System 800

NEWTON 802-DPM

Damp Proof Membrane



Rev 1.1 - 01 March 2019 PRODUCT CODE - 802

INTRODUCTION

<u>Newton 802-DPM</u> is a BBA certified, 1200 gauge, loose-laid, low density polyethylene damp proof membrane for use below concrete floors or screeds. The DPM is flexible even at low temperatures, and is resistant to both ageing and cracking.

The DPM is suitable for numerous applications within domestic and commercial properties to provide a barrier against vapour and capillary-held moisture in accordance with clause 11 of CP 102:1973 to ensure that floor finishes are dry, and is suitable for

use below heavy duty rafts and steel reinforced slabs to form a durable and puncture-resistant barrier to capillary-held moisture within the ground, or for use below basement slabs and rafts as a curing membrane.

COLOUR

Newton 802-DPM is compatible with all commonly used building materials and can be sealed to <u>Newton 809-DPC</u> to extend the DPM through spine and exterior walls.

A range of accessories are available for jointing and to ensure continuation of the DPM, including single and double-sided tapes, preformed pipe cloaks and seals, and made to order cloaks for steel columns.

KEY BENEFITS

- Simple to install, loose-laid ground membrane
- · Good resistance to elongation and tearing
- High water vapour resistance
- Chemically inert and resistant to acids and alkalis
- Suitable for most common floor construction, including ground-bearing concrete floors, suspended concrete floors or beam and block floors
- Range of accessories ensures jointing and detailing to pipes, columns and other protrusions extending through the DPM
- 100% recycled

TYPICAL APPLICATIONS

- Loose-laid DPM below ground-bearing slabs
- Vapour barrier
- Slip membrane
- Screeding membrane above insulation
- Curing membrane below and above concrete slabs and rafts
- Curing membrane above slabs and to cementitious screeds, rendering and tanking

SUITABLE SUBSTRATE

- Sand blinding
- Closed cell insulation
- Newly placed concrete and cemetitious screeds and renders as curing membrane
- Precast floors as slip membrane





Newton 802-DPM is supported by BBA Agrément Certificate 18/5596 and is accepted by major building insurance companies such as Premier Guarantees and the NHBC as a suitable damp-proof membrane for the applications laid out within the BBA Certificate.

ANCILLARY PRODUCTS

- <u>Joist Liner</u> Code BX4
- 110 mm O/D <u>Pipe Sleeve</u> Code BX3
- Internal/External Corner Units Code BX5/BX6
- Newton Waterseal Tape (30 mm x 22.5 m) Code A5
- Newton Overtape (100 mm x 20 m) Code A8
- Newton Pipe Collar (Flexible 110 mm) Code A35

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 a wide choice of downloadable <u>Technical Drawings</u>, and a large selection are also available either via <u>FastrackCAD</u>, or as BIM objects on the <u>National BIM Library</u> and/or <u>BIMobject.com</u>

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TECHNICAL DATA											
Features			Units								
1200 Gauge											
Product Code	8	302-12									
Material		LDPE									
Colour		Black									
Thickness		300	Microns								
Mass		280	g/m²								
Width		4	m								
Length		25	m								
Area		100	m								
Packaged weight		28	kg								
Installed Performance	Result	Units	Test Method								
Tensile strength - MD*	20.3	N/m ²	EN 12311								
Tensile strength - CD**	- CD** 24.3		EN 12311								
Elongation - MD*	383	%	EN 12311								
Elongation - CD**	416	%	EN 12311								
Water vapour resistance – S _d value	284	m	BS EN 1931								
Water vapour resistance – μ value	946667	μ	Calculated from S _d value								
Water vapour diffusion resistance	1420	MNs/g	Calculated from S _d value								
Watertightness		2 kPa	EN 1928								
Nail tear	217	N	EN 12310-1								
Reaction to fire	F		FuroClass								

The above data, even if carried out according to regulated tests are indicative and may change when specific site conditions vary. *Machine Direction. **Cross Direction.

LIFE EXPECTANCY

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

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.

SPECIALIST TOOLS REQUIRED

No specialist tools are required.

PREPARATION & CLEANING

All surfaces should be clean, dry and free from grease, debris and loose materials. Clean off surplus mortar from joints to precast floors.

Under-slab ground membranes

Ensure that the hard-core bed is blinded with soft sand, and then consolidated in order to provide a smooth bed for the membrane that is free of sharp projections that might penetrate the membrane.

Over-slab ground membranes

Before installation, prepare the surface of the concrete slab by ensuring that it is free from ridges, undulations and sharp projections. If this cannot be achieved then a sand bed may be necessary in order to provide a smooth bed and reduce the risk of punctures.

Slip membranes

When used as a slip membrane the substrate must be smooth and uniform so as not to snag the membrane in any way. All sharp edges and snots should be removed and all joints, holes and cracks filled to be flush with the surface.

In all cases, ensure that the membrane is free from grease and dirt.

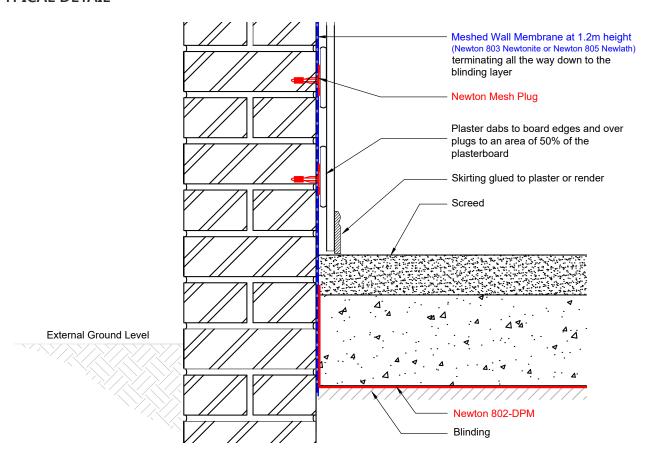
MEASURING

Cut and size the DPM to ensure that it will be sufficiently loose laid so as not to be stretched during the placement of the screed or concrete.

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TYPICAL DETAIL



INSTALLATION

Even though Newton 802-DPM has a high puncture resistance, care should be taken to avoid accidental damage.

- Roll out the first length of membrane and cut a length off the roll that is 200 mm longer than the length of the area to be covered.
- Roll out consecutive adjoining rolls so that it overlaps the already laid membrane by at least 150 mm. Continue until the whole area is covered
- Ensure that the overlapping sections of membrane are clean and dry, using a clean rag and cleaning alcohol if necessary. In cold and humid conditions, a heat-gun may be required to carefully 'burn' off any surface moisture
- Apply an unbroken strip of Newton Waterseal Tape to the underside of the upper membrane
- As you remove the backing paper from the tape, firmly press the two membrane layers together in order to completely seal the joint
- Where preformed ancillaries are used at corners or to protrusions through the membrane, these should be sealed to the DPM with Newton Waterseal Tape
- All joints can be reinforced as necessary with Newton Overtape

REPAIR

Perforations or punctures in the membrane must be repaired with patches of Newton 802-DPM of identical thickness, lapped at least 150 mm beyond the limits of the puncture and sealed with Newton Waterseal Tape. The repair can be enhanced with Newton Overtape.

PROTECTION & COVERING

The DPM should be covered as soon as possible to avoid accidental site damage.

Reinforcement steel should be fixed carefully so as not to damage the DPM. Repairs should be undertaken as they occur using the method outlined above.

If the DPM is not to be covered soon after laying, it should be protected against accidental damage using protection boards.

MEMBRANE SIZE

1200 gauge - 4.0 m x 25.0 m - Product code 802-12

STORAGE

Newton 802-DPM should be stored undercover, in cool, dry conditions, with the rolls standing up on end and away from direct sunlight.

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LIMITATIONS

Newton 802-DPM is not able to resist hydrostatic pressure. Do not use as a barrier to resist ground water.

Do not expose to direct sunlight for more than 48 hours.

Where used as a curing membrane to basement slabs, the membrane must be cut at the wall and not turned up the wall, as this will provide a passage for water ingress and will inhibit the efficacy of the waterbar.

HEALTH & SAFETY

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





Newton Waterproofing Systems Newton House 17-20 Sovereign Way Tonbridge Kent TN9 1RH 802-DPM EN 13967:2012+A1:2017

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Flexible sheets for waterpoofing - Plastic and rubber damp proof sheets including plastic and rubber basement tanking sheet - Damp proof membrane below concrete floors or screeds

Essential characteristics		Declared Performance			Test Standard	Harmonised			
			1000 gauge	1200 gauge	2000 gauge	Units		Technical Standard	
Reaction to fire			F			Ì	EN 13501-2		
Watertightness (2kPa)			Pass	Pass	Pass		EN 1928:2000		
Resistance to tearing (nail shank)			180	217	324	N	EN 12310-1 EN 12317-2 EN 12691		
Joint strength			Pass	Pass	Pass	MLV			
Resistance to impact		Pass	Pass	Pass	MLV				
'' —		MD	21.6	20.3	18.5	N/mm²	EN 12311-2:	EN 13967:	
		CD	23.6	24.3	19.6	N/mm²			
Tensile properties - Elongation: MD CD		371	383	366	%	2013	2012+A1: 2017		
		CD	409	416	399	%		2017	
Resistance to static loading		Pass	Pass	Pass	MLV	EN 12730:2015			
Durability against:	ageing / degrada	geing / degradation		Pass	Pass		EN 1296		
	chemicals	nicals		NPD	NPD		EN 1847		
Dangerous substances		NPD	NPD	NPD		According to National Legislation			
MD: Machine Direction, CD: Cross Direction, MLV: Manufacturer's Limiting Value, NPD: No Performance Declared									

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