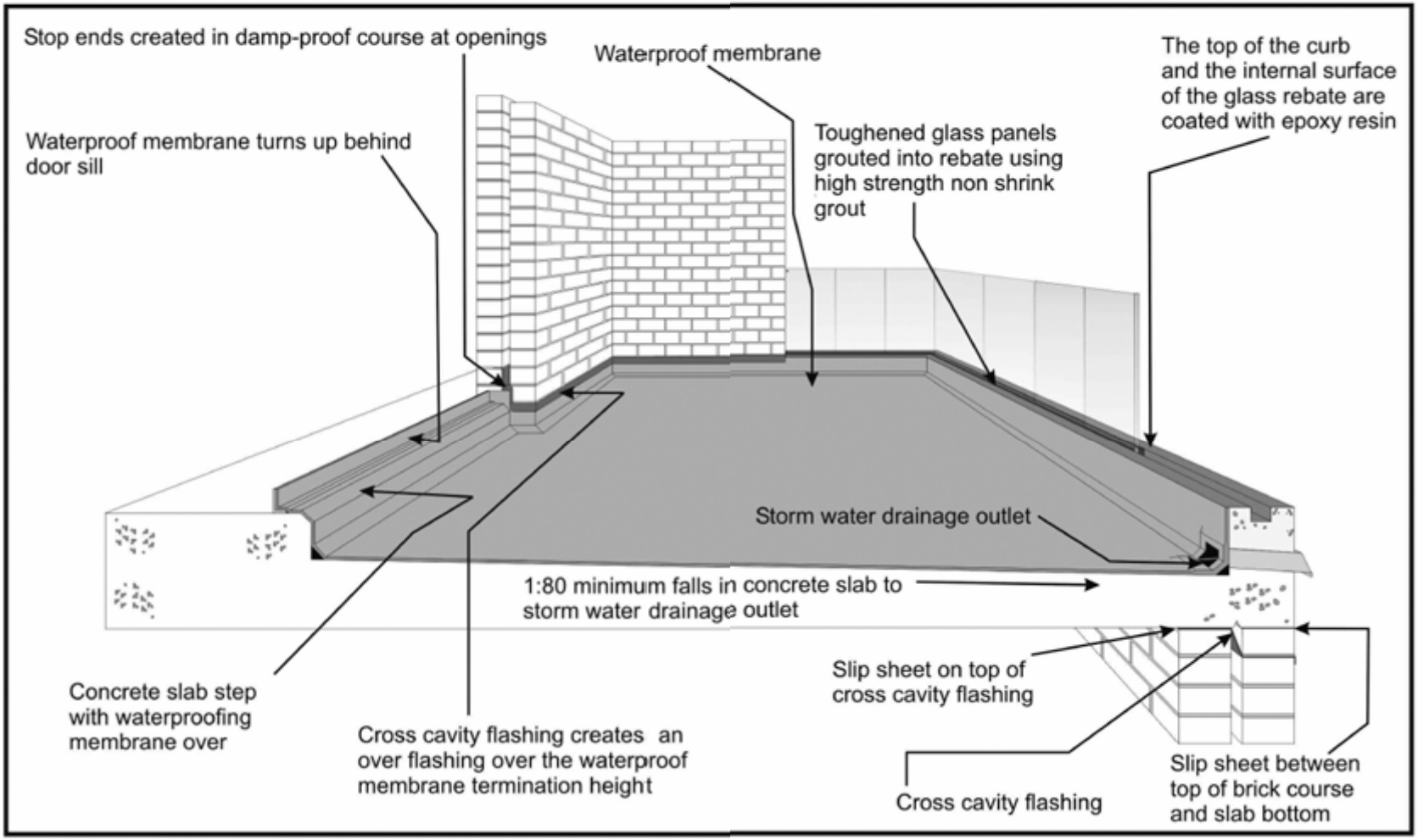
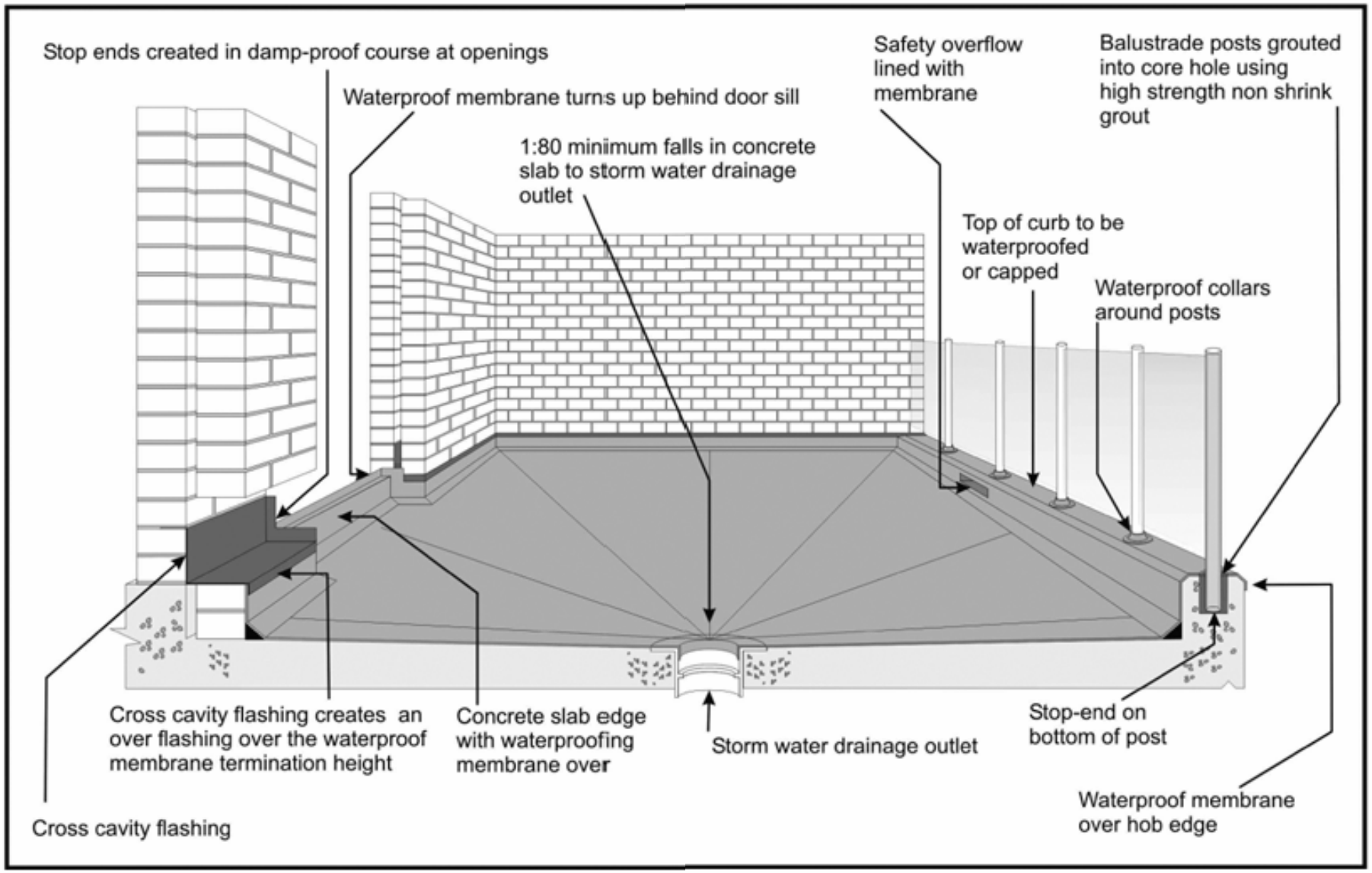
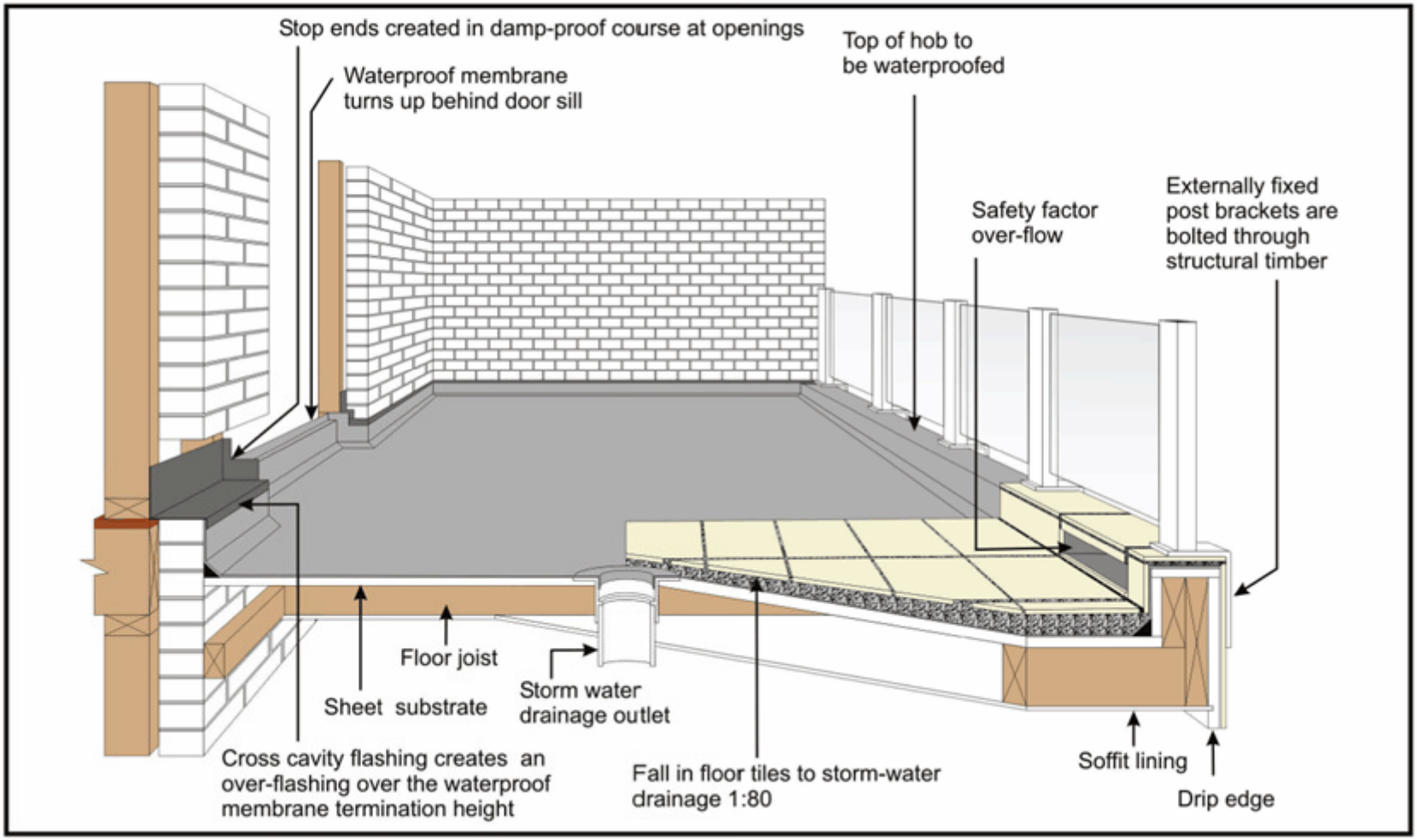
SECTION 11 BALCONY DESIGN CONSIDERATIONS

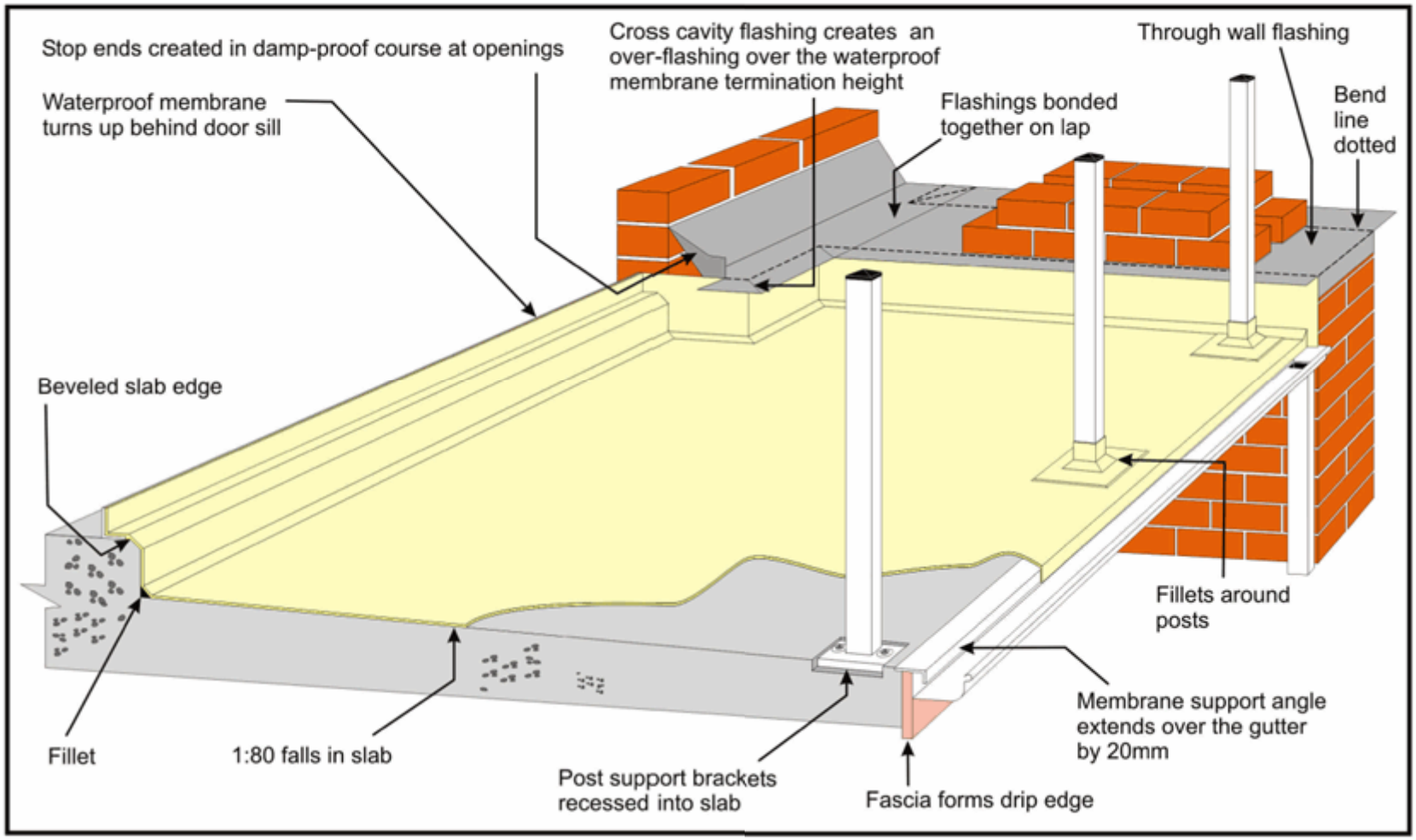



Stop ends created in damp-proof course at openings
Waterproof membrane turns up behind door sill
1:80 minimum falls in concrete slab to storm water drainage outlet
Safety overflow lined with membrane
Balustrade posts grouted into core hole using high strength non shrink grout
Top of curb to be waterproofed or capped
Waterproof collars around posts
Cross cavity flashing creates an over flashing over the waterproof membrane termination height
Concrete slab edge with waterproofing membrane over
Storm water drainage outlet
Stop-end on bottom of post
Cross cavity flashing
Waterproof membrane over hob edge

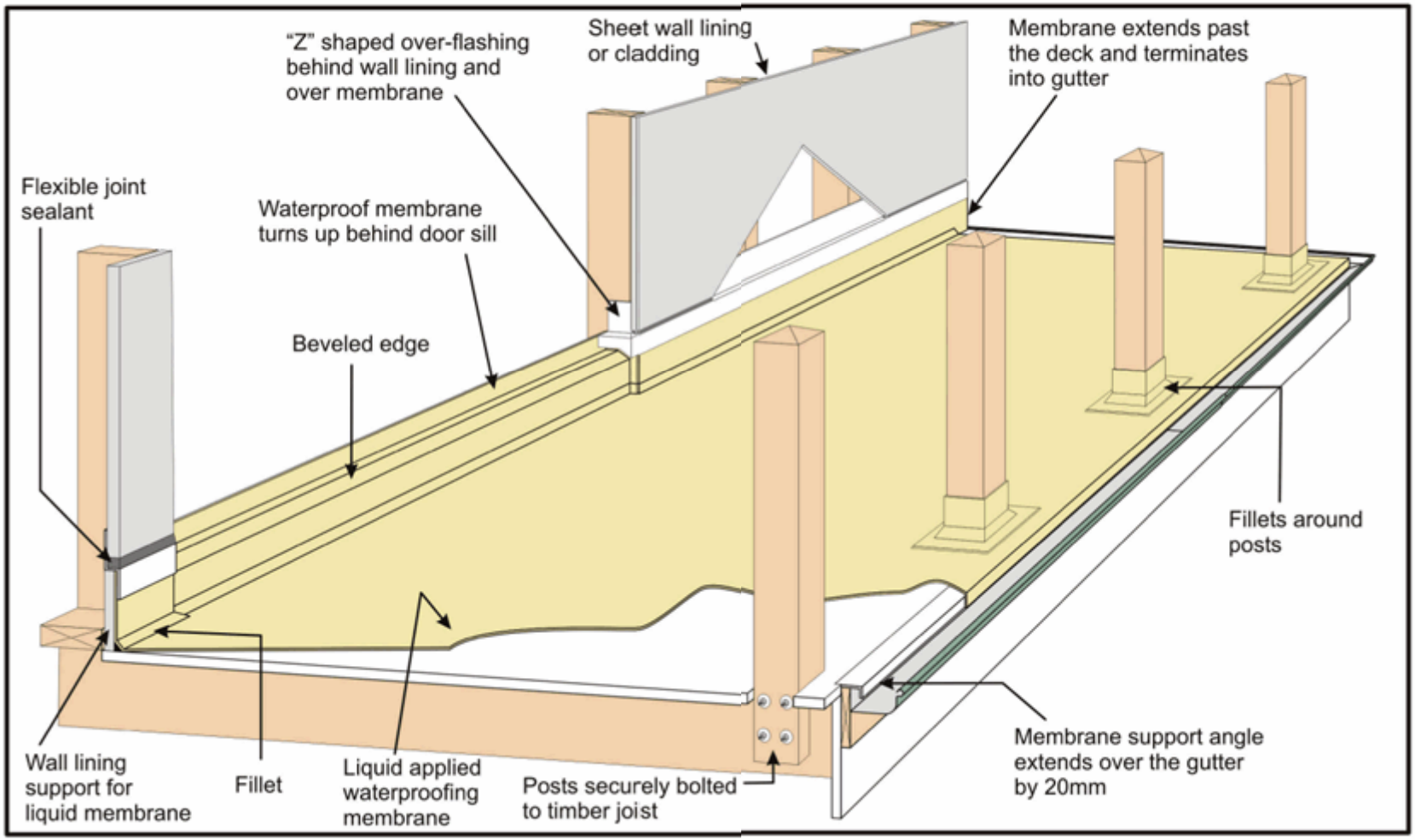
EXPOSED AREA

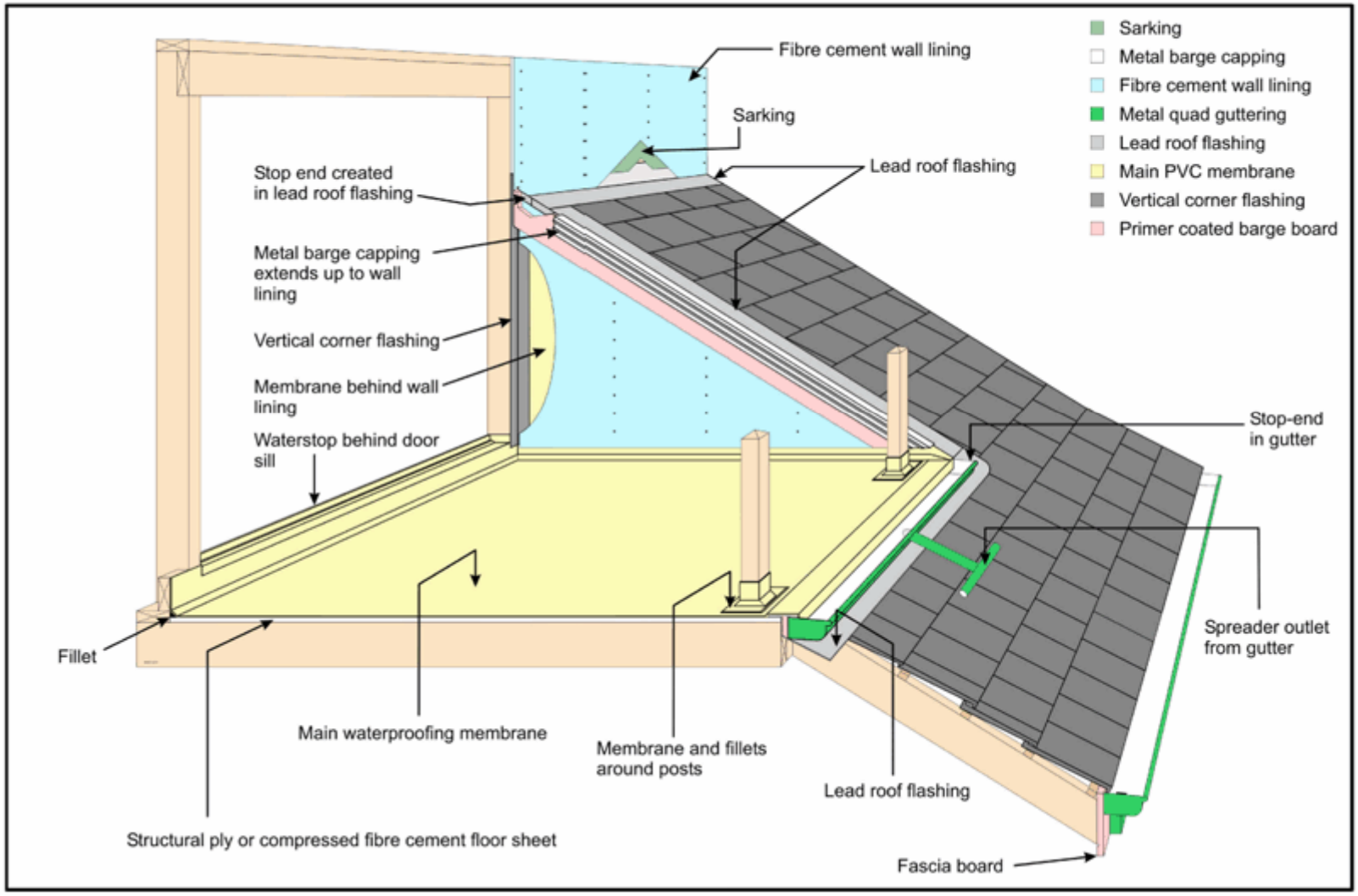


EXPOSED AREA WIND REDUCTION BALUSTRADE ON HOB SECTION

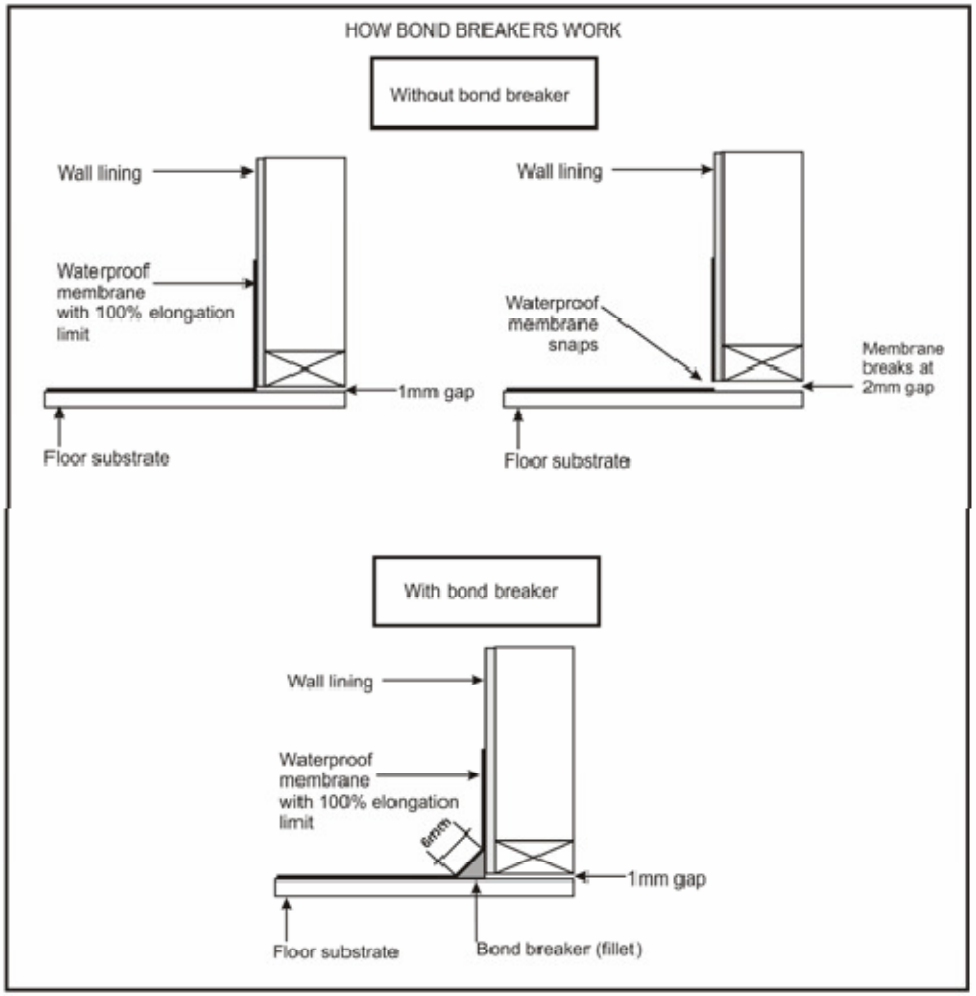


EXPOSED AREA



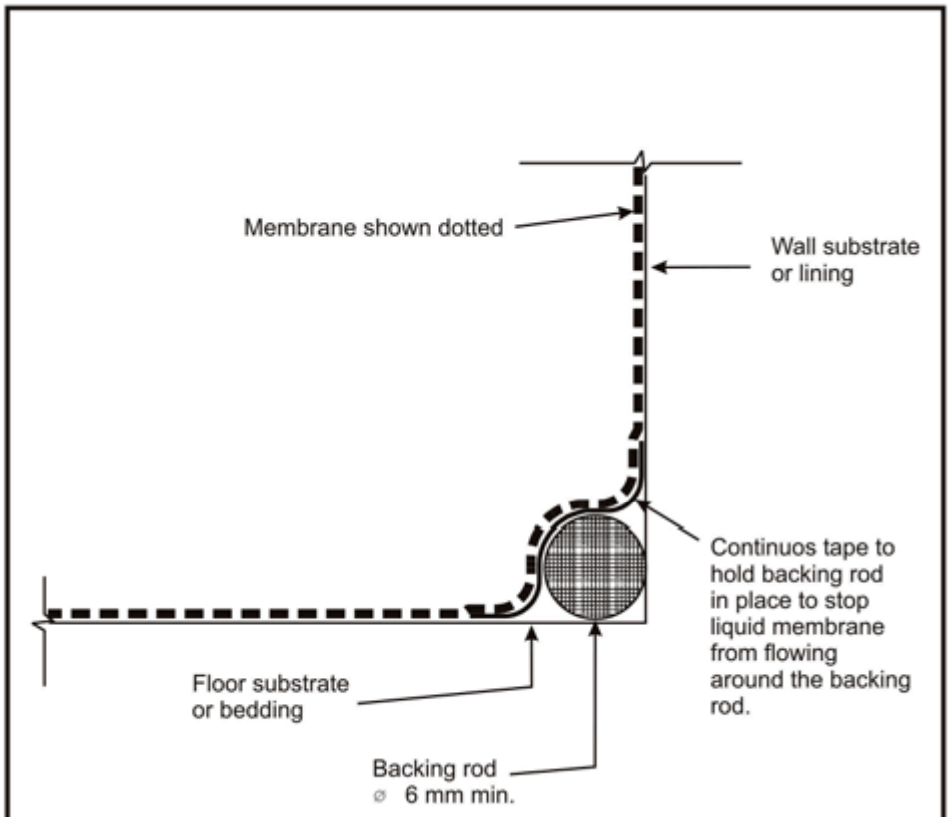

Sarking
Metal barge capping
Fibre cement wall lining
Metal quad guttering
Lead roof flashing
Main PVC membrane
Vertical corner flashing
Primer coated barge board
Fibre cement wall lining
Sarking
Lead roof flashing
Stop end created in lead roof flashing
Metal barge capping extends up to wall lining
Vertical corner flashing
Membrane behind wall lining
Waterstop behind door sill
Stop-end in gutter
Spreader outlet from gutter
Fillet
Main waterproofing membrane
Membrane and fillets around posts
Lead roof flashing
Structural ply or compressed fibre cement floor sheet
Fascia board

HOW BOND BREAKERS WORK



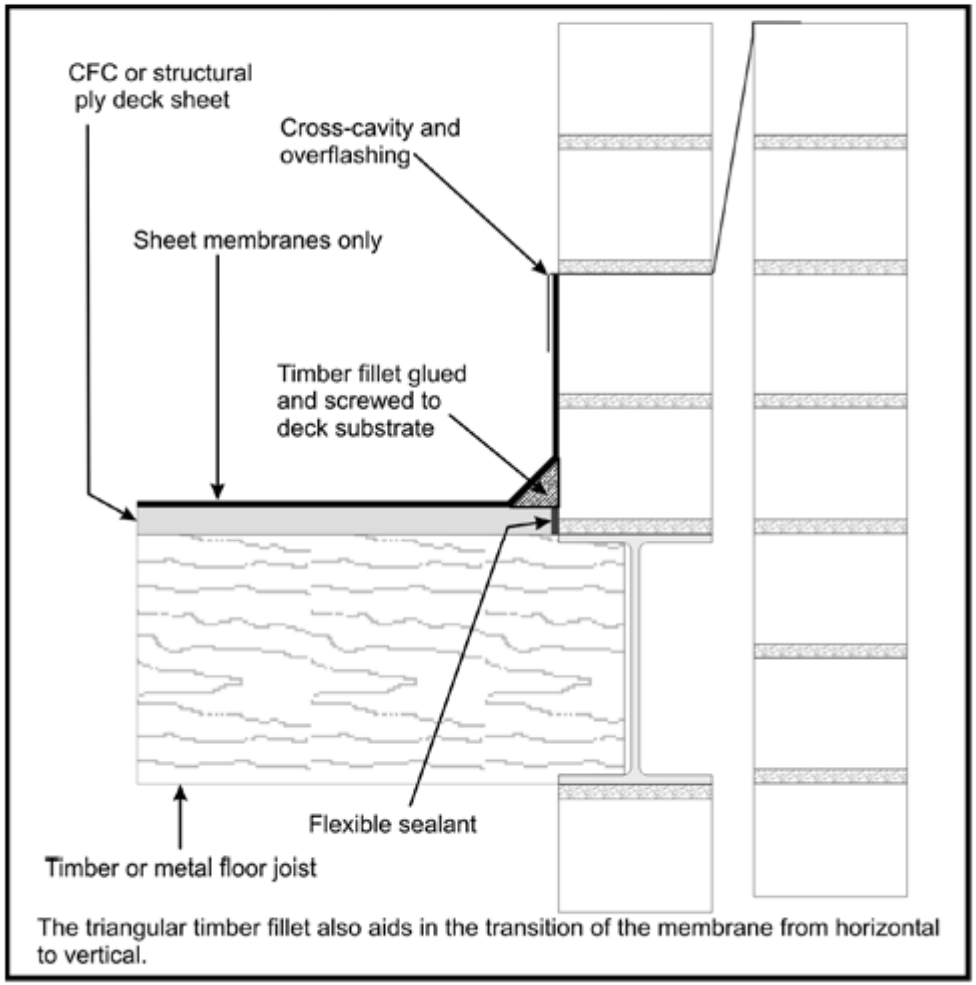
Note: Lack of an effective bond breaker is the most common single source of a waterproofing system breakdown.

TYPICAL BOND BREAKER DETAIL FOR CLASS I MEMBRANES AT A WALL / FLOOR JUNCTION



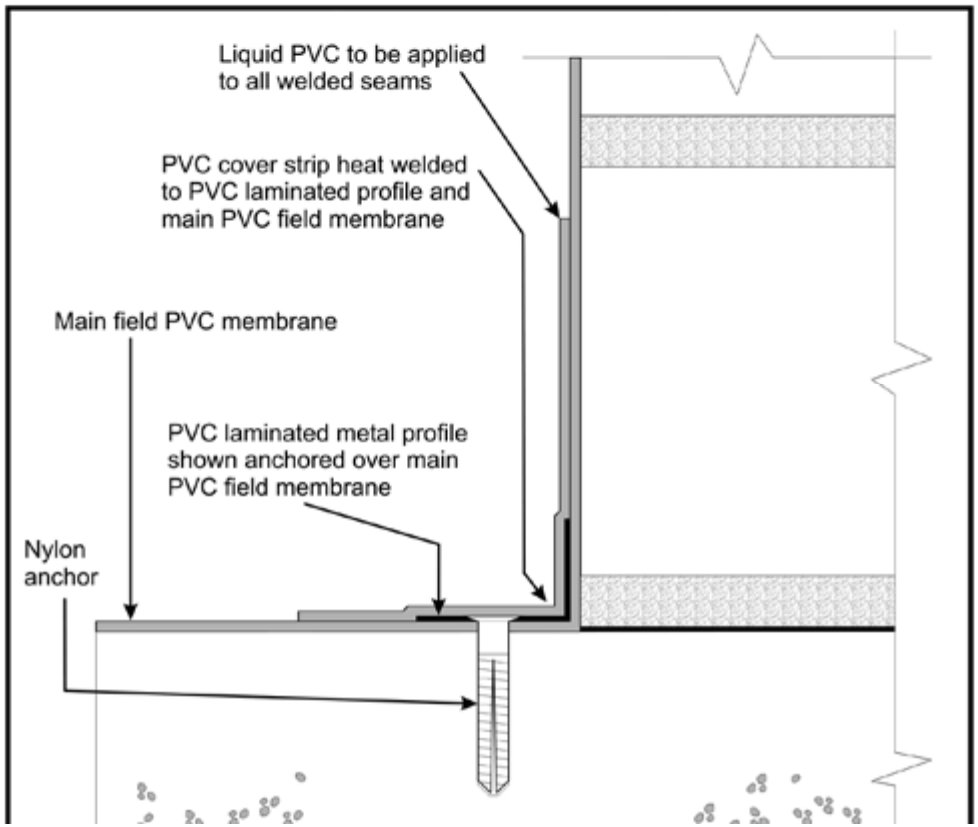
TIMBER FILLET DETAIL FOR CLASS I SHEET MEMBRANES

** Do not use this detail for resin based or liquid applied systems.*

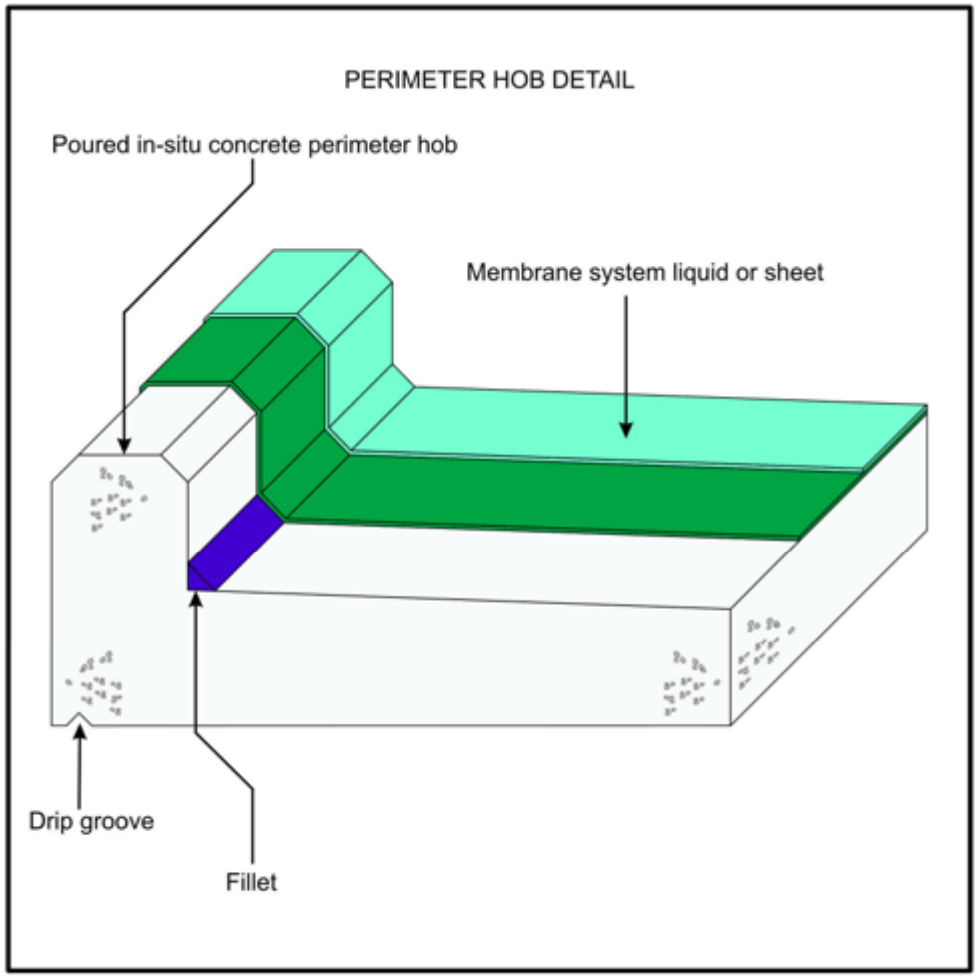


The triangular timber fillet also aids in the transition of the membrane from horizontal to vertical.

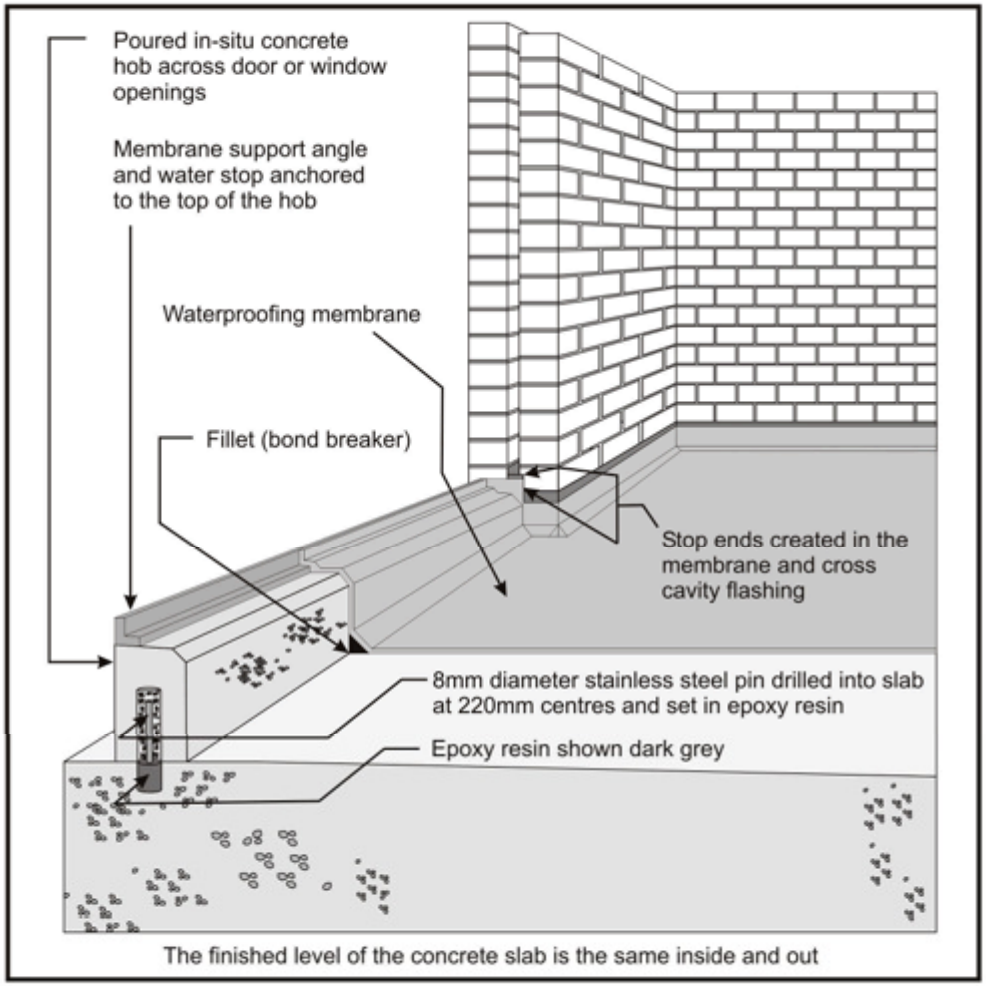
TYPICAL FILLET DETAIL FOR CLASS III PVC MEMBRANES



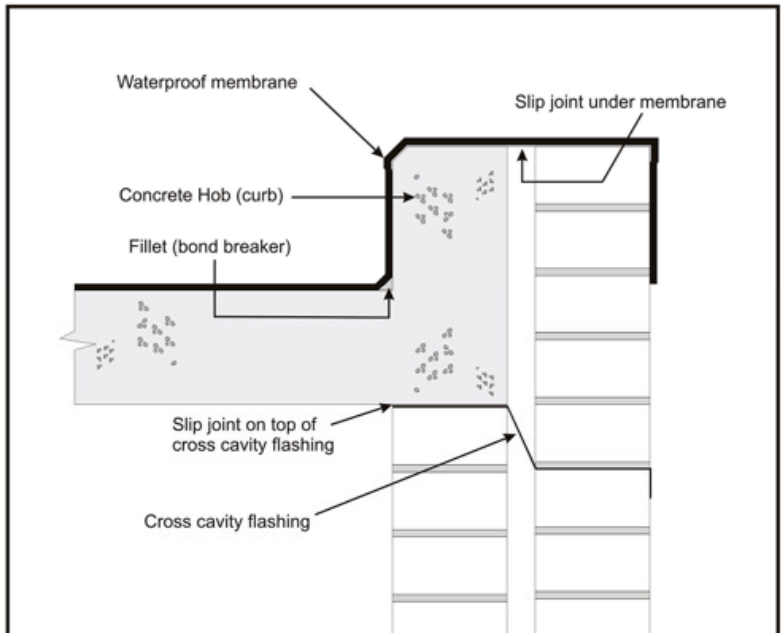
PERIMETER HOB DETAIL



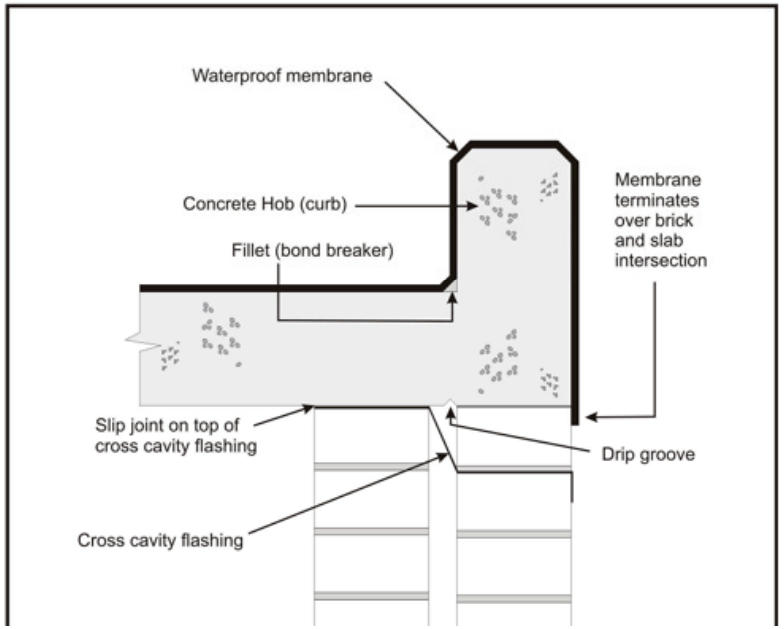
HOBS THAT ARE POURED AS A SECONDARY UNIT



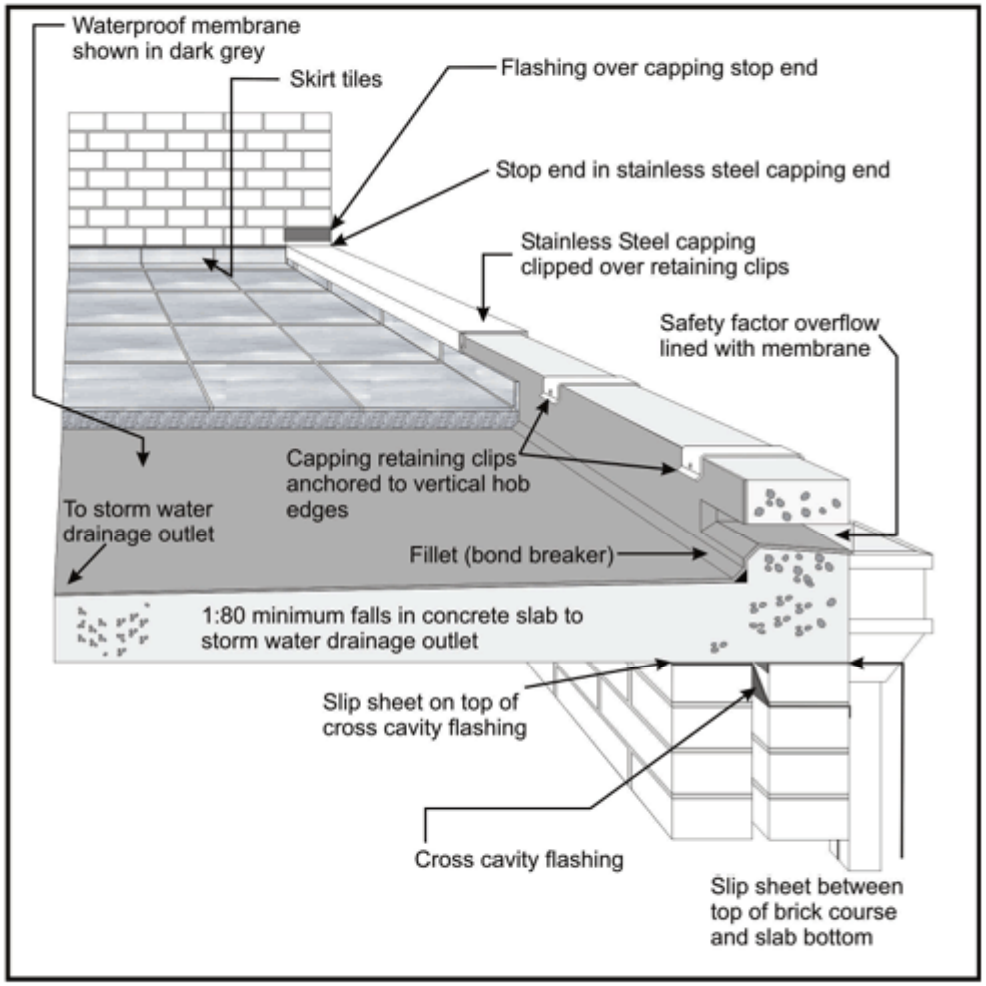
HOB TERMINATION DETAIL IN CAVITY BRICKWORK



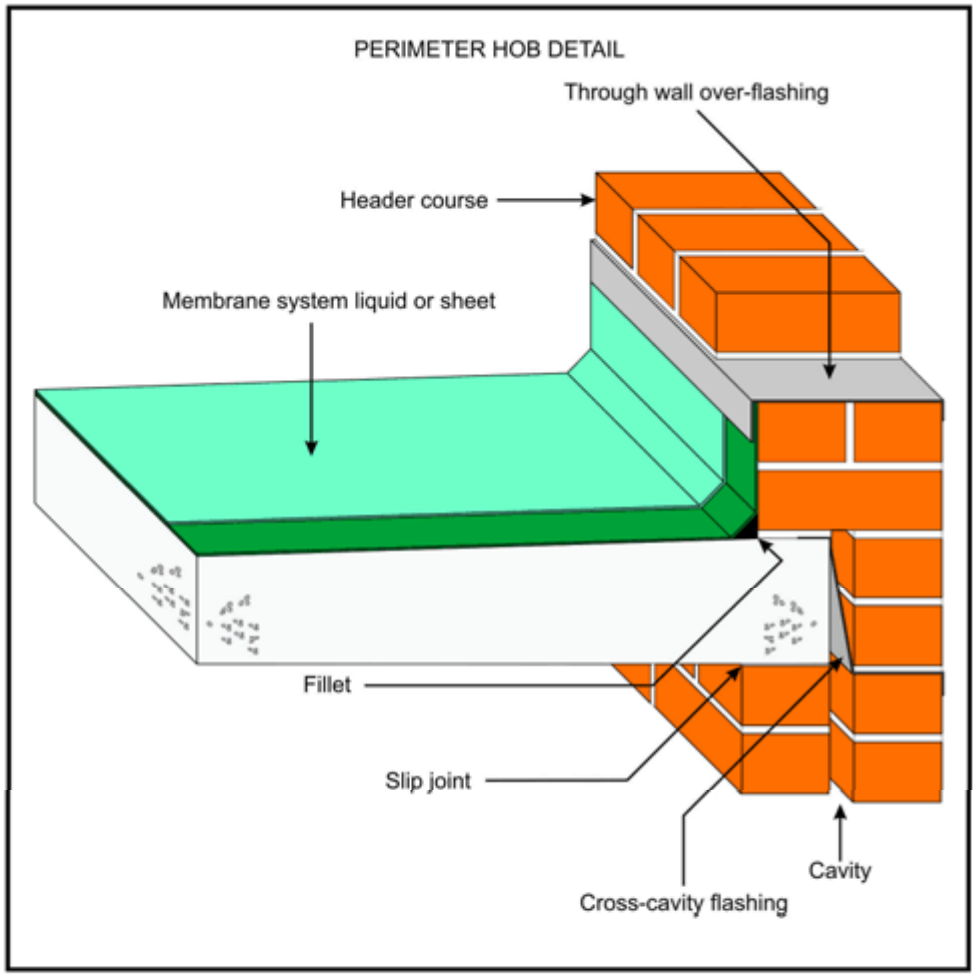
HOB TERMINATION DETAIL IN CONCRETE



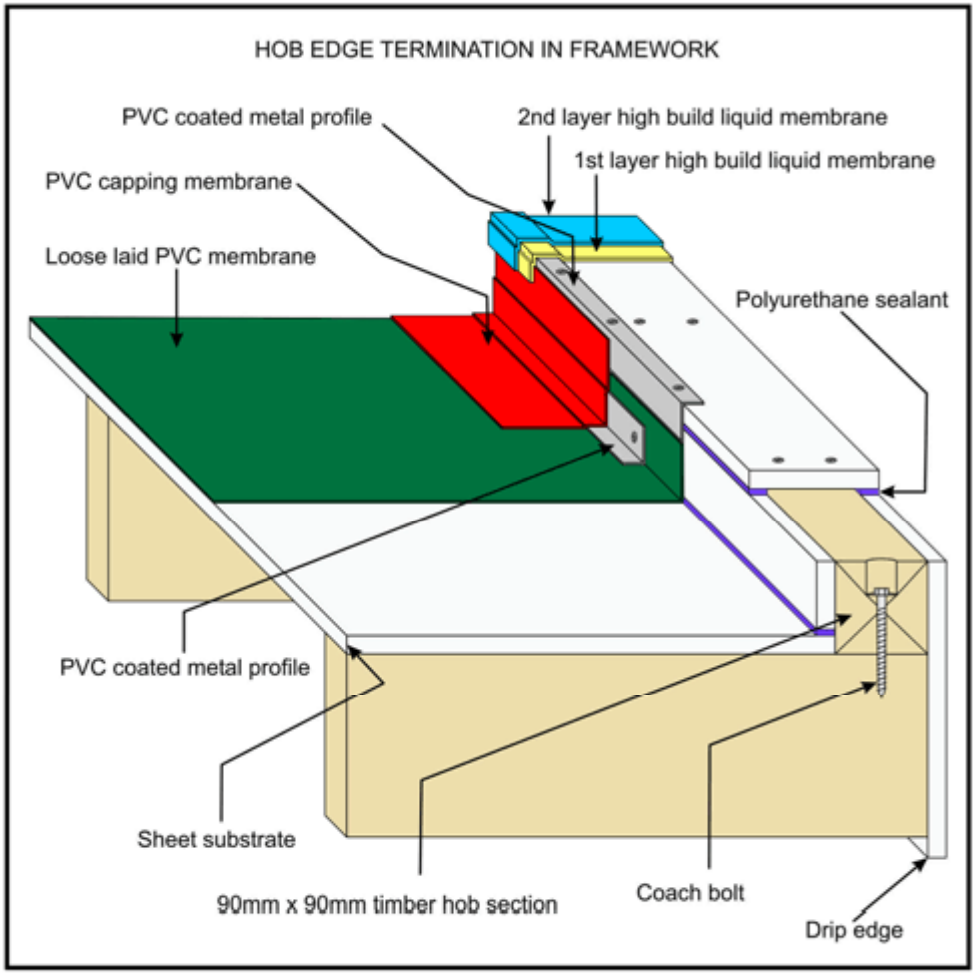
HOB DETAIL WITH METAL CAPPING



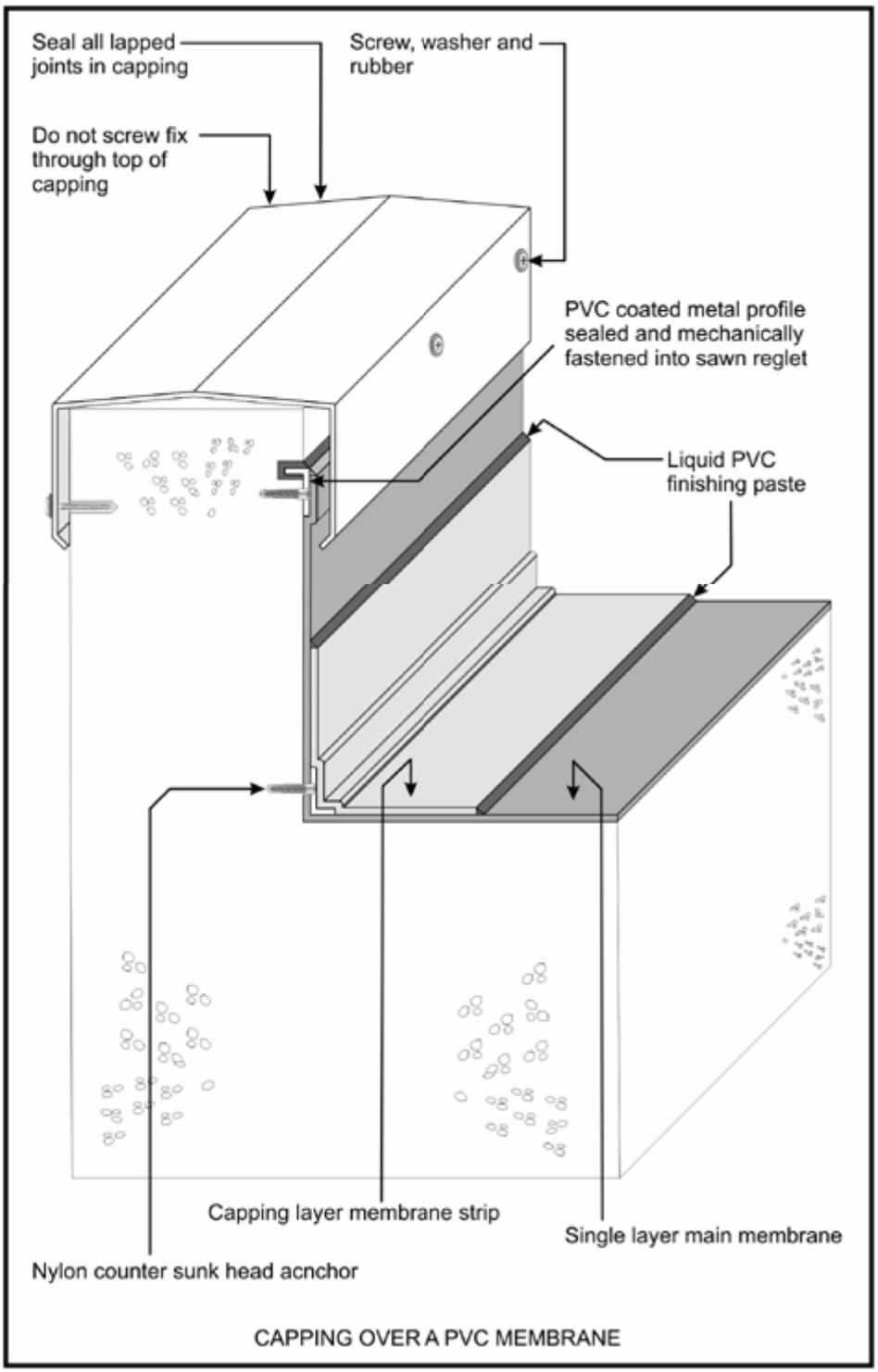
PERIMETER HOB DETAIL



PERIMETER HOB DETAIL

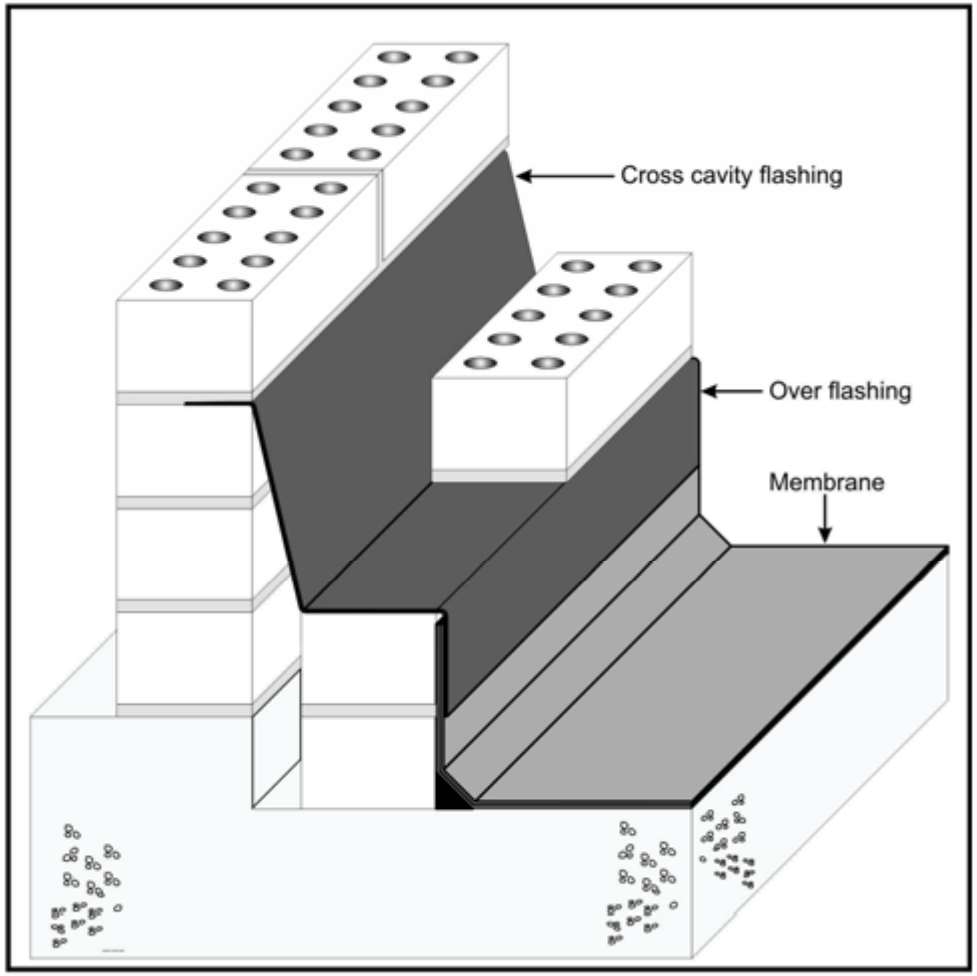


CAPPING

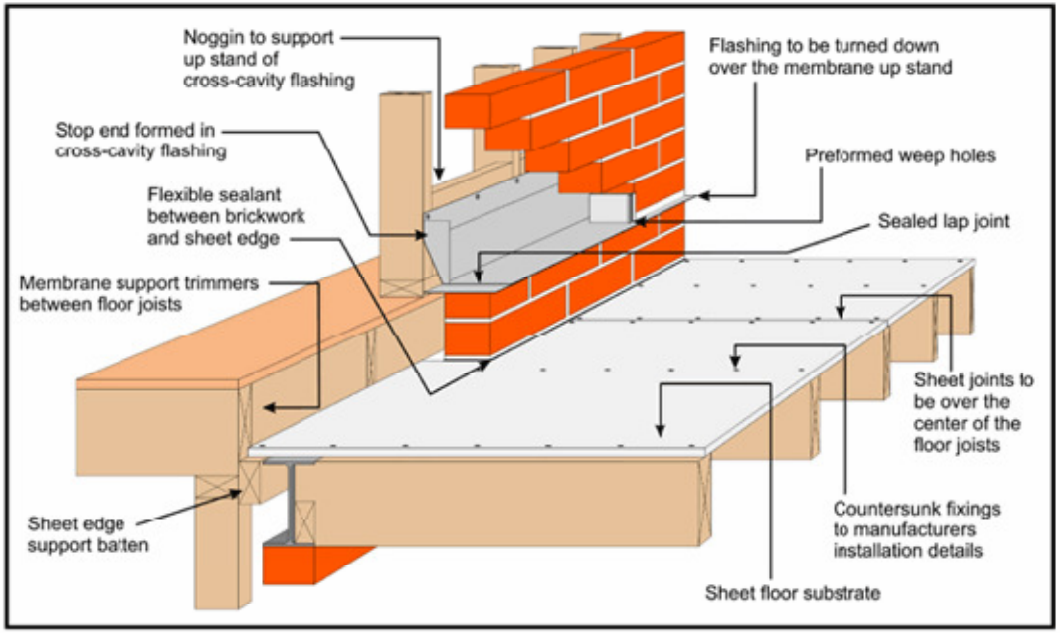


CAPPING OVER A PVC MEMBRANE

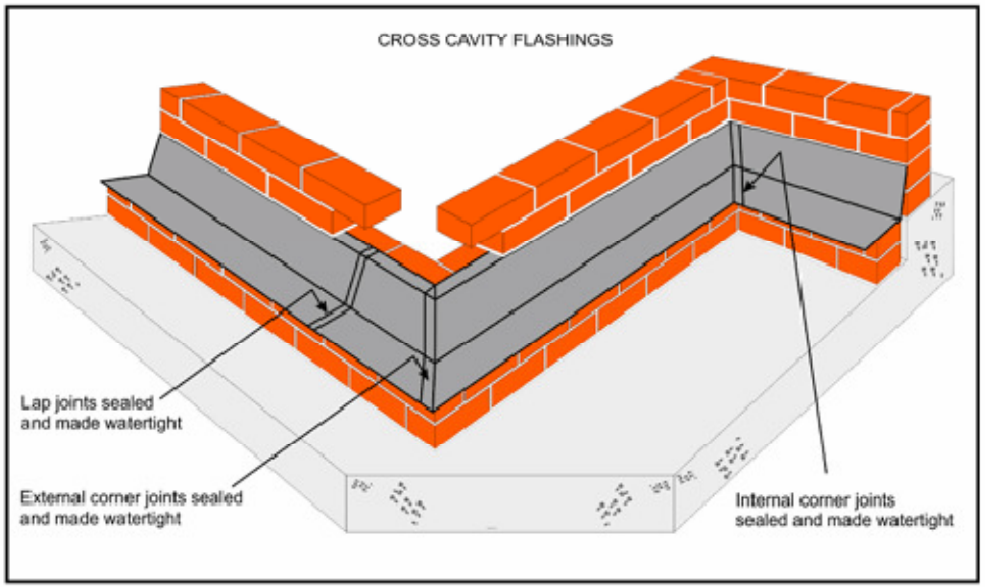
OVERFLASHING

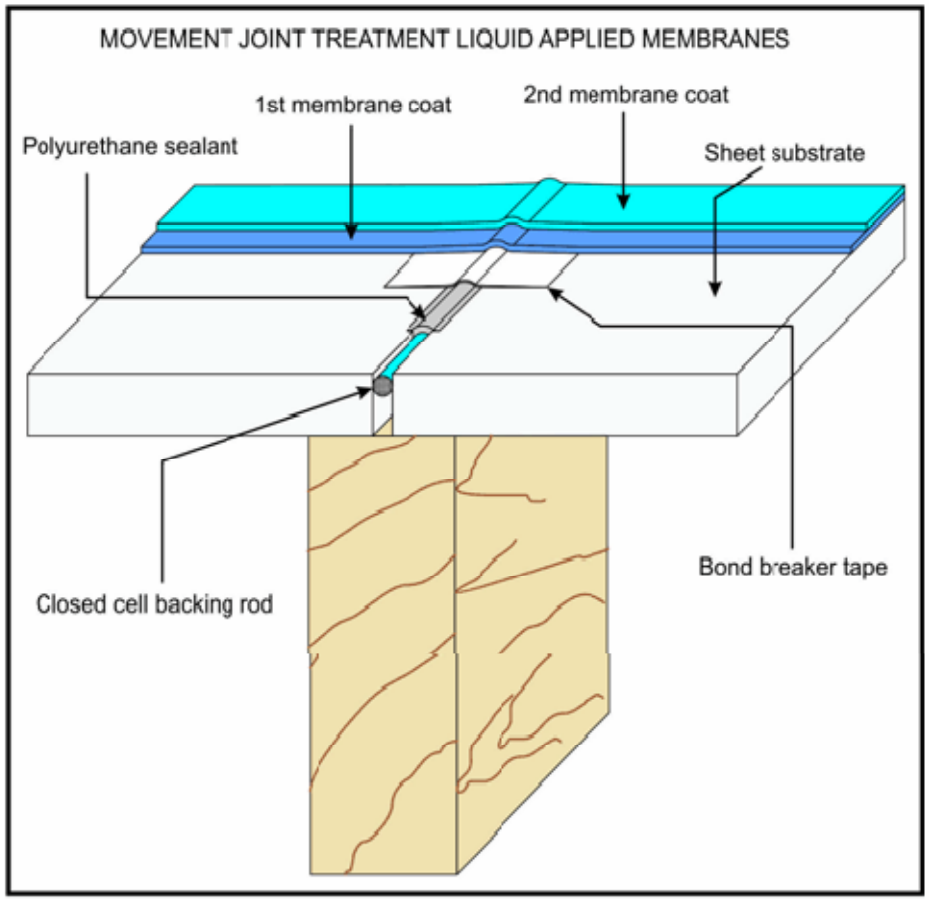


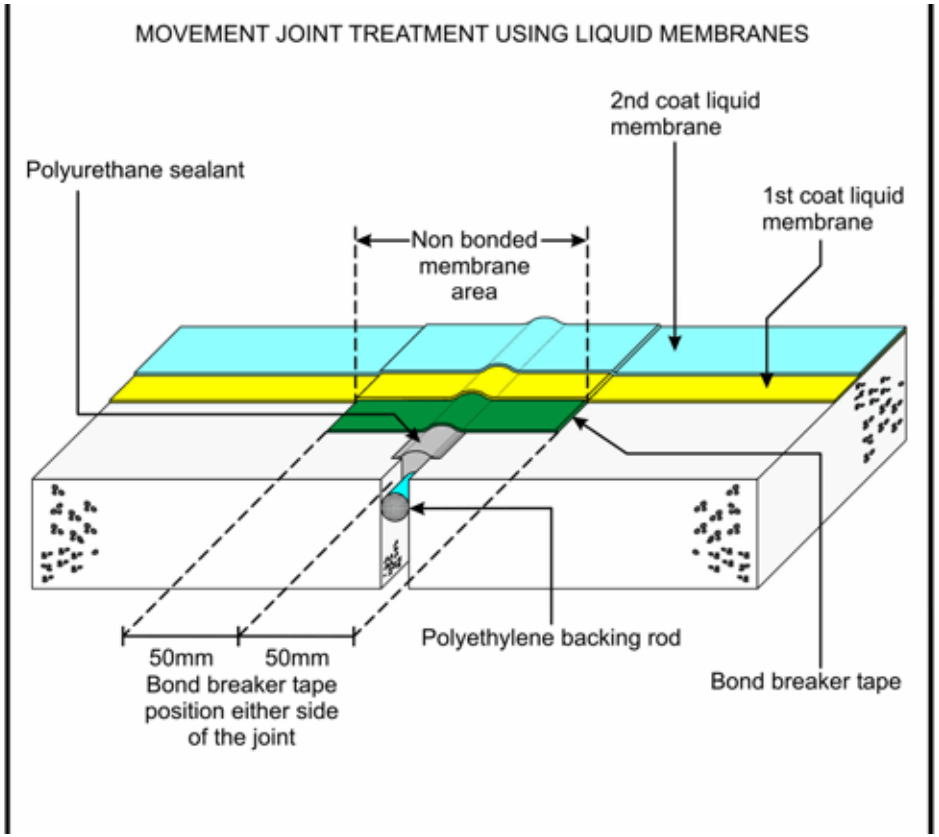
OVERFLASHING



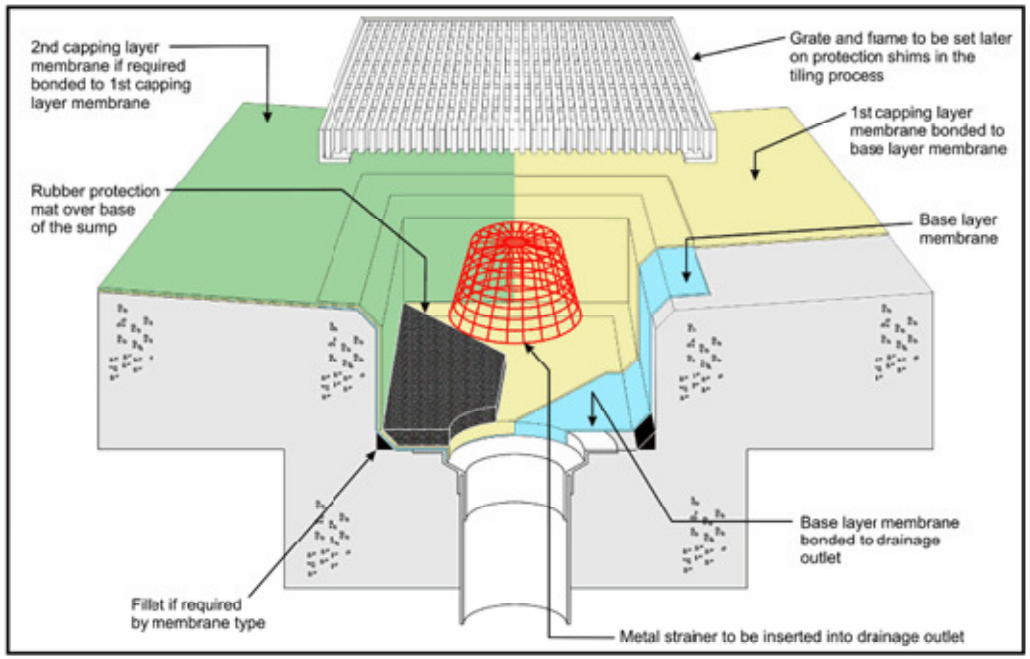
OVERFLASHING



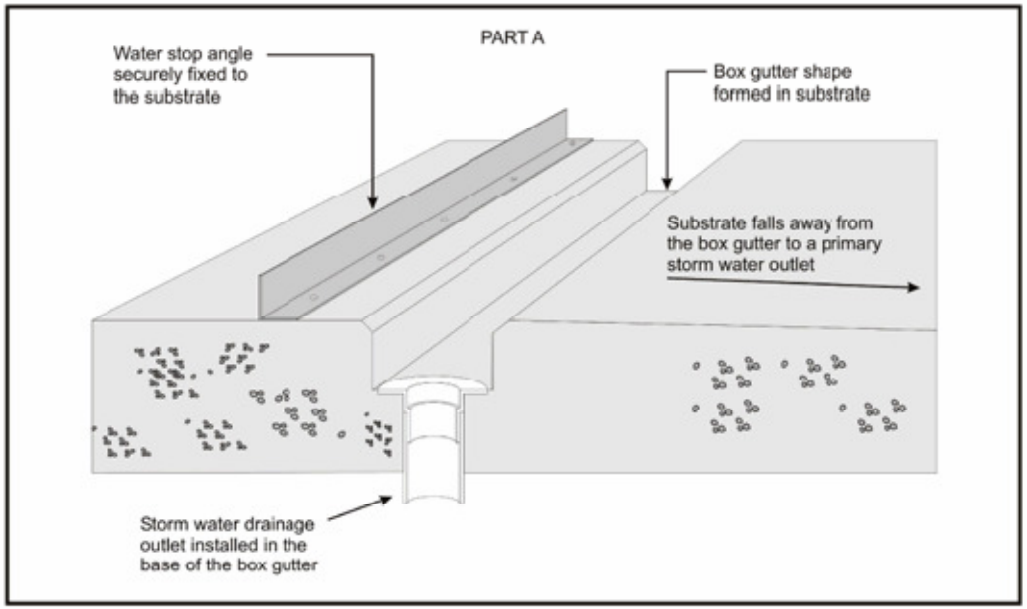

MOVEMENT JOINT TREATMENT LIQUID APPLIED MEMBRANES
1st membrane coat
2nd membrane coat
Polyurethane sealant
Sheet substrate
Closed cell backing rod
Bond breaker tape


MOVEMENT JOINT TREATMENT USING LIQUID MEMBRANES
2nd coat liquid membrane
Polyurethane sealant
1st coat liquid membrane
Non bonded membrane area
Polyethylene backing rod
50mm
50mm
Bond breaker tape position either side of the joint
Bond breaker tape

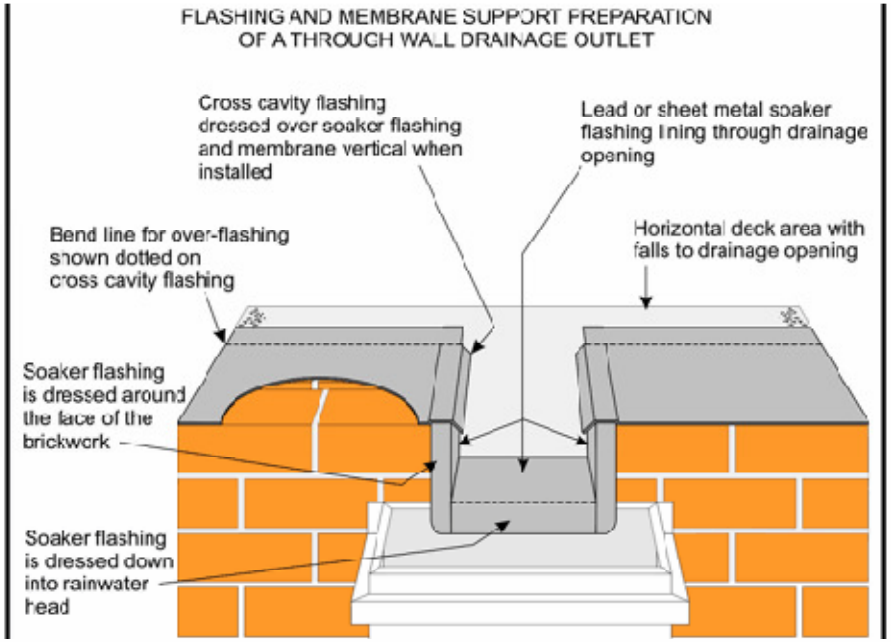
DRAINAGE OUTLETS



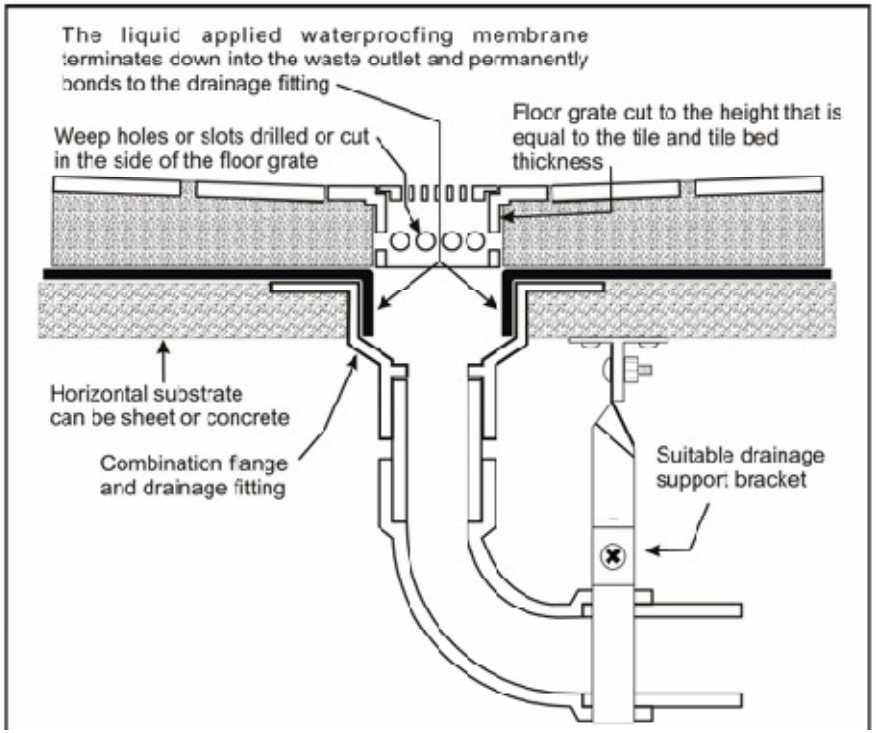
DRAINAGE OUTLETS



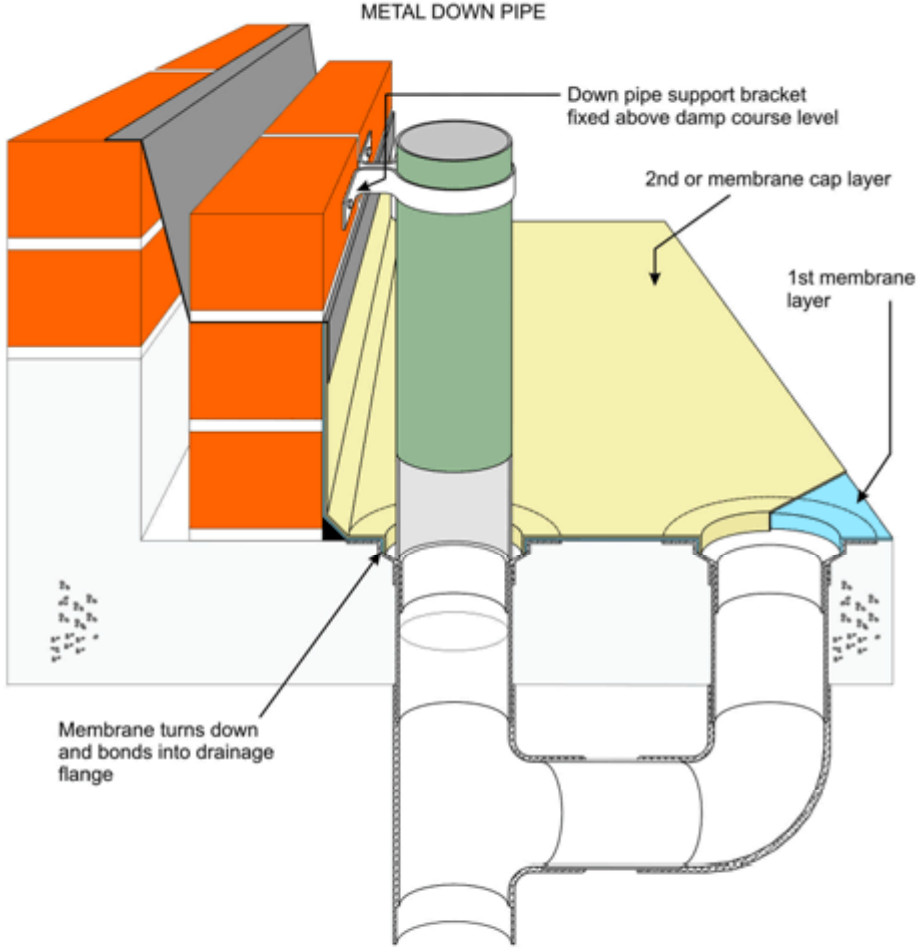
FLASHING AND MEMBRANE SUPPORT PREPARATION
OF A THROUGH WALL DRAINAGE OUTLET



DRAINAGE OUTLETS

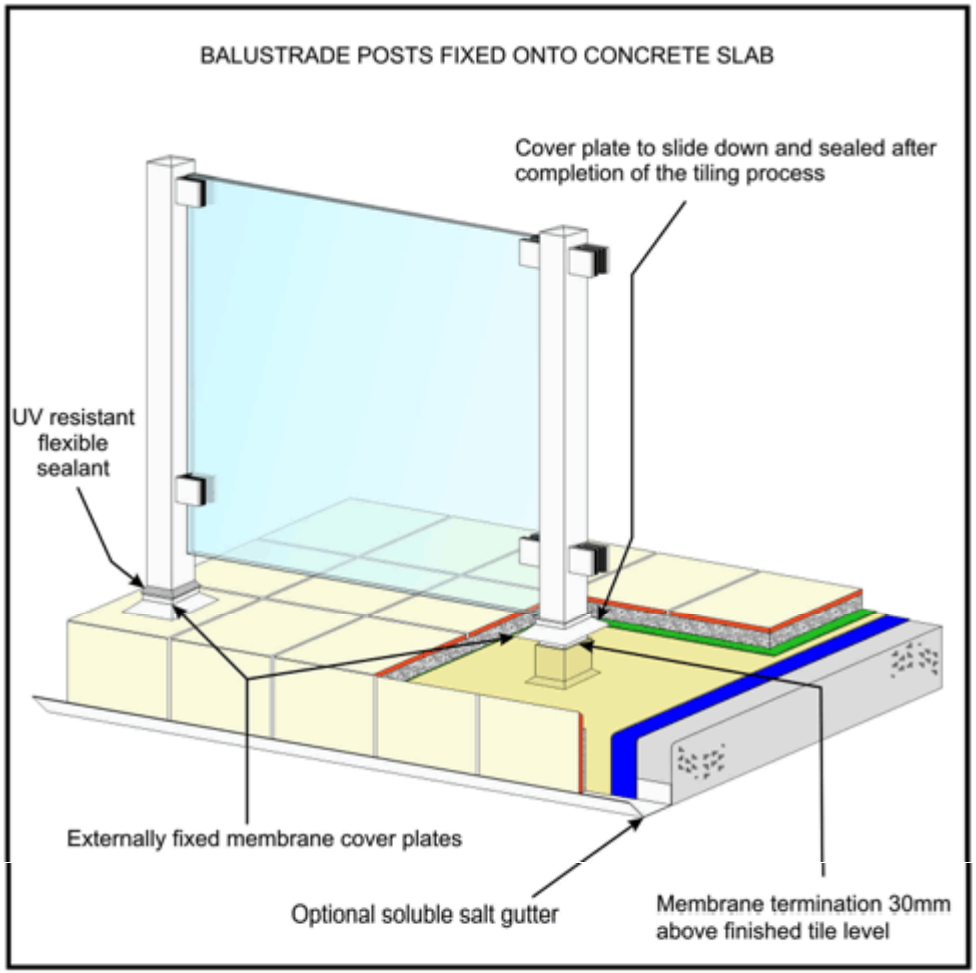


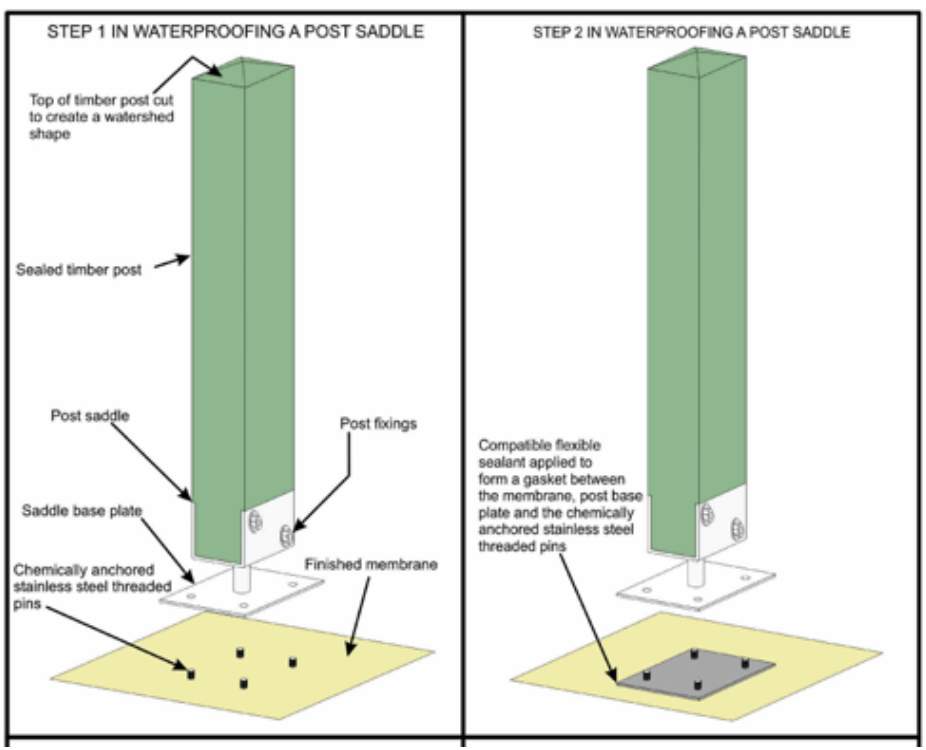
MEMBRANE TERMINATION AROUND
METAL DOWN PIPE



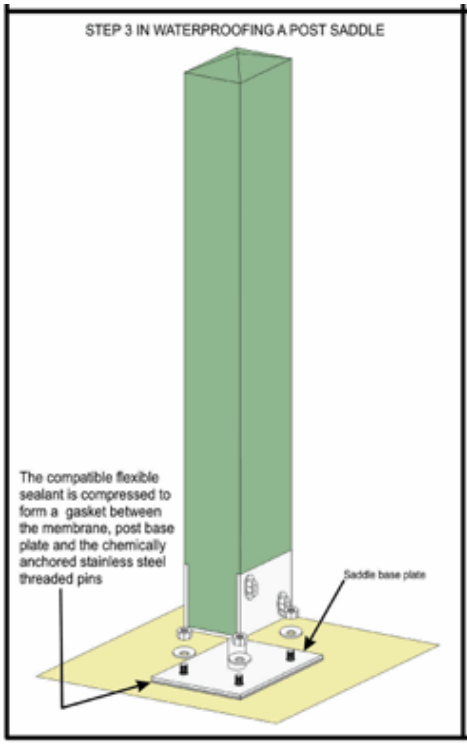
Note: Metal down pipes may need to be replaced after a period of time. To save disturbing the integrity of the waterproofing membrane the above example is the most practical solution

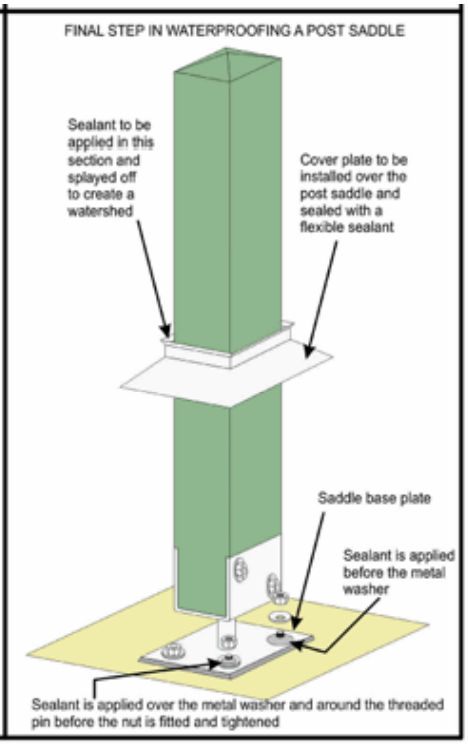
BALUSTRADE POSTS FIXED ONTO CONCRETE SLAB

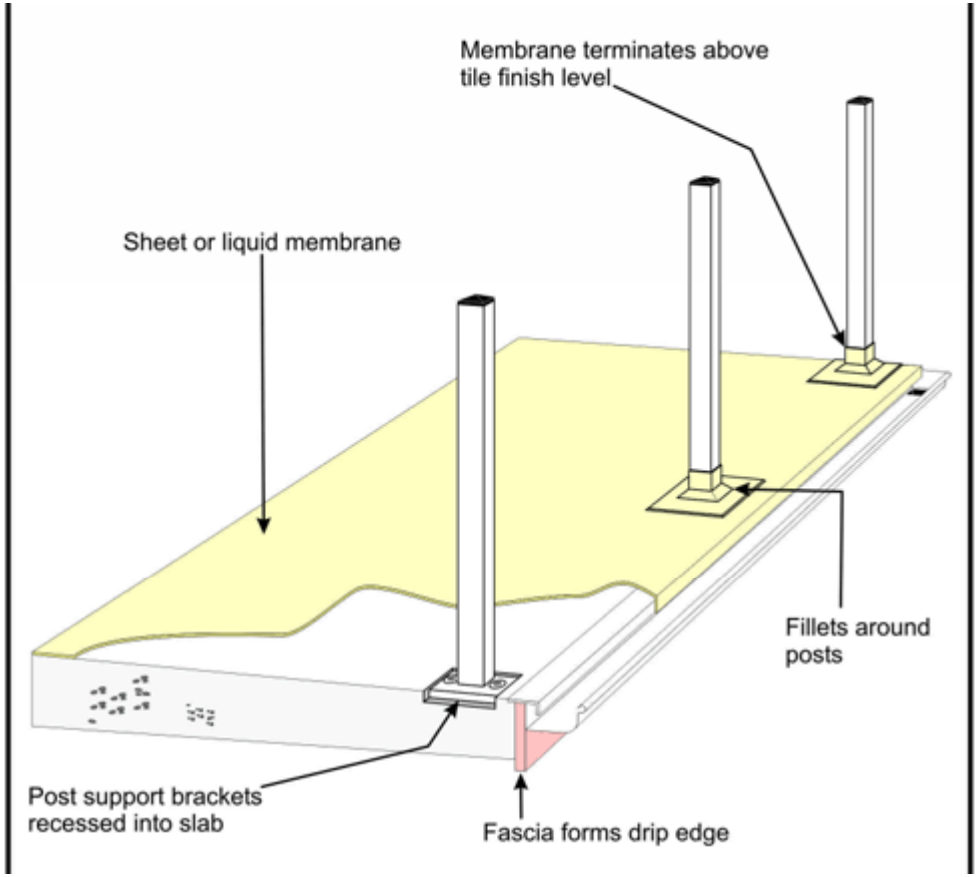


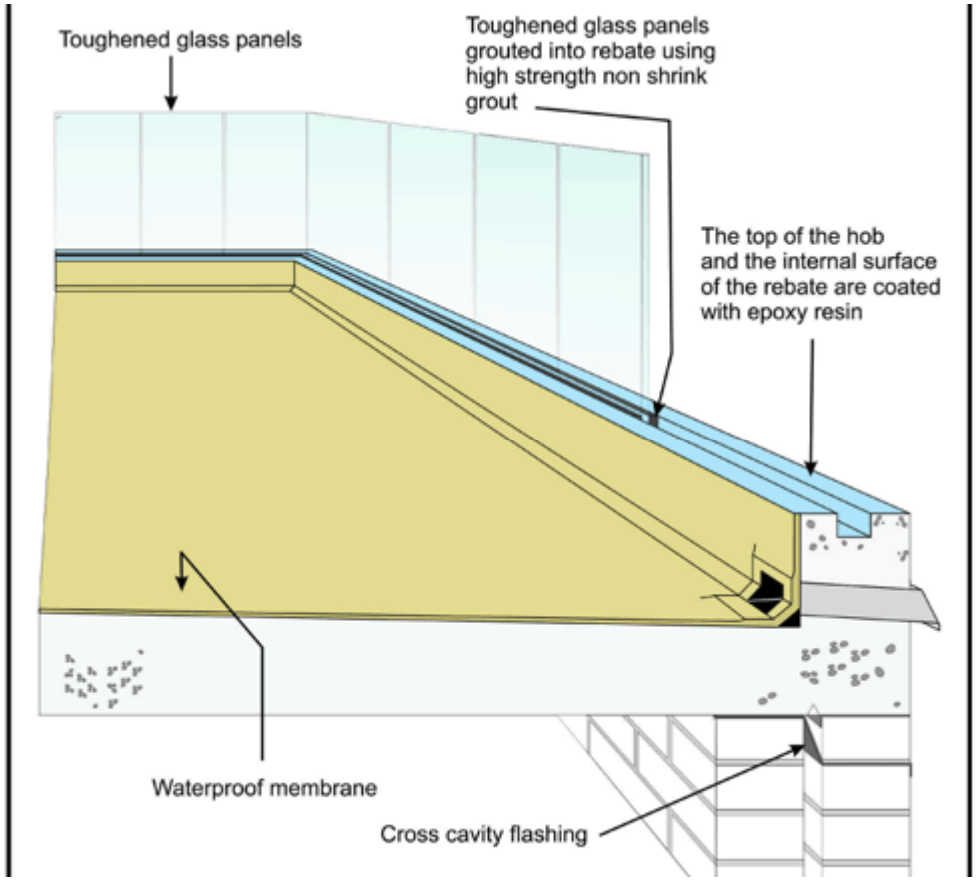

STEP 1 IN WATERPROOFING A POST SADDLE
Top of timber post cut to create a watershed shape
Sealed timber post
Post saddle
Post fixings
Saddle base plate
Chemically anchored stainless steel threaded pins
Finished membrane

STEP 2 IN WATERPROOFING A POST SADDLE
Compatible flexible sealant applied to form a gasket between the membrane, post base plate and the chemically anchored stainless steel threaded pins

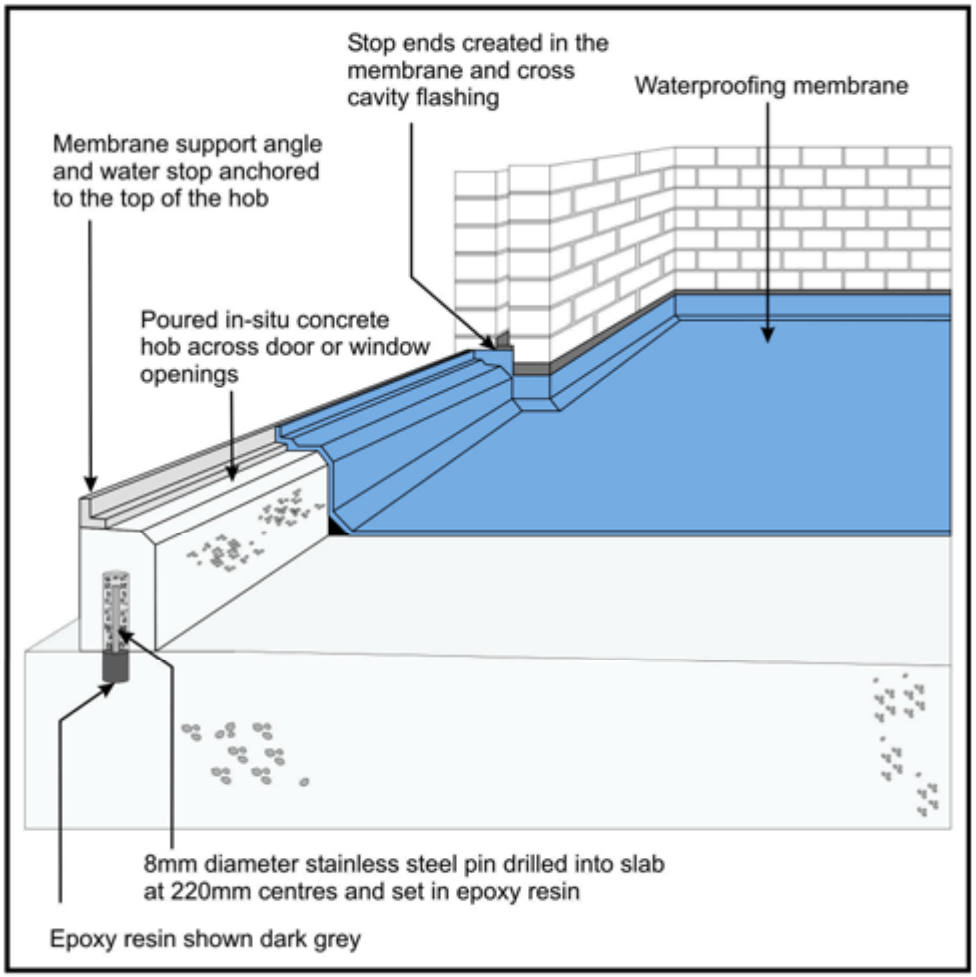
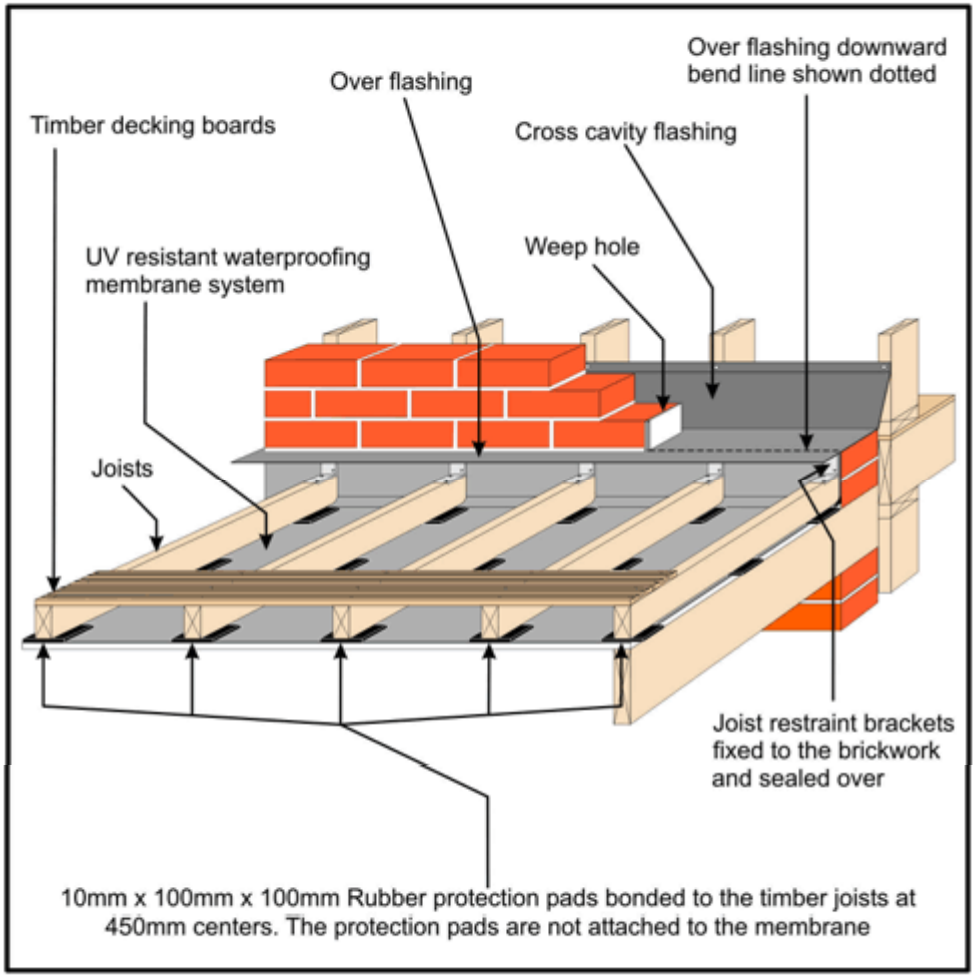

STEP 3 IN WATERPROOFING A POST SADDLE
The compatible flexible sealant is compressed to form a gasket between the membrane, post base plate and the chemically anchored stainless steel threaded pins
Saddle base plate


FINAL STEP IN WATERPROOFING A POST SADDLE
Sealant to be applied in this section and splayed off to create a watershed
Cover plate to be installed over the post saddle and sealed with a flexible sealant
Saddle base plate
Sealant is applied before the metal washer
Sealant is applied over the metal washer and around the threaded pin before the nut is fitted and tightened


Membrane terminates above tile finish level
Sheet or liquid membrane
Fillets around posts
Post support brackets recessed into slab
Fascia forms drip edge


Toughened glass panels
Toughened glass panels grouted into rebate using high strength non shrink grout
The top of the hob and the internal surface of the rebate are coated with epoxy resin
Waterproof membrane
Cross cavity flashing

STEP


Stop ends created in the membrane and cross cavity flashing
Waterproofing membrane
Membrane support angle and water stop anchored to the top of the hob
Poured in-situ concrete hob across door or window openings
8mm diameter stainless steel pin drilled into slab at 220mm centres and set in epoxy resin
Epoxy resin shown dark grey

CROSS CAVITY FLASHINGS AND TIMBER DECKS