Newton Newtonite

Non-Meshed Damp Proofing Membrane



Rev 9 4th July 2023 Code: M20

PRODUCT OVERVIEW

Newton Newtonite is a high quality damp proofing membrane for use above the ground as an alternative to Newton Newtonite Lath Mesh Membrane where a meshed surface is not required as a surface for direct plastering or rendering, typically where the wall finish to the damp proof membrane is timber battens, a dry-lining frame or block wall. Newton Newtonite is guaranteed against deterioration for 30 years, has a life expectancy of at least 50 years (DIN 9001:2000) and inert and is highly resistant to water, alkalies, saline solutions and organic acids, and it is not affected by minerals and is also resistant to bacteria, fungi and other small organisms.

Newton Newtonite is 0.65mm thick and has a pattern of raised 3mm studs and is light, clean and easy to handle. It can be cut with a sharp knife, scissors or shears. The studs face the wall and create air channels that allow for vapour equalisation to take place between the membrane and the wall.

KEY BENEFITS

- Isolation of wall finish from the damp wall
- Does not require extensive and damaging preparation to the wall surface
- Speed of installation
- Resistant to efflorescing salts and hydrocarbon contamination
- Rot-proof
- Shallow stud profile for where space is at a premium

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

SUITABLE SUBSTRATE - WALLS

- Concrete
- Brick
- Concrete block

SPECIALIST TOOLS REQUIRED

- High quality SDS drill and drill bits
- A rotating laser level is recommended but not required

LIFE EXPECTANCY

When specified, installed and protected in accordance with the Data Sheet and Installation Manual, and fully and permanently isolated from UV light and physical damage or wearing, and only to those substrates confirmed within, Newton Newtonite has a service life that can be equal to the design life of the structure.

PRODUCT WARRANTY

Newton Newtonite is supplied with a product warranty of 30 years, and have a life expectancy of at least 50 years (DIN 9001:2000).



TRAINING AND COMPETENCY OF THE USER

Newton Newtonite should be installed by those with an understanding of the requirement to waterproof retained structures and the knowledge and training to use the product as part of a coordinated approach to the waterproofing of the structure, which in many cases will require further waterproofing products so as to achieve the required habitable grade as defined by BS 8102:2022.

Newton Specialist Contractors (NSBCs) are trained by Newton Waterproofing Systems in the correct specification and installation of Newton waterproofing products and will provide the client with a meaningful insurance backed guarantee for the waterproofing.

COLOUR

Translucent white.

TECHNICAL DATA Features Units Result Material **HDPE** Colour White/Translucent Density 500 g/m² Width 1.0 / 2.0 m Length 10 / 20 m Area 10 / 40 m^2 Membrane thickness 0.60 mm Stud depth 2.90 mm Height 3.50 mm °C Vicat softening temperature 126 23.0 Packaged weight ka °C. -40 to +80 Service temperature Installed Performance Result Units Test Method Thermal conductivity 0.461 W/mK EN 12667 Water vapour diffusion resistance - Sd value >604 BS EN 1931 m Water vapour diffusion resistance – µ value >1208000 Calculated from SD value μ Water vapour diffusion resistance >3020 MNs/g Calculated from Sp value Euroclass E BS EN 13501-1 Resistance to fire Chemical resistance - Excellent 100 % FN14030 100 **EN ISO 13438** Oxidation resistance - Excellent %

SPECIFICATION

Newton Waterproofing Systems work in partnership with RIBA NBS and <u>NBS Source</u>, which integrates into project workflows, providing all product data from Newton's NBS BIM Objects, NBS Plus Clauses and RIBA Product Selector into one single source of product information.

NBS Source also hosts a large selection of Newton <u>case</u> <u>studies</u>, as well as product <u>literature and certifications</u>. A wide range of drawings are available <u>on our website</u>.

PROTECTION OF THE MEMBRANE

The membrane should always be protected by suitable surface finishes.

Protection methods include:

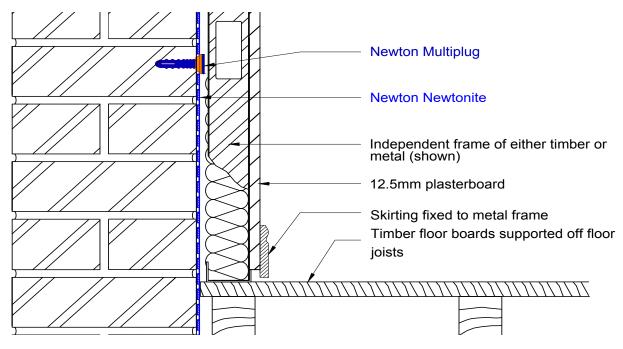
- Timber battens fixed into Newton MultiPlugs as a support for plasterboard or wooden sheeting
- · Block walls
- Timber stud walls
- Metal self supporting frame
- Metal wall supported frame

NOTE: Newton Newtonite is Fire Rated to Euroclass E, the same as plastic based insulation. As such the membrane must always be protected from fire by surface finishes, as would be the case with insulation.

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TYPICAL DETAIL



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 Newtonite prior to the
 laying of the floor slab with the floor DPM extending
 upwards in front of the Newton Newtonite ready for
 the concrete placement

CUTTING TO SIZE

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

PUNCTURING THE MEMBRANE

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

PACKAGING

2.0m x 20m - Product code M20.

COVERAGE

M20: 40m²

FIXING TO THE WALL

- Cut the membrane to size. Ideally, Newton Newtonite 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 Newtonite
- Newton Newtonite is fitted to the wall with the studs facing the wall and the flat surface facing inwards towards the applicator. Fix the membrane to the wall with the <u>Newton MultiPlug</u> to all substrates except to slightly friable mortar substrate, when the <u>Newton 800</u> <u>Cob Plug</u> 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 Newtonite to return walls to isolate wall finishes from dampness transmitting from the main wall being treated
- Newton Newtonite can be taken into reveals

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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 Newtonite 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 secured with Newton Overtape
- In cold and damp conditions a heat gun should be used to gently evaporate surface moisture prior to the application of the Newton Overtape

USING THE MULTIPLUG FOR FIXING

The Newton MultiPlug has a hollow core that is 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.

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.

STORAGE

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

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, which should be considered when sizing the wall tie.

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 801 Mastic Sealant

LIMITATIONS

- Newton Newtonite is a damp proofing product for use to above ground (non earth-retaining) structures only. If the wall(s) to be treated have high ground or earth to the other side, this product is not suitable and <u>The Newton CDM waterproofing</u> system should be used instead
- Not UV stable Ensure the membrane is not left in direct sunlight for more than 7 days
- Fixing should not take place above 30°C and below -5°C

HEALTH & SAFETY

Use appropriate PPE for the environment the system is installed within. Use products only as stated within this Data Sheet.