

# System 800

## NEWTON 803

### Non-Meshed Damp-proofing Membrane

Rev 2.1 28 January 2015

PRODUCT CODE - M19 & M20

#### INTRODUCTION

Newton 803 is a high quality damp-proofing membrane for use above the ground as an alternative to Newton 803 Newtonite and 805 Newlath where a meshed surface is not required as a surface for direct plastering or rendering.

Newton 803 is typically used where the wall finish to the damp-proof membrane is timber battens, a dry-lining frame or block wall.

Newton 803 is 0.5mm thick and has a pattern of raised 3mm studs. The studs face the wall and create air channels that allow for vapour equalisation to take place between the membrane and the wall.

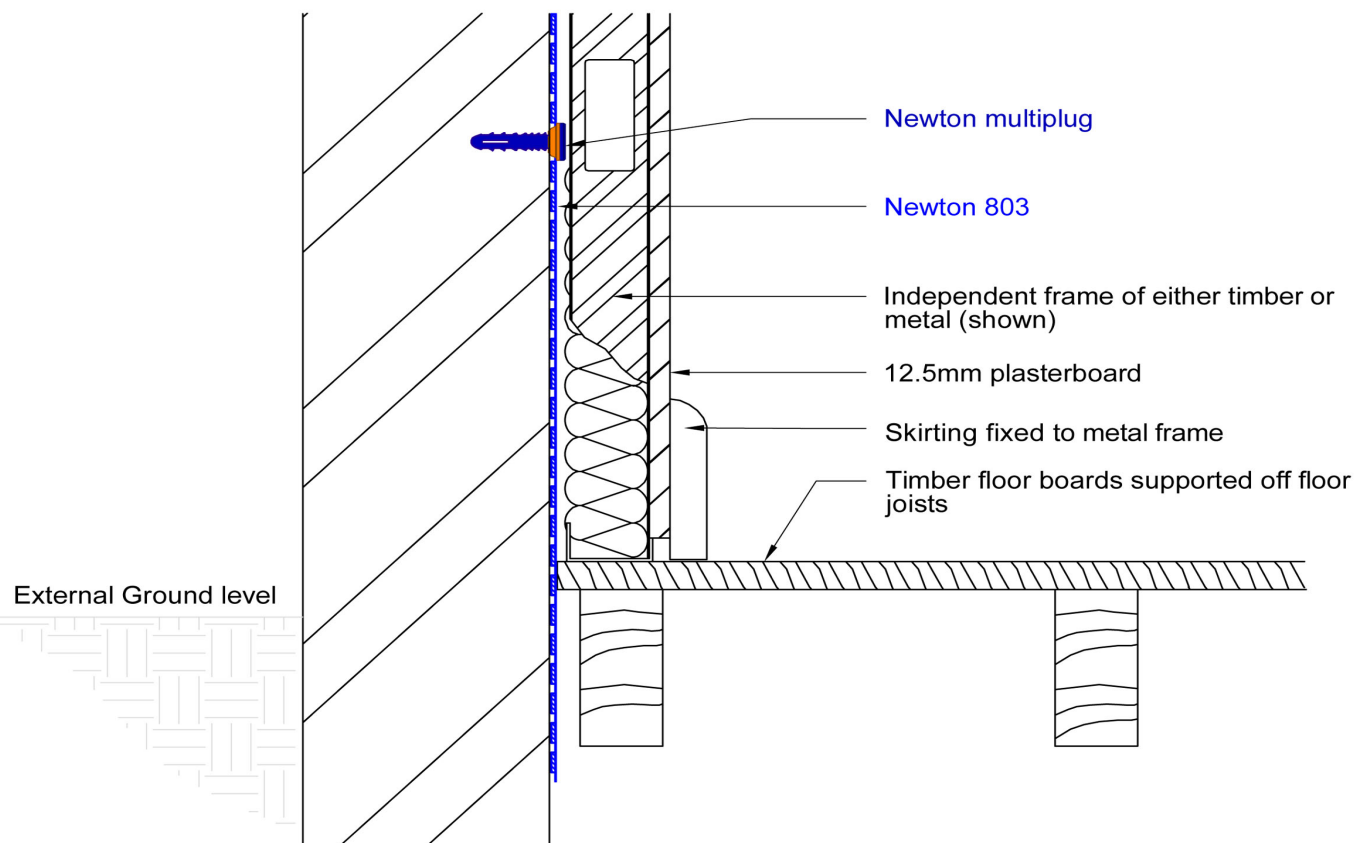
Newton 803 is light, clean and easy to handle. It can be cut with a sharp knife, scissors or shears. The membrane is inert and is highly resistant to water, alkalis, saline solutions and organic acids, and it is not affected by minerals. It is also resistant to bacteria, fungi and other small organisms.

Newton 803 is guaranteed against deterioration for 30 years, and has a life expectancy of at least 50 years (DIN 9001:2000) and is supported by BBA Certification Number 94/3010.

NEWTON 803	
Width (m)	1.00 / 2.00
Length (m)	10.00 / 20.00
Area (m <sup>2</sup> )	10.00 / 40.00
Weight (kg)	6 / 23
Colour	White
Raw material	High Density Polyethylene
Thickness (mm)	0.50
Stud height (mm)	3.00
Compressive strength	N/A - Wall & Soffit membrane only
Vapour permeability	0.046g/m <sup>2</sup> x hr x mmHg
Thermal resistance	0.078m <sup>2</sup> K/W
Thermal conductivity	0.461 W/m K
Air volume between studs	1.56 litres/m <sup>2</sup>
Drainage capacity	N/A - Above ground use only
Vicat softening temperature	126 °C

All technical data stated herein is based on tests carried out under laboratory conditions.

John Newton & Company was formed in 1848 and were the first British company to produce a studded damp-proof membrane with Newton Newlath. We are recognised as the leading supplier of damp and waterproofing proofing membranes in the UK.



# NEWTON 803

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### KEY BENEFITS

- Does not require extensive and damaging preparation to the wall surface.
- Isolation of wall finish from the damp wall.

### TYPICAL APPLICATIONS

- As a damp-proof membrane to isolate the wall finish from the damp wall where a meshed surface for plaster or render is not required.

### SURFACE PREPARATION

- Clean the substrate to remove all loose debris and organic matter. Plaster should be removed as it can soften over time, which will weaken the fix of the membrane to the wall. If the wall render is in good condition, it does not have to be removed and the 803 can be fitted directly over. Loose or crumbling render should be removed.
- If evidence of bacterial growth can be seen, use a fungicidal product prior to the fitting of the membrane.
- If any evidence of wet rot or dry rot is seen, have it dealt with by a qualified remedial specialist.
- If a new slab is to be laid as part of the works, it is preferable to fit Newton 803 prior to the laying of the floor slab with the floor DPM extending upwards in front of the Newton 803 ready for the concrete pour.

### CUTTING TO SIZE

- Newton 803 can be cut with a sharp utility knife, scissors or shears.
- Decide whether the membrane is to be fitted horizontally or vertically.

### FIXING TO THE WALL

- Cut the membrane to size. Ideally, Newton 803 should be continued up into ceiling voids and down past the slab to the oversite. If this is not possible, cut the membrane so that it finishes tightly to the soffit and floor finish. A gap is not required at the soffit or floor, indeed the system works more efficiently when the system is not ventilated as this impedes the natural vapour drive from inside the property to the outside that still continues through the Newton 803.
- Newton 803 is fitted to the wall with the studs to the wall and the flat meshed surface facing inwards towards the applicator. Fix the membrane to the wall with the Newton MultiPlug to all substrates except when fixing to plywood or timber, when a galvanised clout nail should be used, or to slightly friable mortar substrate, when the Newton 800 Cob Plug should be used.
- 803 can be fitted horizontally or vertically. Fit the membrane as level as possible - best results are achieved when a long builders level or a rotating

laser level is used.

- Using a 10mm drill bit, drill through the membrane into the wall to a depth of at least 60mm.
- Fix only as many MultiPlug fixings as are required to fix the membrane neatly to the wall.
- If fixings are required for fixing of timber battens, brackets for Gypliner type dry-lining frame or wall ties, add further plugs to the correct centres required for the wall lining.
- Hammer the plugs home using a wide headed hammer such as a lump hammer or mallet.
- Fit Newton 803 to return walls to isolate wall finishes from dampness transmitting from the main wall being treated.
- Newton 803 can be taken into reveals.
- Fixing should not take place above 30°C and below -5°C.

### MEMBRANE JOINTING

- Joints may be made horizontally or vertically.
- Fit the edge of the next length of membrane adjacent to the previous sheet with a butt-joint. Overtape the butt-joint with Newton Overtape.
- Newton 803 can be taken round corners. Try to fit the membrane square with neat creases to the internal and external corners. Where the membrane starts to be misshapen due to the contours of the wall, cut the membrane and start again with a new butt-joint with Newton Overtape over.
- In cold and damp conditions a heat gun should be used to gently evaporate surface moisture prior to the application of the Newton OverTape.

### SEALING AROUND PROTRUSIONS

Where the membrane has to be cut around pipes or other protrusions, carefully cut the membrane around the protrusion and then seal around the protrusion with Newton Mastic.

### PUNCTURING THE MEMBRANE

Repair punctures to the membrane with small patches of Newton Overtape.

### USING THE MULTIPLUG FOR FIXING

The Newton MultiPlug has a hollow core that designed to receive 5mm self-tapping screws. Use the MultiPlug to secure timber battens or locating brackets from wall lining systems. Heavier items can be supported by screwing a piece of chipboard to the MultiPlugs at fairly close centres and then fixing the heavier item to the chipboard in a conventional way.

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### FIXING HEAVIER OBJECTS TO THE WALL

Heavier objects should be attached to the wall using resin anchors. Seal around the resin anchor with Newton Mastic.

### WALL TIES

The Newton MultiPlug is designed to accept a range of Newton Helifix Wall Ties. These helical ties are driven into the MultiPlug to the correct depth with a hand tool. Newton Helifix Wall Ties are available in lengths of 155mm, 170mm, 195mm, 220mm, 245mm, 270mm, 295mm and 325mm. The hand tool ensures that exactly 30mm of the wall tie is inserted into the MultiPlug, and this should be considered when sizing the wall tie.

### LIMITATIONS

- Newton 803 is a damp-proofing product for use to above ground (non earth retaining) structures only. If the wall(s) to be treated have earth to the other side this product is not suitable and our System 500 waterproofing products should be used instead.
- Not UV stable - Ensure the membrane is not left in direct sunlight for more than 7 days.

### PACKAGING

2.0m x 20m - Product code M5

### COVERAGE

37 to 40m<sup>2</sup> depending on number of laps

### STORAGE

Newton 803 should be stored with the rolls standing up on end and away from direct sunlight.

### HEALTH & SAFETY

Product should only be used as directed. Although Newton 803 poses no health hazards usual protective clothing and goggles should be worn in accordance with current health and safety regulations.

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 John Newton or online via our web site. Please see contact details below.

Newton 803, Newton Mastic, Newton Overtape, Newton MultiPlugs, 800 Cob Plugs and Newton Helifix Wall Ties are available from Newton Waterproofing Systems, and from good builders merchants.

Technical staff will be pleased to give help and advice on the most effective use of the product.