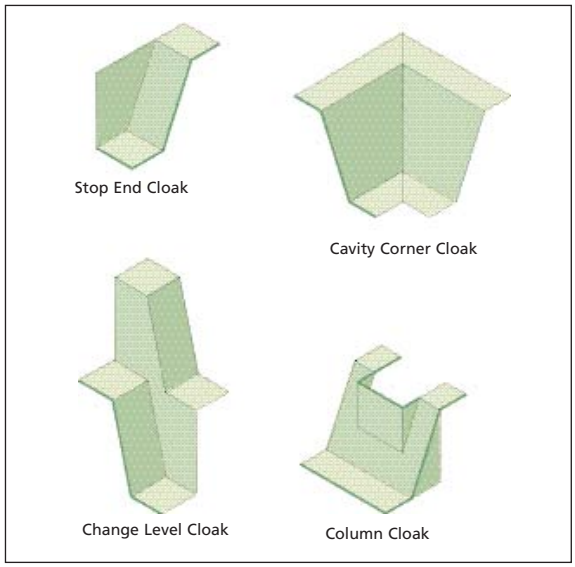
The pre-formed units are not rigid and due to the tough but flexible properties of the product, allow some movement on site.

The unique manufacturing process enables the production of different shapes and sizes to suit the individual customer requirements.

Electronic testing and strict quality control procedures ensure that each Aquagard Pre-Formed Cloak provides continuity of the cavity tray.

USES

To achieve an effective barrier against water and water vapour, the correct detailing of the DPC cavity tray is critical. When forming a continuous cavity tray, detailing problems occur at corners or where structures interrupt the cavity. In these situations it is necessary to form 3-dimensional shapes out of a 2-dimensional DPC material. To overcome this problem, factory produced, 3-dimension Aquagard Pre-Formed Cloaks should be used to simplify complex cavity tray detailing and ensure the continuity of the DPC.



AQUAGARD PRE-FORMED CLOAKS	
Weight/m²	**Thickness**
2.53kg typical	1.9mm nominal

SITE HANDLING

Aquagard Pre-Formed Cloaks are supplied in boxes which should be safely stored on site and protected from damage.

AQUAGARD ADHESIVES

SOLVENT WELD ADHESIVE (NO. 35)
DESCRIPTION

Solvent Weld Adhesive is a PVC welding solution used to seal Aquagard to Aquagard. It forms a strong weld and must be used at the junctions of cavity trays and pre-formed cloaks or at any joint where Aquagard is being used against the downward passage of water.

SOLVENT WELD ADHESIVE (NO. 35)	
Type of Solvent	Adhesive containing MEK and Cyclohexanone
Flash Point	4°C
Viscosity	1100 cps
Shelf Life (in unopened containers)	6 months
Application Temperature	Not below 5°C
Application Rate	1.25m² per 1/2 ltr can approx
Container Size	0.5 ltr

CONTACT ADHESIVE (NO. 39)
DESCRIPTION

Marley Waterproofing Contact Adhesive is a rubber solution used to fix Aquagard and Aquagard Pre-Formed Cloaks to inorganic surfaces such as concrete or steel. It should be used in conjunction with mechanical fixing systems.

CONTACT ADHESIVE (NO.39)	
Type of Solvent	Adhesive containing Petroleum Distillates, Acetone and Toluene
Flash Point	-9°C
Viscosity	5000 cps
Shelf Life (in unopened containers)	6 months
Application Temperature	Not below 5°C
Application Rate	10m² per 5 ltr can
Container Size	5 ltr

SAFE HANDLING PRECAUTIONS

Both Solvent Weld Adhesive (No. 35) and Contact Adhesive (No. 39) are classified are highly flammable and harmful.

Important - Please refer to product Material Safety Data Sheets

INSTALLATION

Aquagard DPC should be designed in conjunction with flashings and damp proof membranes to ensure a continuous barrier against water and water vapour. Not only should DPC's form a barrier to the passage of water, but they should also deflect such water to the exterior of the building, where it can safely drain away.

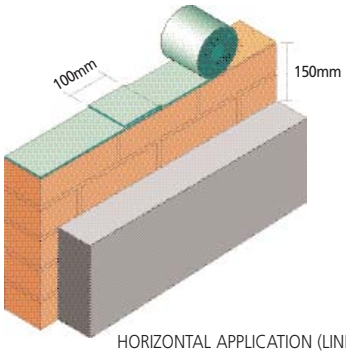
Primary Protection

Careful design, including the provision of weathering coatings, seals, overhangs and projections, should provide primary protection which will eliminate or greatly reduce the risk of damage to building fabric and help to prevent water penetration to the interior of the building.

HORIZONTAL APPLICATION (LINEAR DPC)

Aquagard should be rolled out onto a fresh bed of mortar. The thickness of mortar bed should be sufficient to form a good base for the DPC. Additional mortar should be trowelled onto the top, followed by the brick coursing.
All joints in the DPC should be lapped by a minimum of 100mm. In all situations the DPC should be maintained at a minimum of 150mm above the ground level.

When using Aquagard as a linear DPC in parapet wall situations, all joints must be sealed with Marley Waterproofing's Solvent Weld Adhesive (No. 35).

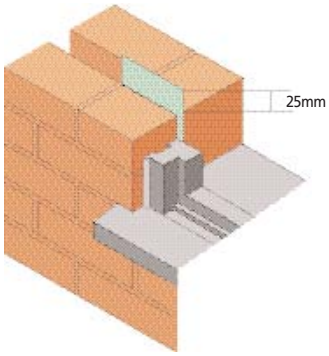


HORIZONTAL APPLICATION (LINEAR DPC)

VERTICAL SITUATIONS (JAMB REVEALS)

Aquagard should be positioned in the vertical situation by restraining the upper section of the DPC. In a jamb reveal situation, the inner block work should be cut and revealed against the outer wall; sandwiching the DPC.

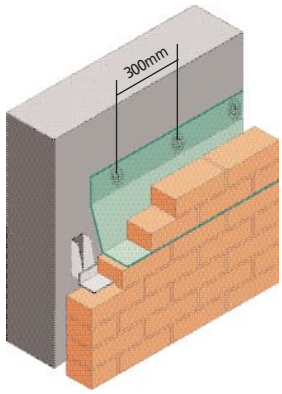
The lower end of the DPC should be terminated into a cill cavity tray. The vertical dpc should project into the cavity and be lapped onto or behind the window/door frame.



VERTICAL SITUATIONS (JAMB REVEALS)

CAVITY TRAYS / PRE-FORMED CLOAKS

When forming an Aquagard cavity tray ensure the outer wall section is bedded in a mortar joint, with the laps being sealed with Marley Waterproofing's Solvent Weld Adhesive (No. 35). The inner leaf section of the cavity tray should be positively restrained to the inner wall. This can be achieved by either bedding the Aquagard into the block/brick coursing or pre-formed chase. If the above mentioned techniques cannot be achieved, the Aquagard cavity tray should be positively restrained by the use of Marley Waterproofing's Cavity Tray Fixing Pins, positioned at 300mm centres. The Marley Waterproofing Aquagard cavity tray should be bonded onto the inner leaf with Marley Waterproofing's Contact Adhesive (No. 39), prior to being restrained with Marley Waterproofing Cavity Tray Fixing Pins. The above restraining method should be used, even when an adhesive is used to bond the cavity tray to the inner leaf.



CAVITY TRAYS

PRICING

Prices are available from our Builder's Merchants stockists, details of which are available from our Customer Services Department.

ORDERING

When ordering, reference should be made to the product code and table of standard roll sizes which can be found in the price list and Technical Details Section of this data sheet.

TECHNICAL SUPPORT

For further technical information, please contact the Technical Department on the telephone number given below.

Due to the policy of continuous development, Marley Waterproofing reserves the right to change specifications without prior notice.

marley waterproofing

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