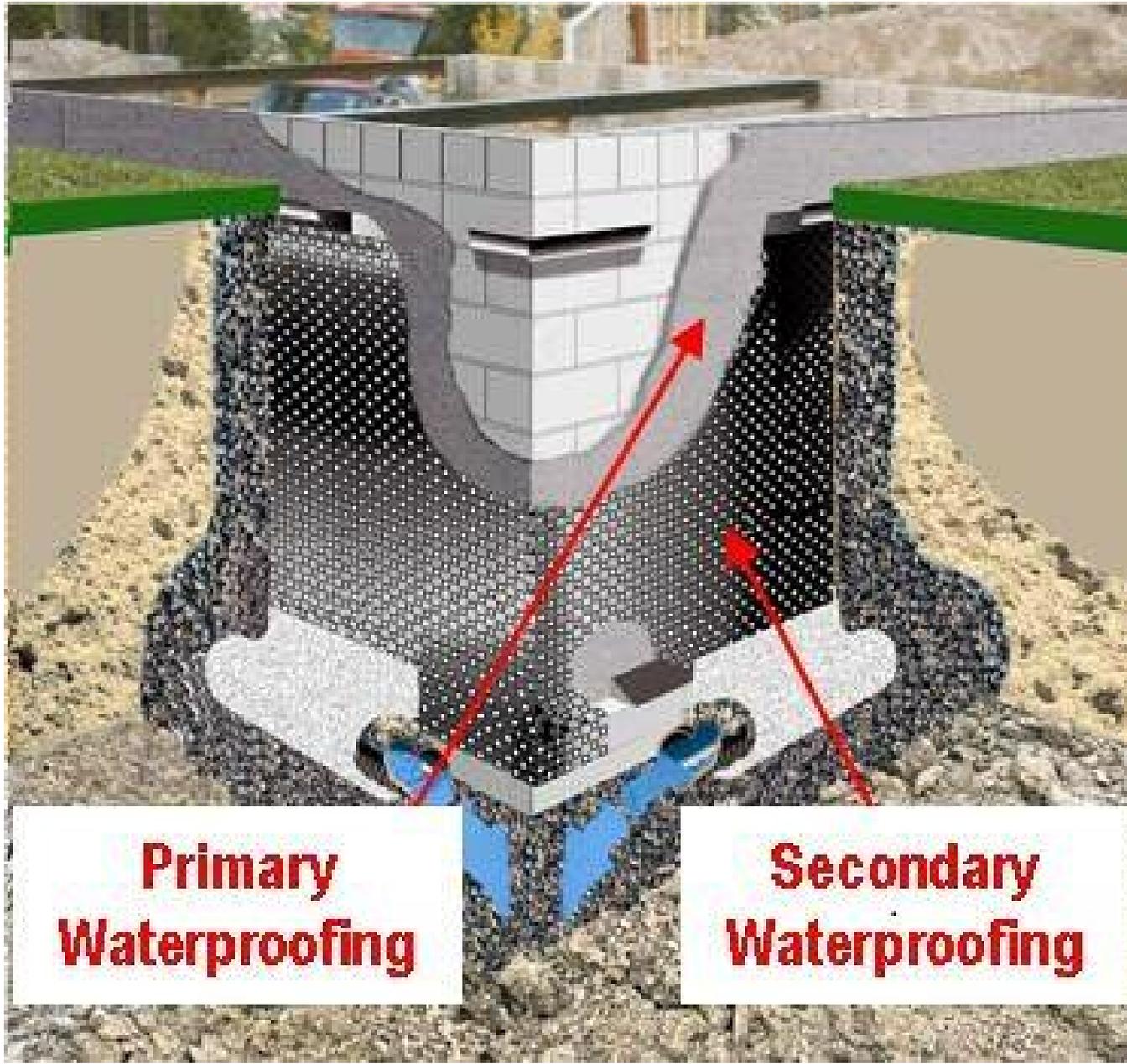


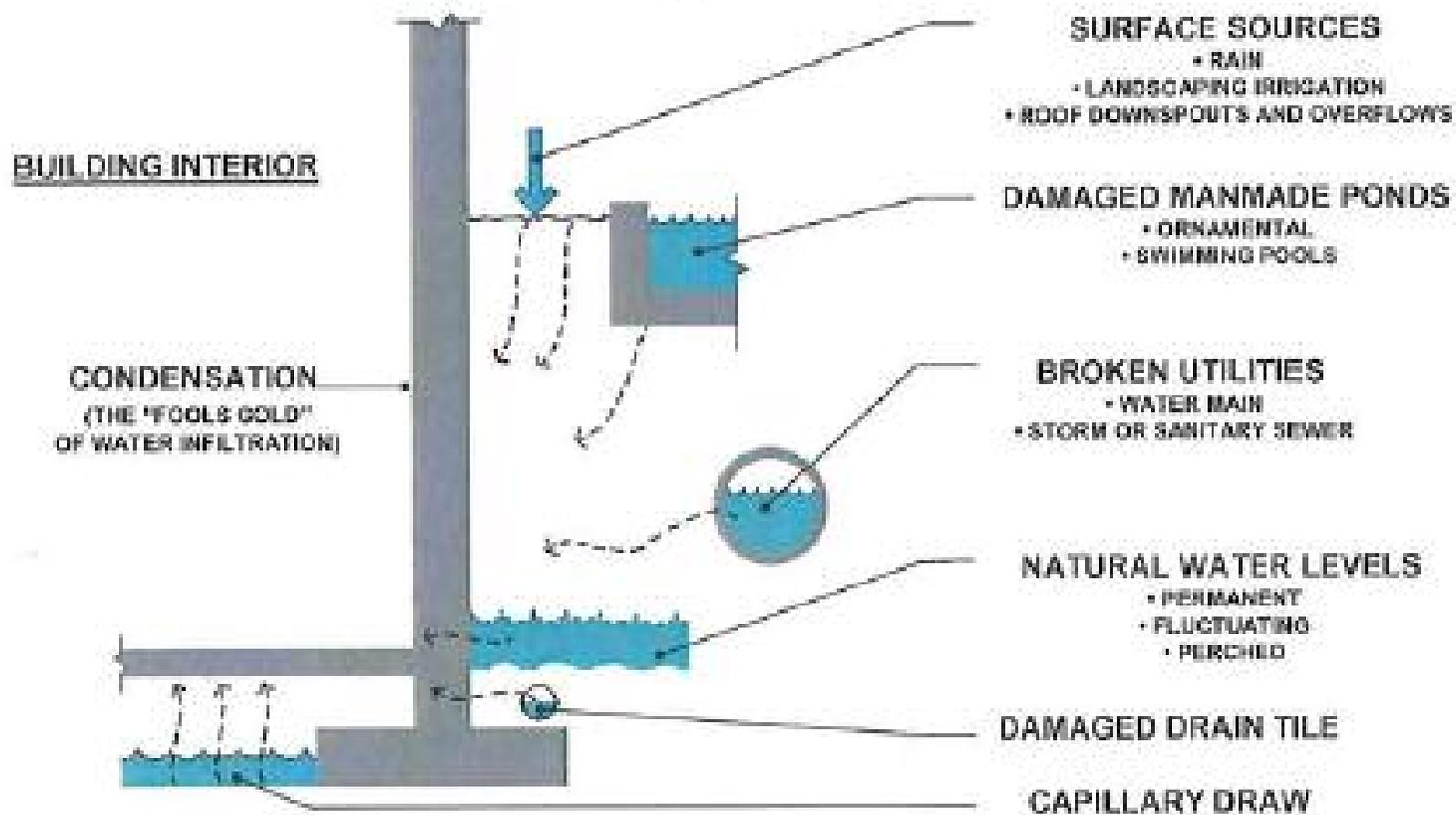
Diagrams to assist with

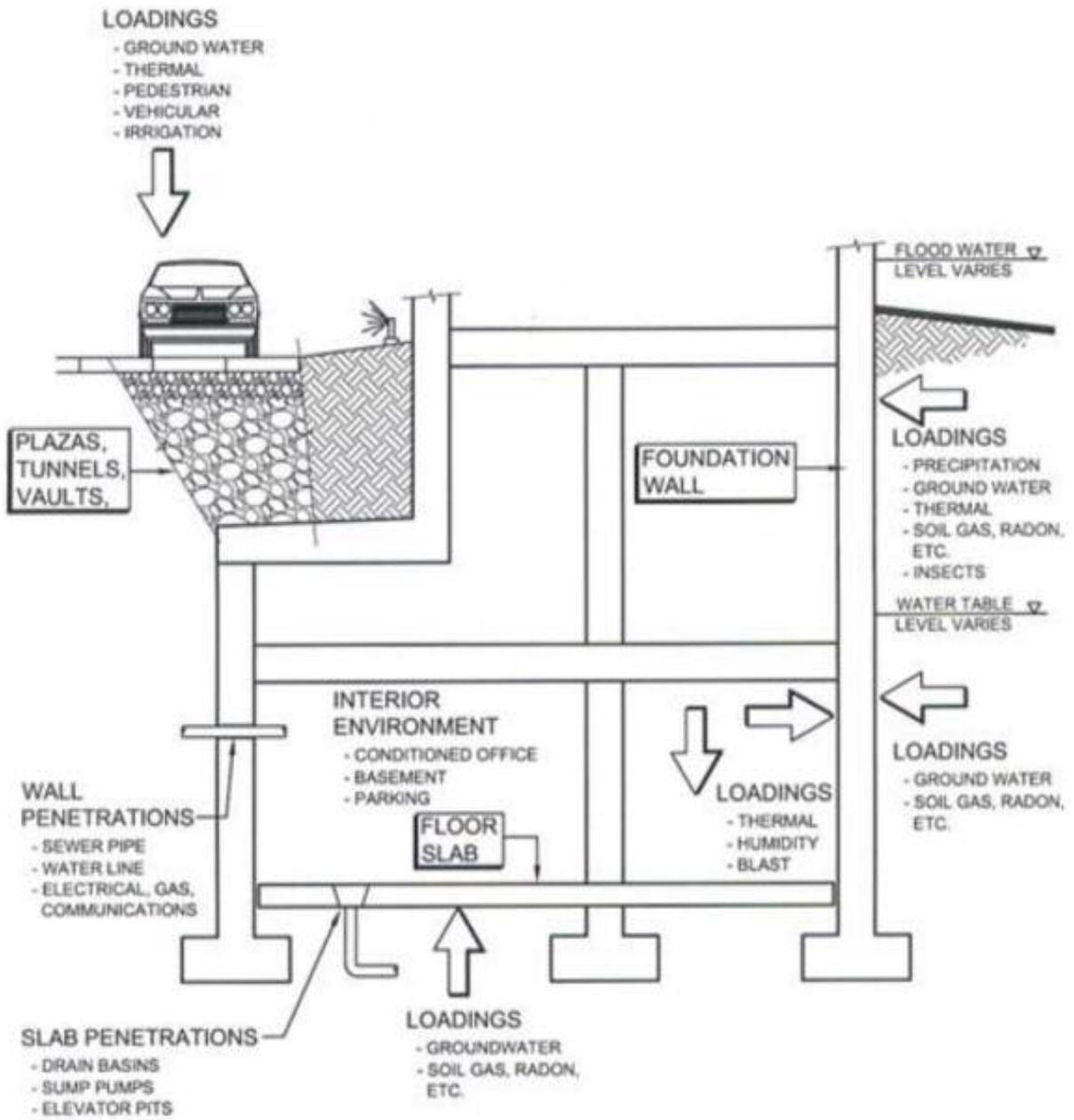
BELOW GROUND WATERPROOFING



Waterproofing Basics

Sources of below-ground moisture

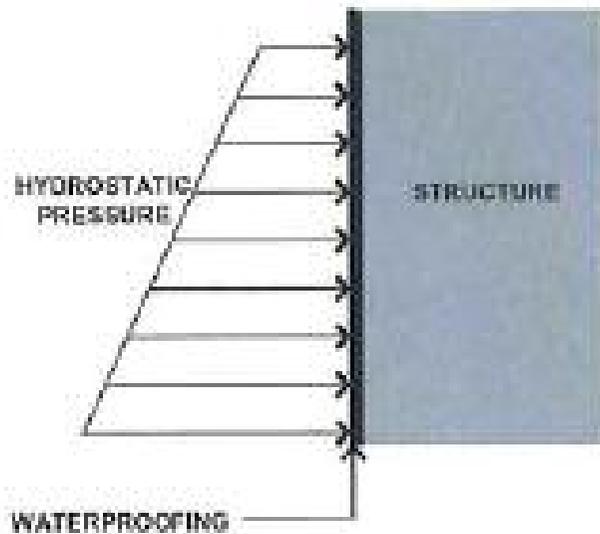




. Below Grade Building Systems Schematic

Waterproofing Basics

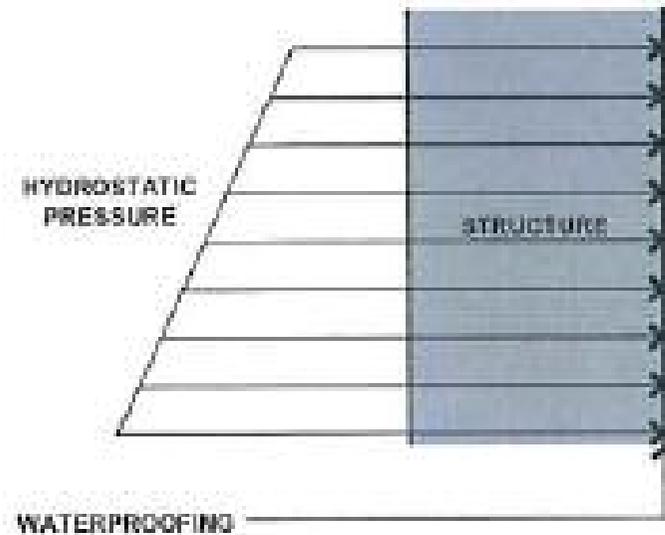
Positive side vs. negative side waterproofing



POSITIVE SIDE WATERPROOFING

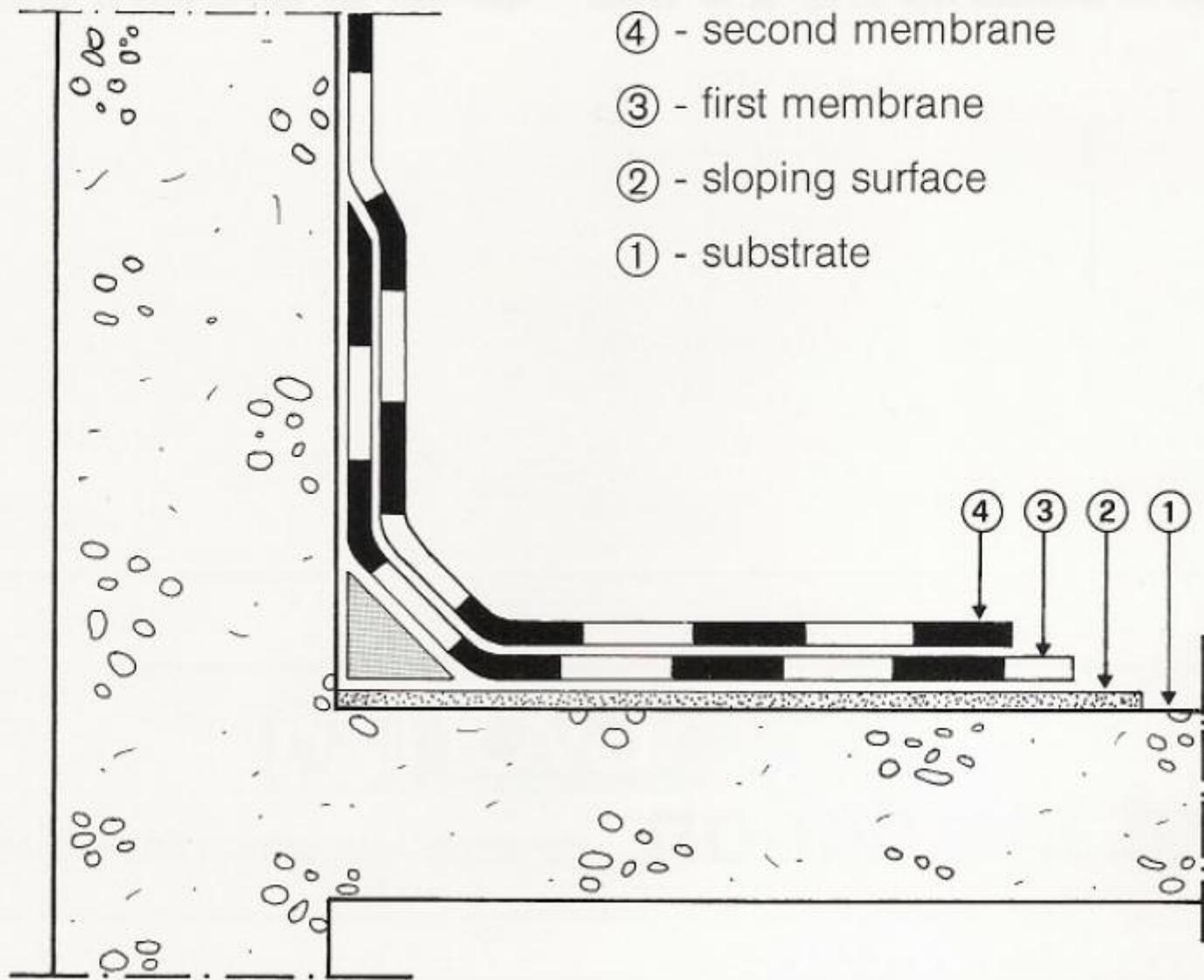
(Most Common)

- BACKFILLED WALLS
- BLINDSIDE WALLS
- PLAZA ROOFING
- EARTH-COVERED ROOFS



NEGATIVE SIDE WATERPROOFING

- INTERIOR REPAIR



④ - second membrane

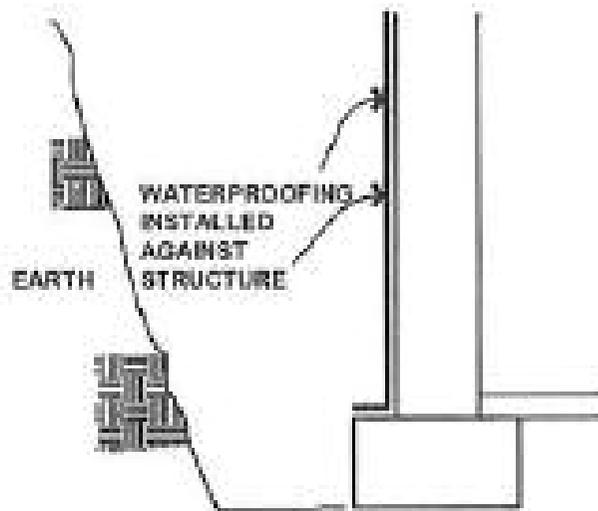
③ - first membrane

② - sloping surface

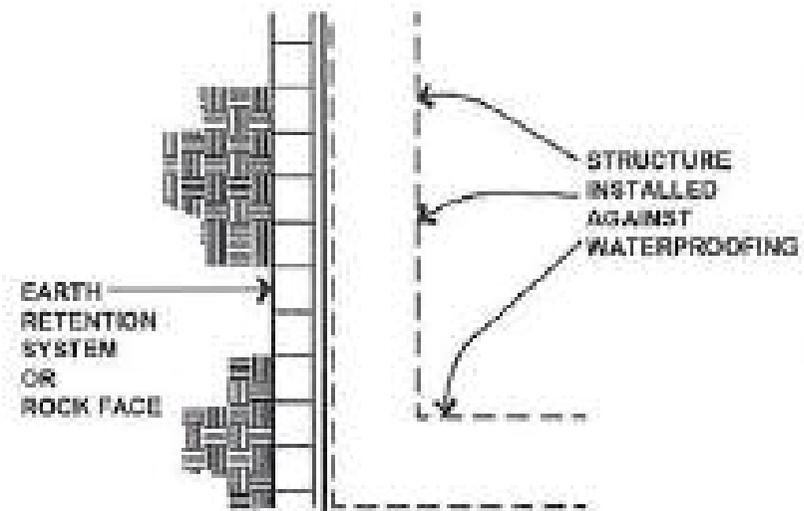
① - substrate

Waterproofing Basics

Positive side waterproofing



**BACKFILLED
WATERPROOFING**

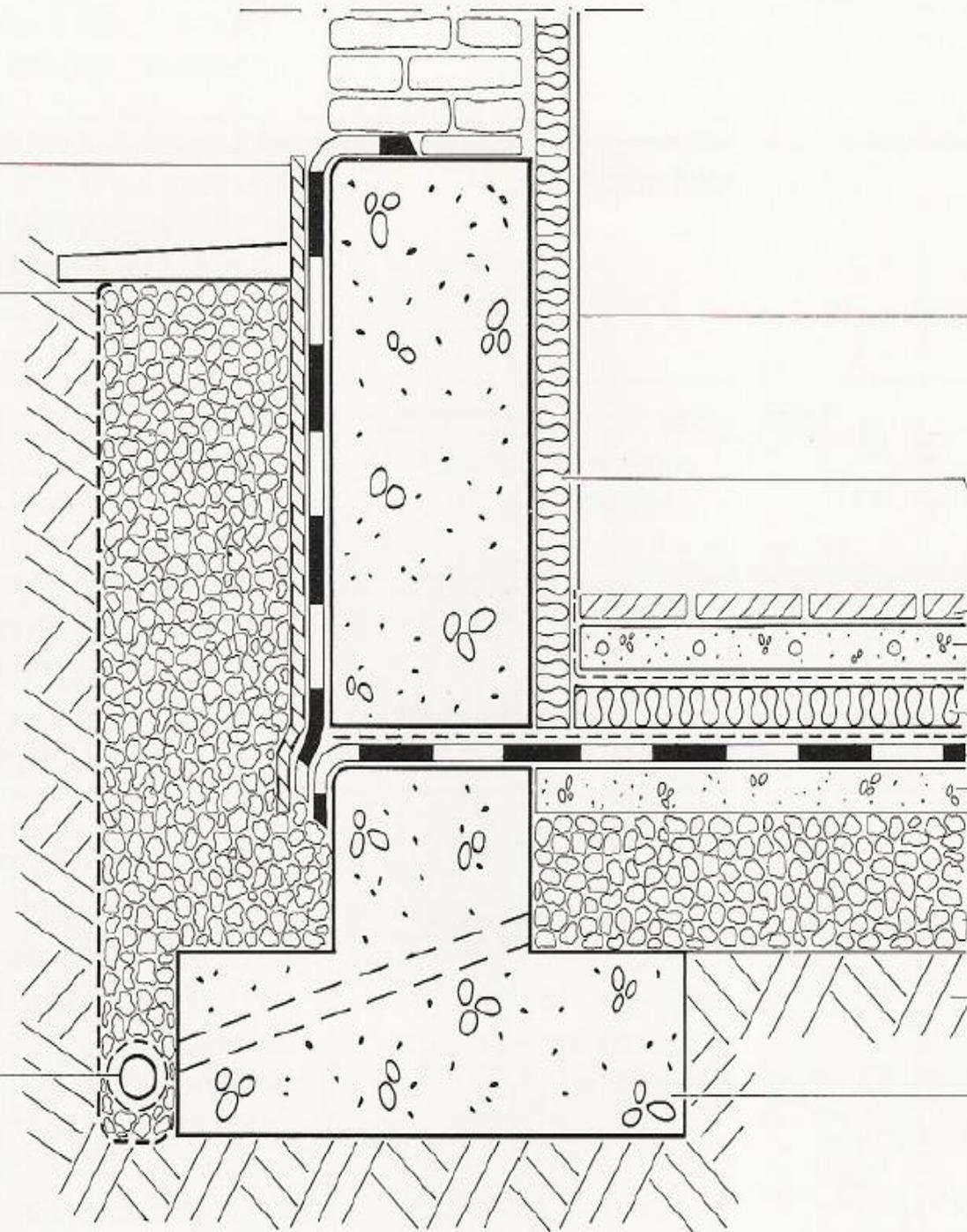


**BLINDSIDE
WATERPROOFING**

Protecting and/or drainage panels ⑩

PET or PP non-woven material ⑪

collector Water ⑫



⑨ Reinforced concrete slab

⑧ Floor

⑦ Protecting plaster with mechanical reinforcing mesh

⑥ LPDE film 0.2 mm (acts as a V.B. on top of the insulating layer)

⑤ Heat-insulating system (if present)

④ Single and double layer waterproofing system

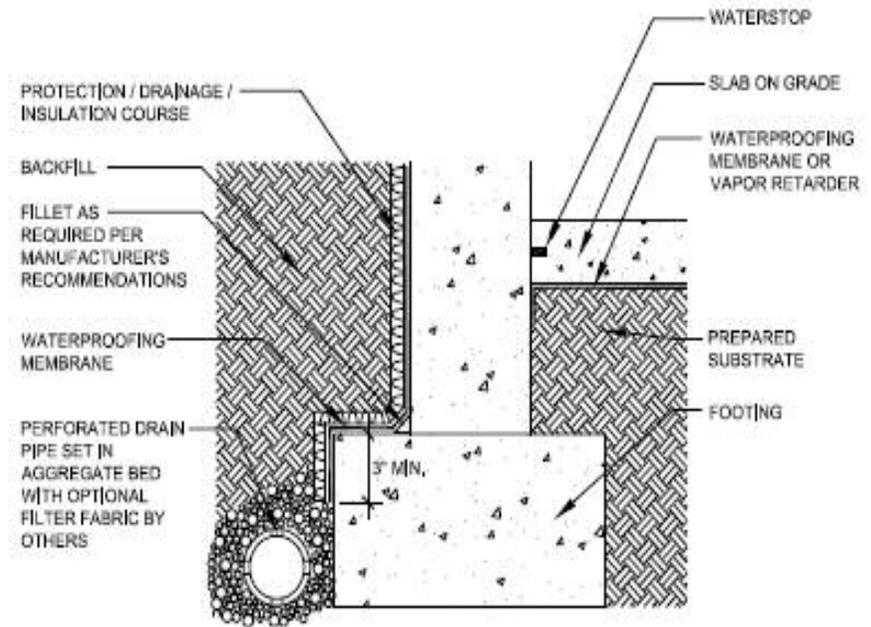
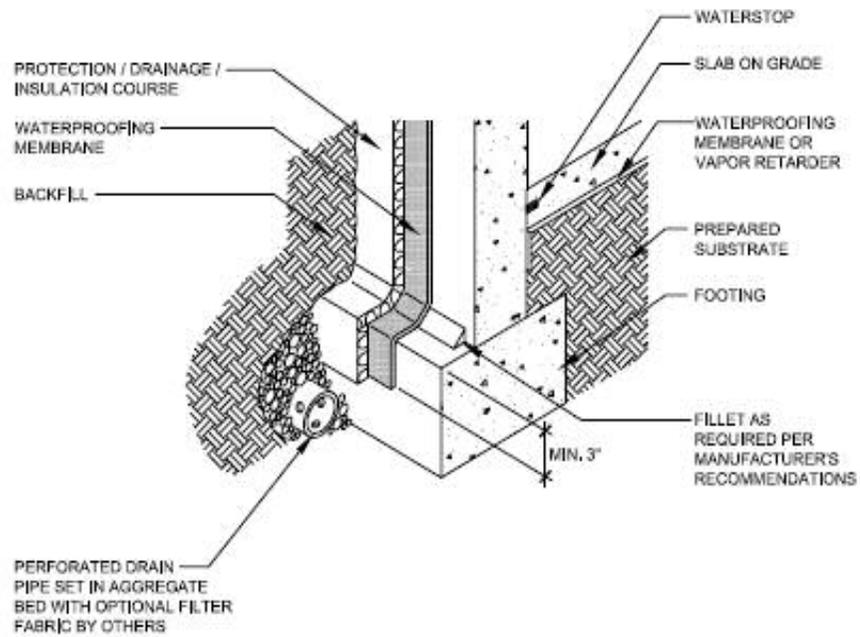
③ Concrete slab

② Drainage material

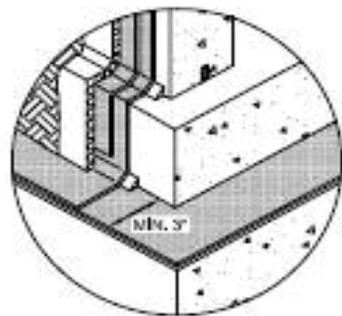
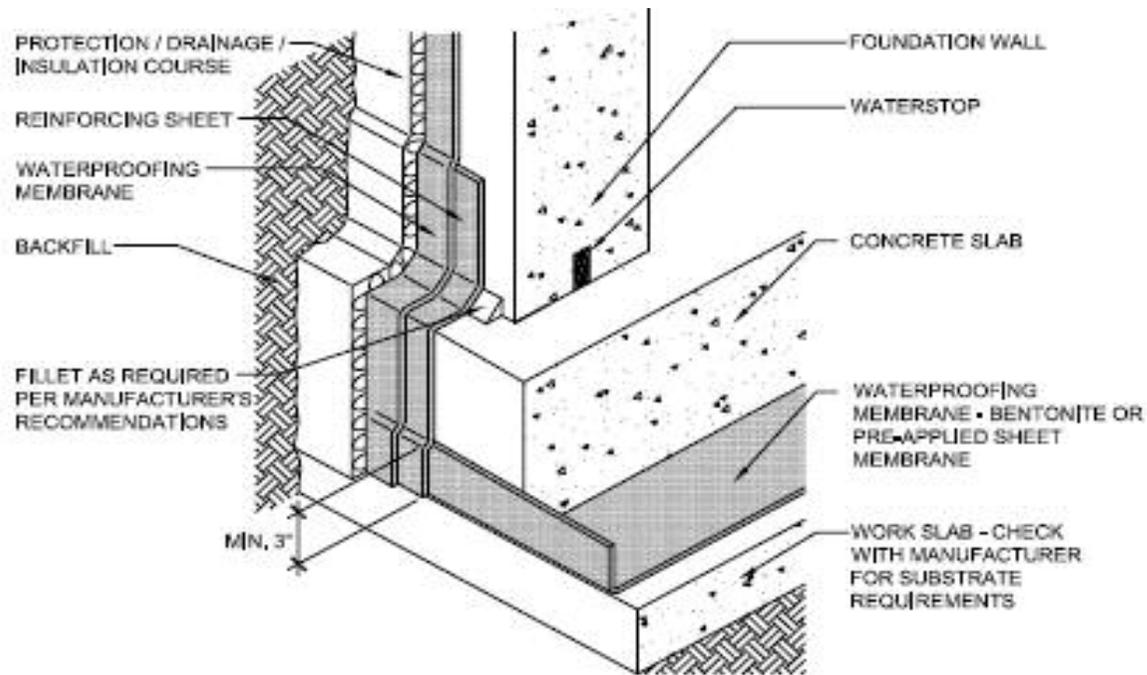
① Soil

① Foundation

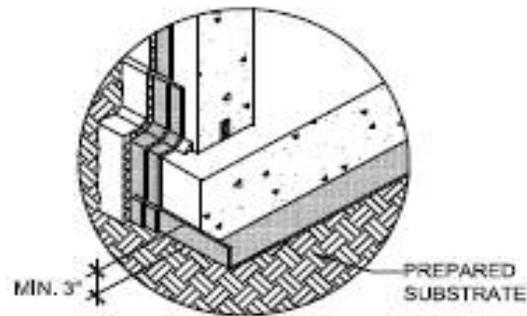
Foundation wall with drainage system



Foundation wall with slab below ground (1)

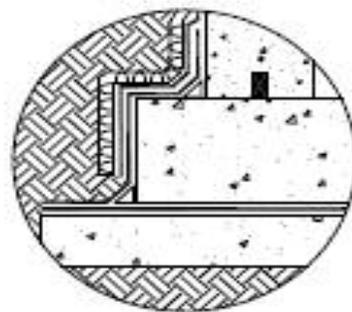
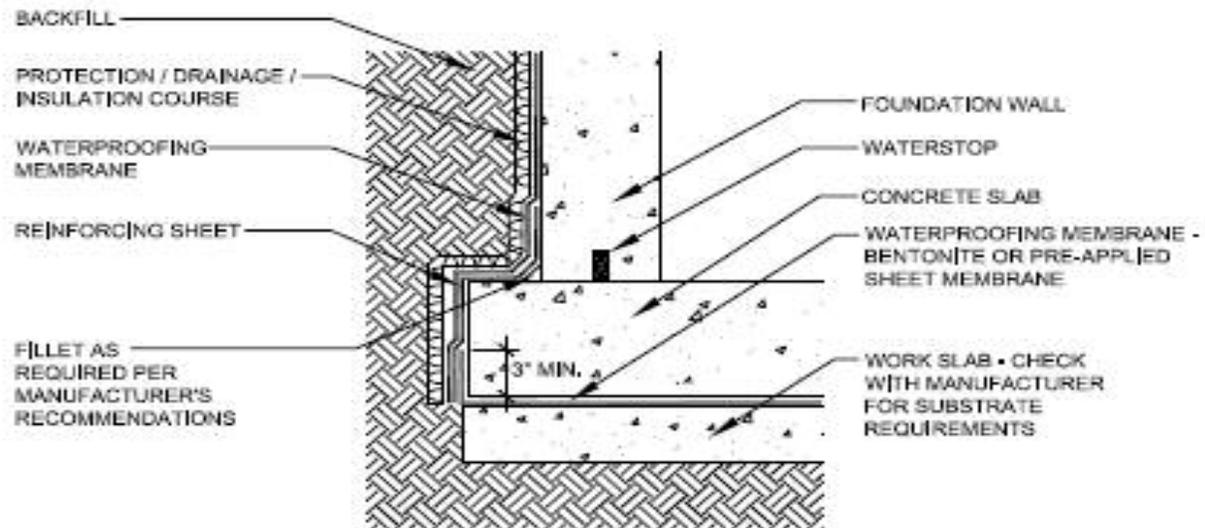


ALTERNATE SLAB EDGE FLASHING

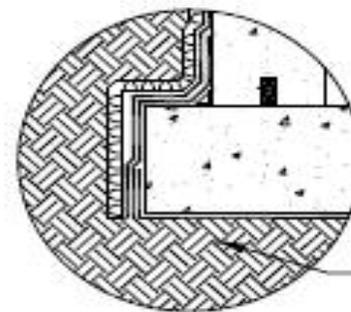


ALTERNATE SUBSTRATE

Foundation wall with slab below ground (2)



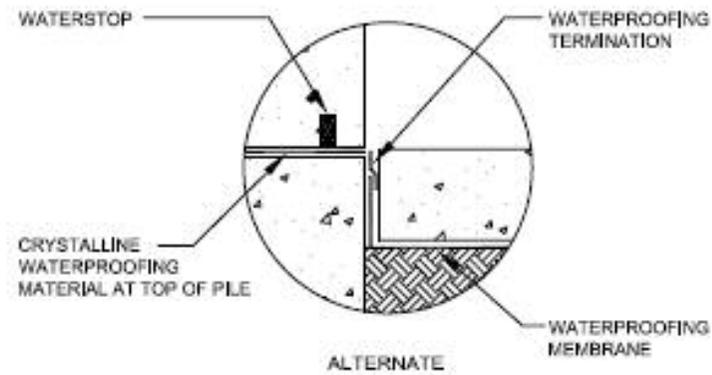
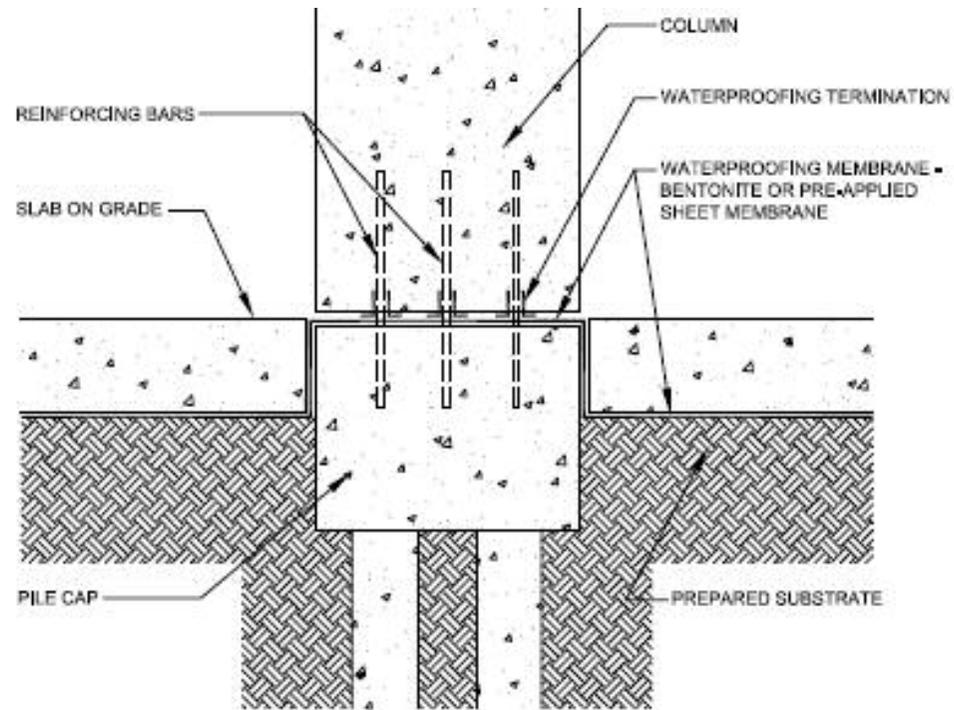
ALTERNATE SLAB EDGE FLASHING



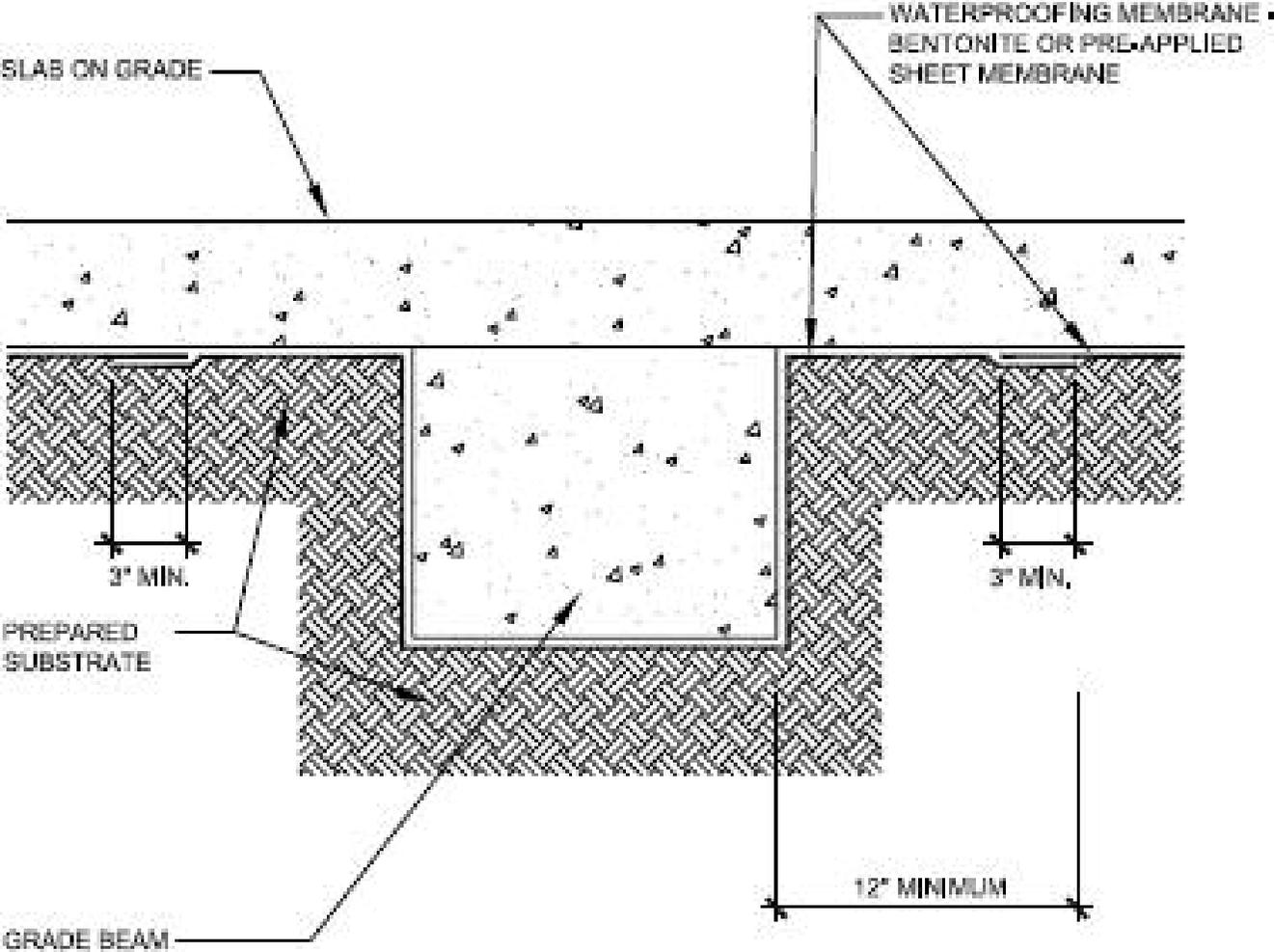
PREPARED SUBSTRATE

ALTERNATE SUBSTRATE

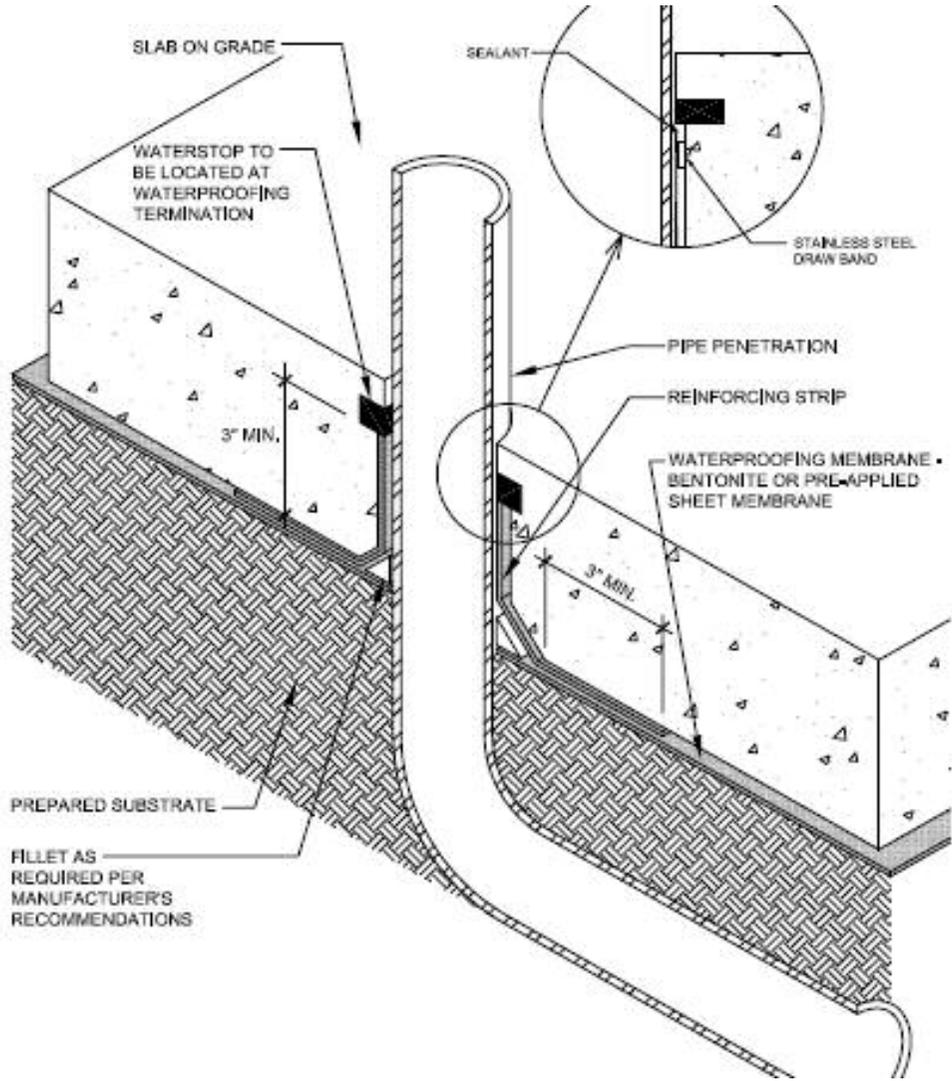
Pile cap waterproofing



Field grade beam waterproofing

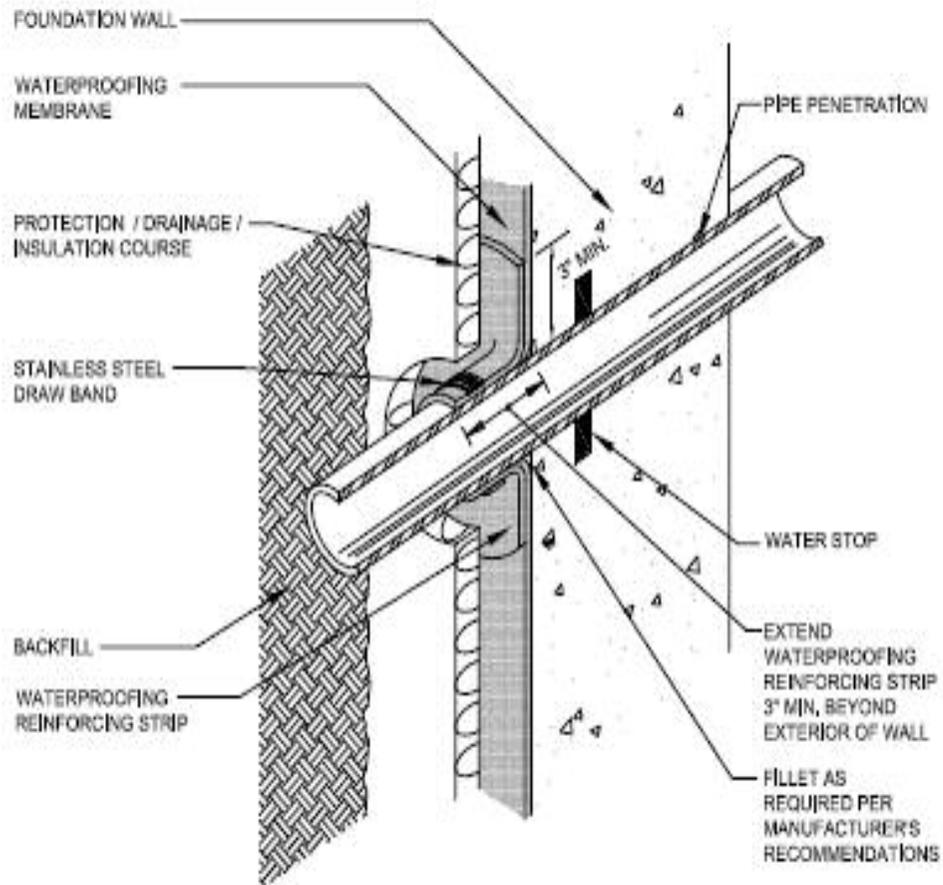


Vertical penetration for below grade membrane



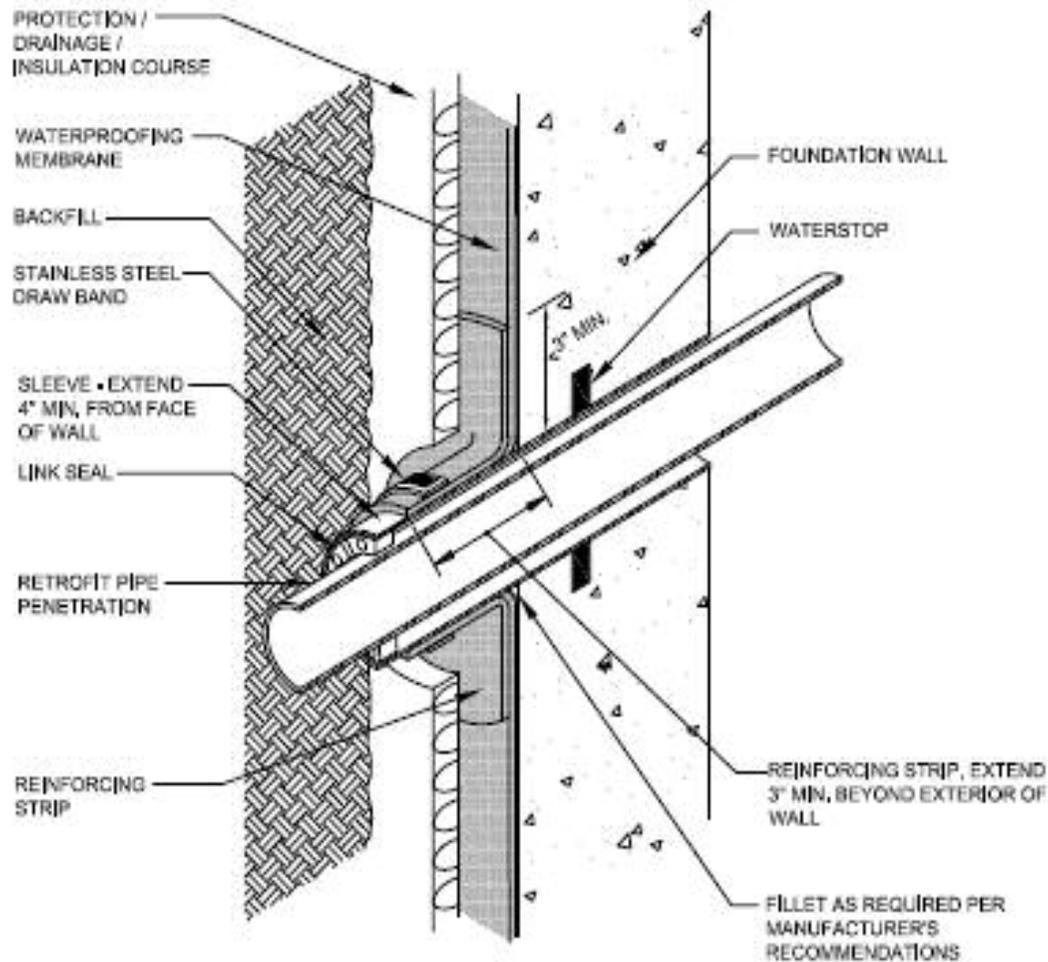
N.B: All penetrations should be 300mm from walls, curbs, up stands, and be placed a minimum of 300mm apart.

Foundation wall with poured in place pipe penetration



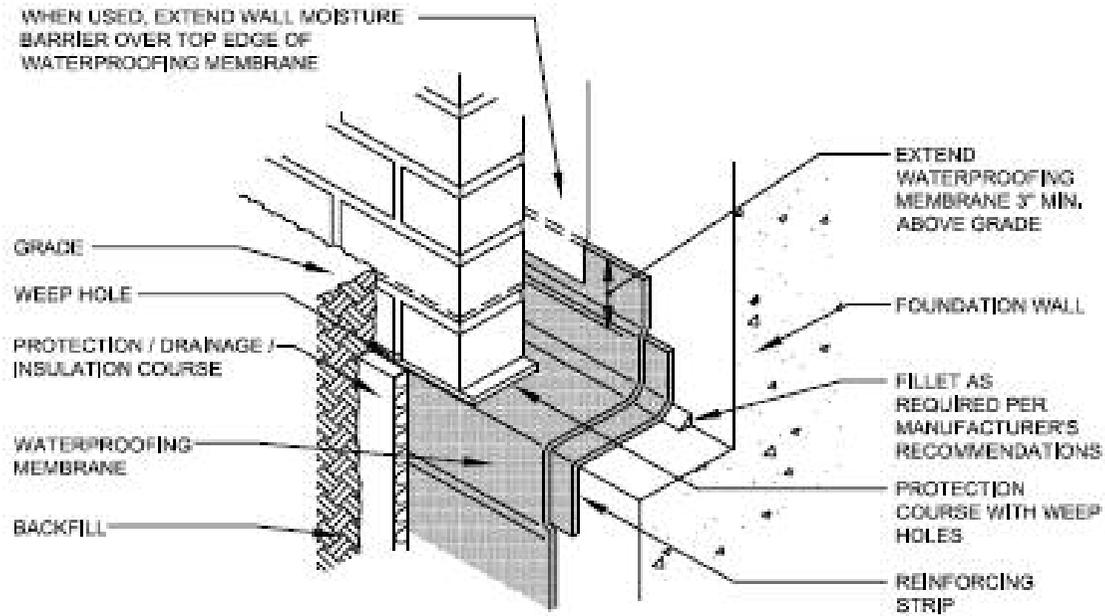
N.B: All penetrations should be 300mm from walls, curbs, up stands, and be placed a minimum of 300mm apart.

Pipe sleeve penetration detail

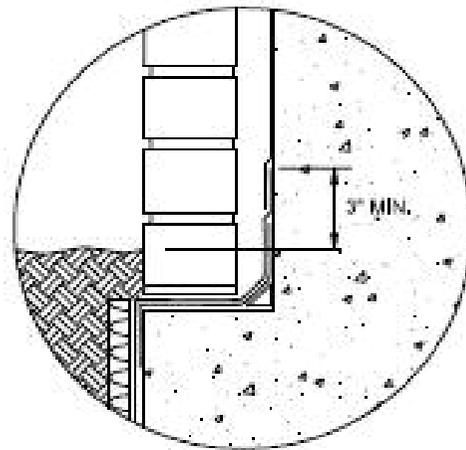


N.B: All penetrations should be 300mm from walls, curbs, up stands, and be placed a minimum of 300mm apart.

Foundation wall – brick ledge termination

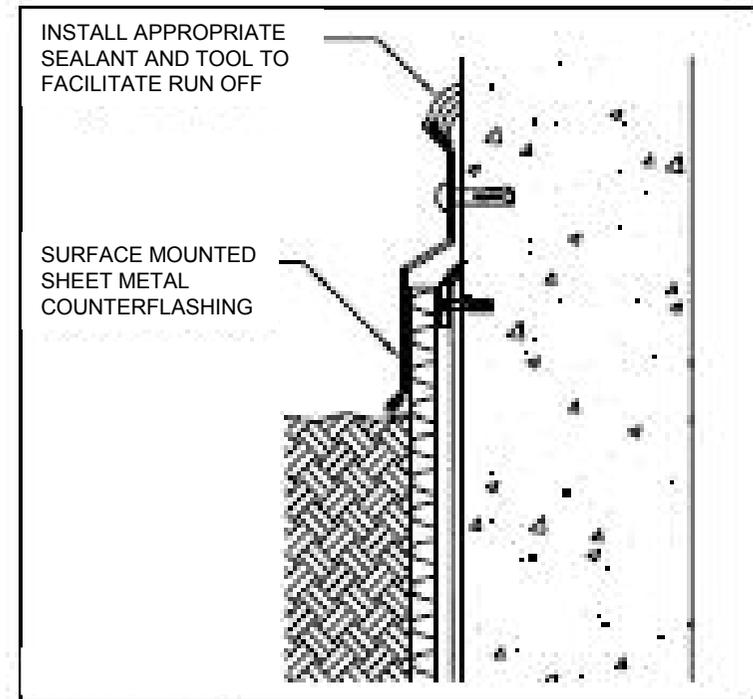
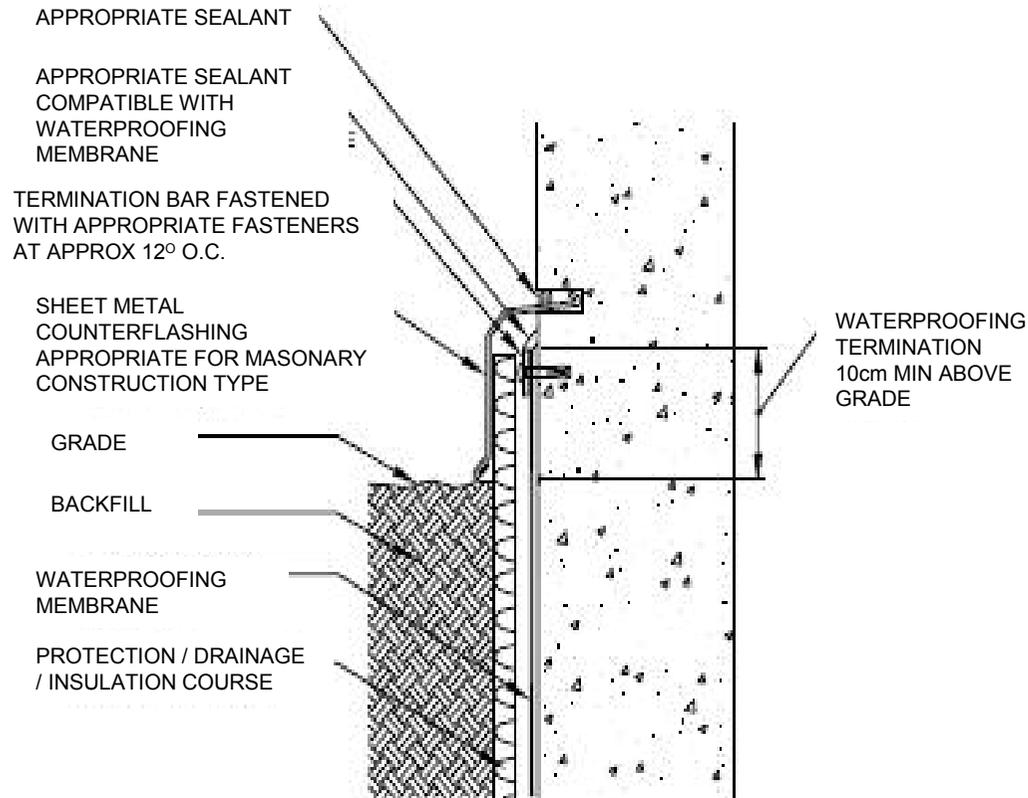


N.B: All penetrations should be 300mm from walls, curbs, up stands, and be placed a minimum of 300mm apart.

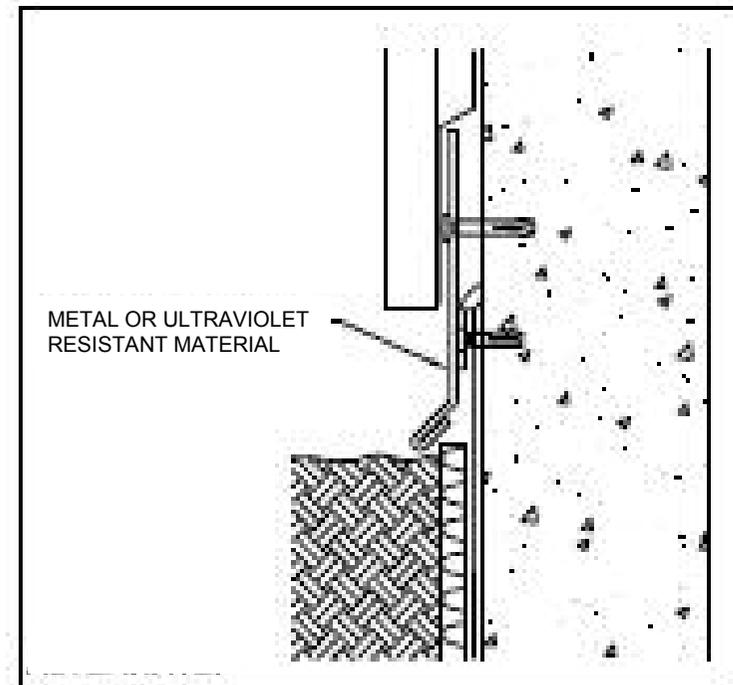
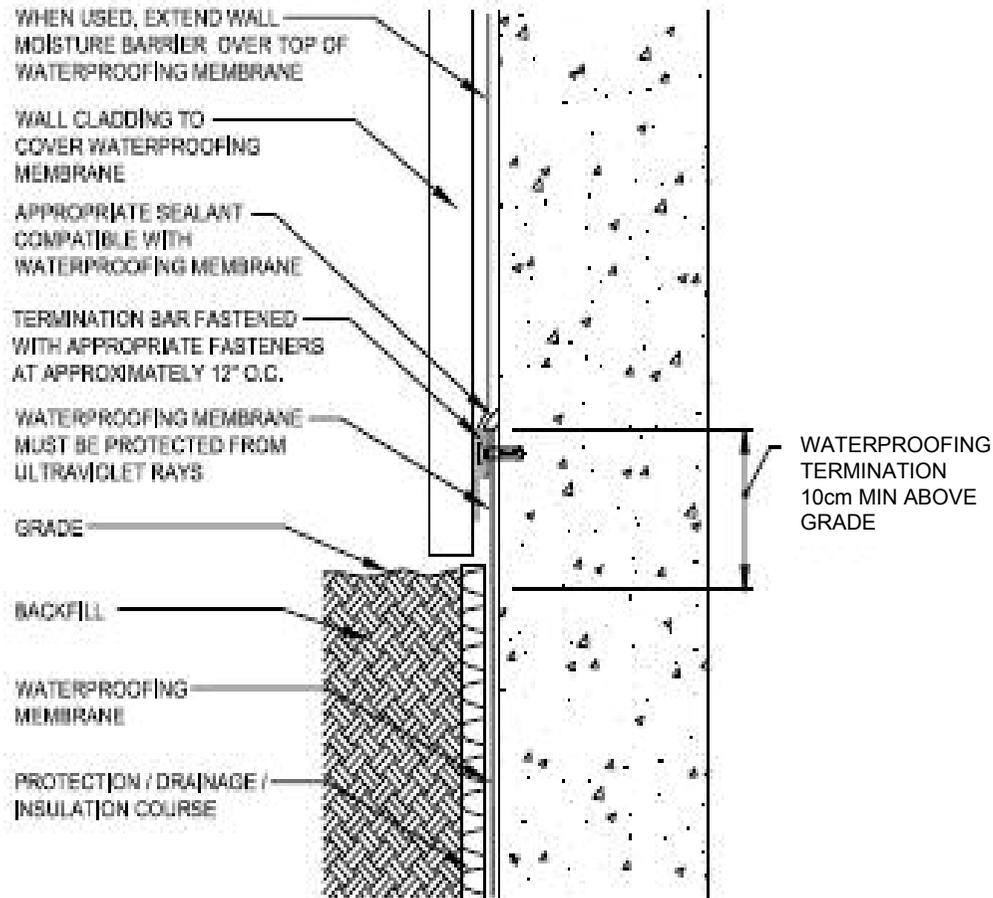


SECTION

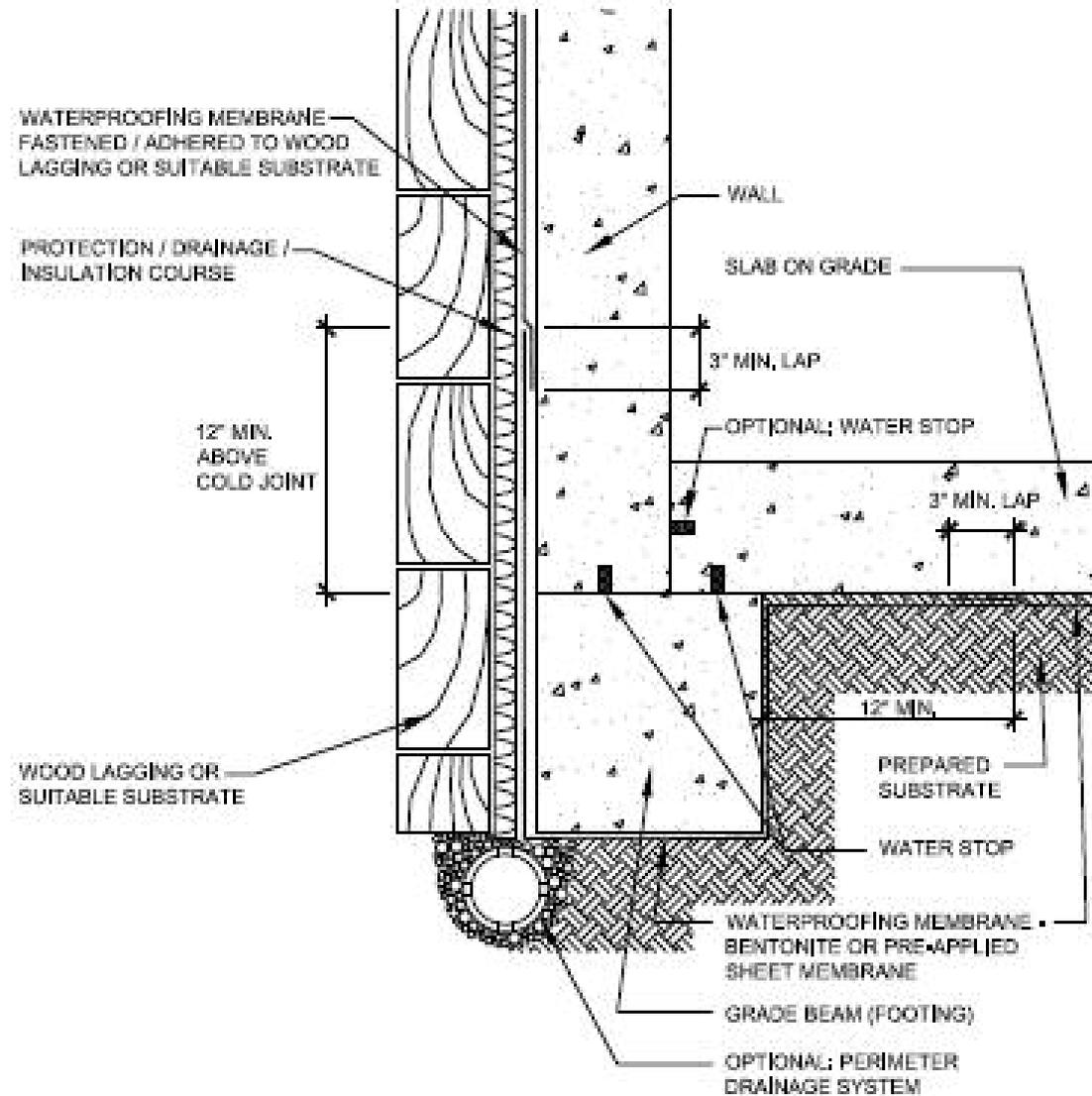
Waterproofing termination at ground



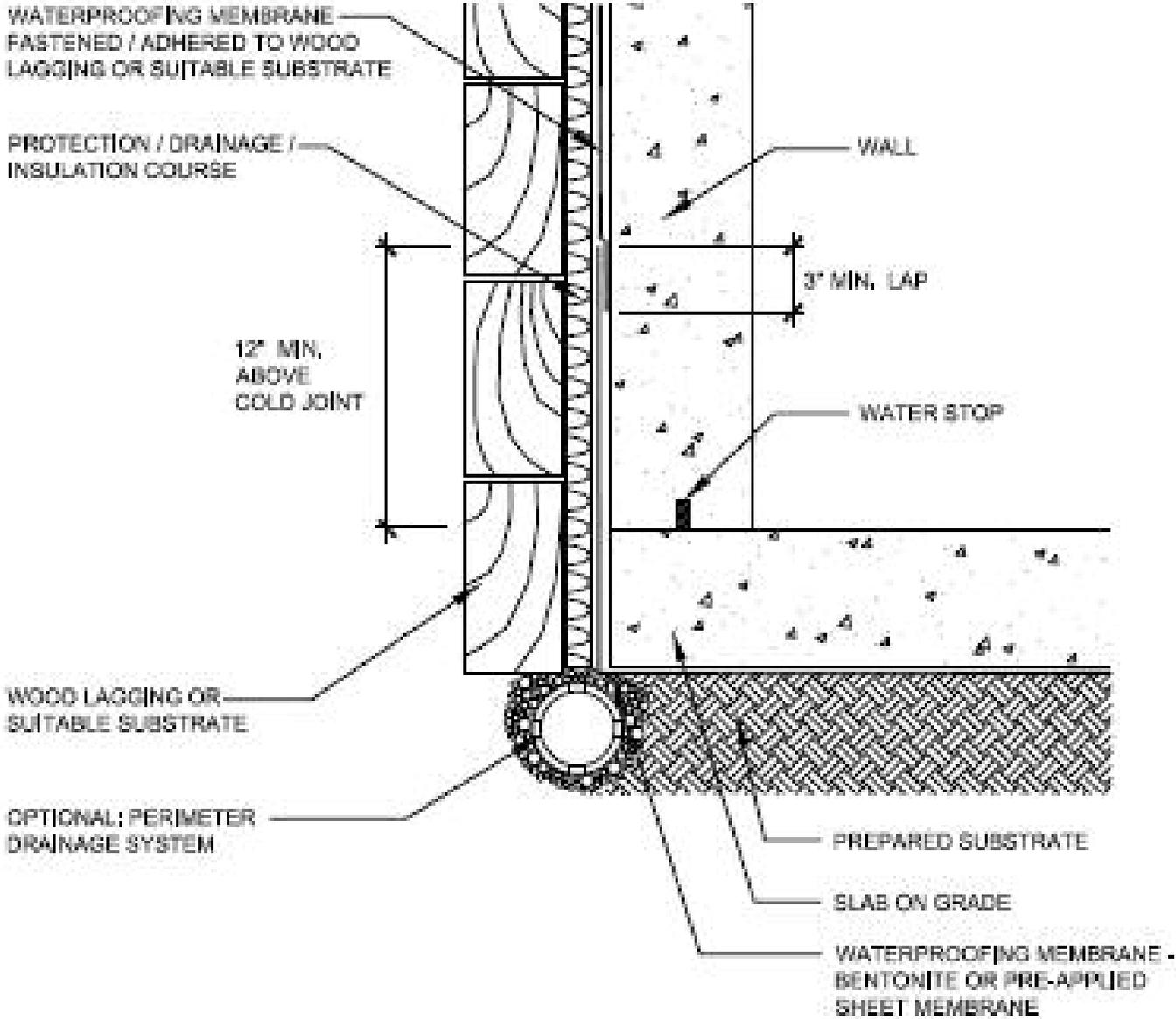
Foundation wall – exterior cladding tie-in



Blind side waterproofing at ground beam



Blind side waterproofing at slab



Perimeter edge detail at ground – dissimilar materials

