HydroBond® SA

Type A - Self-Adhesive Waterproofing Membrane

Revision: 3.0 - 18 February 2026
Code: 401M

INTRODUCTION

Newton HydroBond SA is a high performance, radon certified, self-adhesive membrane for the external waterproofing of below-ground structures such as basements, water holding tanks and culverts. A composite of cross-orientated HDPE and bitumen polymer adhesive, the membrane is post-applied to concrete after removal of formwork, or to built block walls. The membrane is flexible and durable and exhibits high resistance to impact, tear, puncture and settlement.

This combination of high strength and high flexibility results in excellent crack-bridging capability at places where cracks will occur within the concrete. The bitumen polymer adhesive provides a very high strength bond to the substrate at temperatures as low as 5ºC with exceptional peel adhesion qualities, so preventing the migration of water between correctly prepared substrate and the membrane. The product has been tested for water tightness at the laps as per the requirements of BS 8102:2022 section 8.2.2 and can be considered fully bonded as per figure 9 of the British Standard.

Newton HydroBond SA overlaps with the pre-applied HydroBond membranes installed below the concrete raft to provide a complete waterproof envelope to the structure to achieve Type A (barrier) waterproofing suitable for Grades 1a, 1b, 2 and 3 as defined by BS 8102:2022. The membrane is suitable for all below-ground and earth-retained structures from domestic basements to the largest civil engineering projects. Where additional protection against ground gasses is required, such as methane and carbon dioxide, Newton HydroBond SAGM should be used.

Newton HydroBond SA can be used alongside other Newton products to provide a coordinated and combined approach to the waterproofing of the whole structure that includes protection against water penetrating through construction joints, through and around service entries and to movement joints.

Correctly protected, the Newton HydroBond System will provide, under normal service conditions, a durable waterproof barrier for the life of the building to which it is installed.

KEY BENEFITS

- Type A (barrier) waterproofing membrane
- Resistant to aggressive ground water chemicals
- Effective and certified barrier to radon
- Dimensionally stable and flexible for easy detailing
- Quick and simple to install - no jointing tapes

TYPICAL APPLICATIONS

- Post-applied sheet waterproofing to retaining walls of below ground structures
- Used in conjunction with Newton HydroBond pre-applied membranes to provide continuous Type A waterproofing around the whole structure

SUITABLE SUBSTRATE

- Reinforced concrete
- Correctly prepared block walls
- Prepared steel

ANCILLARIES

- Newton HydroBond SA Primer LT - 5 litres - Purchase code: 401-P5. Bitumen-based primer used to enhance bond and to seal porous substrate prior to the application of the self-adhesive membrane. Suitable for use in cooler conditions - **Required to porous substrates**
- Newton HydroBond SA Reinforcing Strip - 300 mm x 20 m roll - Reinforces the wall-to-foundation joint and provides enhanced impact and damage protection at external corners - **Optional**

SYSTEM PRODUCTS

- HydroBond 403 & HydroBond 403 GB - Self-healing and fully-bonded, pre-applied sheet membranes. GB is the gas variant.
- HydroBond 109-LM - UV-stable, single component liquid bitumen used for detailing as the system comes out of the ground
- HydroBond 410 GeoDrain - Protection board or drainage membrane for sloping sites
- HydroBond 2K-Flex - Bitumastic waterproofing paste that cures quickly to form a thick, flexible, membrane
- HydroBond Protection Board

PURCHASE CODES

Product	Purchase Code
HydroBond SA	401M
HydroBond SAGM	401-GM
HydroBond SA Primer LT	401P-5
HydroBond SA Reinforcing Strip	401-RS
HydroBond 403	HB-2
HydroBond 403 GB	HBGB
HydroBond 2K-Flex	HB-2K
HydroBond 109-LM	109
HydroBond 410 GeoDrain	M18
HydroBond Protection Board	HBPB
HydroCoat 203-RM	203-RM
Pipe Collar	A35

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TECHNICAL DATA

Performance	HydroBond SA	Units
Colour	Black	
Material	Cross-linked HDPE/bitumen adhesive	
Width	1.00	m
Length	20.00	m
Area	20.00	m^2
Thickness	1.50	mm
Density	1650	g/m^2
Packaged weight	33.0	kg
Shelf life	12	Months
Application temperature	+5 to +45	°C

Installed Performance	Result	Units	Test Method
Elongation at break (Machine)	≥ 130	%	DIN EN 12311
Elongation at break (Traverse)	≥ 130	%	DIN EN 12311
Tensile strength (Machine)	215	N/50 mm	BS EN 12311
Tensile strength (Machine)	220	N/50 mm	BS EN 12311
Elongation at maximum load - (Machine)	310	%	EN 12311
Elongation at maximum load - (Traverse)	340	%	EN 12311
Tensile strength (Traverse)	220	N/50 mm	BS EN 12311-2
Water tightness - 60 kPa for 24 h	Pass		BS EN 1928 – Method A
Flexibility at low temperature	-30	°C	EN 1109
Resistance to static loading - 10 kg load to concrete	Pass		BS EN 12730
Resistance to static loading - 15 kg load to EPS	Pass		BS EN 12730
Resistance to impact - Hard surface	500	mm	EN 12691
Resistance to impact - Soft surface	500	mm	EN 12691
Resistance to tear - Nail shank (Machine)	135	N	EN 12310-1
Resistance to tear - Nail shank (Traverse)	135	N	EN 12310-1
Sheer resistance of joints	350	N/50 mm	EN 12317
Durability of water tightness against ageing	Pass		EN 1296 then EN 1928
Water vapour diffusion resistance – μ value	90,000	μ	EN 1931
Radon gas diffusion resistance	5.7×10^{-12}	m^2/s	SP Method
Resistance to fire	Euroclass E		BS EN 13501-1

SYSTEM ANCILLARY PRODUCTS

- Newton Pipe Collar - Flexible preformed collar for sealing pipe protrusions
- HydroCoat 203-RM - Fast-curing repair mortar to fill voids and cracks and to create smoothing fillets
- Hauff-Technik - Full range of products for the sealing of service entries

LIFE EXPECTANCY

Newton HydroBond SA will provide, under normal service conditions, a durable waterproof covering for the life of the building to which it is installed. Please note that this is not the guarantee. The waterproofing guarantee is provided by the specialist waterproofing contractor who installs the product. Product clauses can be accessed via the product page on the Newton website.

TRAINING AND COMPETENCY OF THE USER

Newton HydroBond SA 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.

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Opening Hours:
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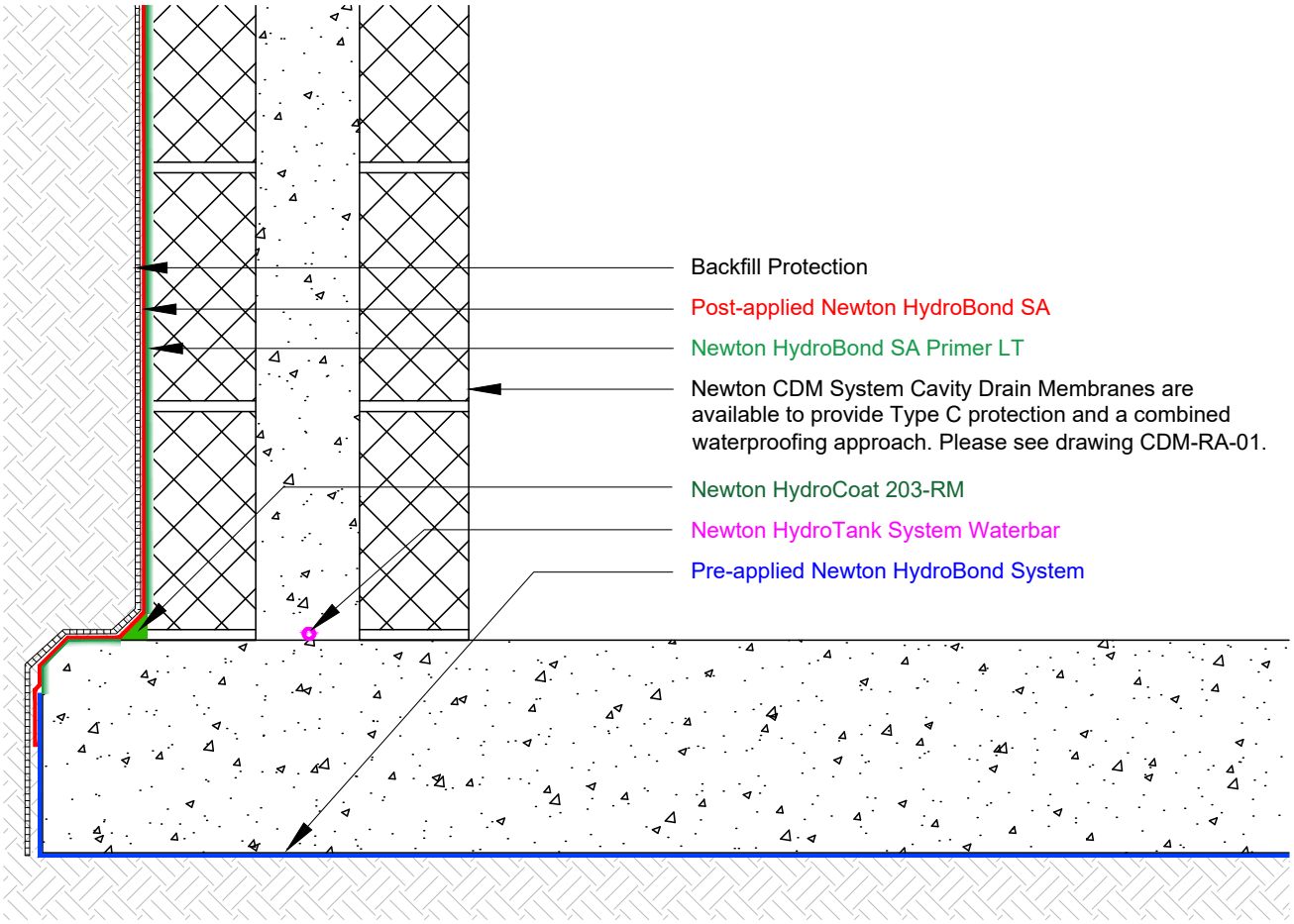
TYPICAL DETAIL



SPECIFICATION

Newton Waterproofing Systems work in partnership with RIBA NBS and NBS Source, 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 case studies, as well as product literature and certifications. A wide range of drawings are available on our website.

SPECIALIST TOOLS REQUIRED

Wooden roller for joints.

STORAGE

Store in dry conditions at temperatures between +5°C and +45°C. Do not expose to freezing conditions. Do not allow to freeze.

LIMITATIONS

- Do not apply at temperatures lower than +5°C or higher than +45°C

SURFACE PREPARATION - GENERALLY

Application should not be carried out under wet conditions or onto damp substrates.

Note that condensation can occur on a cold substrate even in dry conditions. Ensure all previously applied coatings are compatible and are fully cured. Porous substrate requires priming. Priming is not required where the surface has received a smoothing coat of HydroBond 2K-Flex.

Concrete walls

- Power wash with a commercial power washer to remove surface contaminants such as release agents
- Fill/repair concrete defects such as honeycombing, cracks and holes with HydroCoat 203-RM

Concrete foundation

Where the self-adhesive membrane laps to or terminates to the horizontal toe of the foundation:

- Remove surface laitance by grinding or grit-blasting
- Remove all dust by vacuum and wipe with a damp cloth

Block walls

- Remove mortar snots. Clean with stiff brush to remove surface dirt and debris. Prime with HydroBond SA Primer
- If not flush pointed, smooth with a 2 mm (dry) coat of HydroBond 2K-Flex, pushing hard into the joints to fully fill

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TREATMENT OF ANGLES

- Fillets should be installed at 90 degree internal angles using HydroCoat 203-RM, mixed 2:1 with sand
- **OPTION:** Where extra protection is required, internal and external angles should be reinforced with Newton HydroBond SA Reinforcing Strip, 300mm wide, centred along the corner angle

PRIMING

Unless smoothed with HydroBond 2K-Flex as described above, porous substrate such as concrete or block should be primed before application of the self-adhesive membrane with Newton HydroBond SA Primer LT. Purchase code 401-P5, sold in 5 litre containers.

Newton HydroBond SA Primer LT is moisture-tolerant, allowing it to be used on green concrete or damp-to-touch substrates. It can be applied at low temperatures and is quick drying. Allowing early application reduces delays to the building programme, even in marginal weather conditions.

Priming will help bind any remaining surface dust and will help stabilise a friable and powdery surface.

Apply one even coat of primer by brush. Application rate:

- Concrete: 6-8m^2/litre
- Lightweight concrete block: 6-8m^2/litre

Only prime an area that can be covered with membrane during the working day. Application of the membrane should commence as soon as the primer is dry.

APPLICATION NOTES

NOTE: Application is a two-person operation.

Lap joints should be a minimum of 150mm and should be pressed and rollered to form a continuous bond and to ensure water tightness.

The self-adhesive membrane has a paper backing that must be removed to expose the adhesive surface.

At the edge and ends of the membrane is a polythene strip that must be removed to expose the adhesive at the selvedge edge to adhere laps of the membrane.

When bonding the membrane to the surface, care should be taken to avoid forming air pockets beneath the membrane. This can be achieved by applying pressure from the centre towards the edges.

- Edge and end overlaps should be at least 150 mm
- Ensure the laps are dust-free
- Membrane and laps should be firmly pressed to ensure optimum adhesion. A wooden roller is recommended to ensure firm and even pressure is applied to the whole membrane surface.
- End-of-roll overlaps of adjacent lengths should be staggered to avoid them being side by side on adjoining rolls, causing a four fold overlap

APPLICATION

- For vertical applications cut the membrane to a suitable length allowing an additional 150mm for laps. Position and peel back release film and apply the self adhesive face to the substrate. Apply pressure to ensure a full bond is achieved. Commence at the top of the wall and work downwards, progressively removing the release film.
- A scaffolding tower may have to be used to support the applicators and the roll of membrane
- The top of the vertical membrane should be linked to any other waterproof installation which may already exist or will be installed
- It may also be necessary to mechanically fix the membrane at the top such as at day-joints. Do this by either "chasing" the top edge into the substrate or by nailing a wooden batten across its width
- For horizontal applications unroll the membrane where required allowing an additional 150mm for laps. Re-roll one half of the membrane and cut release film taking care not to damage the membrane. Roll out the membrane progressively removing the release film. Use a soft broom over the top of the membrane to ensure full adhesion to the substrate.
- Once the first width has been applied, the next width is applied adjacent to it in exactly the same way, with a side-lap joint of the membrane alongside
- If the membrane is punctured or perforated, a patch of the same material should be lapped and bonded at least 150mm beyond the extents of the puncture
- Watertight seals should be formed around all service entry points. Newton Pipe Collar with Newton Liquid Gas Membrane over or patches of the HydroBond SA should be used for sealing service entry pipes.

LAPPING TO PRE-APPLIED MEMBRANES

Newton HydroBond SA is lapped to Newton HydroBond System pre-applied membranes by 150 mm.

Ensure that the surface of the membrane to be lapped to is clean and dry.

PROTECTION OF THE MEMBRANE

The membrane should always be fully protected immediately after it is installed. When used externally on a retaining wall, the membrane should be protected from backfill using a protection board or drainage sheet:

- Newton drainage membrane, HydroBond 410 GeoDrain (to sloping sites only) - 2.0 m x 12.5 m - Purchase code M18
- Newton HydroBond Protection Board - 3 mm x 1.0 m x 2.0 m - Purchase code HBPB
- Suitable closed cell insulation board such as CDM Fibran XPS 500-C - Purchase code 500C

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PACKAGING

- Newton HydroBond SA is supplied in 20.0 m long rolls x widths of 1.0 m.
- Newton HydroBond Reinforcing Strip is 300 mm wide and supplied in lengths of 20 m.
- Newton HydroBond SA Primer LT is supplied in 5 litre containers.

HEALTH AND SAFETY

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

CE 21	JN NEWTON WATERPROOFING	Newton Waterproofing Systems Newton House 17-19 Sovereign Way Tonbridge Kent TN9 1RH	401M BS EN 13967:2012 1213 Flexible sheets for waterproofing. Plastic and rubber damp proof sheets including plastic and rubber basement tanking sheets

Essential characteristics	Performance	Harmonised Technical Specification
Reaction to fire	E	EN 13969:2004
Water tightness	Pass	
Resistance to impact	500mm	
Resistance to static loading	10Kg	
Water tightness after ageing	Pass	

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