

# System 500

## NEWTON BASEBOARD

### Drainage Conduit

Rev 7.1 - 3 April 2020

PRODUCT CODE - D12

## INTRODUCTION

*[Newton Baseboard](#) is a unique above-slab drainage conduit that is a drainage option for the BBA Agreement Certified Newton CDM Cavity Drain Waterproofing system and is designed to be used where the standard Basedrain Drainage System cannot be used, either due to head room or floor finish reasons. Newton Baseboard is placed at the wall/floor junction where it collects water entering the structure and diverts it to an appropriate drainage medium such as the [Newton Titan-Pro](#) pumping system.*

*Prior to installing the Newton Baseboard System, a Newton CDM membrane is mechanically fixed to the retaining wall with [Newton MultiPlugs](#) at 1 m centres, ready to receive the Baseboard Hanger which is screwed into the head of the MultiPlug. The Baseboard is then clipped tightly over the hanger to hold the linear lengths of the conduit into position. Baseboard jointing pieces are used to form a continuous length of the conduit. A 150 mm band of [Newton 901-P](#) primer is applied to the floor ready for sealing of the Baseboard with [Newton 309-M Adhesive](#). The waterproof bond between the 309-M Adhesive and the epoxy primer ensures that water is retained within the Baseboard and will move to a predetermined drainage outlet for removal. Newton Baseboard preformed internal and external corners and stop-ends are required to complete the system.*

*Newton Baseboard is a patented product only available in the United Kingdom from Newton Waterproofing Systems.*

## KEY BENEFITS

- Does not require recesses to floor or a drainage spacer
- Ensures that water entering at the perimeter stays at the perimeter
- Allows for part drainage systems to single elevations
- The system includes preformed internal and external corners, end-caps, hangers and joints

## TYPICAL APPLICATIONS

As an alternative to using the Newton Basedrain Drainage System where:

- It is not possible to form a recess within the slab or use Basedrain placed on top of the slab
- Low head room applications
- Garages, plant rooms etc., where the waterproofing does not extend across the floor

## SUITABLE SUBSTRATES

Correctly prepared concrete slabs or screed of at least 7 days old.

## SUITABLE SURFACES

Newton Baseboard can only be used as a drainage medium that is adhered to concrete rafts/slabs.

## TRAINING & COMPETENCY OF THE USER

Newton 508 is a constituent part of the Newton CDM Type C waterproofing system which we recommend is installed by Newton NSBC contractors who are trained by Newton in the correct design and installation of the waterproofing system. This is also a requirement of the BBA Certificate.

## SPECIALIST TOOLS REQUIRED

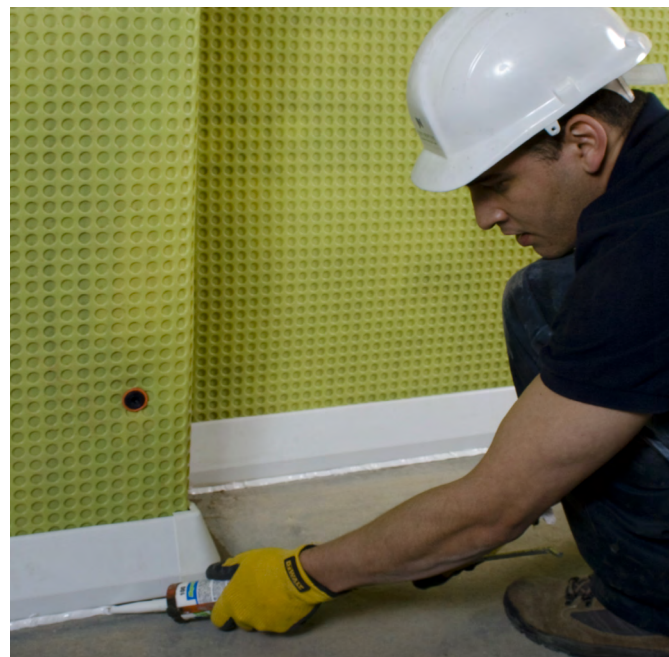
No specialist tools are required.

## SPECIFICATION

Newton Waterproofing Systems work in partnership with RIBA NBS who publish our products on [NBS Source](#). The platform integrates seamlessly 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 [case studies](#), as well as product [literature and certifications](#).

A wide range of drawings are available [on our website](#).



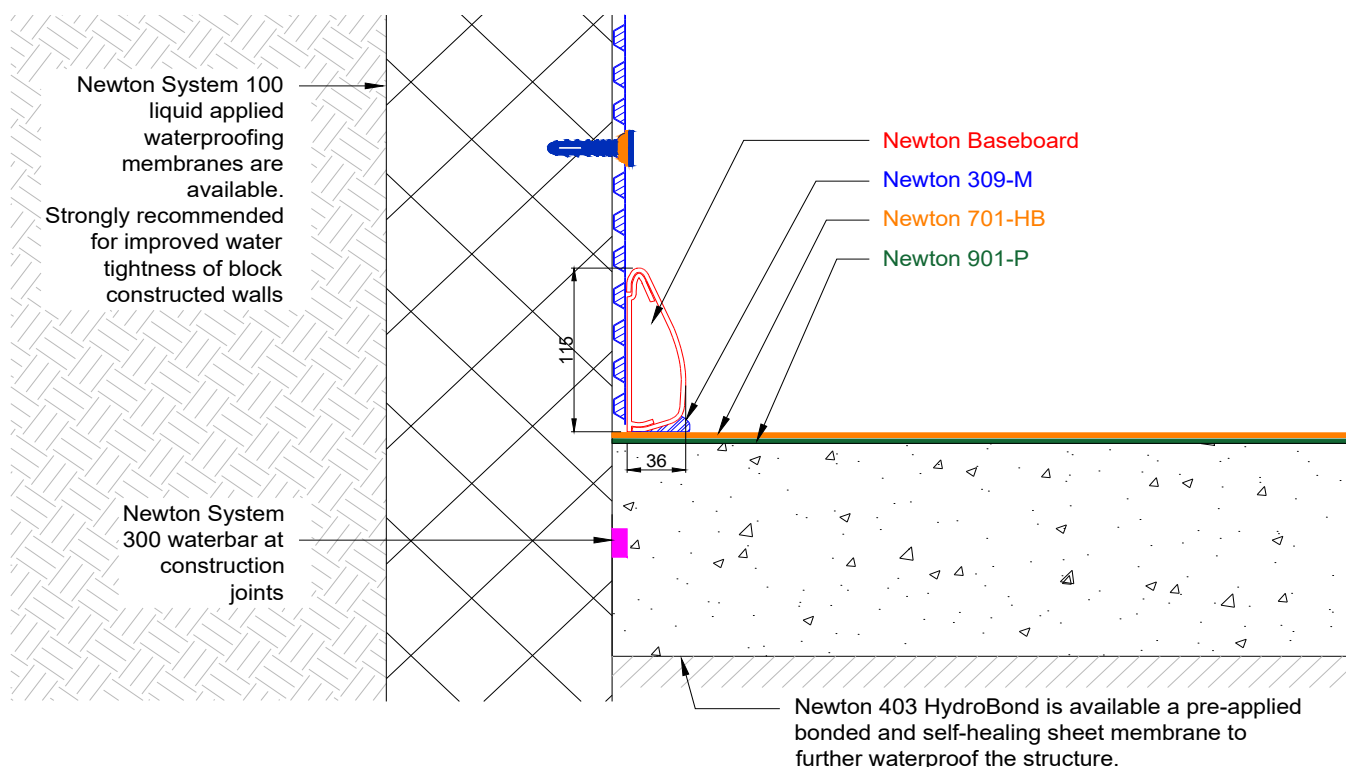
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## Drainage Conduit

### TECHNICAL DATA

Features	Result	Units
Baseboard Pack	1 x 2.0 length	m
Total linear coverage per pack	2.0	m
Pack supplied with	3 hangers, 1 connector, 3 adhesives	
Weight per pack	6.00	kg
Colour	White	
Raw material	UPVC	

### TYPICAL DETAIL



### BASEBOARD SYSTEM PRODUCTS

- Lengths of Baseboard - 2.0 m - D12
- Baseboard Outside Corner - D9
- Baseboard Inside Corner - D10
- Baseboard End Cap - D11 (L&R)
- Newton 901-P primer - 1 litre - BP901
- Newton 309-M mastic sealant - 290ml - 309-M
- uPVC Solvent-on Wet 'R Dry - 240ml - G2

### INSTRUCTIONS

The floor construction should conform with current Building Regulations, British Standards and relevant Codes of Practice. New concrete and screed must be at least 7 days old.

### SURFACE PREPARATION

Newton Baseboard is adhered to the concrete or screed and the success of the application is dependent on the adhesive seal to the floor. It is therefore imperative that the substrate is level and in good condition and is correctly and thoroughly prepared and primed with the supplied Newton 901-P primer.

Prior to application of Newton 901-P primer, concrete must be ground with floor grinding machines to remove laitance and any other forms of contamination such as oils or paints. Vacuum clean after grinding and wash to remove all dust. Screed must be sound and clean.

Concrete surface cracks, holes, low points and indentations should be repaired and filled with Newton 203-RM to leave a level and uniform floor.

Please refer to the Newton 901-P data sheet.

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### FIXING INSTRUCTIONS

- Prepare the concrete as explained above. Prime the prepared floor with a band that is 150 mm out from the wall with 2 x coats of Newton 901-P, as directed within the Newton 901-P data sheet
- Mechanically fix a Newton CDM cavity drain waterproofing membrane to the wall
- Use a Baseboard Hanger as a guide, ensuring that the slot lines up with a line of studs within the wall membrane. Fix Newton MultiPlugs at 1 m centres.
- Fix a Baseboard Hanger in the head of each of the lower level plugs. The foot of the hangers must be tight to the floor
- Clean the floor to remove all dust
- Measure and lay out the Baseboard sections and connecting joints and corners and without gluing, test fit the system on the hangers. Fix by hanging the curved top of the Baseboard to the top of the hangers and then carefully push the bottom of the Baseboard under the foot of the hanger so that it is trapped between the hanger foot and the floor.
- Where the Drainage Conduit is not to a full ring, two End Caps will be required: a left hand and a right hand End Cap are required
- Make adjustments as needed so that the system fits well without any tension, bowing or pulling
- When satisfied, connect all the Baseboard sections, joints and corners and glue with a liberal amount of PVC glue, ensuring that the glue is applied to both of the parts to be jointed. Ensure that the PVC glue coats the inside of the grooves of the jointing pieces
- Make adjustments to ensure the drainage conduit is well fitting, not forced or under tension and flat to the wall and floor
- Glue all the parts together using the supplied glue. Work from one end, gluing a section at a time until the whole system is glued and secured on the hangers
- Seal the Baseboard to the primed floor with the supplied Newton 309-M adhesive. With smooth, constant pressure, apply a uniform bead of adhesive underneath the Baseboard with a mastic gun. Force the as much of the sealing mastic as possible. Any excess will be discarded at the next step
- NOTE: 1 tube of 309-M should be consumed for each 1.2m to 1.5m of Baseboard
- Use a wet putty knife to firmly press the mastic in as far as possible and to finish the adhesive neatly and flush with the face of the conduit. Maximum adhesion is achieved when the sealant is forced as deep into the space between the Baseboard and the primed floor. In addition to ensuring a proper bond, this step creates a clean, neat edge, which enhances the appearance of the Baseboard.



### CONSUMPTION

Newton 901-P - Two coats, each of 0.25 kg/m<sup>2</sup> - total consumption of 0.75 kg/10 linear metres

Newton 309-M - 1 tube for each 1.2 - 1.5 m of Baseboard

### DRAINAGE OPTIONS

Newton Baseboard can be drained by gravity to a 'safe' collection point that is below the level of the floor slab.

'Safe' drainage is where because the collection point is below the level of the basement slab, it is not possible for water to back-up or not drain due to a blockage or surcharge at the collection point.

If a safe collection point is not available, a pumping system will need to be used.

### METHODS OF DRAINAGE

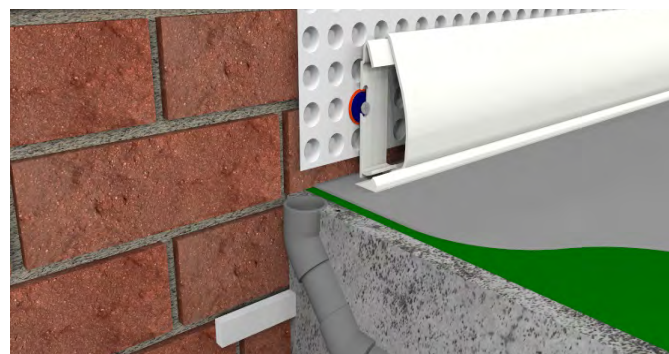
Water within the Baseboard can be removed in two ways: 1. Below Floor or 2. Above Floor.

#### Below Floor

Place 40 mm pipes within the slab, at the perimeter, leading to the water collection point. Remove a semi-circle of the bottom of the Baseboard where it sits above the drainage pipe to ensure that water easily drains down to the drainage pipe.

This method is usually used where water is collected by a pumping system.

Use multiple connections where possible.



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### Above Floor

Water is moved above the floor to the collection point using a half-round pipe. The floor will need to be primed and sealed with Newton 901-P. Cut a 40 mm waste pipe lengthways and carefully cut a hole in the Baseboard to take the half-round pipe.

Seal the half-pipe to the floor primer/sealer and around the opening with Newton 309-M.

This method is typically used where the water is drained to a surface drainage system such as a gully or ACO drain.

### PACKAGING

All parts of the system can be purchased as individual components.

Product code D8 includes:

- 1 x 2.0 m length of Baseboard
- 3 x Baseboard Hangers
- 1 x Baseboard Connector
- 2 x Newton 309-M Mastic Adhesive

### FLOOR FINISHES

The Baseboard drainage system can be used with loose laid and applied floor finishes, depending on the type of finish and the end use of the space. Please speak to our Technical Team for further information.

### COLOUR

White.

### STORAGE

Store away from direct exposure to UV light.

### HEALTH & SAFETY

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

Please read the Safety Data Sheets and Technical Data Sheets for Newton 309-M, Newton 901-P and the uPVC Glue before commencement of work.