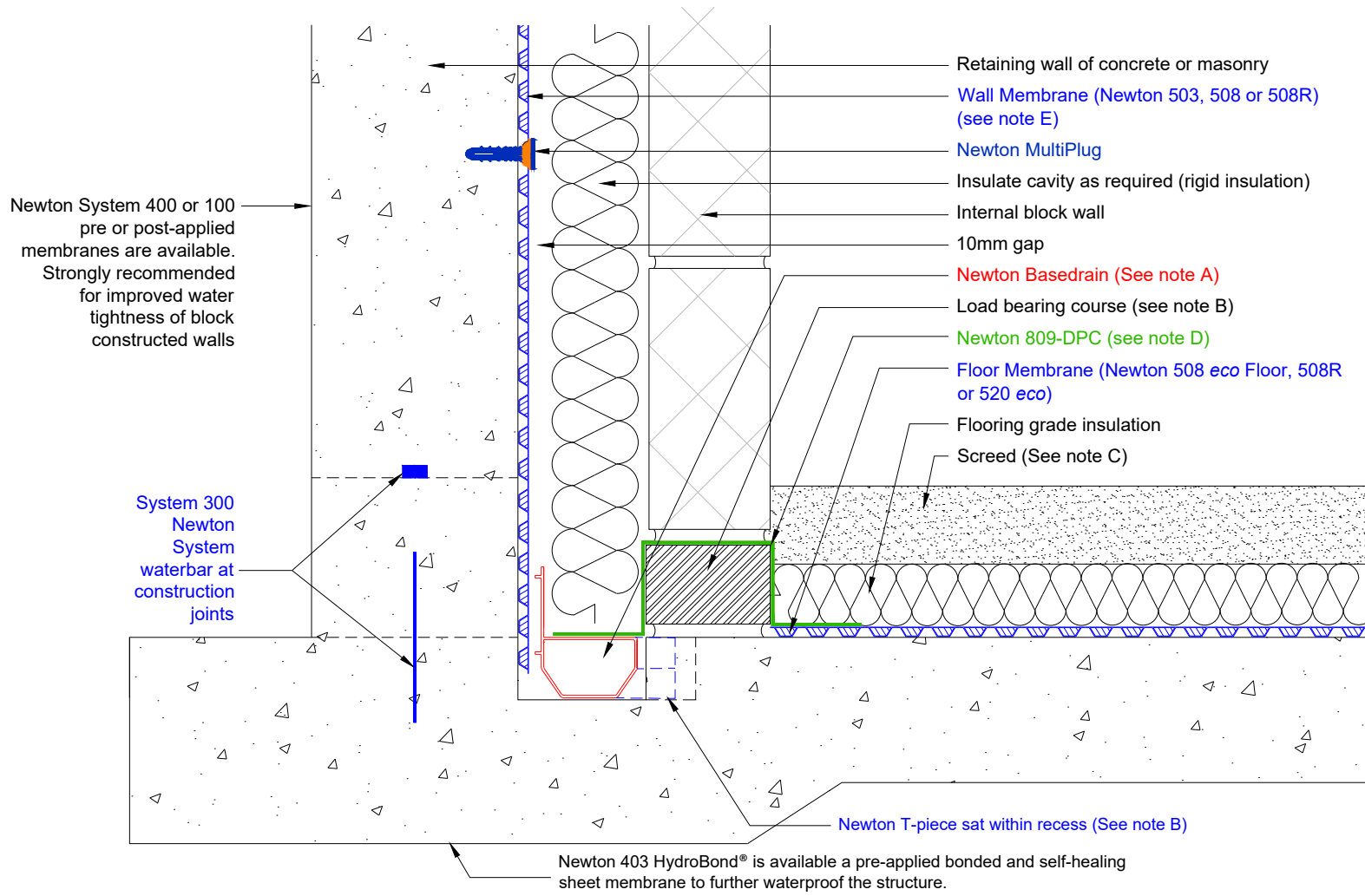


# Section

DO NOT SCALE



Newton System 400 or 100 pre or post-applied membranes are available. Strongly recommended for improved water tightness of block constructed walls

System 300 Newton System waterbar at construction joints

Newton 403 HydroBond® is available a pre-applied bonded and self-healing sheet membrane to further waterproof the structure.

- Retaining wall of concrete or masonry
- Wall Membrane (Newton 503, 508 or 508R) (see note E)
- Newton MultiPlug
- Insulate cavity as required (rigid insulation)
- Internal block wall
- 10mm gap
- Newton Basedrain (See note A)
- Load bearing course (see note B)
- Newton 809-DPC (see note D)
- Floor Membrane (Newton 508 eco Floor, 508R or 520 eco)
- Flooring grade insulation
- Screed (See note C)

Newton T-piece sat within recess (See note B)

## Notes

This detail assumes that the raft is in good condition - constructed to BS EN 1992 (Eurocode 2), and that the structure as a whole is of sufficient mass and quality to resist heads of water pressure as required by BS8102.

The raft reinforcing steel will need to be designed to accommodate the recess for the Newton Basedrain drainage channel to ensure correct coverage of concrete above the steel.

It is recommended that the concrete be treated with Newton 906 Lime Inhibitor to limit the leaching of free lime from the concrete.

All construction joints (day joints, shrinkage joints, movement joints etc) should be waterproofed with Newton System 300 waterbars to limit water ingress thorough joints in the structure.

A) Newton Basedrain should always be laid level and connected to the sump chamber or safe gravity drainage with at least two Drainage Connectors, see drawings CDM-P03 (Basedrain Layout & Parts) and CDM-P09 (Titan-Pro Pump System). Construction joints to the floor should be protected by Newton Floor drain, see drawing CDM-D02 (Construction joints protected by Newton Floor drain). For supporting walls detailing please see drawing CDM-D04.

B) The load bearing course will be either engineering brick or a load bearing insulation if a cold bridge is to be avoided. Newton Basedrain 'T-Pieces' should be placed through the load bearing course within a recess at 2m centres to allow water to pass to the Newton Basedrain.

C) Screed to manufacturers recommendations or current British Standard.

D) i) Newton 809-DPC is taped to the Newton Floor membrane with Newton Waterseal Tape - not shown.  
ii) Take the Newton 809-DPC across onto the top of the Newton Basedrain within the cavity as shown, tape to the Newton Basedrain with Newton Waterseal Tape - not shown (option).

E) Wall membrane should be trimmed to 40mm from slab to keep clear of the Basedrain holes.

To access further details and relevant technical information please call our Technical Team on 01732 360095 or refer to our [website](#).

Newton CDM System

Internal cavity drain membrane system

Typical installation to structure with raft foundation

NOTE: This is a Newton waterproofing detail and copyright remains with John Newton & Co. Ltd. (trading as Newton Waterproofing Systems). Any specification/advice provided is only valid if used with products supplied by John Newton & Co. Ltd. For the design of the structure, please use a professional designer. We recommend that Newtons' waterproofing systems are installed by our NSBC registered contractors who can offer insurance backed guarantees and accept liability for both the design and installation of our systems. Please refer to product data sheets before installation of our products. Newton Waterproofing Systems reserve the right to update drawings and product literature at any time.



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Scale Not to scale	Drawing Reference CDM-RW-03	Original Reference	Drawing Revision f
Date 27/05/2020	Designed by DGB	Drawn by CER	Checked by RC