

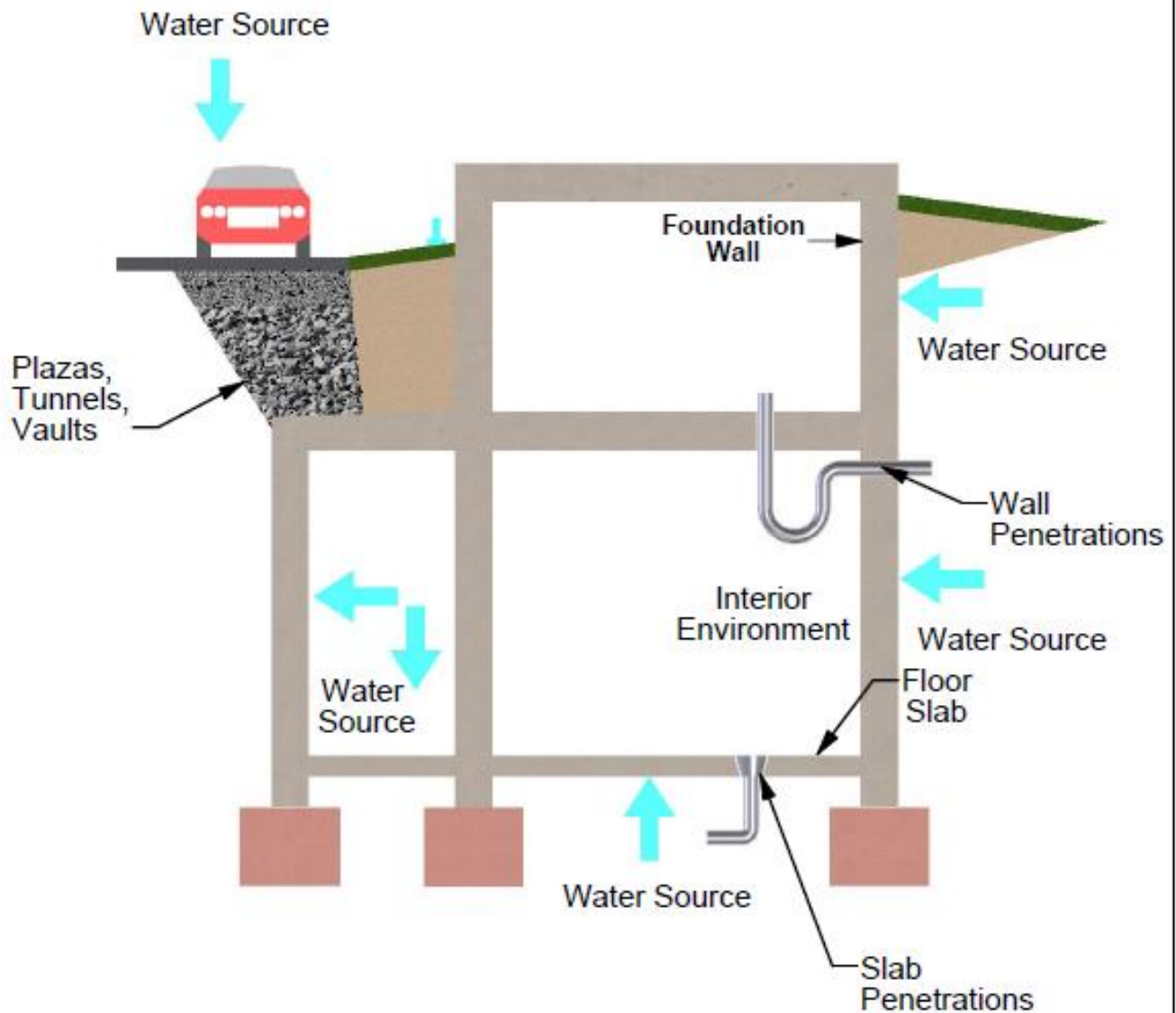
Principles of Below Ground Waterproofing

Applications for Commercial and Residential buildings



CONCRETE PROTECTION
WATERPROOFING SOLUTIONS





Positive Tanking as the first defence

- Foundations
- Block work Walls
- Tilt Panel Walls
- Internal wet areas

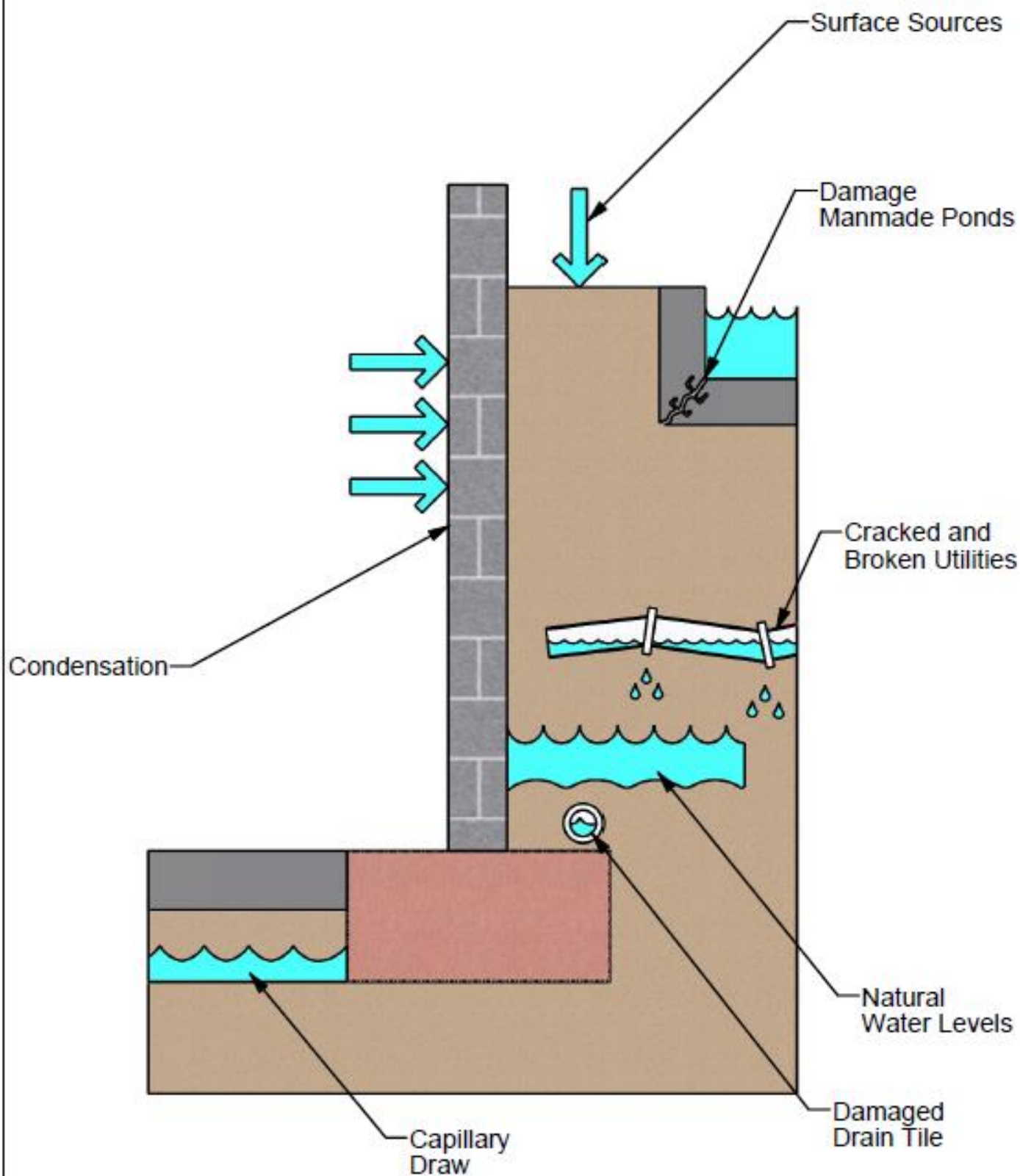


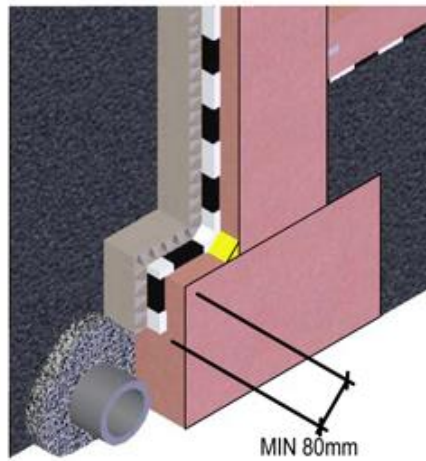
The following technical drawing
cover the detailing required



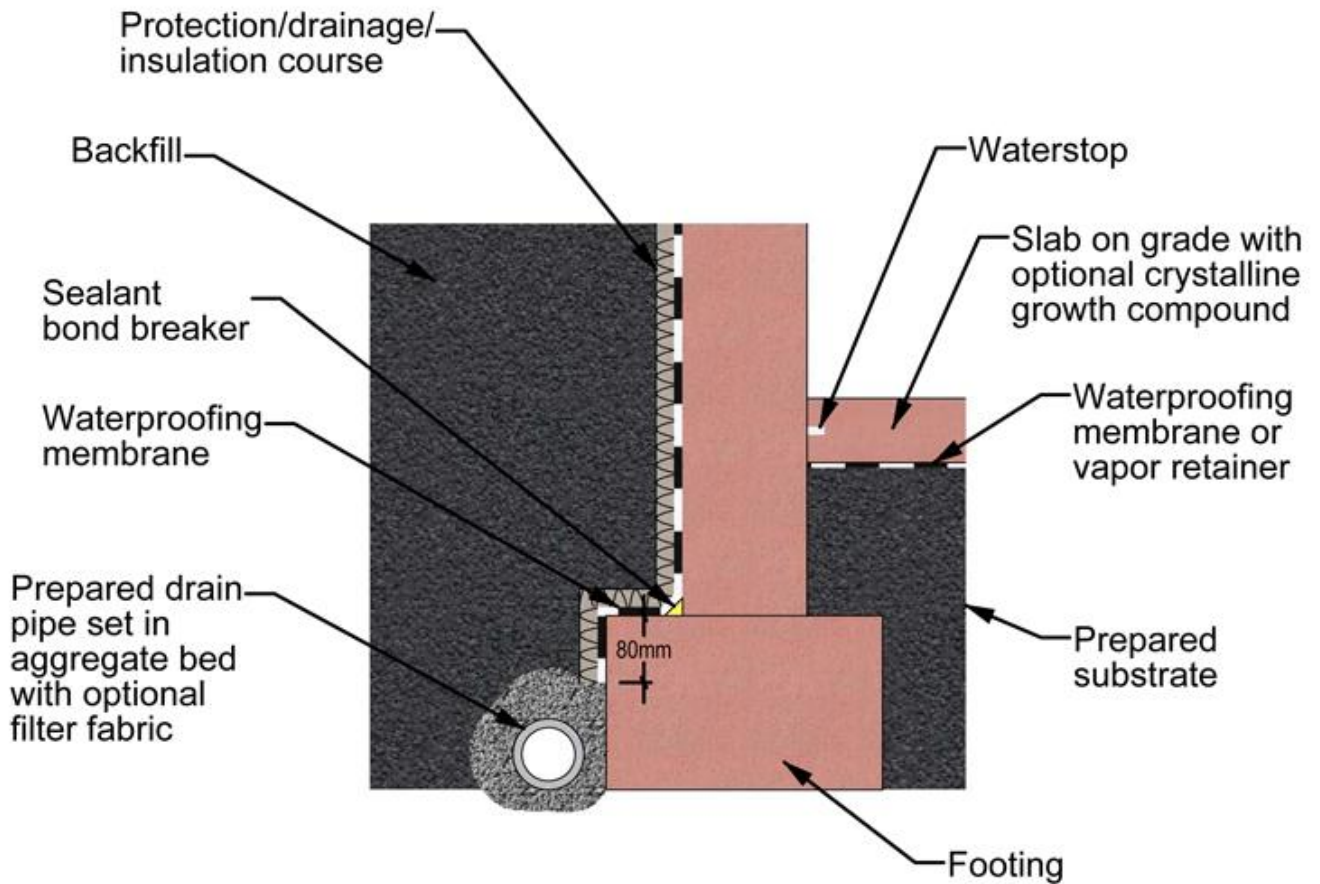
CONCRETE PROTECTION
WATERPROOFING SOLUTIONS

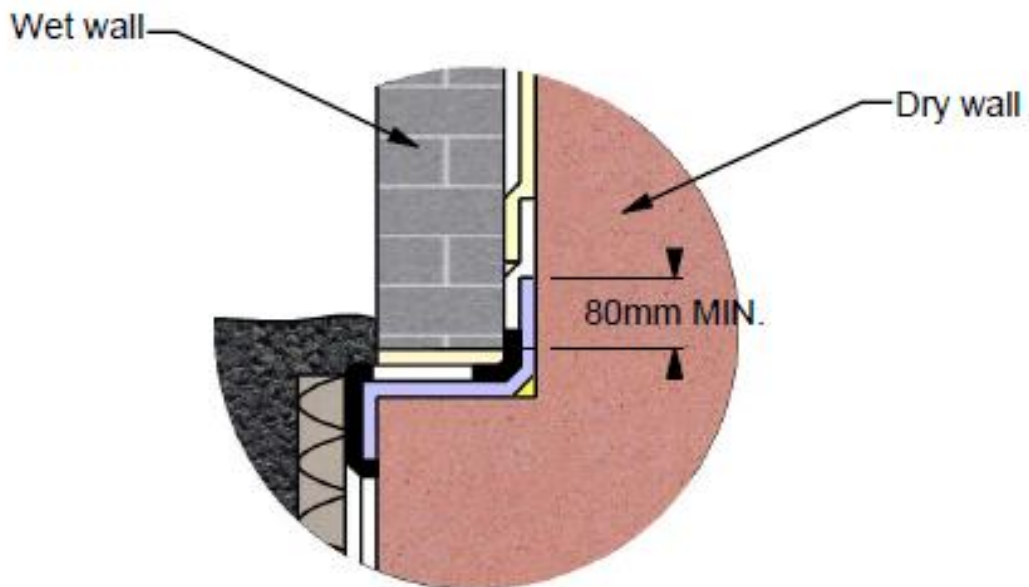
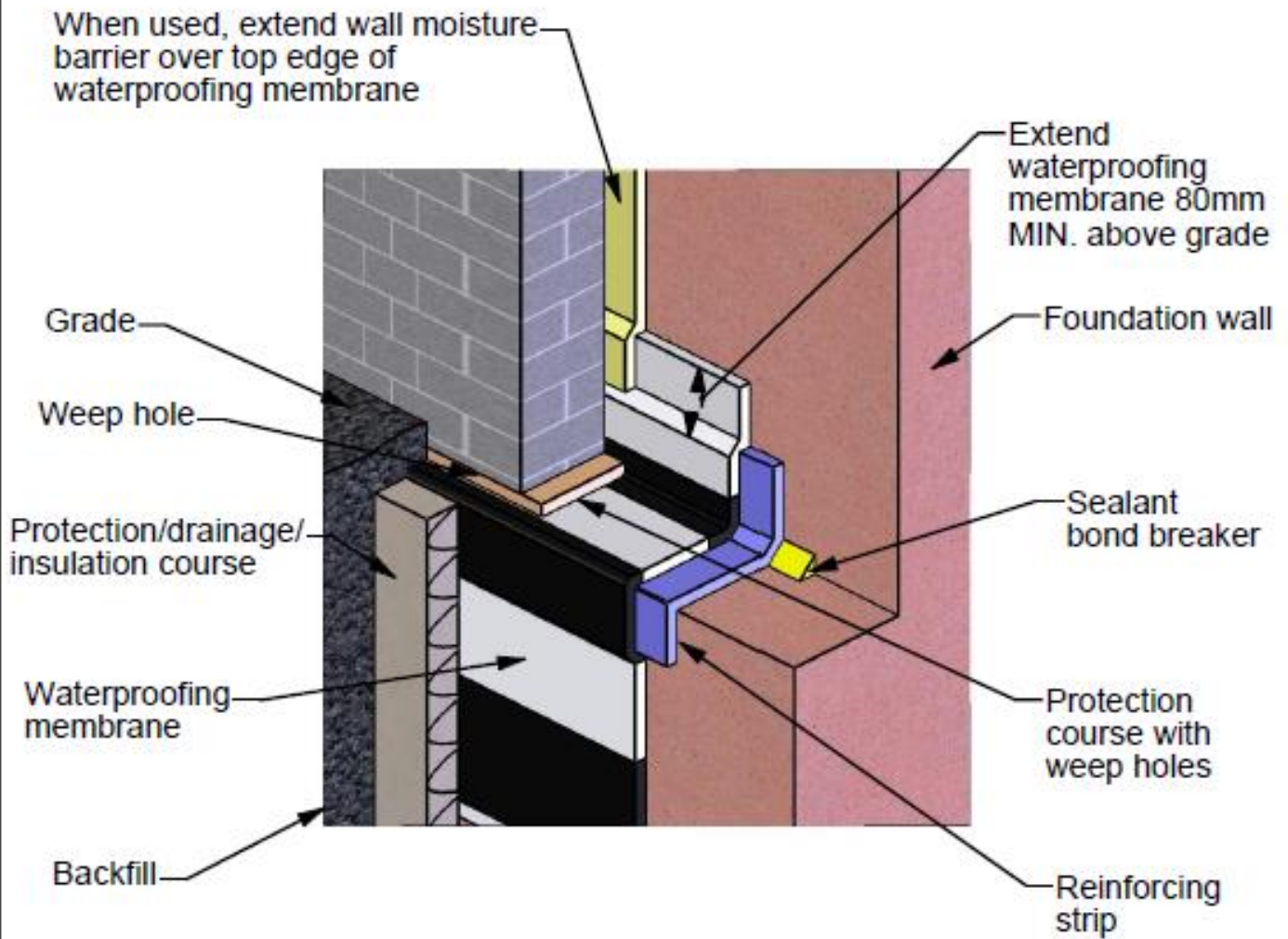


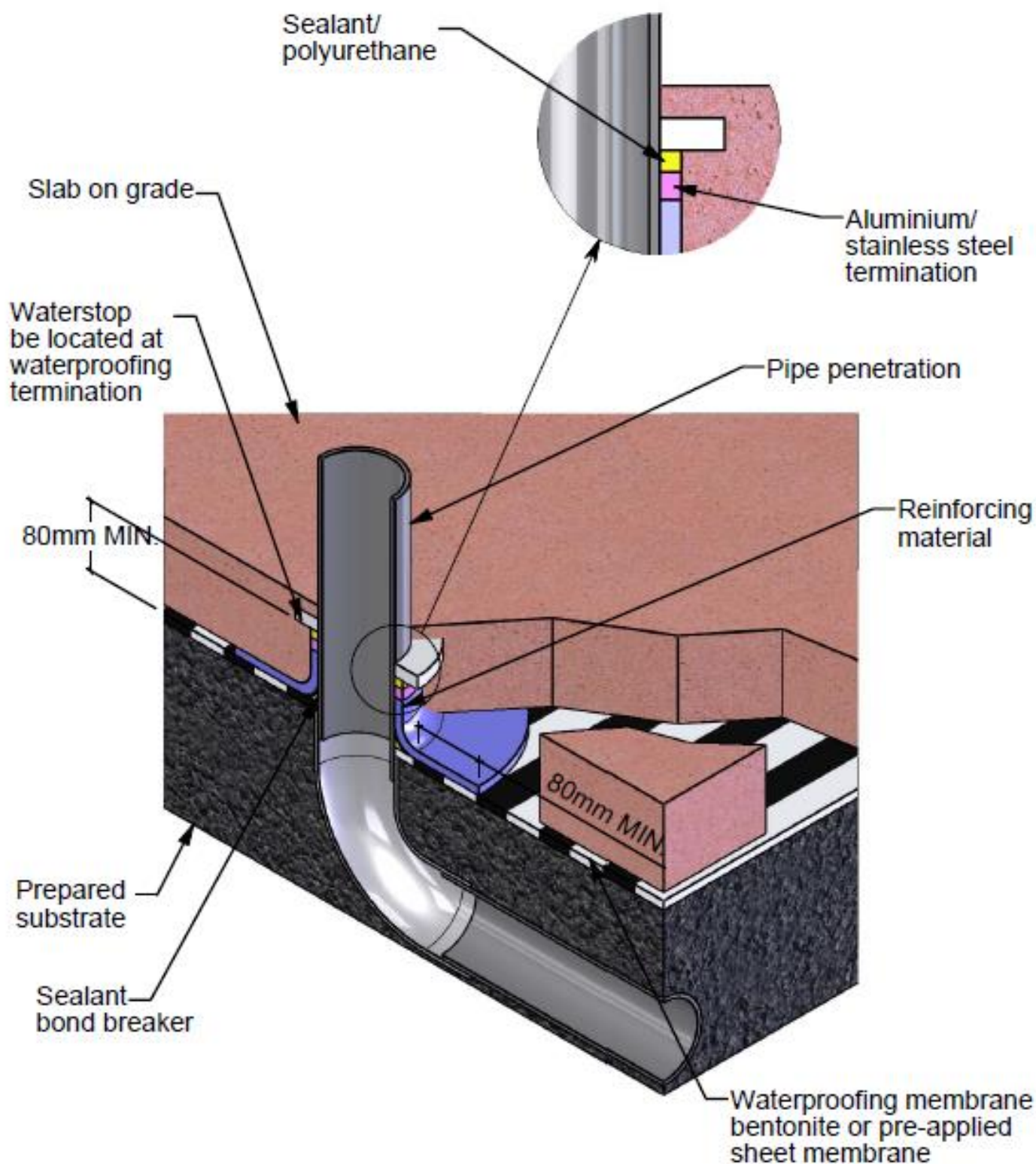


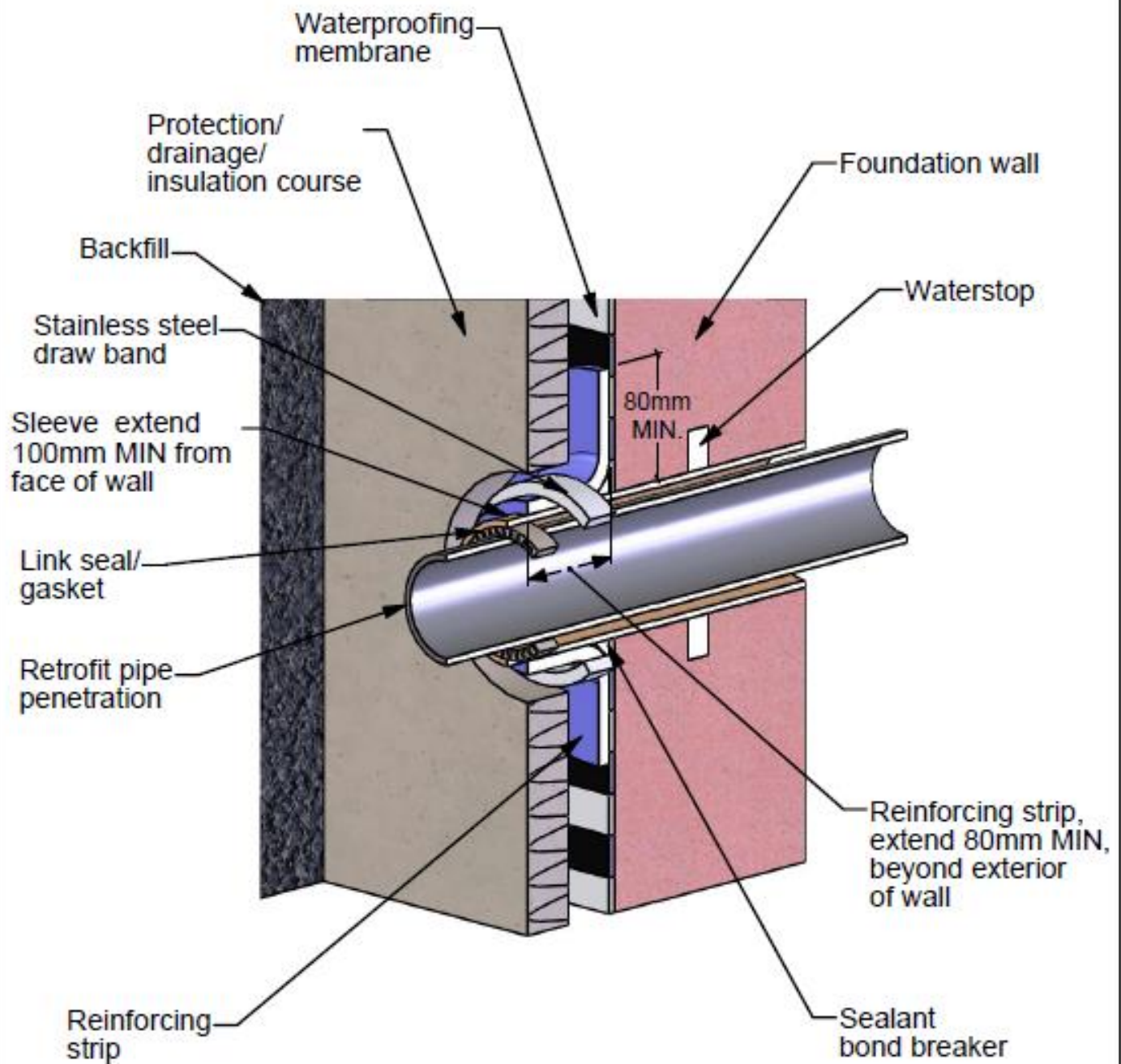


MIN 80mm









Protection/drainage/
insulation course

Waterproofing membrane
fastened/adhered to wood
lagging or suitable substrate

Wall

80mm MIN. LAP

Optional: water stop

Waterstop

80mm MIN. LAP

300mm
above
cold joint

Prepared
substrate

300mm

Waterproofing membrane
bentonite or pre-applied
sheet membrane

Wood lagging or
suitable substrate

Grade beam(footing)

Optional: perimeter
drainage system

Termination bar fastened with appropriate fasteners at approx 12° O.C.

Sheetmetal counterflashing appropriate for masonry construction type

Grade

Backfill

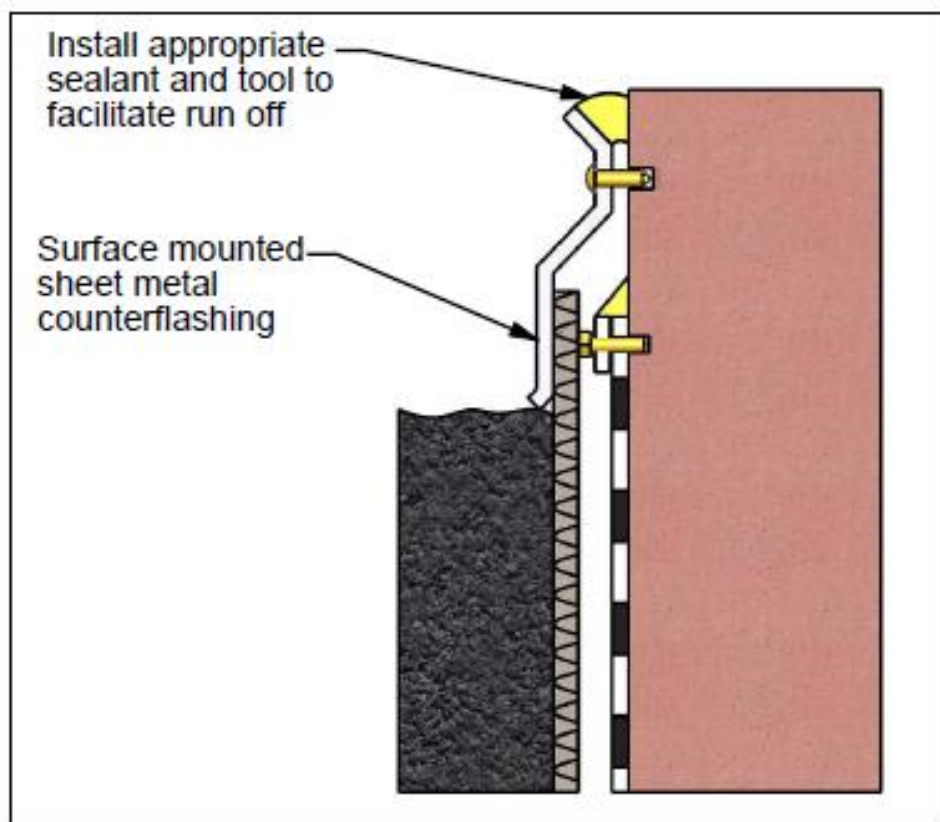
Protection/drainage/insulation course

Appropriate sealant

Appropriate sealant compatible with waterproofing membrane

Waterproofing termination 100mm MIN above grade

Waterproofing membrane



Products for Positive Tanking Waterproofing



High quality polyurethane caulking

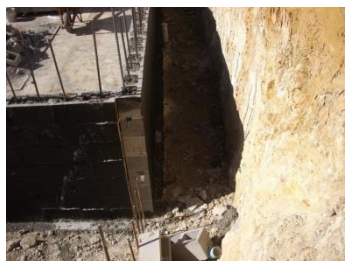
Liquid applied Waterproofing Membrane

Reinforcing Joint fabric

Geofabric

Protective board or sheeting

Agriculture drainage



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WATERPROOFING SOLUTIONS



Helping to Waterproof the Structural integrity



Common methods of preventing water penetration are:

- Install a “water stop” between structural joints, typically the centre of the floor/wall joint.
- Include crystalline growth compound in the concrete mix when pouring foundations, walls or core filling block work



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WATERPROOFING SOLUTIONS



Internal Waterproofing



Rooms with an internal water source become wet areas such as Plant Rooms, Liquid Storage Rooms or Basement Bathroom / Laundry / Toilet facilities, all of which require waterproofing to avoid damage to the surrounding facilities.

The approach in these areas is 'Positive Tanking'. It is essential to correctly identify the condition of the floors, water exit design and traffic load.

Floor preparation may require grinding, installation of Hobs and Water Stops. Some floors also require a vapour barrier application before applying a waterproofing membrane. Options for decorative wear surfaces typically include tiles or epoxy coatings.

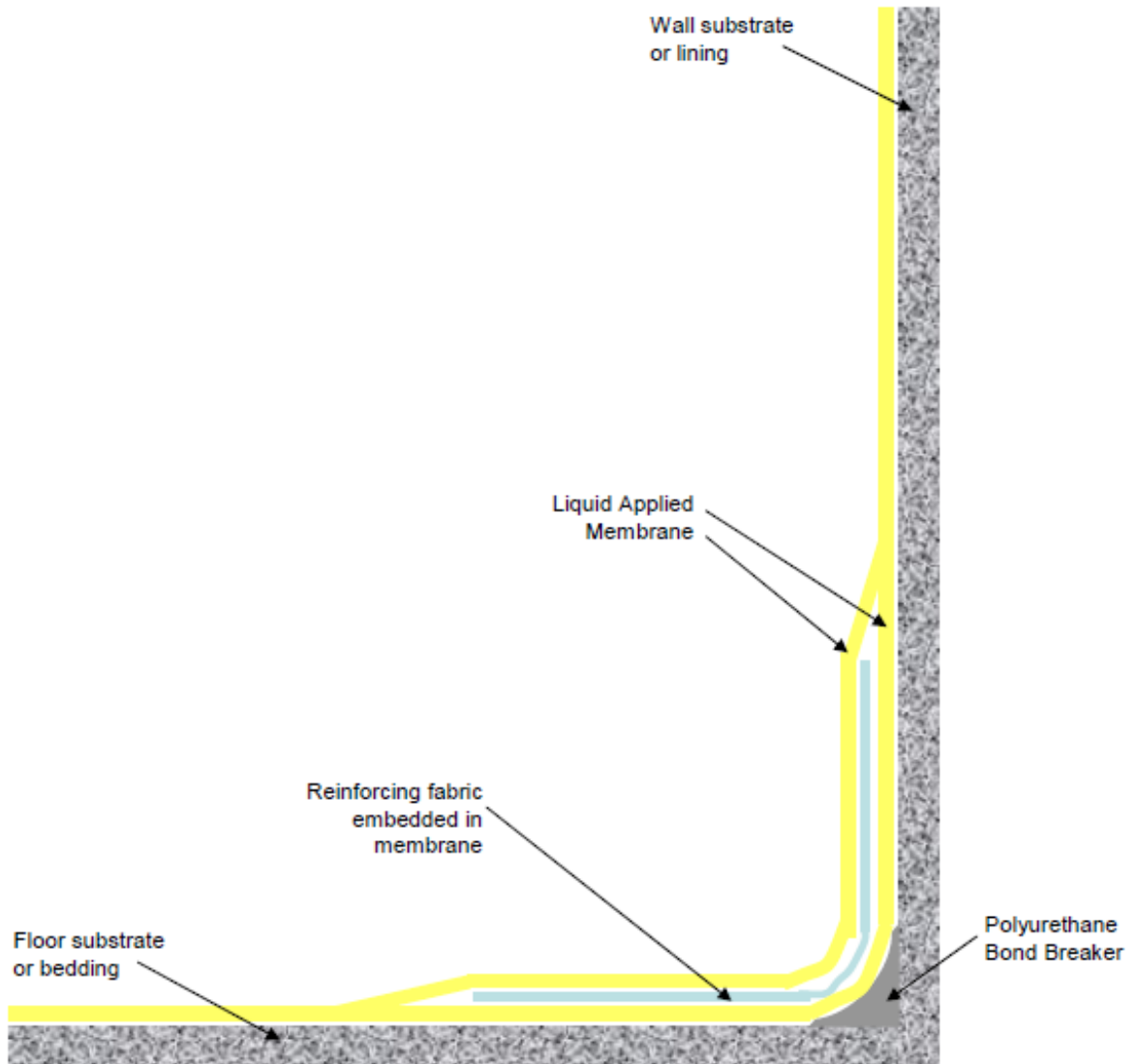


CONCRETE PROTECTION
WATERPROOFING SOLUTIONS



BOND BREAKER SYSTEM – CLASS II MEMBRANES

AS3740 requires a “bond breaker” to be installed at the wall/floor joint as outlined in APPENDIX B : B3.5.3(b). This diagram demonstrates our preferred method.



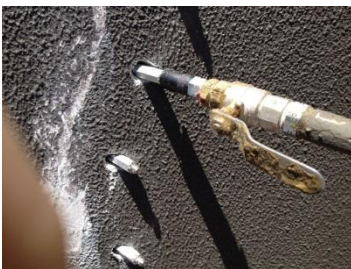
All Waterproofing Membranes manufactured by Concrete Protection are approved to AS4858



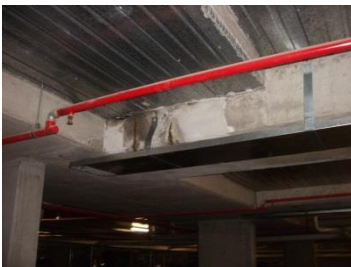
CONCRETE PROTECTION
WATERPROOFING SOLUTIONS



Remedial and Negative Tanking Waterproofing



Most occasions in which Negative Tanking occurs is due to remedial action. Either structural damage has occurred, the membrane system has failed or no waterproofing was installed. In some occasions the water problems are not solved, but the situation managed.

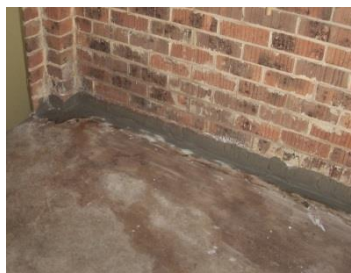


Hydrostatic pressure barrier applied to the inside wall – Epoxy coatings, often with cementous component.



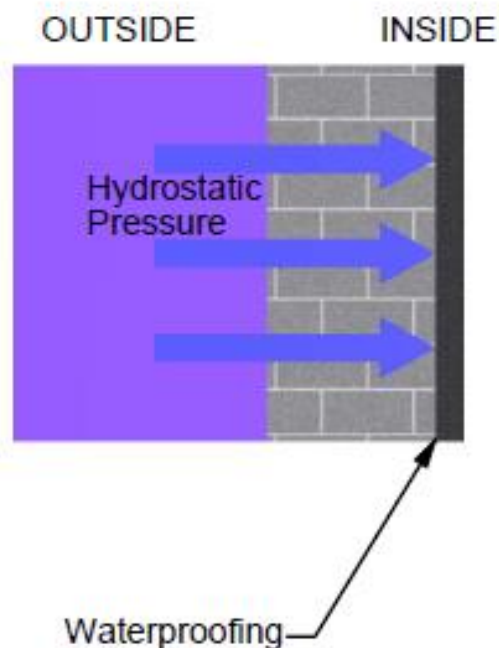
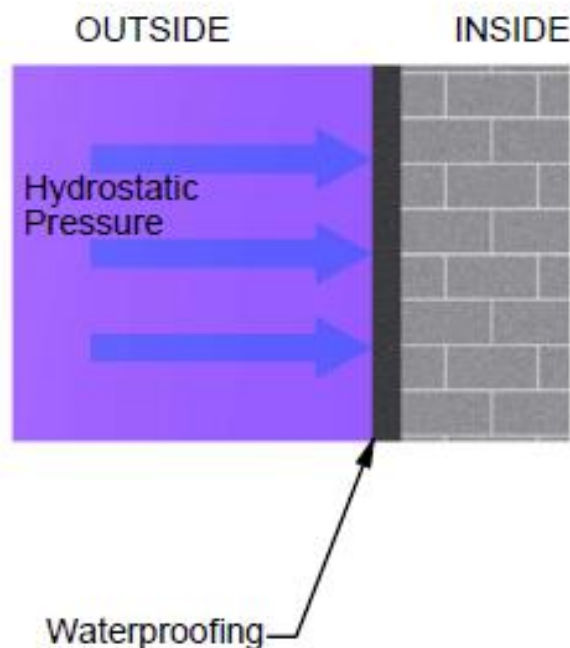
Treat concrete weakness with crystalline growth compound. Car Park ceilings often need Drip Trays as a back up system.

Deep concrete cracking often requires injection fill via packers.



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POSITIVE SIDE WATERPROOFING
(Most Common Situations)

- Backfilled Walls
- Blindside Walls
- Plaza Roofing
- Green/Garden Roofs

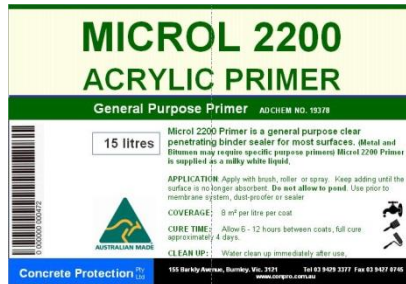
NEGATIVE SIDE WATERPROOFING

- Interior Repair Treatments

Waterproofing Products

Manufactured by and for Concrete Protection Pty Ltd

Positive Side



Liquid applied Waterproofing Membranes

POLYCLOTH – reinforcing fabric

PROTECTION BOARD



Negative Side & Repair

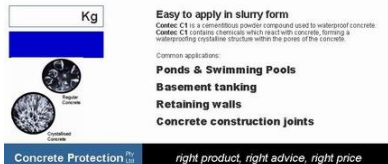


DIMACOAT – Water based Epoxy as vapour barrier

PLUG – rapid setting repair compound



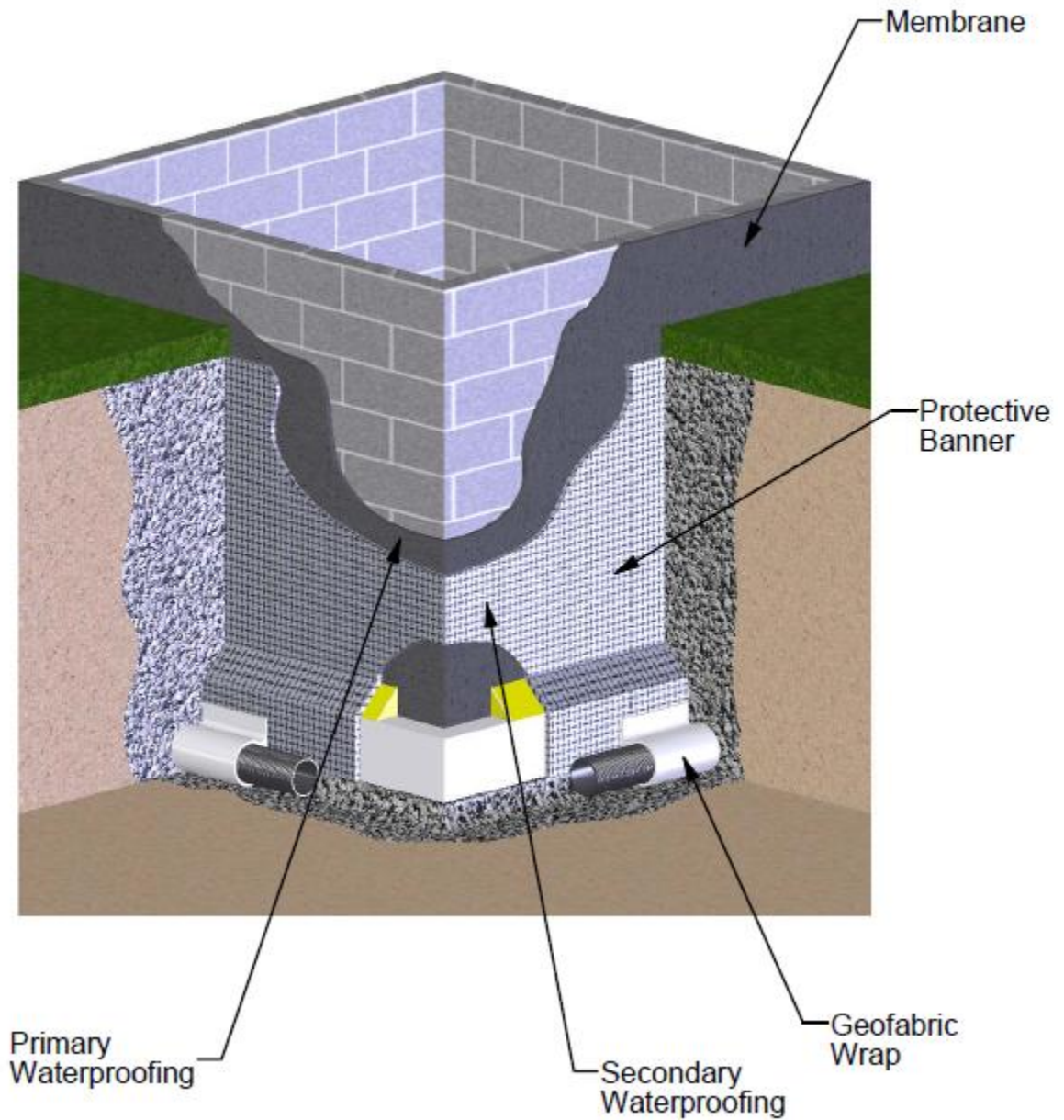
C1 – crystalline growth compound





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