

# ALLCO VOLCLAY BACKFILL AND PROTECTION

## Backfill requirements for Volclay® tanking membranes

There must be no voids in the backfill, regardless of the type of backfill material being used to confine the membrane. How this is achieved is the contractor's responsibility. If building above, then the top 500mm must be compacted with a walk-behind vibratory compactor or mechanical soil compaction device to the extent that foot traffic on the lift does not leave indentations greater than 12mm. Engineering backfill requirements take precedence for floor substrate. Care should be taken to ensure that the compactor does not touch the waterproofing membrane. External walls will vary as to final topping.

### Acceptable Backfill

25/7 Scoria	MUST have protection
GAP25 river run gravel poorly graded with fines	MUST have protection
GAP40 Scoria with fines	MUST have protection
GAP40/45 River run gravel with fines	MUST have protection
GAP60/65 with fines (mix as used for roads)	MUST have protection

### Limited Use Backfill

Flowable Fill	MUST talk to Allco for more information
Permeable (No Fines) Concrete	MUST talk to Allco for more information
Pit Sand (Bay of Plenty/Waikato Region)	MUST talk to Allco for more information

## Backfill to Drain Coil + Drain Coil location

The backfill / drainage material around the drain coil and wall / floor joint must be of a finer grade to prevent voids from occurring. E.g GAP 7 or similar.

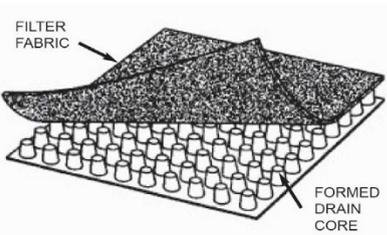
Where possible, confirm with the contractor the location of the drain coil:  
Important:

- 300mm below the finished Floor Level (FFL) is recommended
- 100mm from membrane face, to allow backfill material between coil and membrane.

## Hydrostatic Conditions – Contact Allco if unsure

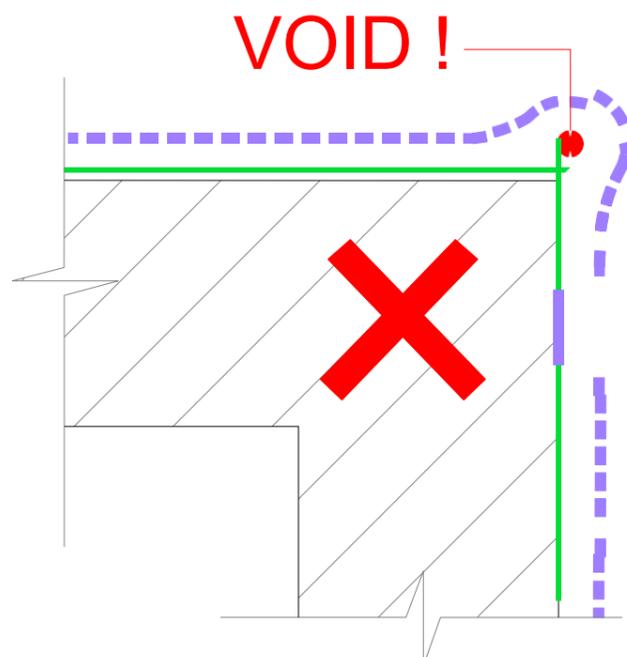
Under hydrostatic conditions a good compactable product is to be used to achieve good confinement of the membrane such as GAP40 with fines. Backfill is to be compacted at 300mm lifts, protection is required with either ALLCO ALLGUARD Coreflute or 6mm fibre cement board.

Acceptable Protection – Contact Allco if unsure

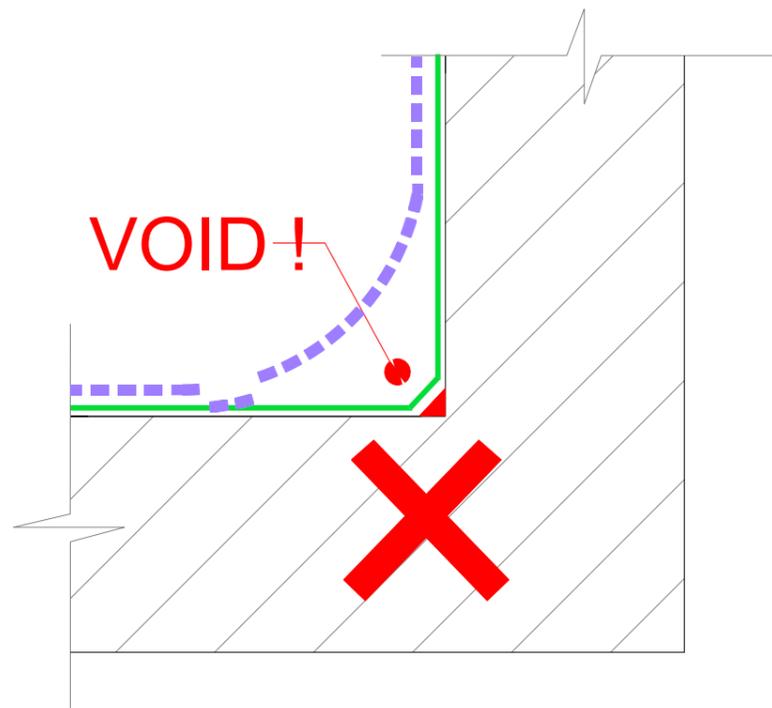
Product	Description
ALLCO Allguard 2300 x 1150 x 4mm sheet size	Polypropylene plastic sheet. Minimum requirement for light commercial and residential membrane protection.
ALLCO Aquadrain 15X® 1.22m x 15.85m roll size. 	A cost-effective drainage sheet designed to replace aggregate drainage. Drainage material. Not to be used in Hydrostatic conditions. When applying, cut the edges and corners where necessary. DO NOT BEND around corners or changes from vertical to horizontal installations. Adjust the fit to prevent voids. Also see details below for installation guides
Polystyrene - High Density 20mm min	MUST be high density / HD. To prevent voids, joints must be well butted together with no damaged edges or corners. Generally High Density XPS products have better density characteristics, but some EPS (H/VH grades) products may be suitable, check with Allco. Guide - Density 25-30kg/m <sup>3</sup> . Compressive strength 250kPa”
Fibre cement board 6mm min.	Joints butted together.

Acceptable Substrates – Contact Allco if unsure or alternate requirements.

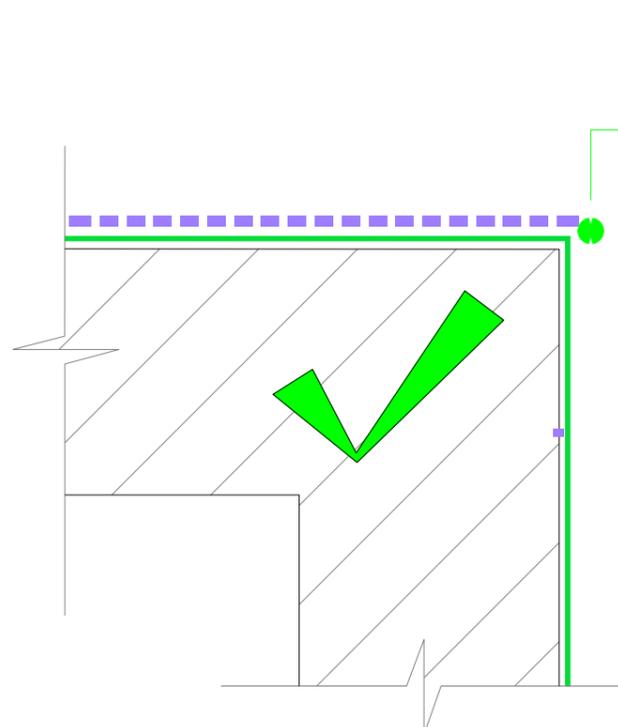
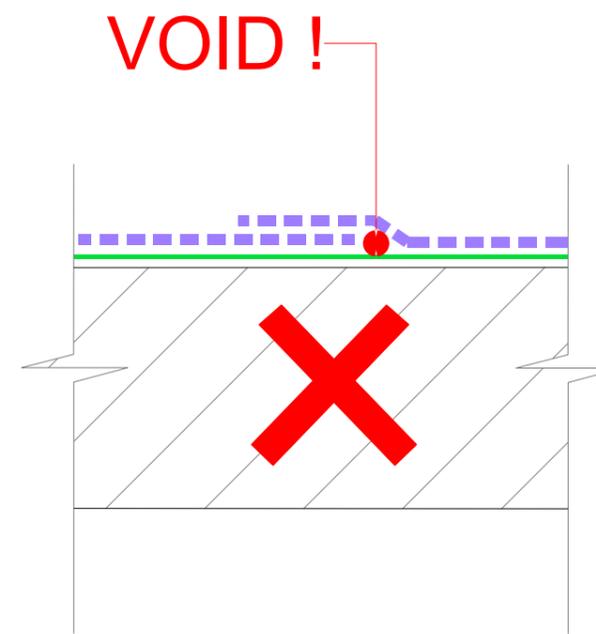
Site Concrete (50mm minimum) with no boney areas.
Clean Cut Clay (if unsure seek further advice from Allco).
GAP7 mixed with 10% cement (firms up substrate)
GAP60 / 65 compacted with fines (cannot be any boney areas)



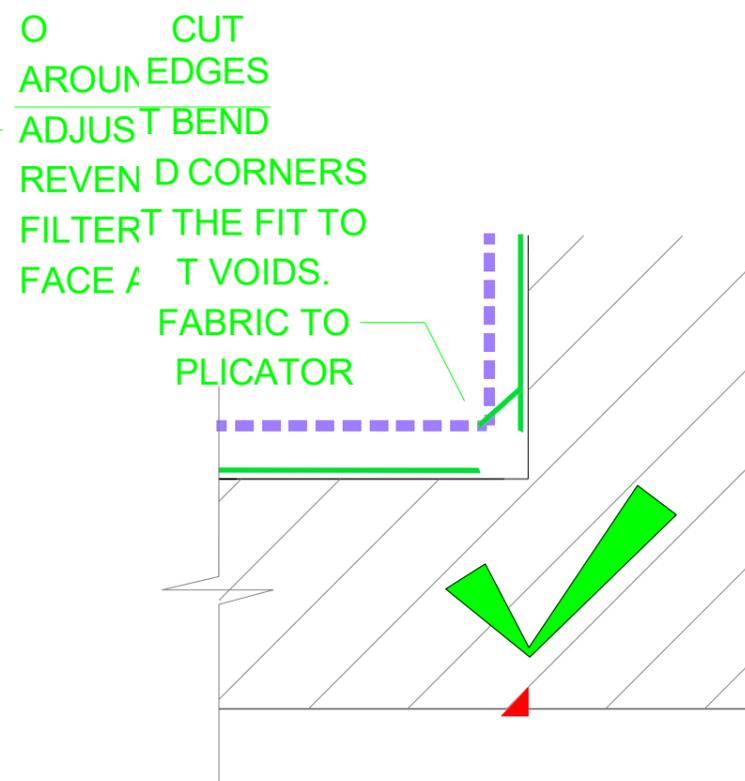
EXTERNAL CORNERS



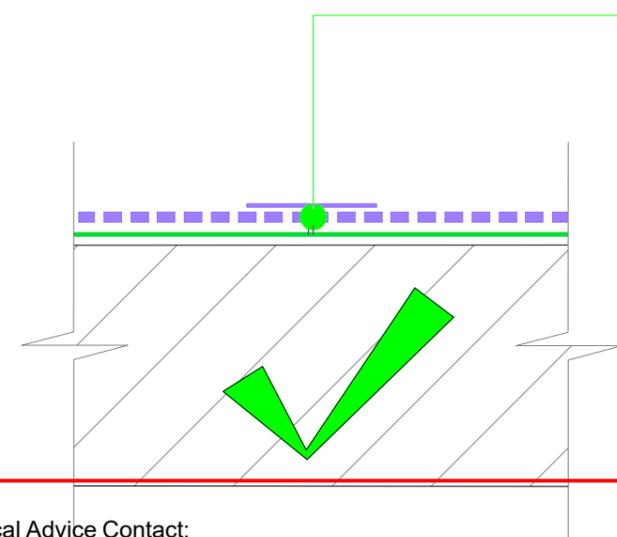
FOOTINGS / INTERNAL CORNERS



EXTERNAL CORNERS



○ CUT AROUND EDGES  
 ○ ADJUST BEND  
 ○ REVEAL CORNERS  
 ○ FILTER THE FIT TO FACE / NO VOIDS.  
 ○ FABRIC TO PPLICATOR



BUT JOINT WITH TAPE JUNCTION.  
 OR.  
 CUT BACK CORE AND OVERLAP FILTER FABRIC



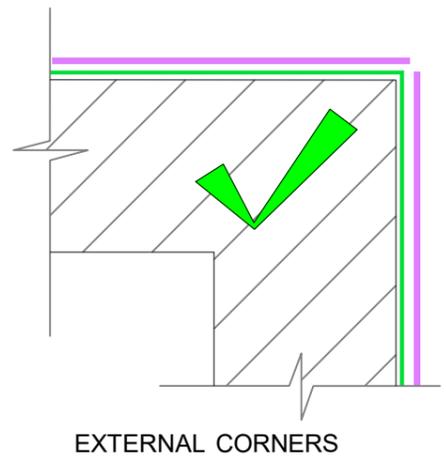
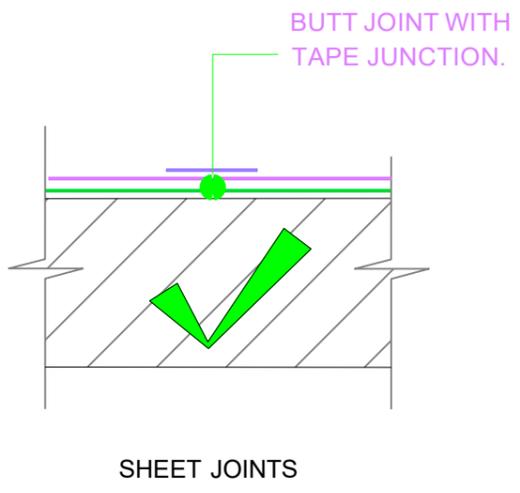
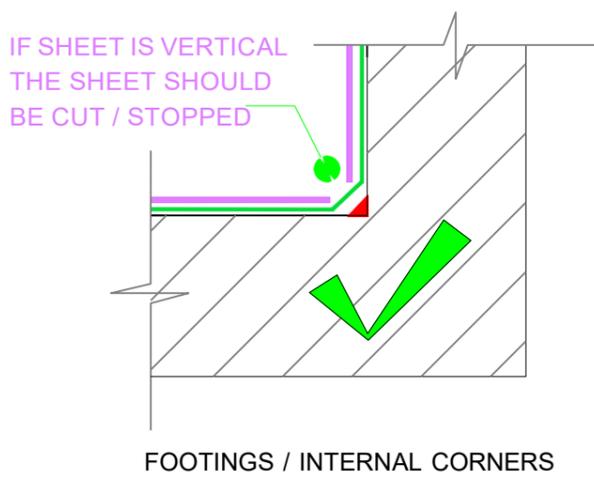
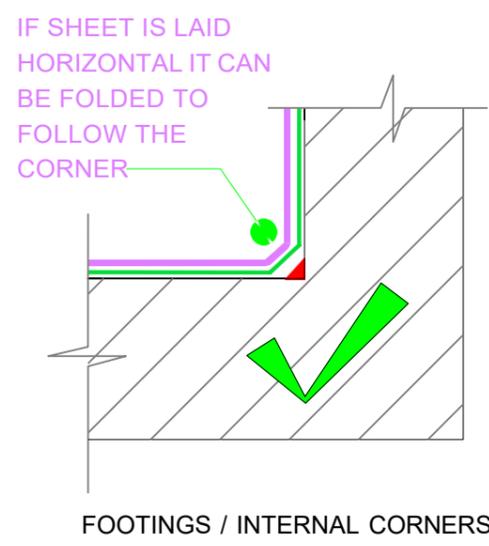
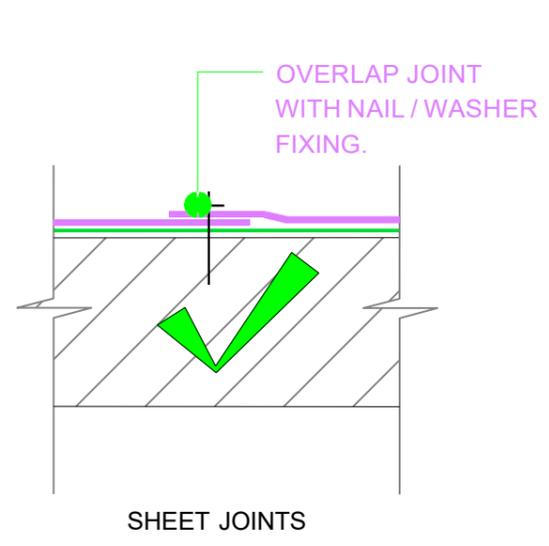
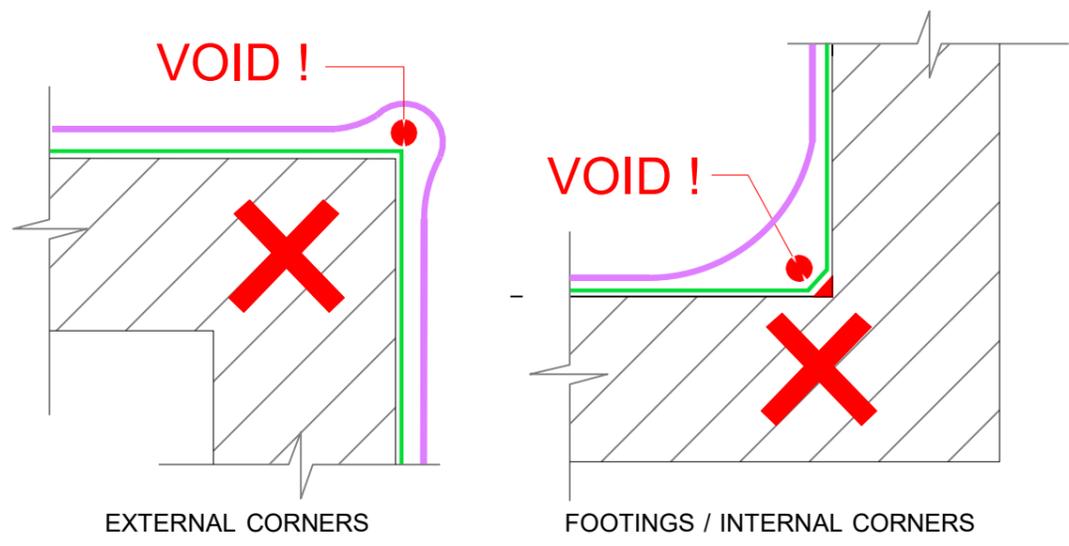
The information and data contained herein are believed to be accurate and reliable. This information does not constitute a warranty and should be used in conjunction with the project specification document supplied by Allco Waterproofing Solutions Ltd. Please contact Allco Waterproofing Solutions Ltd with any questions or deviations from this information. © Allco Waterproofing Solution Ltd

For Technical Advice Contact:  
 Web: [www.allco.co.nz](http://www.allco.co.nz)  
 Email: [info@allco.co.nz](mailto:info@allco.co.nz)  
 Telephone: 09 448 1185  
 Facsimile: 09 448 1186

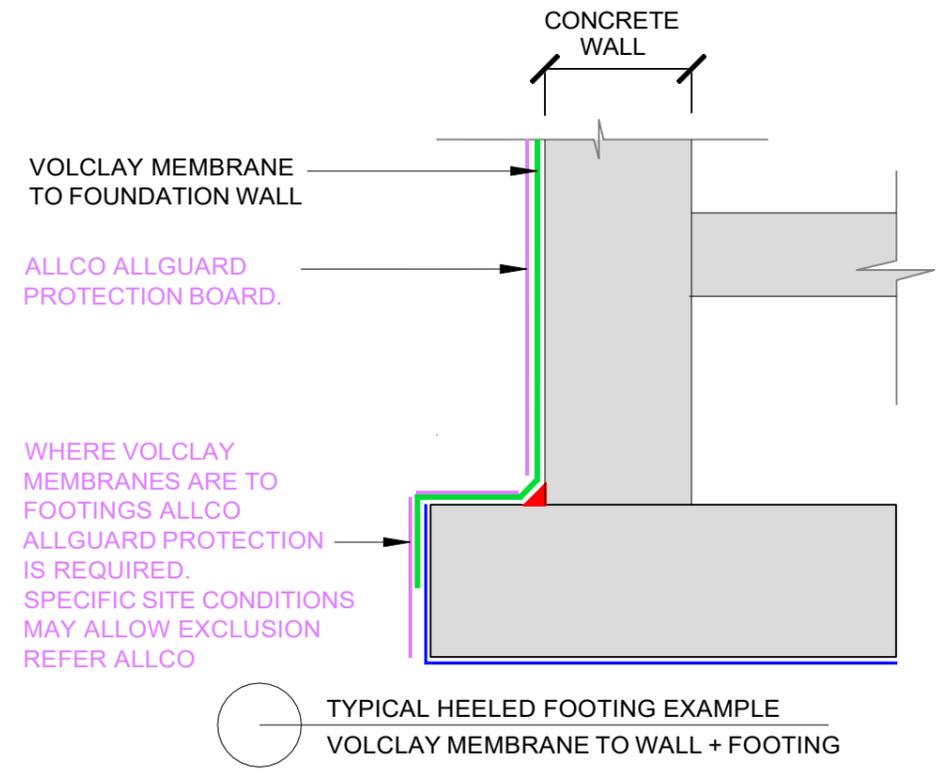
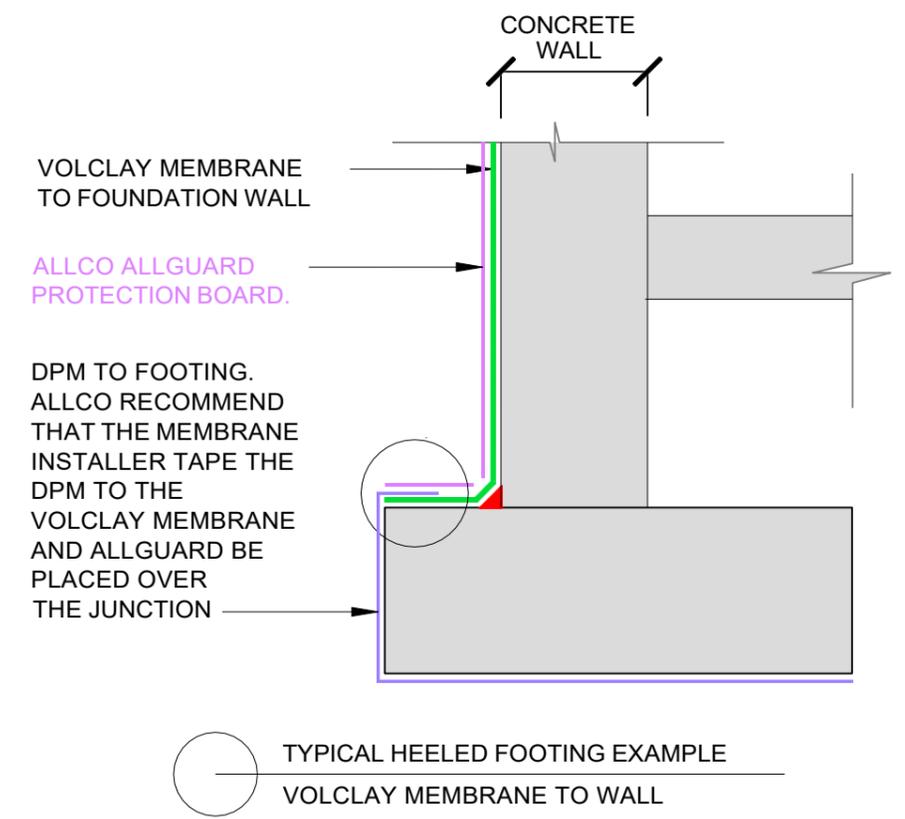
DRAWN BY: ALLCO  
 DATE: 11/2022

DRAWING REF: V-AQUA

REV: 1



- ALLCO ALLGUARD SHOULD ;**
- BE MECHANICALLY FIXED OVER THE MEMBRANE.
  - FIXED TO REDUCE MOVEMENT PRIOR TO AND DURING BACKFILL
  - PLACED TO REDUCE RISK OF DAMAGE TO MEMBRANE BY OTHER TRADES.
  - TEMPORARY TERMINATIONS SHOULD BE TAPED WHEN NEXT STAGE INSTALL IS IMMINENT.
  - FOLLOWING COMPLETED INSTALLATION ADVISE THE MAIN CONTRACTOR OF THE BACKFILL REQUIREMENTS

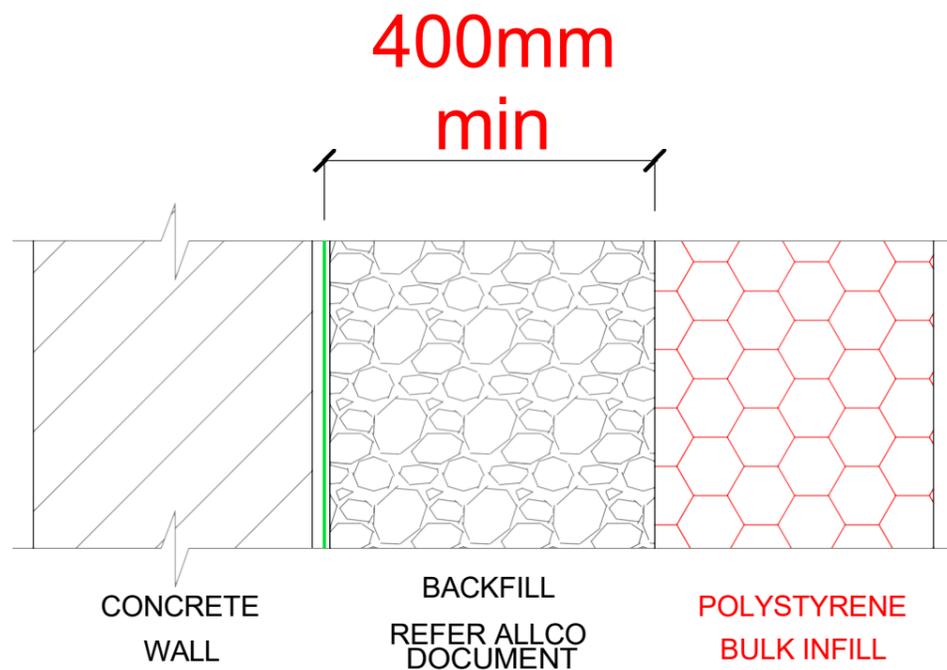


The information and data contained herein are believed to be accurate and reliable. This information does not constitute a warranty and should be used in conjunction with the project specification document supplied by Allco Waterproofing Solutions Ltd. Please contact Allco Waterproofing Solutions Ltd with any questions or deviations from this information.  
© Allco Waterproofing Solution Ltd

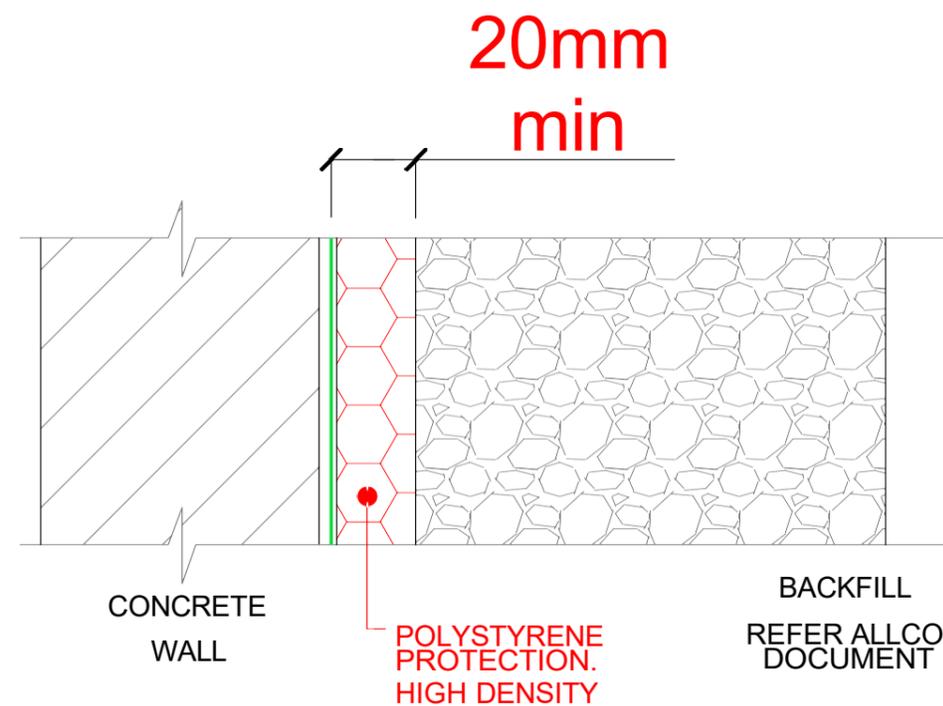
For Technical Advice Contact:  
Web: [www.allco.co.nz](http://www.allco.co.nz)  
Email: [info@allco.co.nz](mailto:info@allco.co.nz)  
Telephone: 09 448 1185  
Facsimile: 09 448 1186



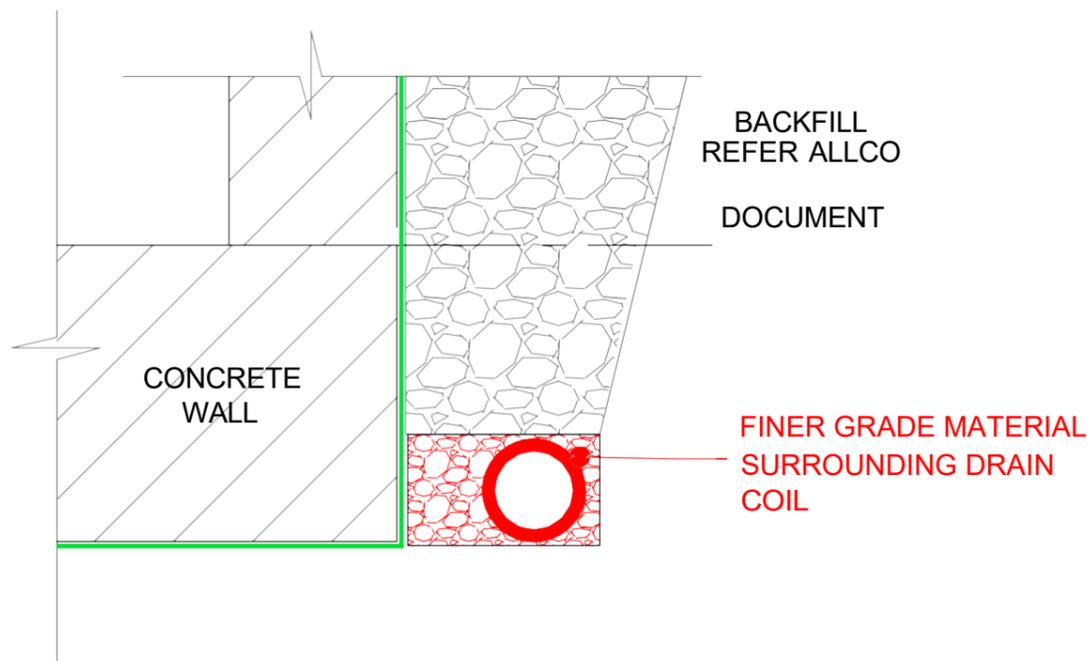
DRAWN BY: ALLCO	DATE: 11/2022
DRAWING REF: V-Allguard	REV: 2



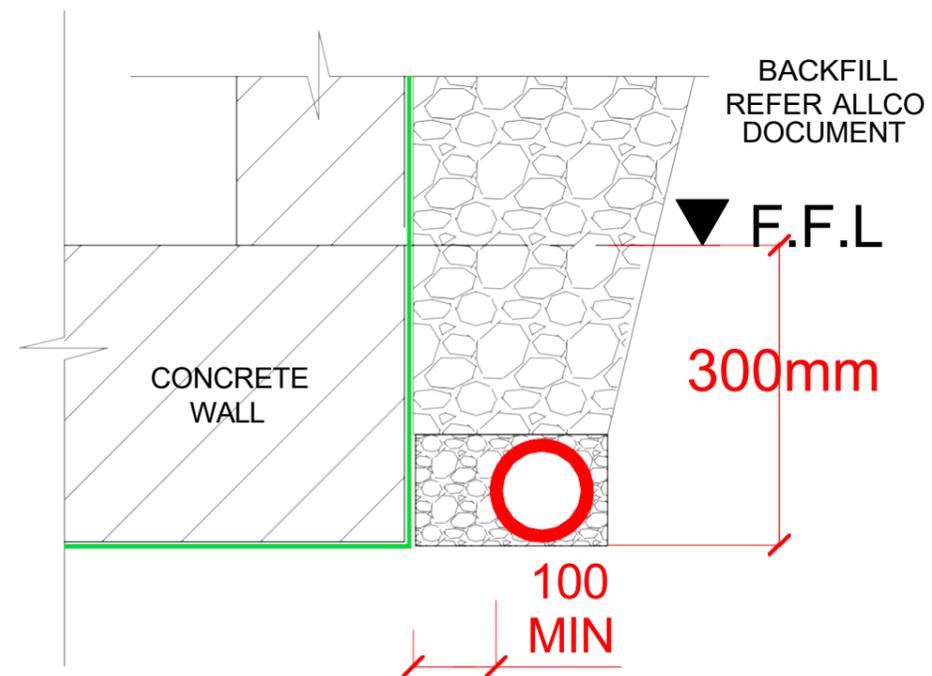
POLYSTYRENE BULK INFILL



POLYSTYRENE AS PROTECTION



BACKFILL AROUND DRAINCOIL



DRAINCOIL LOCATION



The information and data contained herein are believed to be accurate and reliable. This information does not constitute a warranty and should be used in conjunction with the project specification document supplied by Allco Waterproofing Solutions Ltd. Please contact Allco Waterproofing Solutions Ltd with any questions or deviations from this information.  
© Allco Waterproofing Solution Ltd

For Technical Advice Contact:  
Web: [www.allco.co.nz](http://www.allco.co.nz)  
Email: [info@allco.co.nz](mailto:info@allco.co.nz)  
Telephone: 09 448 1185  
Facsimile: 09 448 1186



DRAWN BY: ALLCO  
DATE: 11/2022

DRAWING REF: V-DO'S

REV: 1