## Type A & C Waterproofing E-CA-04 SPECIFICATION SHEET Internal Waterproofing of Existing Brick Wall



Rev 3.0 - 07 September 2021

### BUILD

WALL CONSTRUCTION: Existing brick FLOOR CONSTRUCTION: Existing slab



### **NWI SCORE**

0 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 2.0 2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9 3.0 3.1 3.2 3.3 3.4 3.5 3.6 3.7 3.8 3.9 4.0

This specification employs 2 forms of waterproofing (Type A - Barrier Protection) to limit ground water ingressing behind the (Type C - Drained Protection) to ensure that the desired internal environment is achieved. The effectiveness of the waterproofing is dependent on the Type A systems being effective, especially at the mortar joints.



## SPECIFICATION

## TYPE A APPLIED INTERNALLY

Waterproof the structure with <u>Newton HydroSeal</u> <u>System</u> providing barrier protection.

### TYPE C INSTALLED INTERNALLY

Waterproof internally with <u>Newton CDM System</u> providing drained protection.

### NEWTON WATERPROOFING INDEX

The Newton Waterproofing Index (NWI) is a unique scoring system that accurately assesses the level of risk and potential success of specific waterproofing specifications. The NWI score is awarded by a panel of experienced waterproofing design specialists and reflects the chances of success of that specification. The scoring system works in conjunction with the British Standard for waterproofing, which defines the three types of internal environments as Grades 1, 2 and 3.

## NOTES

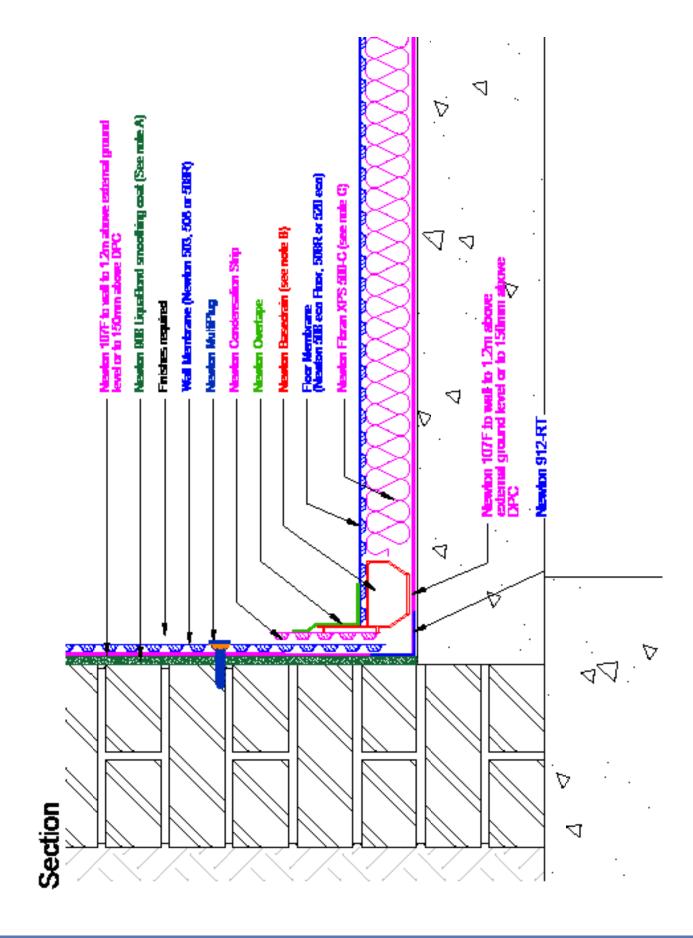
To improve the NWI score please see Newton Specification Sheet E-CA-02.

The detailing of other building elements and termination details are available within the Newton Waterproofing specification library.

## A-RATED INSURANCE

Tailor made insurance policies available depending on the specialist contractor and specification.

Any specification/advice provided is only valid if used with products supplied by John Newton and Company Ltd (trading as Newton Waterproofing Systems). Newton Waterproofing Systems reserve the right to update product literature at any time. Please always refer to our website for the latest versions.



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## Type A & C Waterproofing E-CA-04 SPECIFICATION OUTLINE Internal Waterproofing of Existing Brick Wall



The following specification provides two forms of waterproofing

Specification	E-CA-04.	
Description	Combined waterproofing to existing concrete slab and Existing Brick wall	
Build	structure. No gas protection. Existing concrete slab, placed within brick walls supported from existing foundations.	
NEWTON HYDROSEAL SOLUTION		
Newton 107F		
Substrate Preparation		
Walls	Existing brick will require grit blasting or scabbling to ensure all surface containments are removed and that a good 'key' is achieved.	
Floor	Concrete floors should be ground or sand blasted to remove laitance.	
Application	Install the barrier membrane as described in the product Installation Manual	
	Brush, roller, spray, squeegee, trowel or pin leveller apply as described within the product data sheets in one coat of 2mm.	
Priming		
Newton 107F	Porous surfaces should be sealed with <u>Newton 903-P</u> .	
Environmental requirements	Do not apply at temperatures lower than +5°C or higher than +30°C. With Newton 109-LM, the overnight temperature must not be below +5°C.	
Protection		
Newton 107F	The membrane is protected by CDM system above.	
NEWTON CDM SYSTEM		
Substrate Preparation		
Walls	See J40/310 NBS Clause for Newton System 500.	
Floor	Horizontal concrete surfaces should have a surface finish to should have a surface finish to at least Class of finish U3 and preferably to class U4 or U5 as document- ed in 'General Specification for Civil Engineering Works' section 14: 'Formwork and Finishes to Concrete', namely a 'Uniform, dense and smooth surface'.	
	Floor to be no more than +/- 5mm over 2m in any direction and no more than 25mm over any dimension. Floor to be flood tested and and depressions over 10mm or over to be filled with appropriate repair product such as Newton 908 LiquaBond mortar.	
	Floor slab to be treated with <u>Newton 906 Lime Inhibitor</u> as per the product datasheet	
Drainage Channels	Drainage channels placed above the slab, within a spacer of Newton XPS, insulation.	
Floor preparation:		
Surface cracks (dead)	Fill with fine filler or 901-P mixed with sand and/or scrim with plasterers scrim	
Surface Cracks (live) Small holes or slight surface damage	Treat as movement joint - see below Repair with appropriate filler	
Joints		
Day/Shrinkage Joints	Newton Floordrain used as part of the floor drainage system should be placed above joints.	
Movement Joints and Isolation Joints	<b>IMPORTANT:</b> Movement and isolation joints should be avoided if possible as they are very difficult to waterproof. If they need to be included, please speak to the Newton Technical Department who will confirm an exact specification for the joint.	Page 3 of 5

# E-CA-04 Internal Waterproofing of Existing Brick Wall

Methods for forming of the sump chamber are included within the <u>Titan-Pro</u> pumping system Installation Manual.
The Titan-Pro sump chamber must be surrounded by compacted concrete or placed within a concrete box and then concrete in place.
Install the Newton CDM Waterproofing System as per the Installation Manual.
It is a requirement of the BBA Certificate that the system is installed by Newton Specialist Basement Contractors (NSBC) who are trained in the installation of the system.
Install with as many fixings required to place the membrane to the wall.
Add further fixings as required for wall mounted ancillaries such as dry-lining brackets, insulation ties or brick/block ties.
Newton Condensation Strip is required at the base of wall membrane
Place above the slab within a spacer of <u>Newton XPS 500-C</u> .
Place Newton Basedrain drainage channel to the perimeter and to any internal walls that are supported from the own strip foundations.
Place Newton Floordrain above construction joints, door thresholds or where cross drains are required.
The drainage system to terminate at the pumping system. Make connections to the Titan-Pro sump with Newton Basedrain Connectors.
Place the membrane to the floor, above the Fibran-XPS insulated drainage spacer.
Joint the membrane with Newton Waterseal Tape at the overlapping flange.
Seal the floor membrane to the permitter Basedrain drainage channel with Newton Overtape, sealed to the up-stand of the Basedrain.
Always required
Please see Reference sheet WF.
Please see Reference sheet FF.

## Type A & C Waterproofing E-CA-04 NBS CLAUSE Internal Waterproofing of Existing Brick Wall



The following document is to be read alongside the relevant Newton Waterproofing datasheets.

NEWTON J10 - NEWTON HYDROSEAL SYSTEM

J10 Designed joints in in situ concrete

### 120A CEMENTITIOUS COATING

#### Newton 107F

Cementitious coating for the waterproofing and protection of concrete and masonry. Can be spray-applied so ideal for large projects. Suited to the waterproofing of reservoirs, tunnels, water tanks, basements, podium decks, flat roofs and balconies.

Newton Waterproofing Systems Ltd, Newton House, 17-20 Sovereign Way, Tonbridge, Kent, TN9 1RH

Tel: 01732 360095, Email: Tech@Newtonwaterproofing.co.uk, Web: www.newtonwaterproofing.co.uk

Please click here to download the full Newton 107F NBS Clause

#### NEWTON J40 - NEWTON CDM SYSTEM

J40 Flexible sheet waterproofing/damp proofing

### 290A HIGH DENSITY POLYETHYLENE STUDDED CAVITY DRAIN MEMBRANE

#### Newton CDM System

The Newton Cavity Drain Membrane (CDM) System is a maintainable basement waterproofing solution ideal for new-build basements and refurbishment projects. Comprising of four components: Cavity Drain Membranes, Drainage, Pumps and Control Systems, the Newton CDM System complies with the British Standard for Waterproofing and provides a Grade 3 habitable internal environment.

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