

System 800

NEWTON 809-DPC

High Load Physical Damp Proof Course

Rev 1.0 - 19 February 2017

PRODUCT CODE - 809-DPC

INTRODUCTION

Newton 809-DPC is a BBA certified, high-performance polymeric DPC which will not extrude under load, up to the point of compressive failure of the wall. It will also not adversely affect the ability of a properly designed and built wall to sustain and transmit compression.

Newton 809-DPC is compatible with all commonly used building materials and is suitable for horizontal, vertical and stepped Damp Proof Courses, including cavity trays, in cavity or solid masonry walls, and is also suitable for extending the floor membrane through internal and spine walls within our [Newton CDM](#) waterproofing system.

A range of preformed cloaks for continuation of the DPC to internal and external corners are available, as are preformed cloaks for sill tray stop ends, changes in levels, stop ends, joist and beam ends and electrical pattress boxes.



KEY BENEFITS

- Extremely tough and durable
- BBA certified for proven performance
- Will not deform or extrude under high compressive loads
- Complete system includes cloaks and accessories
- Flexible at low temperatures
- Resistant to ageing and shrinkage
- Effective barrier to water and water vapour
- Bond of Newton 809-DPC is greater than the bond between mortar and brick

TYPICAL APPLICATIONS

- Horizontal, vertical and stepped damp proof course
- As part of the Newton [Newtonite Damp Proofing System](#) when used in conjunction with [Newton System 800](#) damp proofing membranes
- As part of the [Newton CDM Waterproofing System](#) when used in conjunction with [Newton System 500](#) waterproofing membranes

SUITABLE SUBSTRATE

- Brick & Block
- Stone
- Concrete
- High load insulated wall courses such as Marmox Thermoblock and Foamglas Perinsul

ACCREDITATIONS & APPROVALS

Newton 808-RA is supported by BBA Agrément Certificate 18/5497. The Newton Newtonite Damp Proofing System is accepted by the NHBC.

COLOUR

Black.



LIFE EXPECTANCY

When properly specified and installed, the product will in normal circumstances, remain effective during the lifetime of the building.

ANCILLARY PRODUCTS

- [Back-Box Liner](#) - Single Socket - Code BX1
- [Back-Box Liner](#) - Double Docket - Code BX2
- [Joist Liner](#) - Code BX4
- 110 mm O/D [Pipe Sleeve](#) - Code BX3
- Internal/External Corner Units - Code BX5/BX6
- Stop End Units - Code BX7/BX8
- Change in Level Unit - Code BX10
- Sill Tray Stop End Unit - Code BX9
- [Newton Waterseal Tape](#) (30 mm x 22.5 m)- Code A5
- [Newton Overtape](#) (100 mm x 20 m) - Code A8

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TECHNICAL DATA

Features	Result	Units
Material	Thermoplastic polymer	
Colour	Black	
Thickness	0.8	mm
Density	830	g/m ²
Length	20	m
Width	337	mm

Installed Performance	Result	Units	Test Method
Resistance to static load (10 mm steel ball)	20	kg	EN 12730 / EN 13967
Water vapour permeability	0.65	gm ² /day	BS 3177
Water vapour transmission	316	MNsg	BS 3177
Water absorption	0.2	%	BS 2782-4
Resistance to leakage at joint	Pass		MOAT 27 : 5.2.1
Tensile strength of joint - unaged	235	N	MOAT 27 : 5.2.2/3/4
Tensile strength of joint - heat aged*	290	N	MOAT 27 : 5.2.2/3/4
Tensile strength of joint - water soaked**	257	N	MOAT 27 : 5.2.2/3/4
Tensile strength - longitudinal***	14.6	N/mm ²	BS 2782-3.320A
Tensile strength - transverse***	14.0	N/mm ²	BS 2782-3.320A
Elongation at break - longitudinal***	558	N/mm ²	BS 2782-3.320A
Elongation at break - traverse***	671	N/mm ²	BS 2782-3.320A
Tear strength - longitudinal***	88	N/mm ²	BBA Method****
Tear strength - traverse***	118	N/mm ²	BBA Method****
Cold flex temperature	-60	°C	BS 2782-1.150B
Low temperature flexibility - longitudinal***	≤30	°C	MOAT 27 : 5.4.2
Low temperature flexibility - transverse***	≤30	°C	MOAT 27 : 5.4.2
Dimensional stability - longitudinal	-1.4	%	MOAT 27 : 5.1.6 (free)
Dimensional stability - traverse	-0.4	%	MOAT 27 : 5.1.6 (free)

The above data, even if carried out according to regulated tests are indicative and may change when specific site conditions vary. 337 mm is the standard size. 100, 113, 150, 225, 300, 450, 500, 600, 900, 1000 (mm) sizes are available by order. Lead times will vary so please provide as much notice as possible. Minimum order quantity will apply. *Heat aged at 80°C for 28 days. **Water soak at 60°C for 7 days. ***Unaged. ****BBA Method is based on BS 2782-3.360B:1980, which has been superseded.

SPECIFICATION

Newton Waterproofing Systems are in partnership with RIBA NBS who publish details of our products and systems within their specification clause library to allow Architects ease of specification through their NBS Plus interface. NBS clauses can be accessed via the technical resources area of the web site where a live NBS Feed is available at [NBS Plus Live Feed](#)

Our website has drawings available for download in [Technical Drawings](#). A selection are also available via [FastrackCAD](#), as well as a range of BIM objects on the [NBS National BIM Library](#)

TRAINING & COMPETENCY OF USER

The product is designed to be installed by a competent general builder, or a contractor, experienced with this type of product. When used as part of the Newton CDM cavity drain waterproofing system, installation should be by/or supervised by, the Newton Specialist Waterproofing Contractor who is installing the waterproofing system.

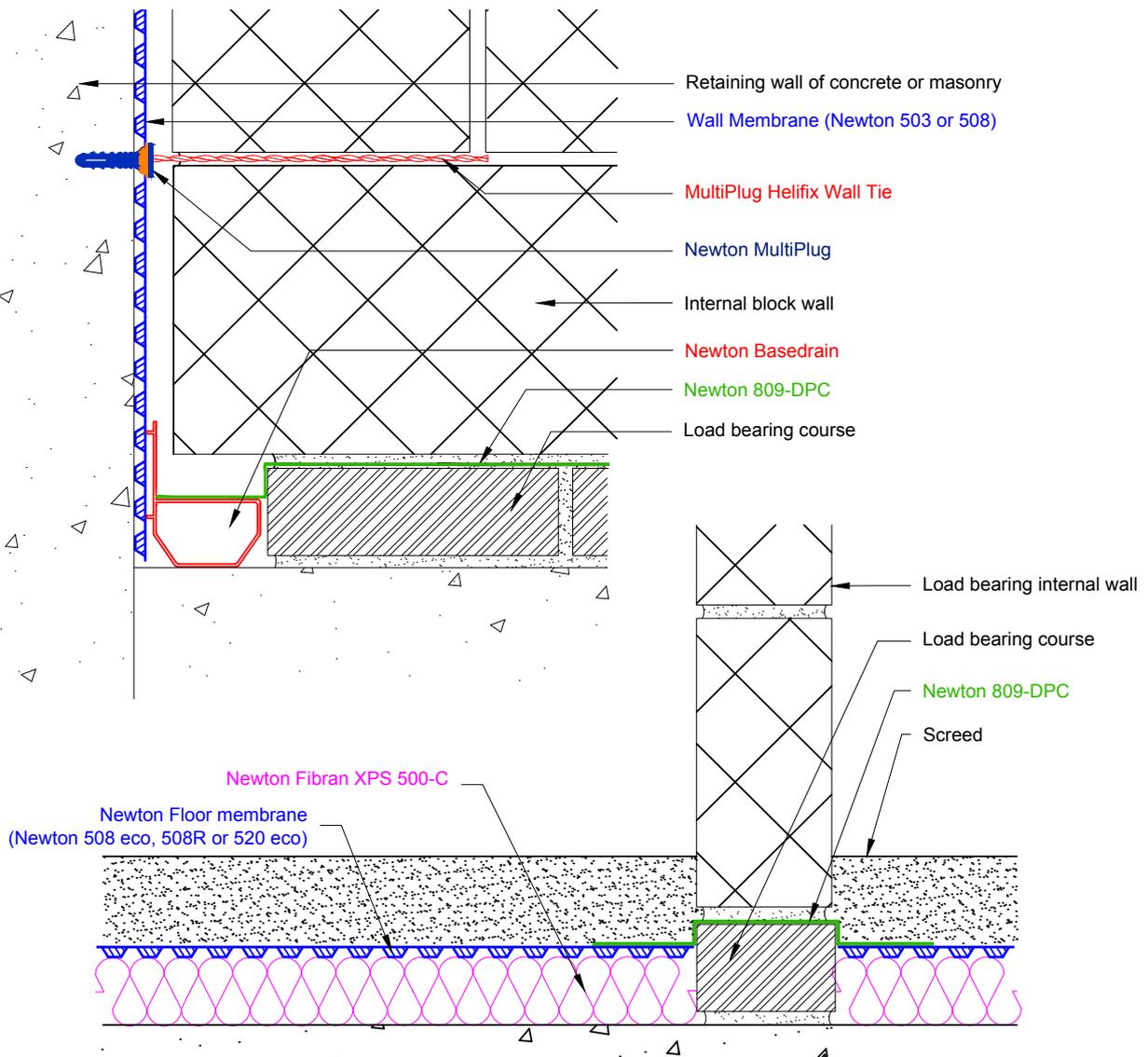
SPECIALIST TOOLS REQUIRED

No specialist tools are required.

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TYPICAL DETAIL



PREPARATION & CLEANING

All surfaces should be clean, dry and free from frost, grease and loose materials. Clean off surplus mortar from joints on cavity faces as the work proceeds.

As with other damp proof course materials, damage can occur during cleaning of mortar droppings from the damp proof course unless care is taken. The following recommendations minimise damage occurring:

- Cavity battens should be used to prevent excessive amounts of mortar droppings reaching the damp proof course
- Mortar droppings should be removed before they have had time to harden
- Implements such as steel rods should never be used for cleaning
- Damp proof courses should be examined for damage as work proceeds

CONSTRUCTION

The construction should conform with current Building Regulations, British Standards and relevant Codes of Practice.

CONSTRUCTION

The product is handled and cut using the same techniques as traditional flexible damp proof courses. It retains sufficient flexibility when used at the lowest temperature at which walls are normally built and does not become tacky in warm, ambient weather conditions.

Difficulties may occur when forming certain details, particularly when bending the DPC through two angles at the same time. In such cases, care must be taken to achieve a satisfactory seal, and where necessary preformed cloaks should be used. Care should be taken at temperatures below +5°C to avoid the risk of condensation on jointed surfaces which may affect the efficiency of the taped joint. Use a heat-gun to remove the surface moisture.

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INSTALLATION

Newton 809-DPC should be installed in accordance with the good practice recommendations as conveyed in the relevant clauses of the BS 5628: part 3 2005, BS 8000: part 3 2001, and BS 8215:1991.

Installation practice

The following installation practices are essential:

- The DPC must extend through the full thickness of the wall or wall-leaf, including pointing, applied rendering or other facing material
- The DPC must be laid on a wet, even bed of mortar, and perforations in adjacent courses of brickwork must be closed with mortar, and project 5 mm beyond the finished face
- The DPC must always be sandwiched between wet mortar and not laid dry
- All lap joints in the DPC must have a minimum 100 mm overlap and be completely sealed with [Newton Waterseal Tape](#). If required they should be further sealed with [Newton Overtape](#). Joints must always be supported
- Newton 809-DPC Preformed Cavity Tray Units must be used at stop ends, and at all corners or changes in levels of cavity trays
- Where used as a cavity tray, the DPC laps must be sealed
- Better joint performance is achieved if the laps are warmed with a heat-gun
- When using Newton 809-DPC with boot lintels or similar constructions, it is recommended that the material is installed following the lintel profile, where appropriate

In beam-and-block flooring, Newton 809-DPC may be laid dry on a brick or block wall, provided the following conditions are met:

- The minimum bearing of the beams recommended by the flooring systems manufacturer is achieved
- The dead and applied loads upon the DPC via the beam do not exceed 2.5 N/mm²
- The surface of the wall onto which the DPC and beam are to be installed is clean, smooth and free from projections and perforations. Failure to comply with this requirement could lead to perforation of the DPC. If this requirement cannot be met, the DPC should be laid on an even bed of mortar
- Any loose aggregate is swept from the wall prior to installation of the DPC and from the DPC prior to the installation of the beam

PACKAGING

The product is delivered to site in rolls wrapped in pre-printed wrappers. The rolls are packed on pallets with polythene wrapping.

STORAGE

Rolls must be stored on end and under cover.

Care must be taken to ensure that the DPC does not become contaminated by hydrocarbon or other organic solvents.

LIMITATIONS

Newton 809-DPC is not able to resist hydrostatic pressure. Do not use as a barrier to resist ground water.

HEALTH & SAFETY

Product should only be used as directed. We always recommend that the [Material Safety Data Sheet \(MSDS\)](#) is carefully read prior to application of the material. Our recommendations for protective equipment should be strictly adhered to for your personal protection. The MSDS is available upon request from Newton Waterproofing Systems or online via our website. Please see contact details below.

	 <p>Newton Waterproofing Systems Newton House 17-20 Sovereign Way Tonbridge Kent TN9 1RH</p>	<p>809-DPC EN 14909:2012 0836</p> <p>Flexible sheets for waterproofing. Plastic and rubber damp proof courses.</p>
<p>Water tightness (2 kPa)</p> <p>Durability (artificial aging)</p> <p>Durability (alkali)</p> <p>Resistance to impact</p> <p>Resistance to low temperatures</p> <p>Resistance to static loading (10mm steel ball)</p>	<p>Pass</p> <p>Pass</p> <p>Pass</p> <p>250mm</p> <p>-40°C</p> <p>20 kg</p>	

Newton Waterproofing Systems reserve the right to update product literature at any time. Please always refer to our [website](#) for the latest versions.