



1 Croft Stairs
Newcastle upon Tyne
NE1 2HG

Ref: 211108.L.FR
13 May 2022

Patrick Casey,
Senior Site Manager – Civils Division,
Chartrange,
Wharf Street,
Dukinfield,
Cheshire,
SK16 4NJ

Dear Patrick,

Re: Gas Membrane Validation – Final Report, Belle Vue Coop Academy

This letter has been produced in order to report and advise on the validation of the installation of gas protection measures in line with the Visqueen Design (Enclosure 1) at the following site:

- **Belle Vue Coop Academy, Manchester M12 5AL**

It is our understanding that gas protection measures are required within each of the school blocks at the abovementioned site in line with Characteristic Situation 2 ground gas classification (BS8485:2015+A1:2019).

Validation inspections have recently been carried out at the **Drama Block, Teaching Block** and **Sports Block** and details relating to the final block inspections are provided in the following table. Photographic records are provided within Enclosure 2.

Block / Area Validated	Date of Final Validation Report	Inspecting Engineer	Inspected				Pass/Fail
			Membrane	Joints/ Seals	Service Entry Points	Dowel Entries	
Lift Pit	16.11.2021	RJ	✓	✓	N/A	N/A	Pass
Teaching Block	11.02.2022	RJ	✓	✓	✓	✓	Pass
Drama Block	24.03.2022	RJ	✓	✓	✓	✓	Pass
Sports Block	13.05.2022	RJ	✓	✓	✓	✓	Pass

N/A – Not Applicable



Conclusion

The overall installation of the Visqueen gas protection design was satisfactory within the lift pit, Teaching Block, Drama Block and Sports Block and **the gas protection measures at the inspected areas are considered to have been installed in accordance with the agreed Visqueen Design (Enclosure 1)**. For further information, please refer to the individual reports for the appropriate components.

We trust that these comments and attachments are to your satisfaction and if you require any further information or clarification, please do not hesitate to contact us.

Yours sincerely,

**Rebecca Jordan BSc (Hons) MEnv M.I. Soil Sci
Consultant**

For and on behalf of Roberts Environmental Ltd

Tel: 0191 230 4521

Mobile: 07904 533 938

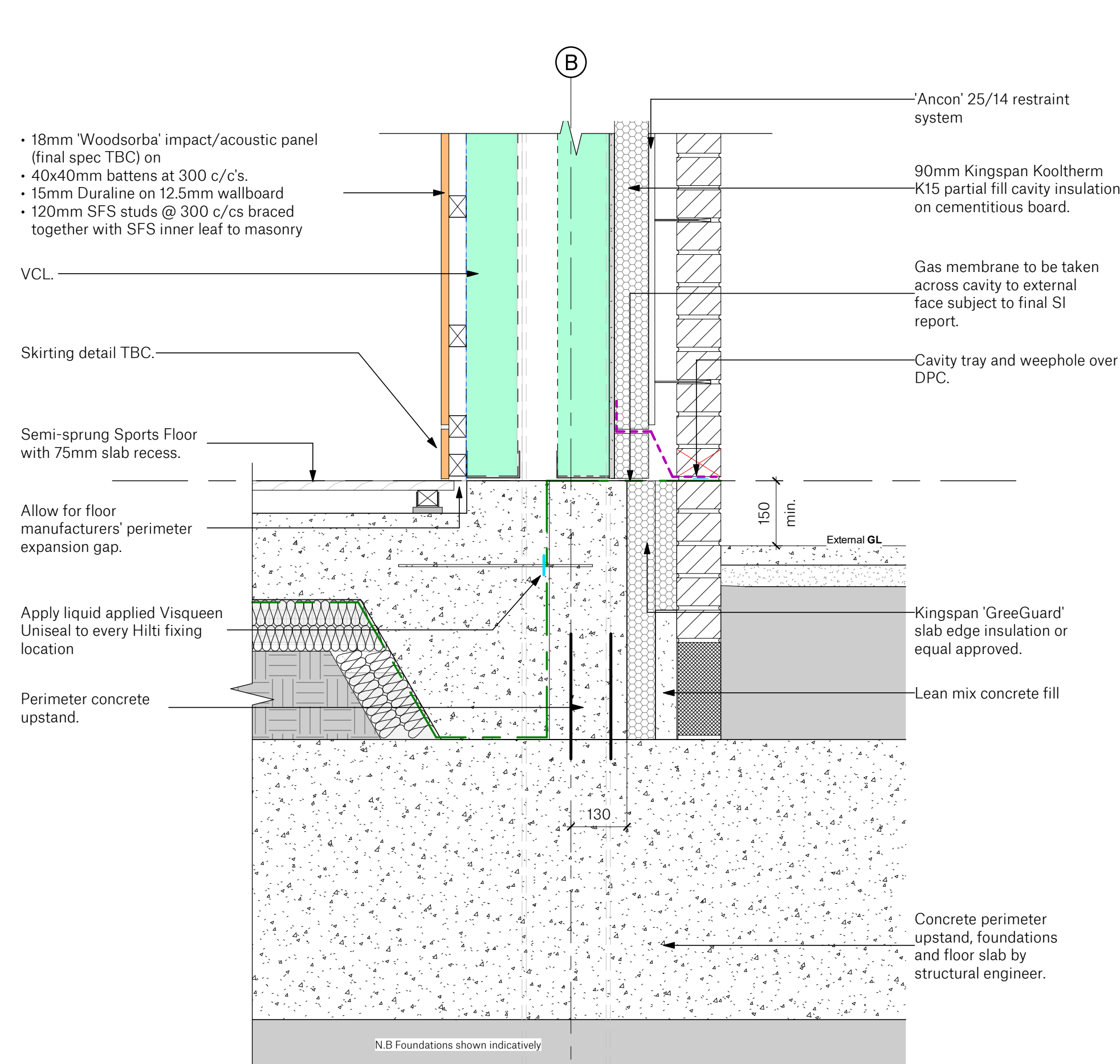
Enclosures:

- Enclosure 1 – Visqueen Drawings

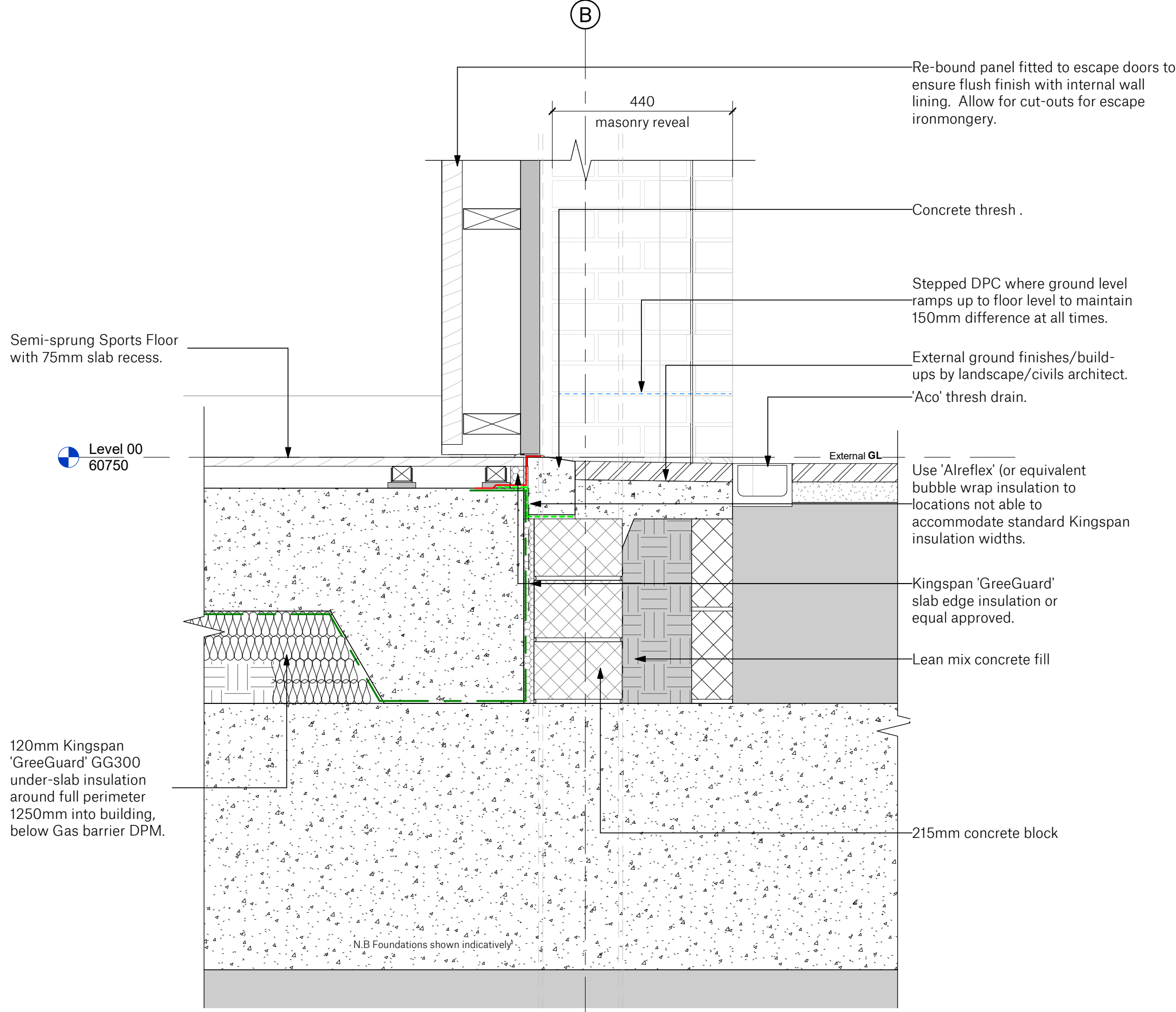


Enclosure I – Visqueen Drawings

Revision	Description	Author	Checker	Date
P01	First Issue	AWA	LB	08/06/21
P02	Details amended following changes to BDP slab & substructure design	AWA	LB	30/09/21
P03	Waterproofing to base of upstand wall to re-bar locations amended , sports hall internal lining updated, extent of sports slab recess updated	RG	AWA	02/08/21
C01	Updated following further developments between SRM & BDP. Issued as CONSTRUCTION	AWA	RG	20/09/21
C02	Details updated in line with Roberts assessor comments and markup following inspection	RG	SPE	07/02/22



Slab Edge Detail 04
1:10



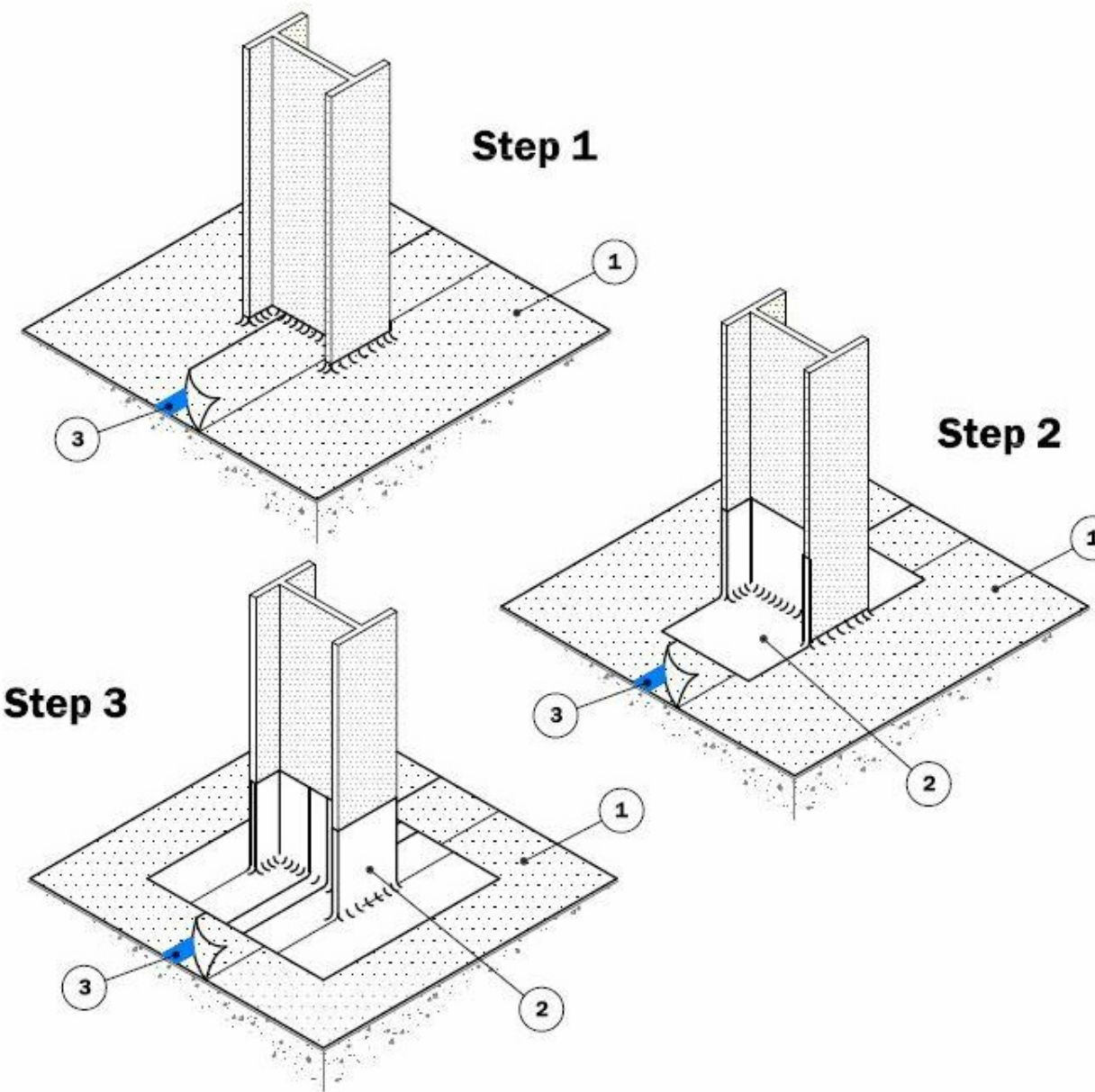
Slab Edge Detail 05
1:10

KEY TO MATERIALS :-	
1	Visqueen Gas Barrier.
2	Visqueen 300mm / 500mm Detailing Strlp.
3	Visqueen Double Sided Tape (10m x 50mm).

Step 1.
Install Visqueen Gas Barrier DPM on a suitable smooth & well compacted blinding layer. All laps to be 150mm minimum & fully sealed using Visqueen Double Sided Tape & Visqueen Gas Resistant Foli Tape. Neatly cut the DPM around the profile of the steel column.

Step 2.
Ensure steelwork is clean & dry before applying Visqueen Detailing Strip (300mm or 500mm). Ensure that the Detailing Strip extends 150mm minimum horizontally onto the DPM & 150mm minimum vertically onto the steel column. Ensure all laps are fully sealed.

Step 3.
Apply more Detailing Strip to the remaining exposed steel flanges ensuring all laps are 150mm in all directions & fully sealed.



GB-52 Detail
N.T.S

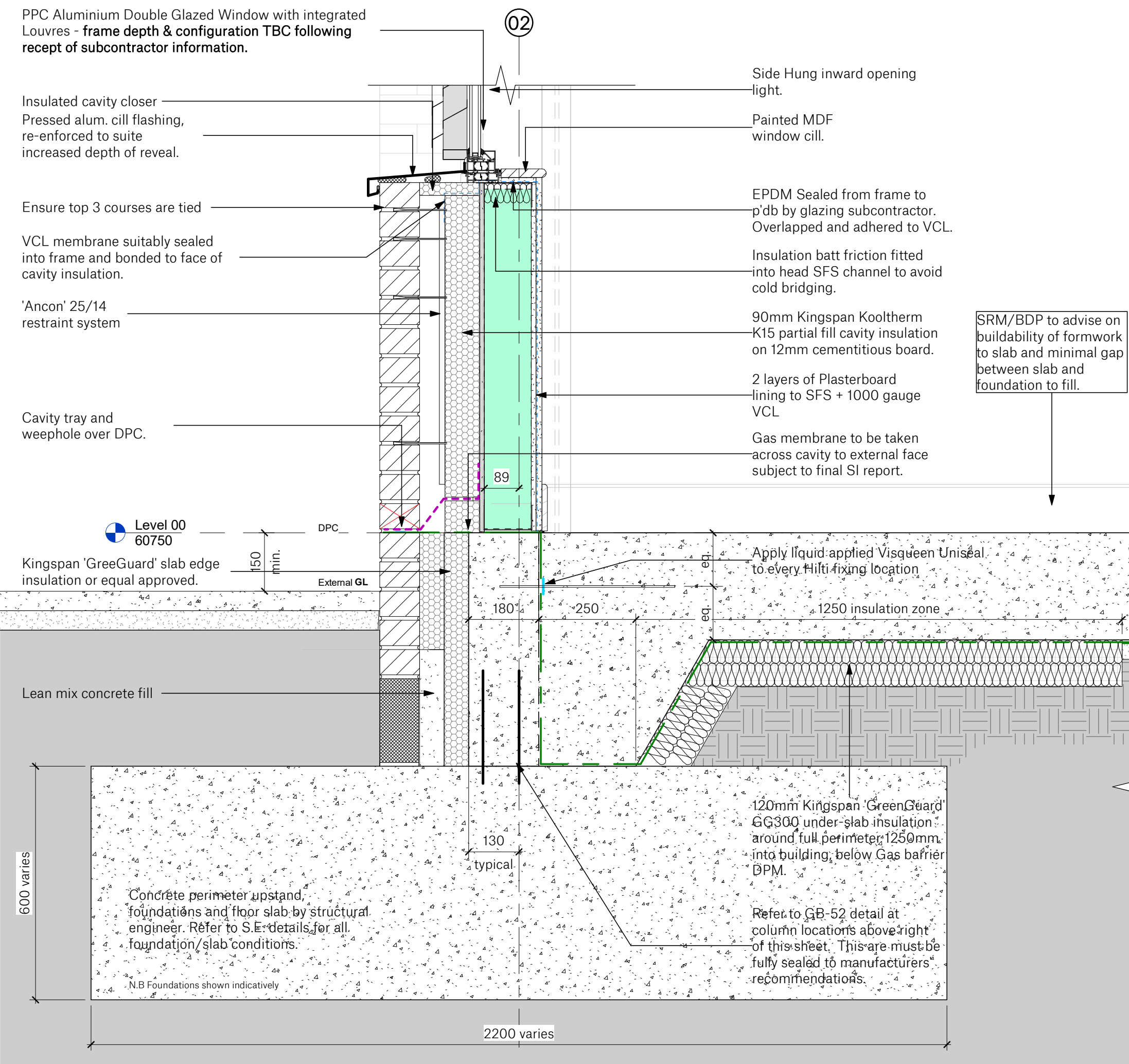
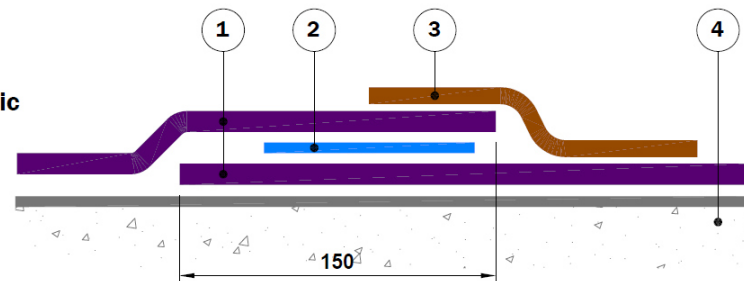
Visqueen Jointing Details

N.T.S

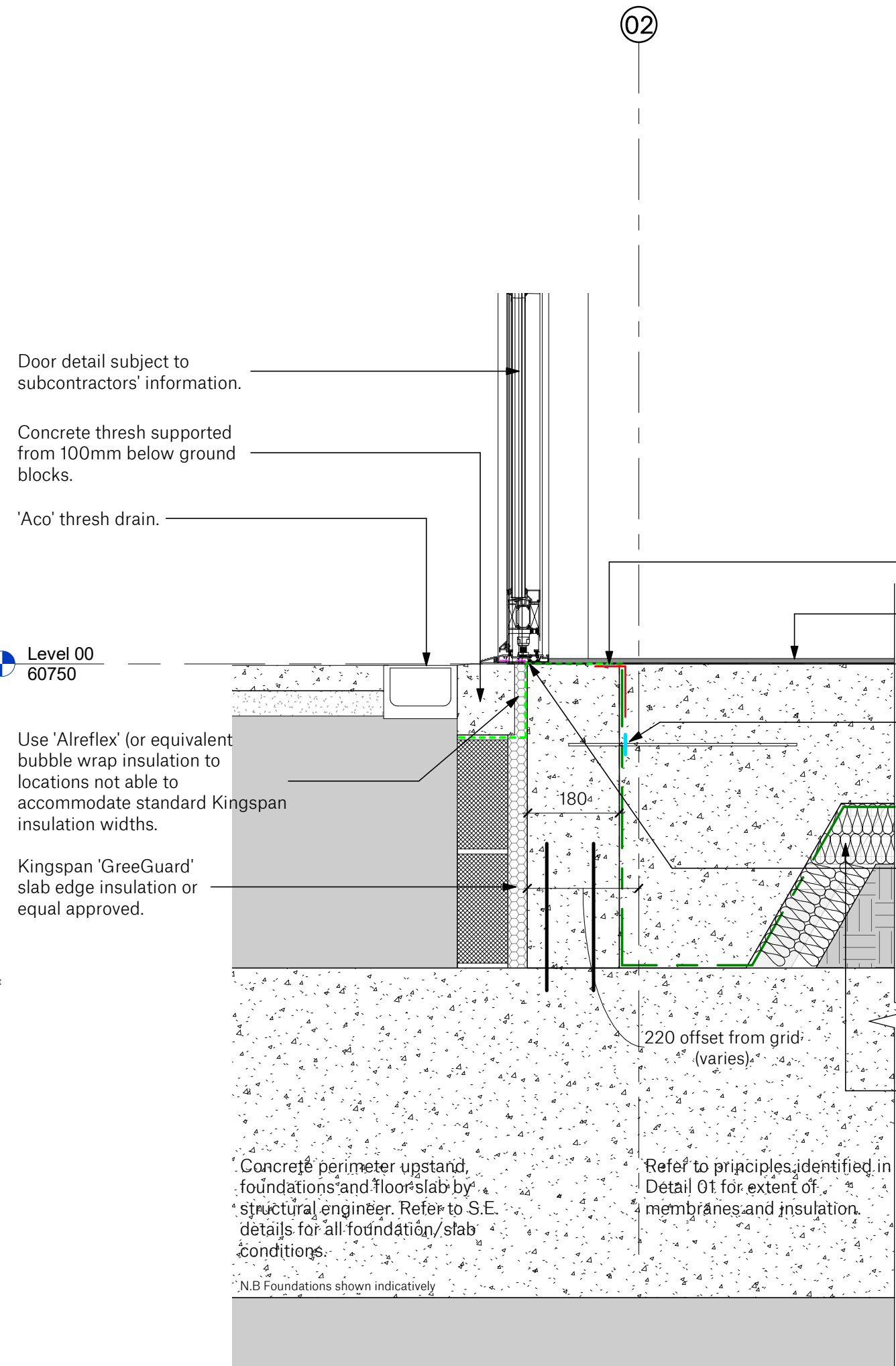
KEY TO MATERIALS :-	
1	Visqueen Ultimate GeoSeal or loose laid membrane
2	Visqueen Ultimate Double Sided Tape.
3	Visqueen Ultimate Lap Tape.
4	Smooth slab or blinding layer.

NB : Ensure careful placement of steel reinforcement to avoid damage to the DPM.

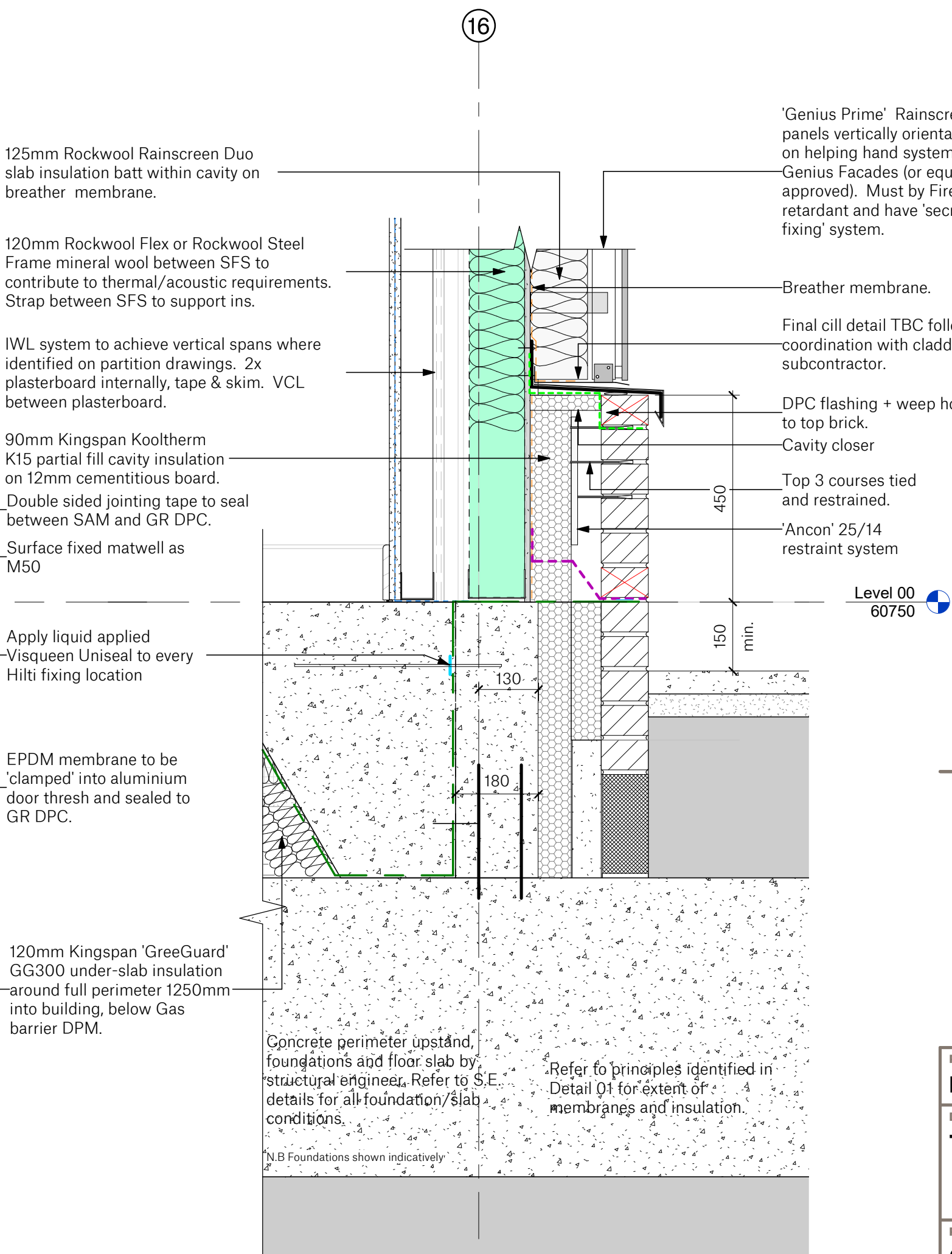
TAPED JOINT :
LOW RISK of hydrostatic water pressure



Slab Edge Detail 01



Slab Edge Detail 02



Slab Edge Detail 03

LEGEND

- Extent of SFS
- Visqueen Liquid Gas Membrane
- Visqueen ZEDEX CPT DPC (cavity tray)
- Visqueen GR DPC
- Visqueen GR SAM
- Visqueen Gas Barrier
- Visqueen GR Lap Tape
- VisqueenPro Double Sided Jointing Tape (50mm x 10m)
- Visqueen Double Sided Jointing Tape (100mm x 15m)
- Visqueen Treadguard 1500
- Visqueen Protect & Drain 12mm
- Visqueen Pro 300/500mm Detailing Strip on HP Tanking primer
- Visqueen Ultimate GeoSeal
- EPDM
- VCL
- Breather Membrane

NOTE:

Always refer to slab edge setting-out plans for location of slab edge offset from gridlines.

SPACE

Spaceworks, Benton Park Road, Newcastle upon Tyne,
NE7 7LX
T: +44 (0)844 800 6660
www.spacearchitects.co.uk

Sir Robert McALPINE

MANCHESTER CITY COUNCIL

Project Belle Vue Co-op Academy, Manchester				
Drawing Title Typical Slab Edge Details - Sheet 01				
Project No. 009433	Drawing No. 01-XX-DR-A-100001	Status C02	Revision As indicated	Scale at A1
File Reference: 009433-SPA-01-XX-DR-A-100001				
This drawing is Copyright - Check all dimensions on site - Inform originator of any discrepancies - Work to figured dimensions only - Do not scale				