PREMCRETE

PRODUCT INSTALLATION TRAINING GUIDE

STRUCTURAL WATERPROOFING
GAS PROTECTION
HEAVE PROTECTION

PREMCRETE
ACADEMY

PREMCRETE TRAINING
THE KNOW HOW

This training guide is intended as a guide and does not replace the requirement of installation training on site by a Premcrete trainer.
Project specific details should always be adhered to as these may vary from illustrations shown.
Coverage Guides may differ from official data sheet coverage, to make allowance for the realities on site.

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PREMCRETE ACADEMY

BRINGING YOU THE **KNOWHOW** WHEREVER YOU ARE.

We aim to make substructure protection Knowhow accessible wherever you are - Onsite or Offsite, Online or Offline.

ONSITE

- Installer practical training sessions
- Product demonstrations
- Product trials and testing
- Quality control training

OFFSITE

- CPDs
- Premcrete HQ training facility
- Product testing & formulation
- Partnerships with other academies

ONLINE

- PREMTRAC QC portal & training register
- Downloadable typical details & data sheets
- Youtube 'how to' videos
- Interactive 3D model & online training program

OFFLINE

- Training manual
- Training banners
- Written training programme
- Offline to online QR codes

PREMCRETE CERTIFIED SPECIALIST INSTALLER OPERATIVE

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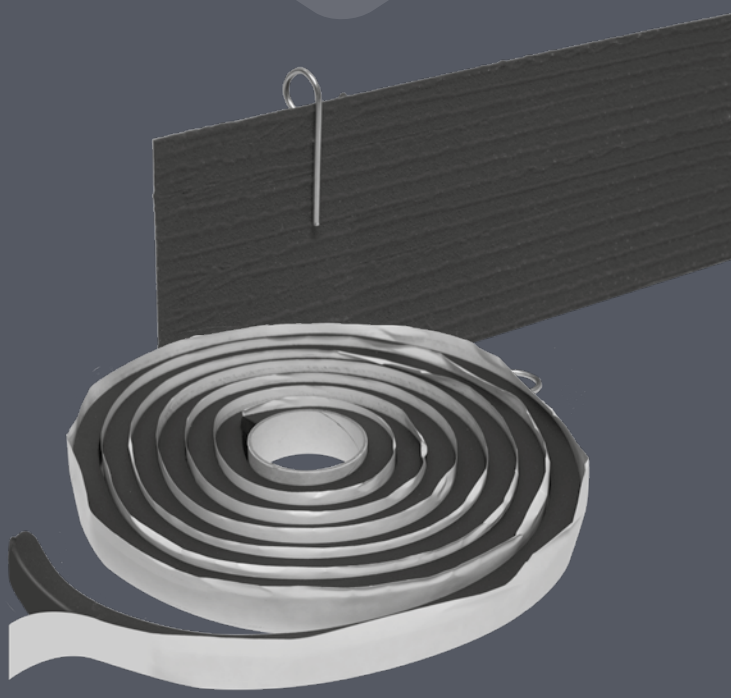
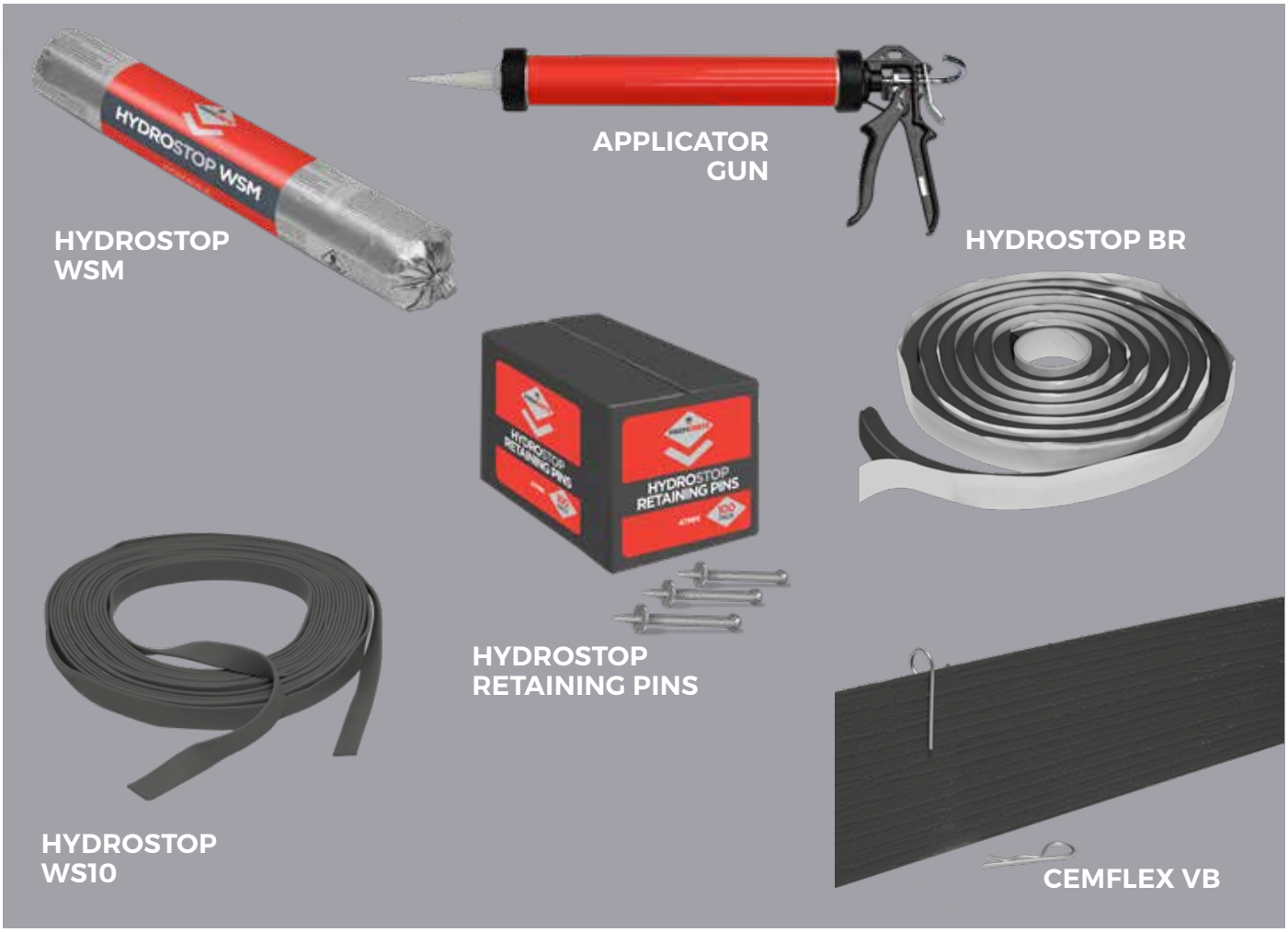
CONSTRUCTION JOINT PROTECTION

PRODUCT GLOSSARY

- PRODUCTS REQUIRED
- KICKER PREPARATION
- APPLICATION OF HYDROSTOP WSM
- APPLICATION OF HYDROSTOP BR
- APPLICATION OF CEMFLEX VB
- PENETRATION DETAILING





KICKER PREPARATION

Prepare joint to provide a sound substrate free of loose material. Application of Premtard TF / MF is recommended to enable removal of surface laitance with jet-washing to expose aggregate.

HYDROSTOP WSM APPLICATION

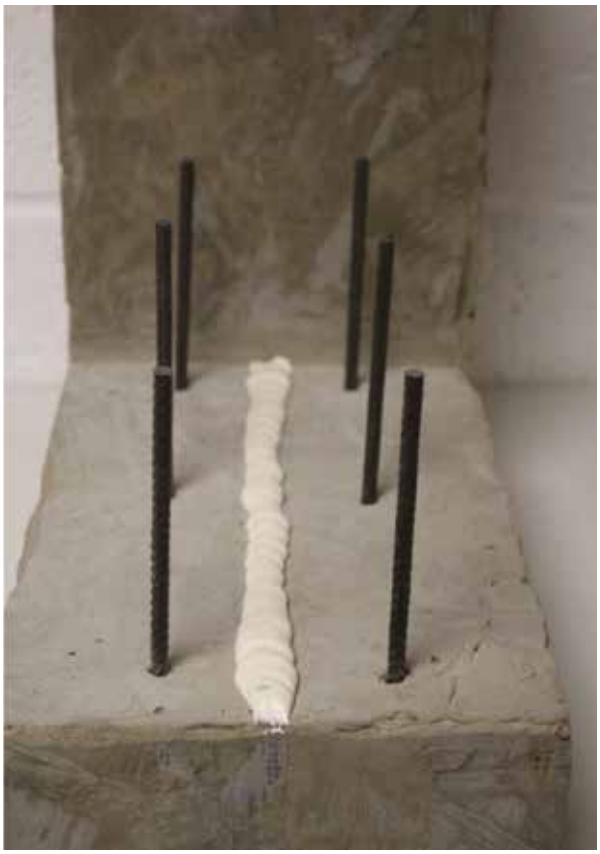
No rebate in construction joints required for this product.

HYDROSTOP WSM COVERAGE GUIDE

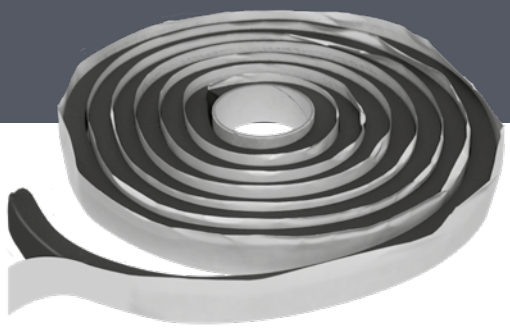
PRODUCT SIZE
600ML SACHET
WITH 8MM NOZZLE

COVERAGE
UP TO 8 LINEAR METRES
25 X 3MM BEAD

Insert Hydrostop WSM into applicator gun.



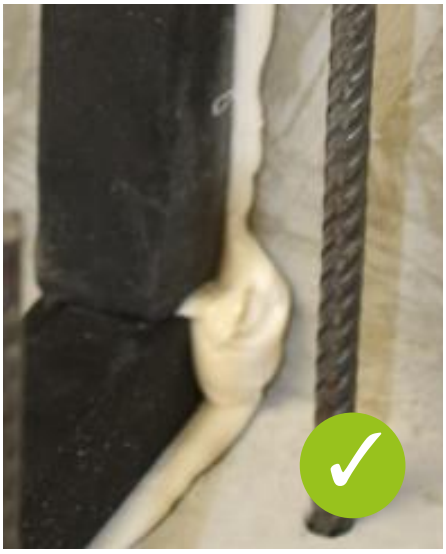
Apply 8mm bead of Hydrostop WSM to substrate.



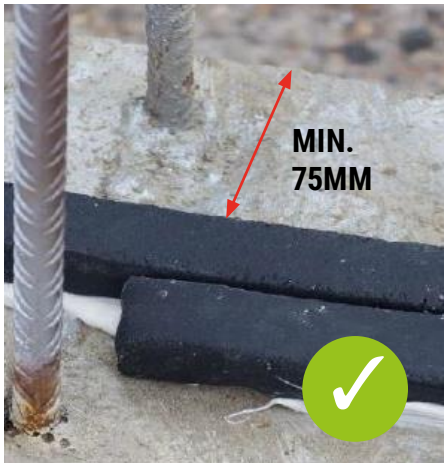
HYDROSTOP BR APPLICATION

No rebate in construction joints required for this product.

Firmly press the waterbar into Hydrostop WSM and ensure there are no voids below.

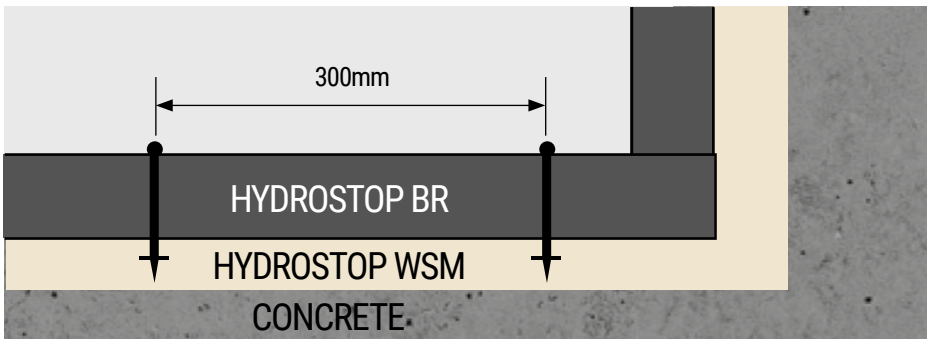


Butt joint internal corners to ensure there are no voids behind.

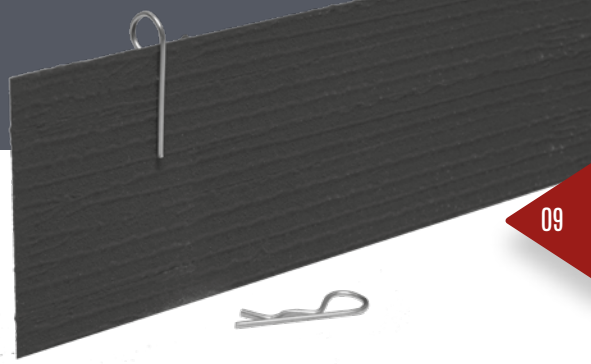


Joints in Hydrostop BR should be overlapped by a minimum of 50mm side-by-side. Install with a minimum of 75mm concrete cover to face of concrete.

Nail waterbar at 300mm centres using Hydrostop retaining pins.



CEMFLEX VB APPLICATION



Cemflex VB should be pre-installed in kicker joint before concrete is cast. This can be hung with tying wire and timber blocks as pictured above, or Omega Holders can be supplied.

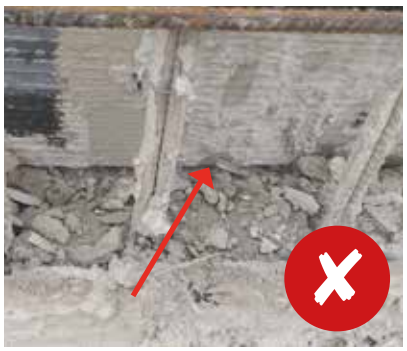
Cemflex VB to be secured between starter bars.

Ensure waterbar is Installed with 30mm embedment into first pour, leaving 120mm protruding for wall pour.

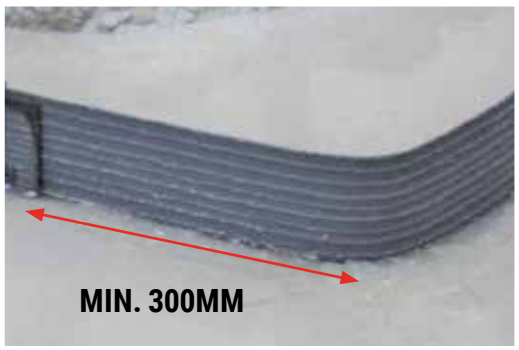
Overlap waterbar by minimum 150mm ensuring plates are held tightly together. Two Cemflex clips should be used to secure each lap.

Continue waterbar through construction joint by minimum 200mm for lapping to next pour.

Laser level used to ensure correct consistent height.



There must be no gap beneath the Cemflex VB after the first concrete pour.



Corners must be bent to follow the construction joint. Cemflex VB must be lapped at least 300mm away from corner.

HYDROSTOP WS10 PIPE PENETRATION

SMOOTH PIPE
Apply Hydrostop WS10 directly to pipe using tying wire to secure. Overlap waterbar by 75mm side by side. Position to maintain a minimum of 75mm concrete cover.

RIBBED PIPE
Fill ribs with Hydrostop WSM. Apply Hydrostop WS10 to pipe using tying wire to secure. Overlap waterbar by 75mm side by side. Position to maintain a minimum of 75mm concrete cover.

MAXIPRUFE PLUS

PRODUCT GLOSSARY

- PREPARATION
- HYDROSEAL FX MIXING
- HYDROSEAL FX APPLICATION
- MAXIPRUFE PLUS APPLICATION
- TWINSEAL COMPOUND GR APPLICATION
- CAPPING BEAM ILLUSTRATION & SEQUENCING
- MAXIPRUFE PLUS FIXING
- PENETRATION DETAILING
- PILED WALL DETAILING

PILE HEAD/PILE CAP PREPARATION

Substrates should be thoroughly jetwashed to remove loose material.
Use airline to remove standing water.

MIXING THE HYDROSEAL FX

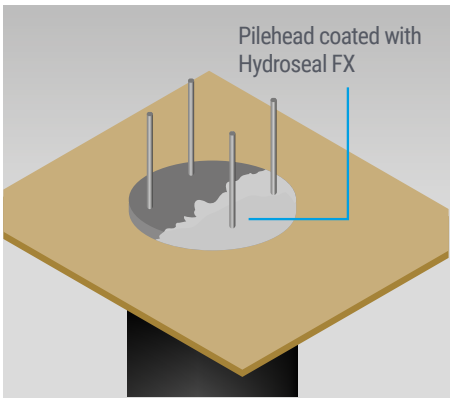
Mix one full bag of powder with one full container of liquid – no part mixing.

Pour all the liquid component into the bucket and then add the powder slowly to ensure continious mixing.

Thoroughly mix for five minutes using mixing paddle.

APPLICATION

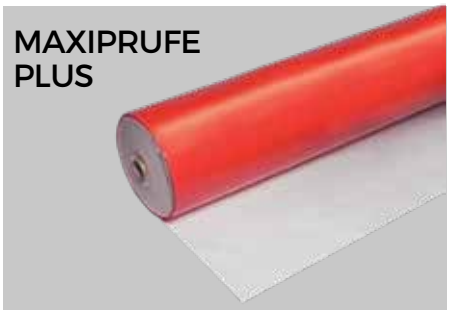
Ensure concrete is damp with no standing water and apply as a single 2mm thick coating. Ensure Hydroseal FX is applied to the sides of the pile head to meet the blinding level.



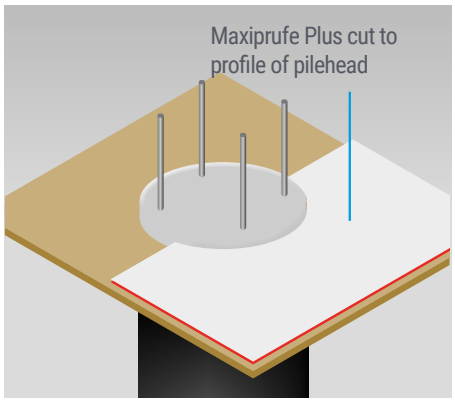
HYDROSEAL FX COVERAGE GUIDE

PRODUCT SIZE (2 PART)
30LTR
COVERAGE
UP TO 6.5 M^2

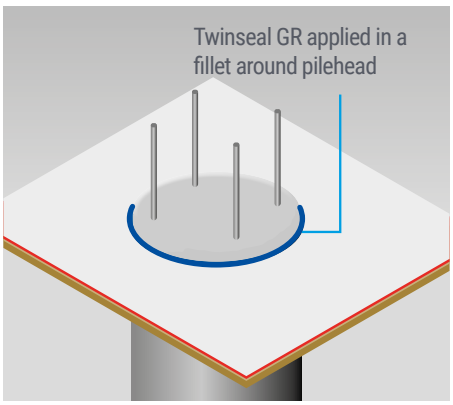
450MM PILE HEADS	600MM PILE HEADS
x17	x11



Cut membrane tightly to the pilehead.



Add curing agent to the base component and mix for 3 minutes. Brush apply the Twinseal GR as a 3mm x 100mm application.



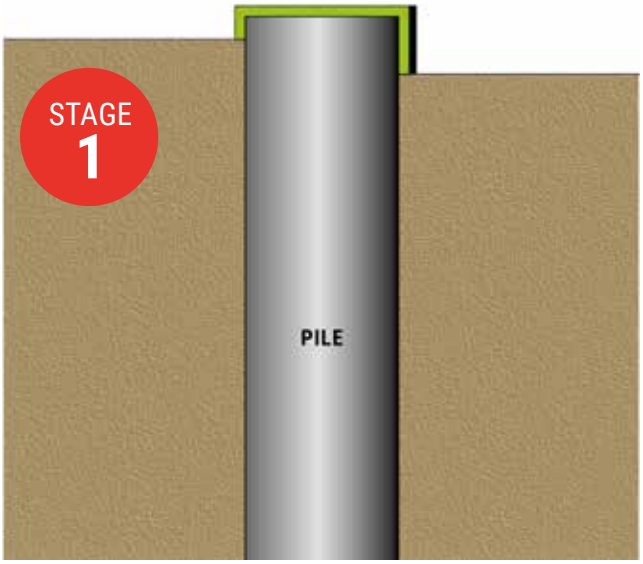
TWINSEAL GR COVERAGE GUIDE

PRODUCT SIZE (2 PART)
5KG
COVERAGE
UP TO 9.5 LINEAR METRES

450MM PILEH EADS	600MM PILE HEADS
x6	x5

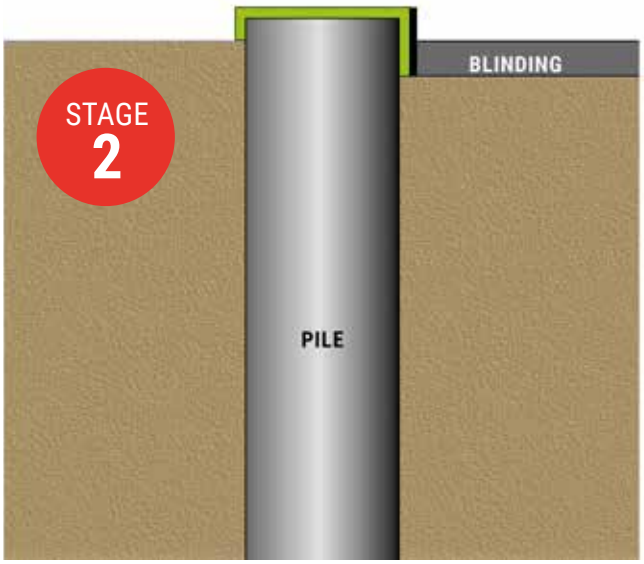
TYPICAL CAPPING BEAM ILLUSTRATIONS & SEQUENCING

Hydroseal FX
Twinseal Compound GR
Maxiprufe Plus
Hydrostop BR
Hydrostop WSM



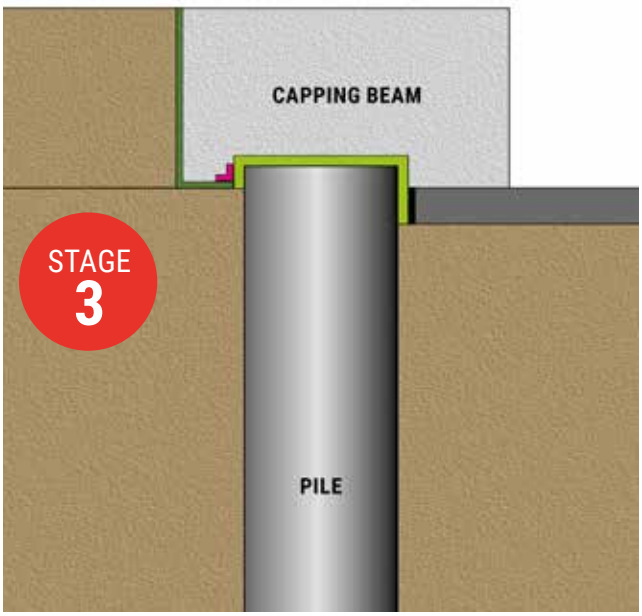
STAGE 1

Coat pileheads with Hydroseal FX and place Correx Board against the basement side of piles.



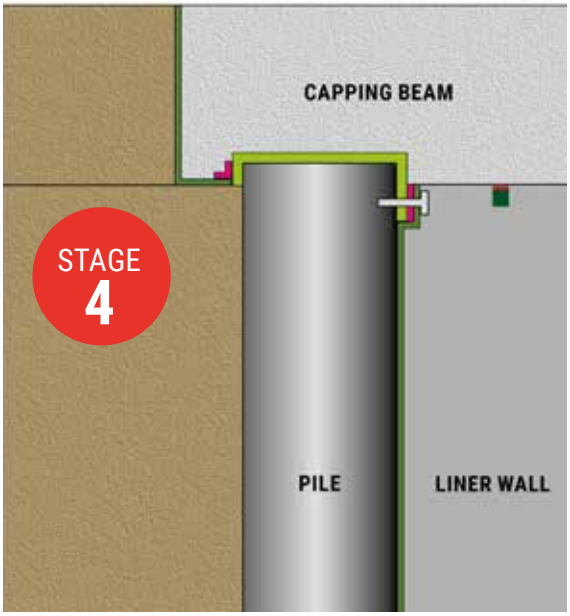
STAGE 2

Cast blinding against Correx Board.



STAGE 3

Install membrane to the outside of the pilehead and capping beam and seal the membrane to the pile head with Twinseal Compound GR.



STAGE 4

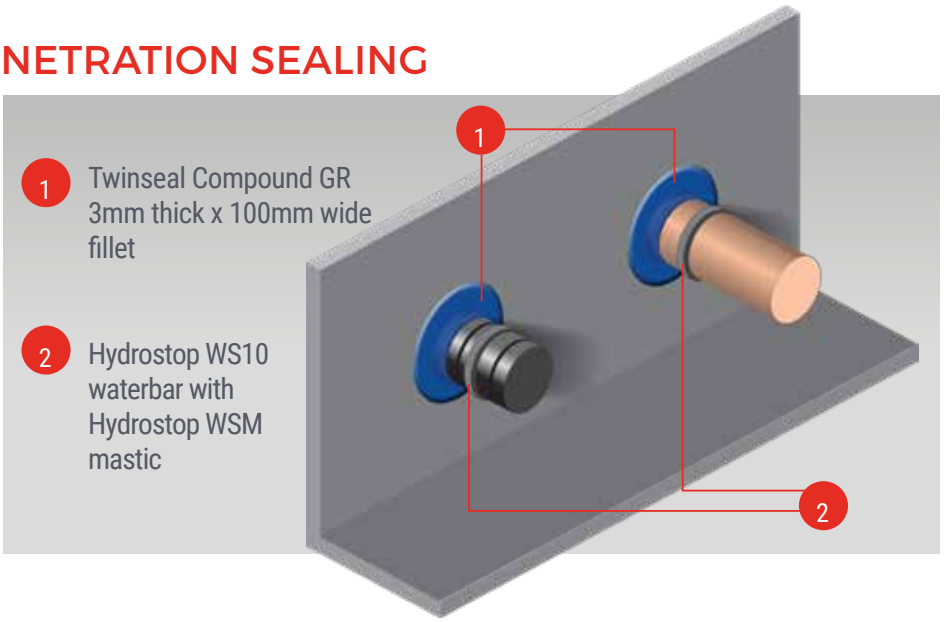
When capping beam is cast, and basement excavation is taking place, remove the Correx board exposing the Hydroseal FX ready to connect the membrane.

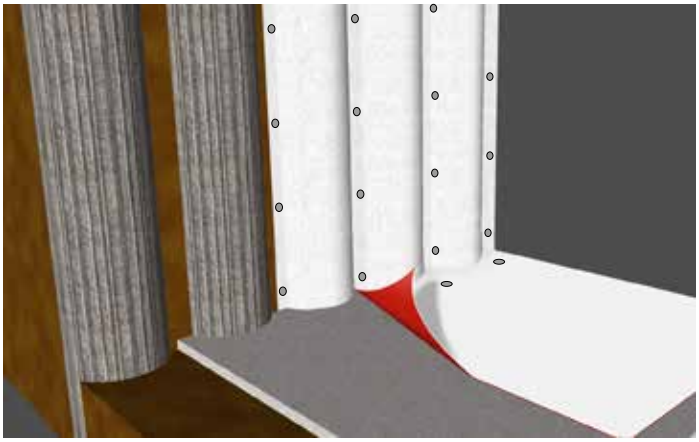
FIXINGS & APPLICATION

Overlap membrane by 100mm and fix using metal washer Fixings at 500mm centres. In vertical applications, the membrane fixed in the higher position, should be lapped over the top of the membrane fixed in the lower position by 150mm to prevent concrete penetrating between laps.

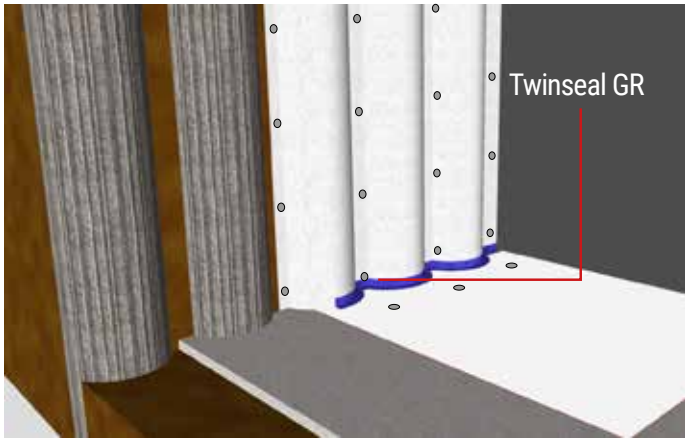
MAXIPRUFE PLUS – PENETRATION SEALING

With a ribbed pipe, Hydrostop WSM should be applied before Hydrostop WS10 to fill the ribs.
Ensure Hydrostop WS10 is lapped side by side by 50mm and secure with tying wire. Smooth pipes don't require Hydrostop WSM and should be held in place with tying wire.
Twinseal Compound GR should be applied as a 3mm thick x100mm wide coating to seal around penetration onto the membrane.



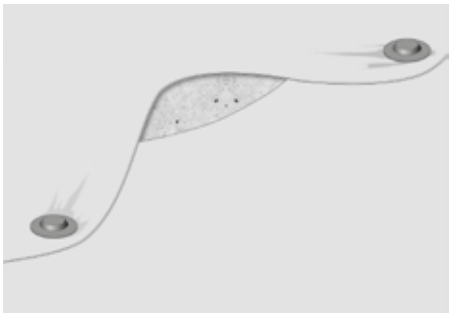


Trim horizontal membrane to blinding and fix tightly into the contours of the piles. Also fix wall membrane tightly into the contours of the piles with Metal Washer Fixings.

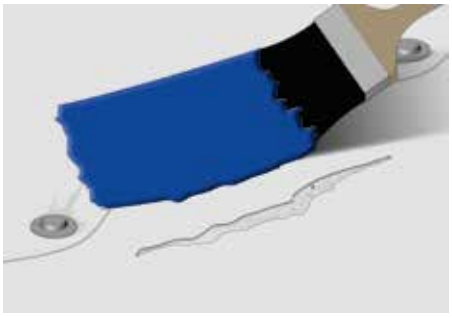


Apply 3mm thick x 100mm wide strip of Twinseal Compound GR along base of wall, sealing between slab and wall membrane.

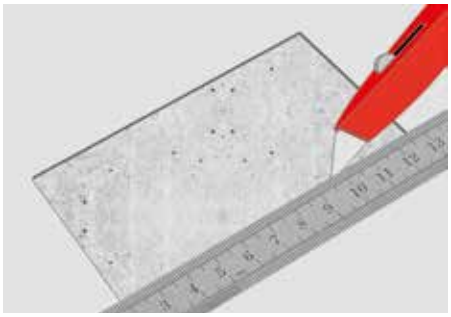
REMEDIATION OF MEMBRANE (ONLY WHEN REQUIRED)



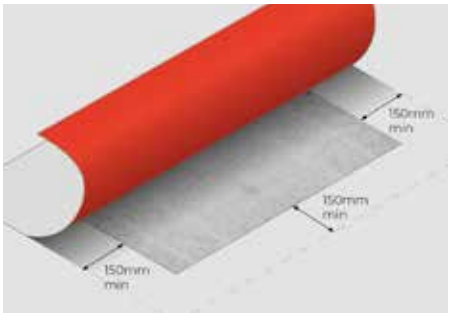
Due to the MS Polymer Technology, the membrane will show a degree of movement during times of heat exposure.



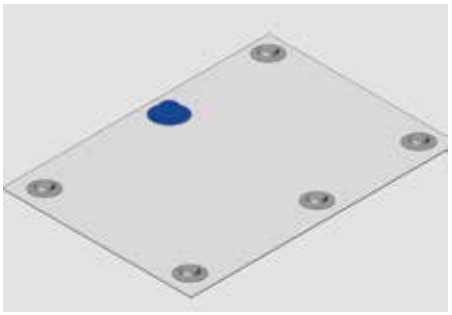
For damaged areas less than 100mm (ie shrinkage or tears), the membrane can be repaired by applying a layer of Twinseal Compound GR.



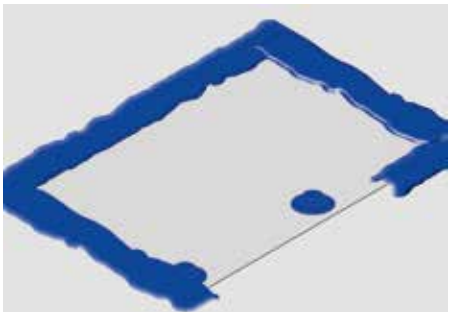
For damaged areas exceeding 100mm, this can be remediated, by cutting back the area of membrane to reveal a 'cut away area' with straight edges.



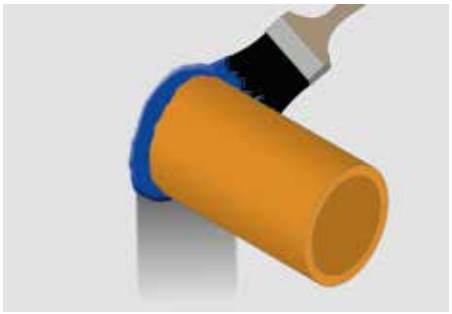
Place a new section of membrane cut to a shape (size exceeding the repair area by 150mm all round) and lay over the top of the damaged area.



Washer fixings should be used for fixing any remedial membrane pieces into the substrate and these should be nailed through the joints of the membrane where possible and the head of the fixing must be sealed over using Twinseal Compound GR.

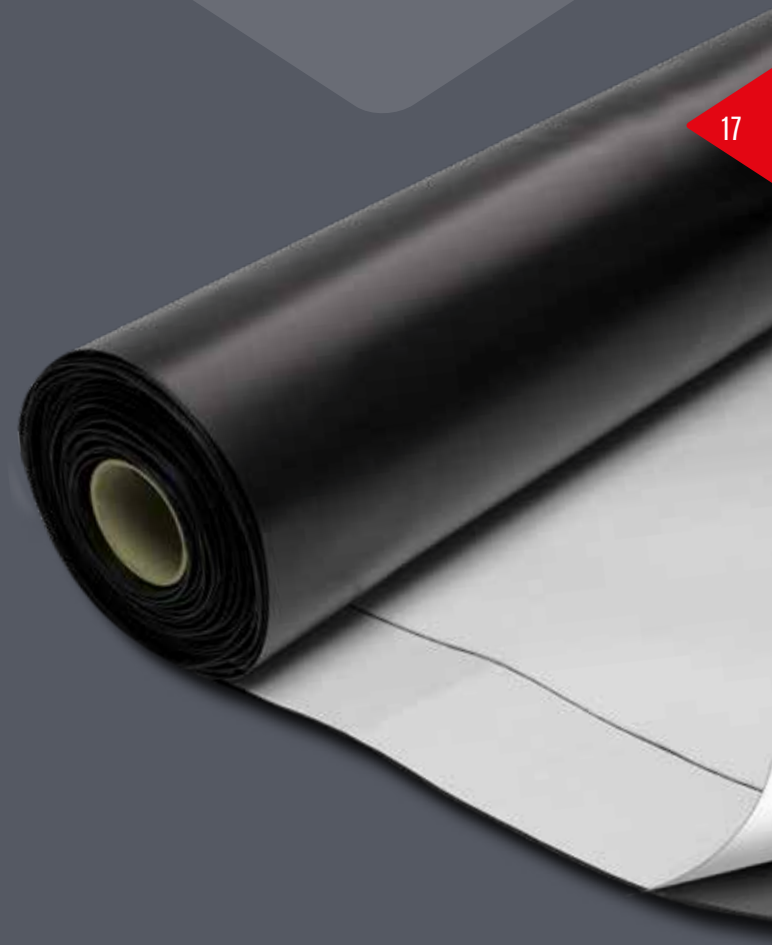


In some cases it may be required to seal the edges of the new piece of membrane with Twinseal Compound GR if fixings can't be applied with ease.



Any penetrations (i.e. drainage pipes or reinforcing anchors into piles) should be sealed with Twinseal Compound GR. In instances where a layer of Twinseal GR cracks, reapply another layer of Twinseal GR on top.

COMBI-SEAL
COMBI-SEAL PLUS



PRODUCT GLOSSARY

- PILE HEAD/PILE CAP PREPARATION
- HYDROPRUFE LG MIXING
- HYDROPRUFE LG APPLICATION
- COMBI-SEAL APPLICATION
- TWINSEAL COMPOUND GR MIXING
- TWINSEAL COMPOUND GR APPLICATION
- CAPPING BEAM ILLUSTRATION & SEQUENCING
- COMBI-SEAL JOINTING
- COMBI-SEAL FIXING
- PROTECTION BOARD 600 DETAILING
- COMBI-SEAL DETAILING
- PENETRATION DETAILING

PILE HEAD/PILE CAP PREPARATION

Substrates should be thoroughly jetwashed to remove loose material.
Use airline to remove standing water.

HYDROPRUFE LG MIXING

Hydroprufe LG is supplied with two components: base & curing agent.

Pour the curing agent into the base component and mix for 2-3 minutes using a drill and mixing paddle.

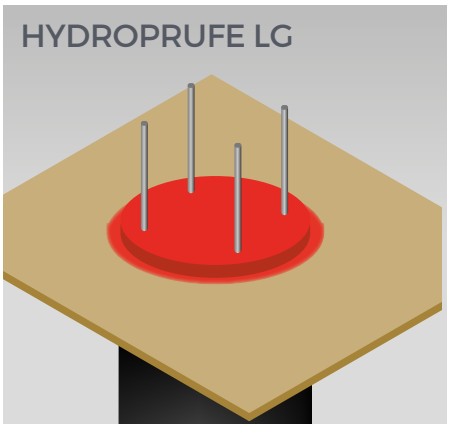
HYDROPRUFE LG COVERAGE GUIDE

PRODUCT SIZE (2 PART)
5LTR

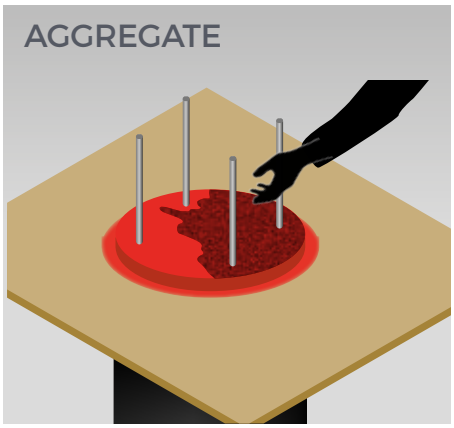
COVERAGE
UP TO 4.5 M^2

450MM PILE HEADS	600MM PILE HEADS
x12	x8

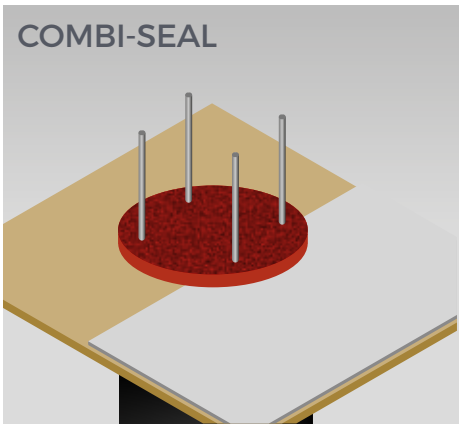
APPLICATION



Apply Hydroprufe LG at a minimum thickness of 1m and ensure fully coated down the sides of the piles to blinding level.



Apply Quartz Aggregate to wet coating at 0.5kg / m^2. Allow to dry prior to detailing membrane. Typically overnight.



Cut membrane tightly to the pile head.

TWINSEAL COMPOUND GR MIXING

Twinseal Compound GR is supplied in two components: base & curing agent.

Add curing agent to the base and mix for 2 - 3 minutes with mixing paddle.

TWINSEAL GR COVERAGE GUIDE

PRODUCT SIZE (2 PART)
5KG

COVERAGE
UP TO 9.5 LINEAR METRES

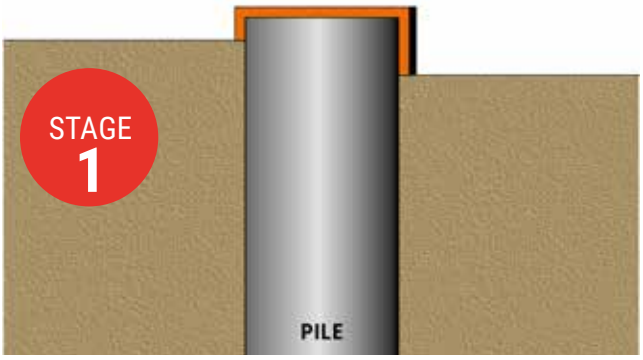
450MM PILEHEADS	600MM PILEHEADS
x6	x5

TWINSEAL COMPOUND GR APPLICATION

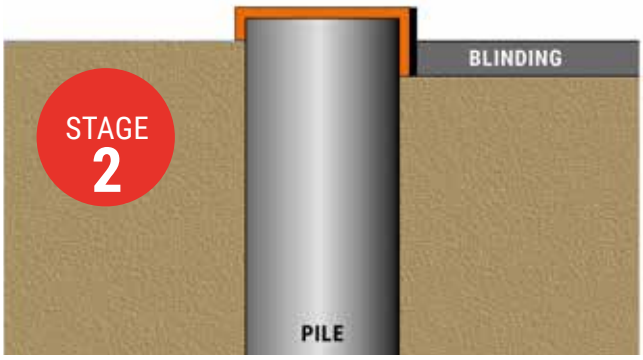
Brush apply the Twinseal Compound GR as a 3mm thick x 100mm wide strip

- Hydroprufe LG
- Twinseal Compound GR
- Combi-seal
- Hydrostop BR
- Hydrostop WSM

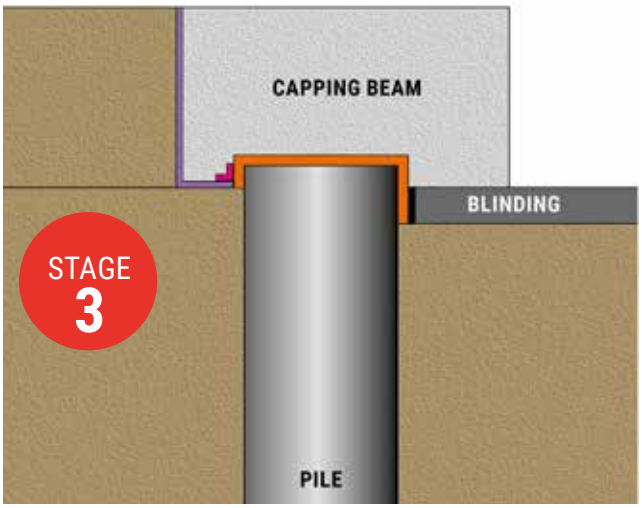
TYPICAL CAPPING BEAM ILLUSTRATIONS & SEQUENCING



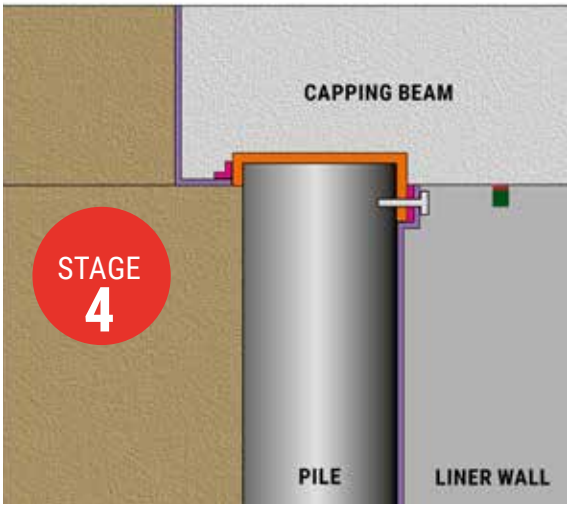
STAGE 1
Coat pile heads with Hydroprufe LG and place Correx Board against the basement side of piles.



STAGE 2
Cast blinding against Correx Board.



STAGE 3
Install membrane to the outside of the pilehead and capping beam and seal the membrane to the pile head with Twinseal Compound GR.

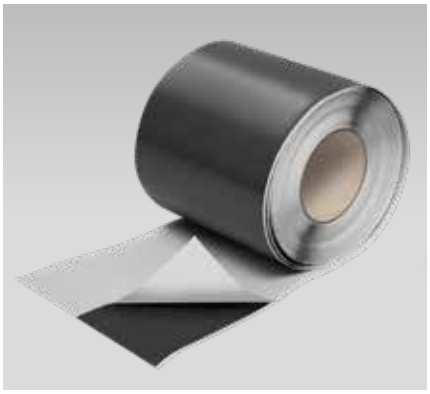


STAGE 4
When capping beam is cast, and basement excavation is taking place, remove the Correx board exposing the Hydroprufe LG ready to connect the membrane.

JOINTING MEMBRANE - COMBI-SEAL JOINTING

Remove white release paper from selvedge tape and butt joint the membrane ensuring a consistent seal along the lap.

For detailing use Combi-Seal Tape applied to the black side of the membrane ensuring a lap of 150mm.

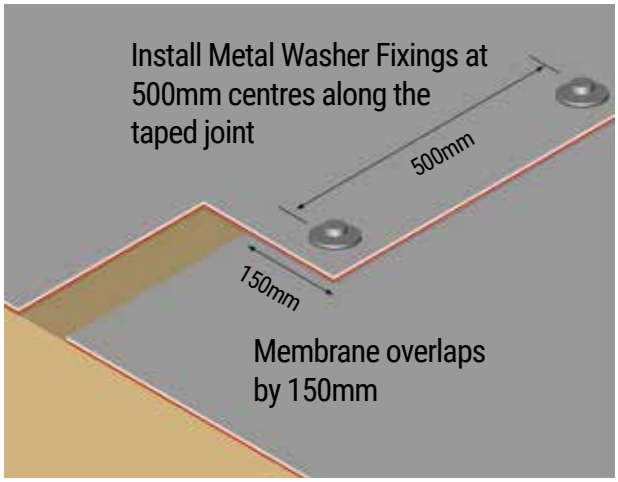


Combi-Seal Tape.

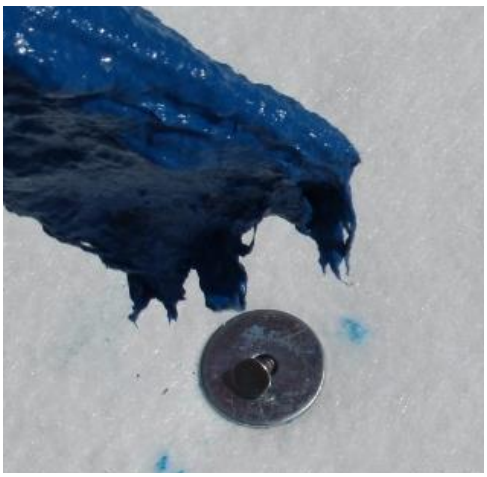
JOINTING MEMBRANE - COMBI-SEAL FIXING

Metal Washer Fixings should be used for all fixing details.

Shot fire fixing gun such as Trutek LV350 to be used.

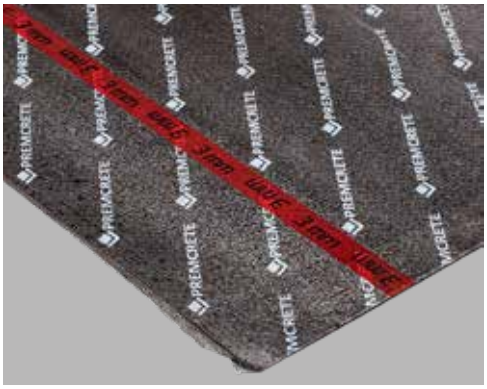


Lap membrane by 150mm and fix at 500mm centres. In vertical applications the higher membrane should be lapped over the lower membrane by 150mm.



Where nails aren't fixed through the tape, overcoat the penetration with Twinseal Compound GR.

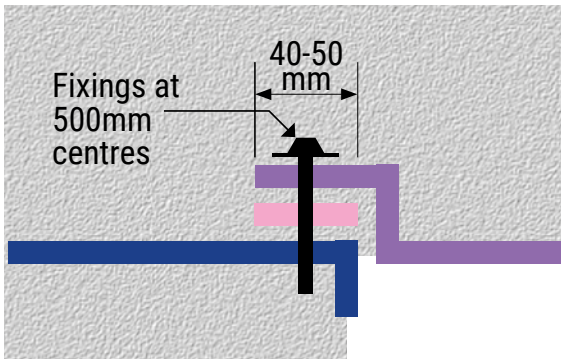
MEMBRANE - COMBI-SEAL PROTECTION



When backfilling against Combi-seal Plus, Protection Board 600 should be used to protect membrane from puncture.

MEMBRANE - COMBI-SEAL PILE CAP

Aim to achieve a smooth trowelled surface to the peimeter of pile caps and beams, for applying HCR Butyl Tape to, once the Hydroprufe LG has dried.

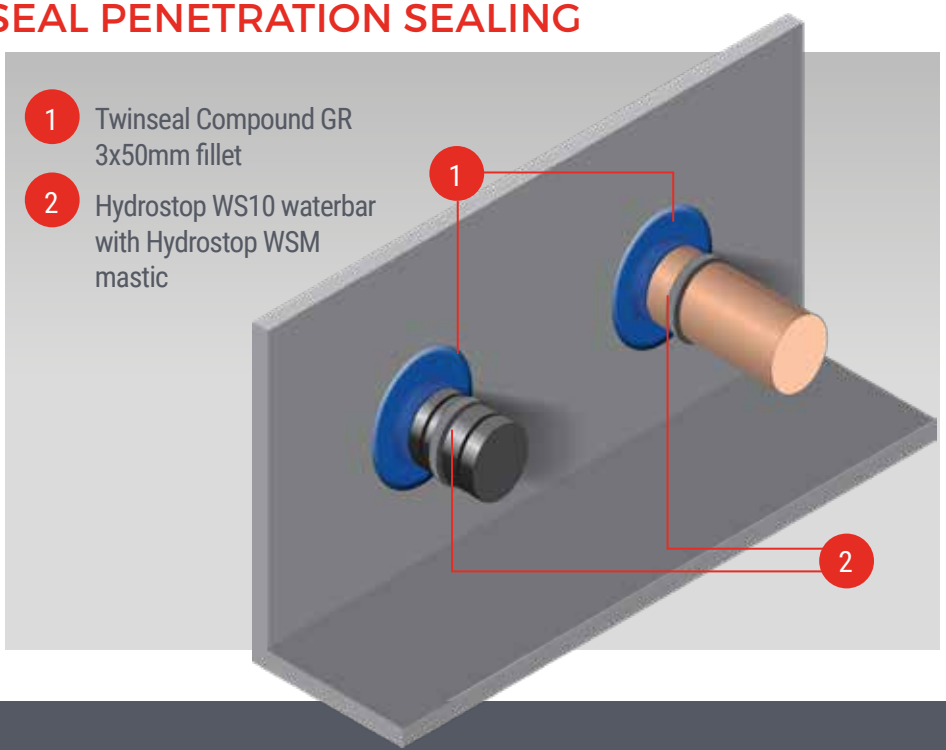


Section through pilecap showing membrane application.
Please note: Colour coding is based on our drawing key for Combi-seal membrane. The same principle applies for Combi-seal Plus.

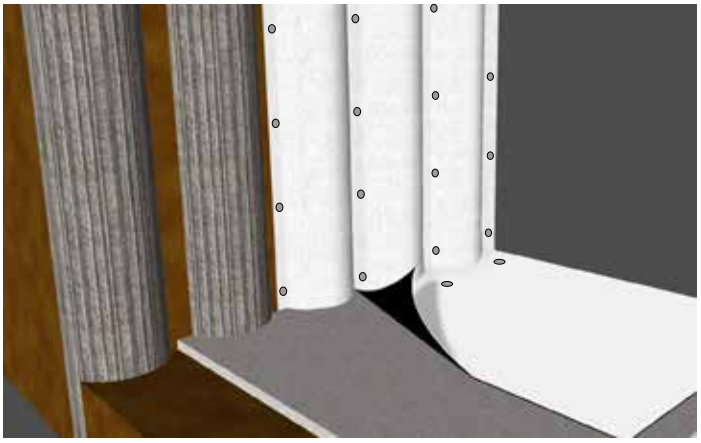
Metal Washer Fixings installed at 500mm centres around perimeter.

MEMBRANE - COMBI-SEAL PENETRATION SEALING

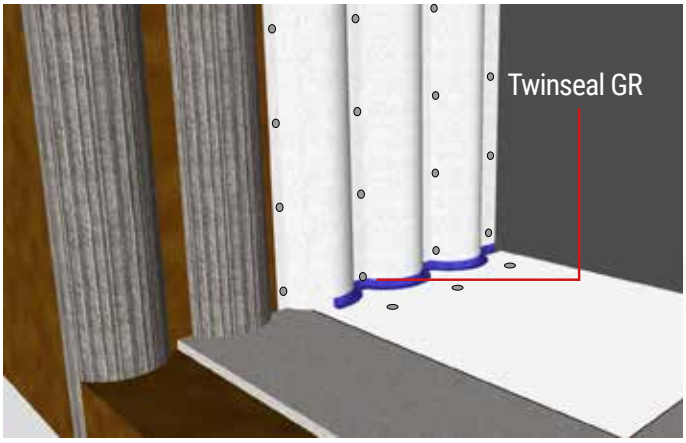
With a ribbed pipe, Hydrostop WSM should be applied before Hydrostop WS10 to fill the ribs.
Ensure Hydrostop WS10 is lapped side by side by 50mm and secure with tying wire. Smooth pipes don't require Hydrostop WSM and should be held in place with tying wire.
Twinseal Compound GR should be applied as a 3mm thick x100mm wide coating to seal around penetration onto the membrane.



COMBI-SEAL DETAILING TO PILED WALL

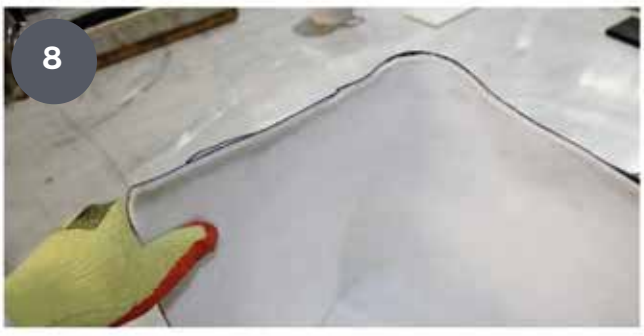


Trim membrane to contours of the piles with Tolerance of 20mm.

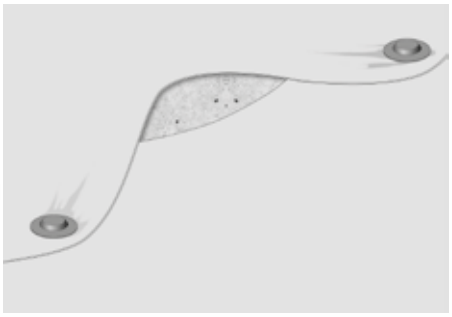


Apply 3mm x 100mm fillet of Twinseal GR along base of wall, sealing between slab and wall membrane.

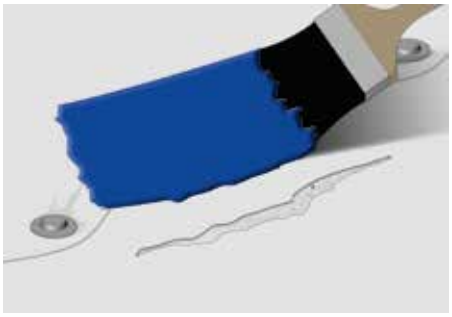
FORMING CORNER DETAILS



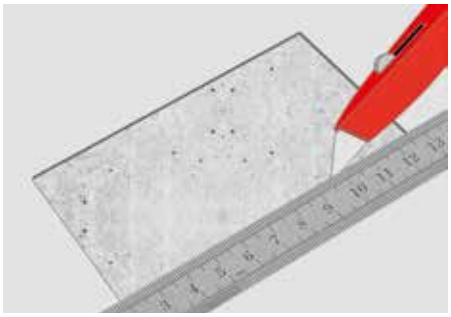
REMEDIATION OF MEMBRANE (ONLY WHEN REQUIRED)



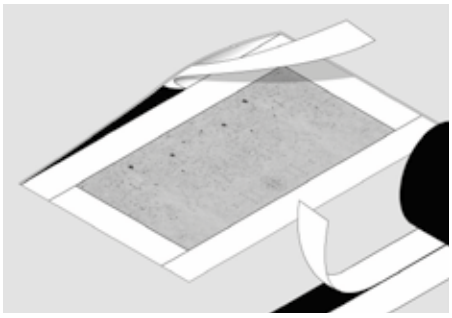
Due to the MS Polymer Technology, the membrane will show a degree of movement during times of heat exposure.



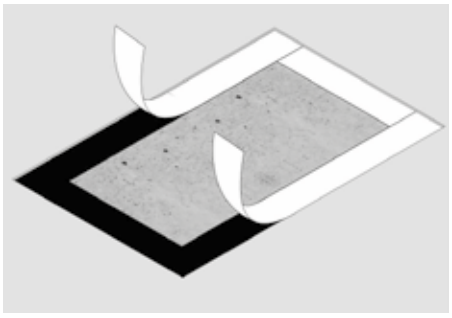
For damaged areas less than 100mm (ie shrinkage or tears), the membrane can be repaired by applying a layer of Twinseal Compound GR.



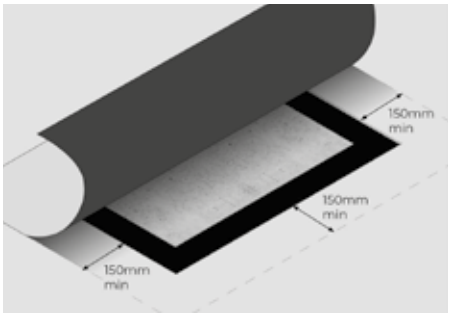
For damaged areas exceeding 100mm, this can be remediated, by cutting back the area of membrane to reveal a 'cut away area' with straight edges.



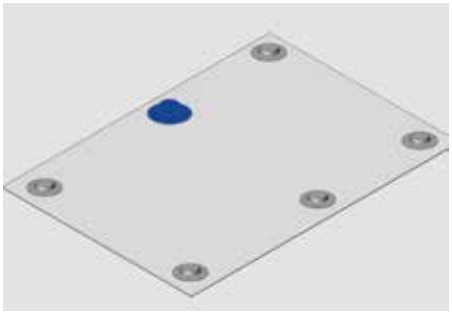
The laps must be re-taped by applying Combi-Seal Tape to the black underside of the membrane around the perimeter of the cut away area, leaving half the width of the tape (75mm) exposed.



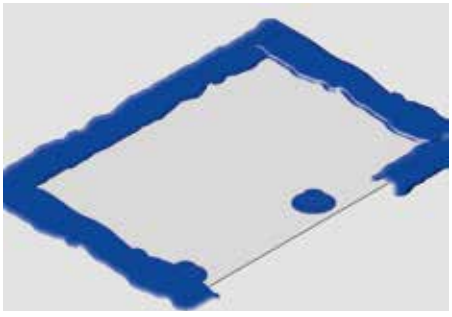
Remove the release paper from the exposed tape revealing the black adhesive side of the Combi-Seal Tape.



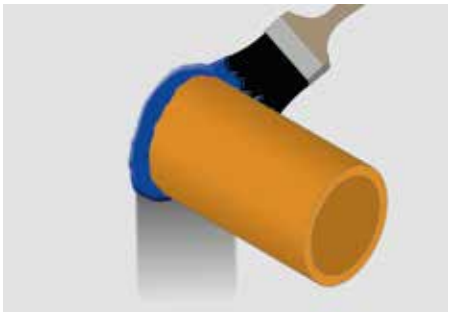
Place a new section of membrane cut to a shape (size exceeding the repair area by 150mm all round) and lay over the top of the damaged area.



Metal Washer Fixings should be used for fixing any remedial membrane pieces into the substrate and these should be nailed through the joints of the membrane where possible and the head of the fixing must be sealed over using Twinseal Compound GR.



In some cases it may be required to seal the edges of the new piece of membrane with Twinseal Compound GR if fixings can't be applied with ease.



Any penetrations (i.e. drainage pipes or reinforcing anchors into piles) should be sealed with Twinseal Compound GR. In instances where a layer of Twinseal GR cracks, reapply another layer of Twinseal GR on top.

HYDROPRUFE 6000 & 9000

PRODUCT GLOSSARY

- PILE HEAD / PILE CAP PREPARATION
- HYDROPRUFE LG MIXING
- HYDROPRUFE LG APPLICATION
- PILE CAP MEMBRANE APPLICATION
- JOINTING MEMBRANE TAPING DETAILS
- JOINTING MEMBRANE DETAILING
- PIPE PENETRATIONS
- PROTECTING MEMBRANE

PILEHEAD/PILE CAP PREPARATION

Substrates should be thoroughly jetwashed to remove loose material.
Use airline to remove standing water.

HYDROPRUFE LG MIXING

Hydroprufe LG is supplied with two components: base & curing agent.

Pour the curing agent into the base component and mix for 2-3 minutes using a drill and mixing paddle.

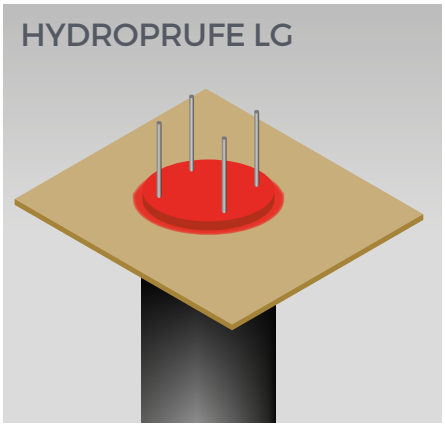
HYDROPRUFE LG COVERAGE GUIDE

PRODUCT SIZE (2 PART)
5LTR
COVERAGE
UP TO 4.5M²

450MM PILE HEADS	600MM PILE HEADS
x12	x8

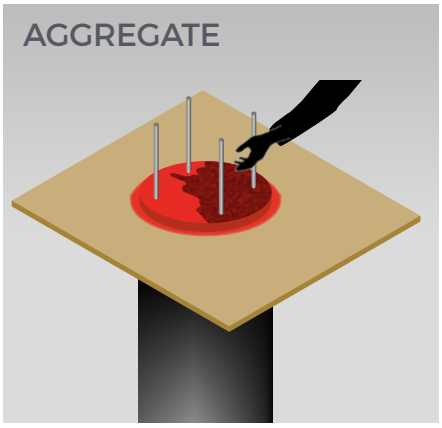
APPLICATION

HYDROPRUFE LG



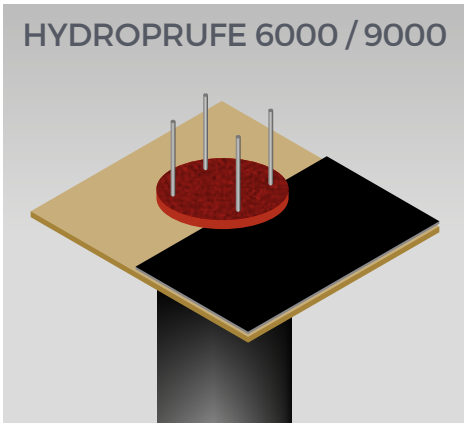
Apply Hydroprufe LG at a minimum thickness of 1m and ensure fully coated down the sides of the piles to blinding level.

AGGREGATE



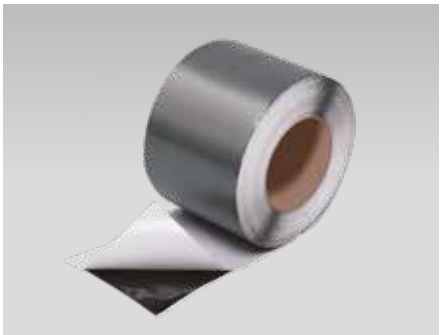
Apply Quartz Aggregate to wet coating at 0.5kg / m². Allow to dry prior to detailing membrane. Typically overnight.

HYDROPRUFE 6000 / 9000

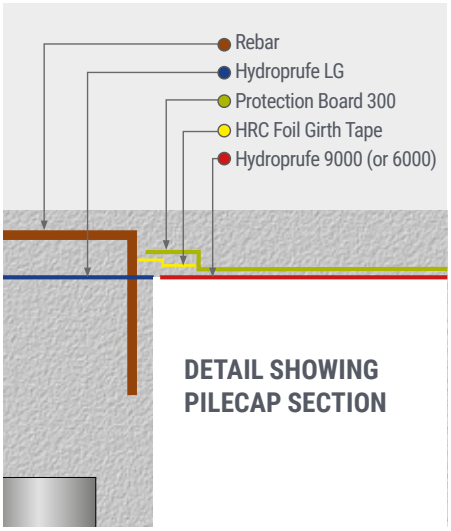


Cut membrane tightly to the pile head.

HYDROPRUFE 9000/6000 APPLICATION



Cut membrane tightly to the pilehead/cap and seal using HCR Foil Girth Tape.



MEMBRANE JOINTING

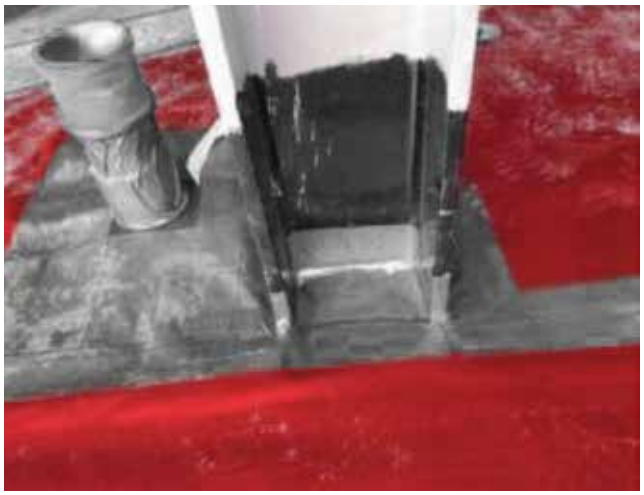
Minimum overlap between membrane should be 150mm.

Laps sealed using HCR Butyl Tape between lap and HCR Foil Girth Tape overlap.

MEMBRANE DETAILING

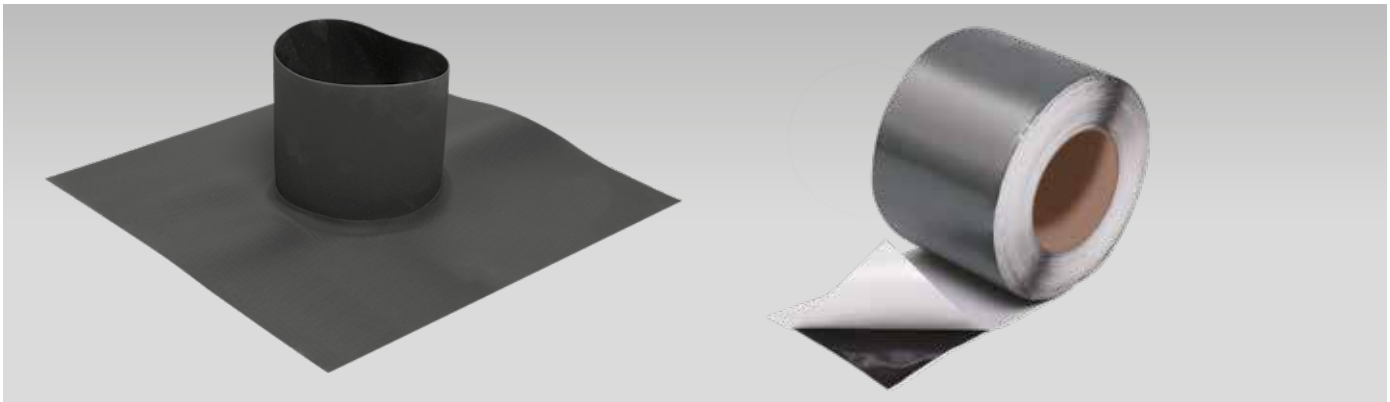
Membrane prior to protection board installation.

Care to be taken on areas with increased contours.



COLUMNS Apply Hydroprufe Primer. Leave to cure and seal using HCR Foil Girth Tape.

MEMBRANE PENETRATIONS



Seal using Hydroprufe Tophat to suit. Tape flanges to membrane using HRC Foil Girth Tape.

For multiple penetrations, Hydroprufe Tophats can be overlapped.

MEMBRANE PROTECTION

Protection board 300 to be installed to protect membrane from puncture.
Spacer blocks can then be installed.

NOTES & DRAWINGS

HYDROPRUFE DPM 2000G

PRODUCT GLOSSARY

- PILE HEAD/PILECAP PREPARATION
- HYDROSEAL FX MIXING
- HYDROSEAL FX APPLICATION
- MEMBRANE APPLICATION
- PROTECTION BOARD APPLICATION

HYDROPRUFE DPM 2000G

PILEHEAD/PILE CAP PREPARATION

Substrates should be thoroughly jetwashed to remove loose material.
Use airline to remove standing water.

MIXING

Mix one full bag of powder with one full container of liquid – no part mixing.

Pour all the liquid component into the bucket and then add the powder slowly to ensure continuous mixing.

Thoroughly mix for five minutes using mixing paddle.

APPLICATION

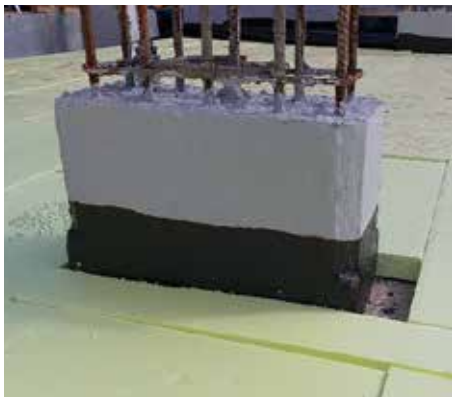
Ensure concrete is damp with no standing water and apply as a single 2mm thick coating. Ensure Hydroseal FX is applied to the sides of the pilehead to meet the blinding level.

HYDROSEAL FX COVERAGE GUIDE

PRODUCT SIZE (2 PART)
30LTR

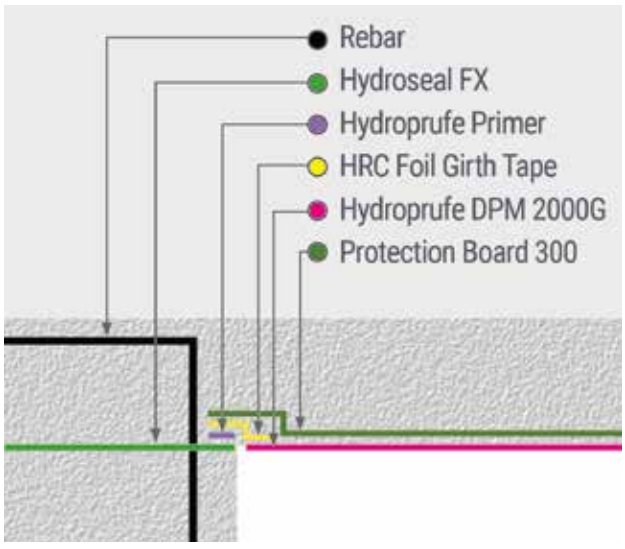
COVERAGE
UP TO 6.5 M^2

450MM PILEHEADS	600MM PILEHEADS
x17	x11

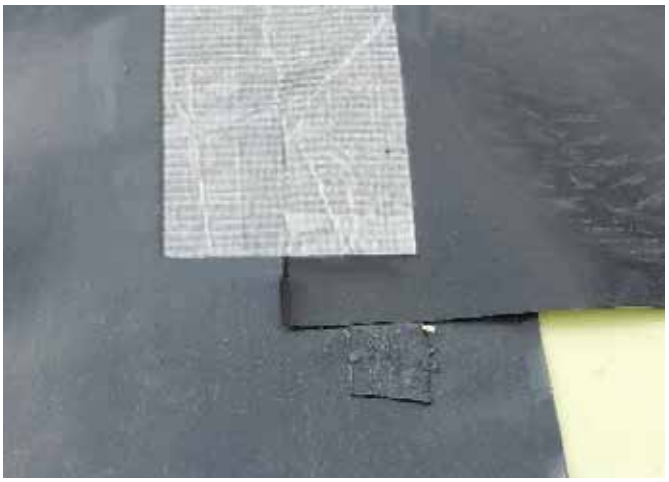


Apply 100mm strip of Hydroprufe Primer on top of Hydroseal FX where taped connections are required. Allow primer to cure.

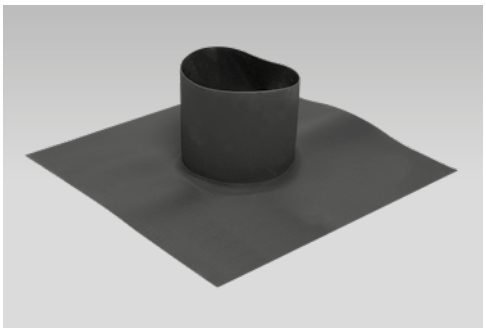
Cut membrane carefully around the concrete profile, apply HCR Foil Girth Tape to connect the membrane to the Hydroprufe Primer.



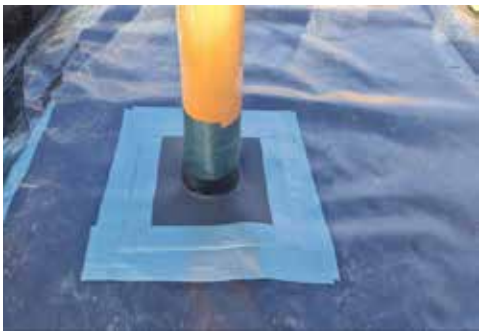
Detail shows section through a pilecap with application sequence as described above.



Minimum overlap should be 100mm. Laps to be sealed with 30mm HCR Butyl Tape within the lap and Girth Tape on the overlap. Laps should be rolled with a soft roller to ensure the tapes are fully bonded.



Seal penetrations to membrane using Hydroprufe Top Hats to suit diameter of penetration.



Tape flanges to membrane using HCR Foil Girth Tape.

For multiple penetrations Hydroprufe Top Hats may be overlapped.

Protection Board 300 to be installed over the membrane to prevent damage from spacers and rebar.

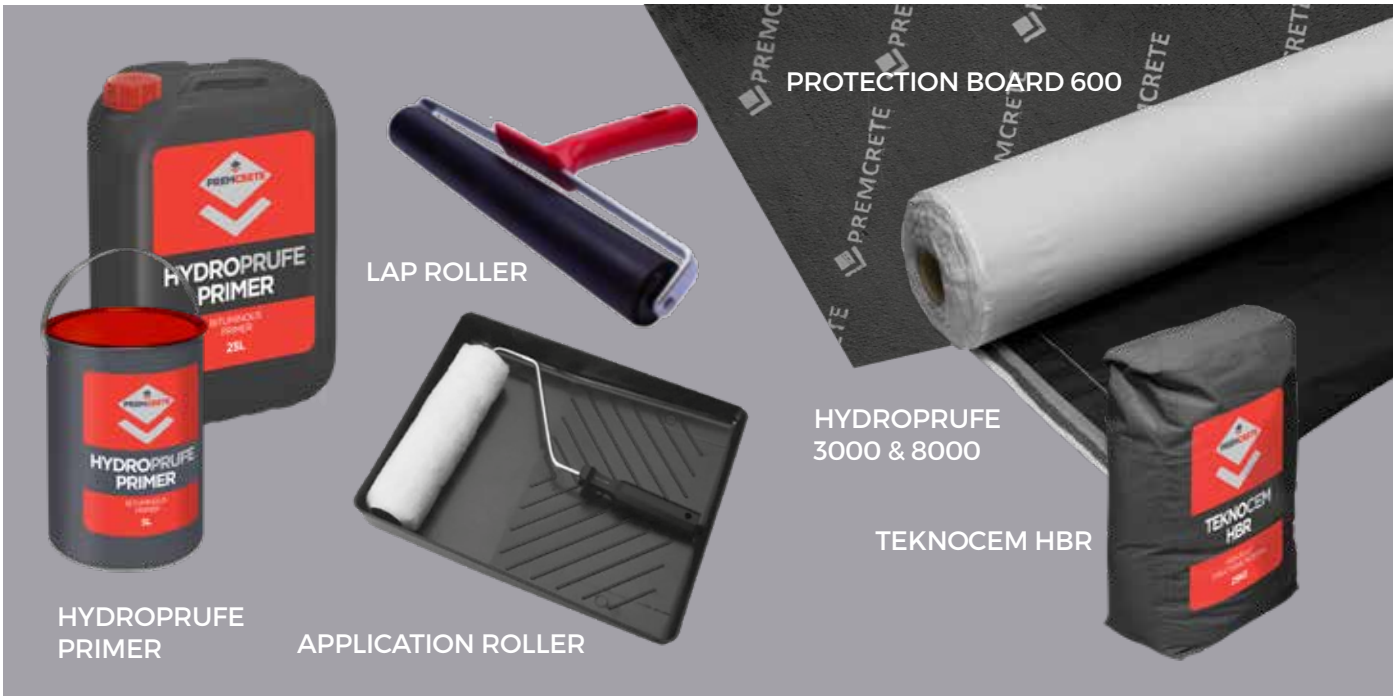
HYDROPRUFE 3000 & 8000

PRODUCT GLOSSARY

- PRODUCTS REQUIRED
- SUBSTRATE PREPARATION
- HYDROPRUFE PRIMER APPLICATION
- MEMBRANE APPLICATION
- PROTECTION BOARD APPLICATION

PREMCRETE

HYDROPRUFE 3000 & 8000



SUBSTRATE PREPARATION

Substrates should be jet washed to remove all loose material and any repairs carried out with Teknocem HBR.

Internal corners should have a 50mm x 50mm fillet of Teknocem HBR installed to ensure the membrane is fully supported.

HYDROPRUFE PRIMER APPLICATION

Pour Hydroprufe Primer into a suitable tray and apply to substrate with a roller.

The substrate should be thoroughly coated throughout with the Hydroprufe Primer.
A second coat may be necessary on porous substrates.

MEMBRANE APPLICATION

Hydroprufe 3000 is supplied in 20m^2 rolls.

Hydroprufe 8000 is supplied in 30m^2 rolls.

Mark a vertical line on the wall using a level.

Cut the membrane to the length of the wall and remove the top 150mm of the backing paper.

Adhere the membrane in place at the top of the wall ensuring that the membrane strip is vertical.

Laps in the membrane should be a minimum of 50mm wide.

Once membrane is installed, roll firmly with a lap roller to ensure that any entrapped air beneath the membrane is removed.

PROTECTION BOARD APPLICATION

Install Protection Board 600 in front of the self-adhesive membrane once installed to ensure the membrane is protected when backfilling.

Double sided tape can be used to locate protection board.

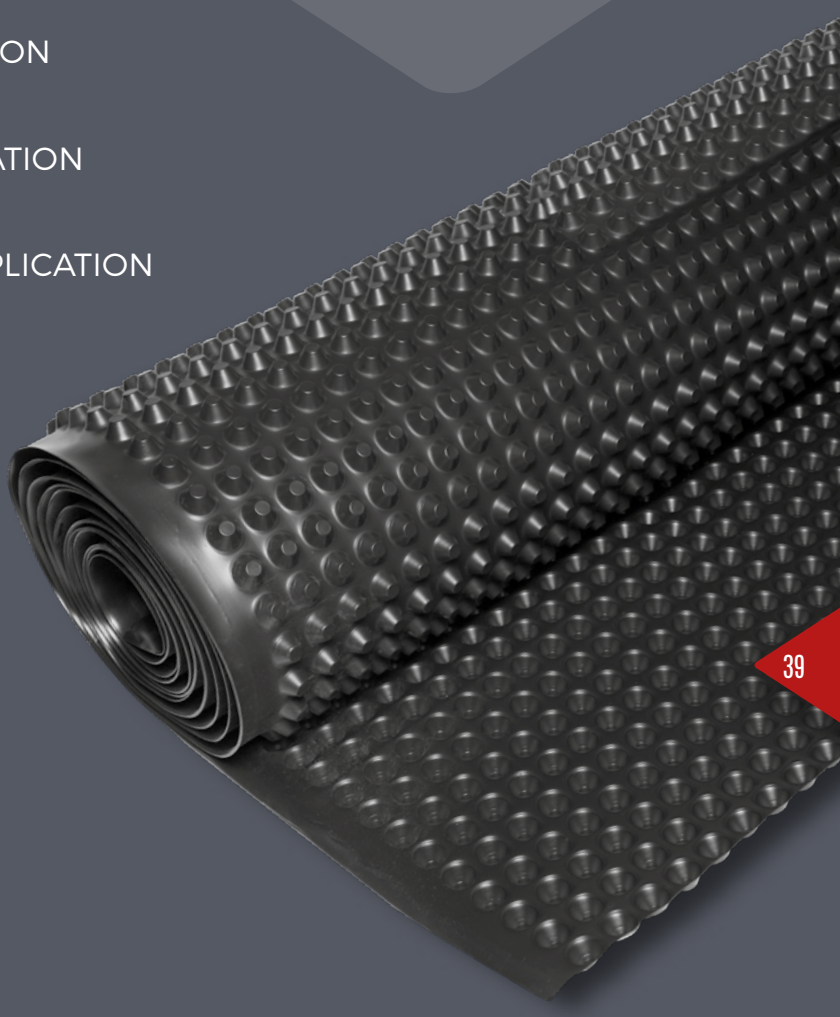
NOTES & DRAWINGS

FUTURE PROOFING YOUR SUB STRUCTURE

HYDROFLOW HP

PRODUCT GLOSSARY

- PRODUCTS REQUIRED
- HYDROSEAL SEALER PREPARATION
- HYDROFLOW HP8 APPLICATION
- HYDROFLOW QS PLUGS APPLICATION
- HCR BUTYL TAPE APPLICATION
- HYDROFLOW CORNER TAPE APPLICATION
- HYDROCHANNEL APPLICATION
- HYDROFLOW DPC APPLICATION
- HYDROFLOW HP20

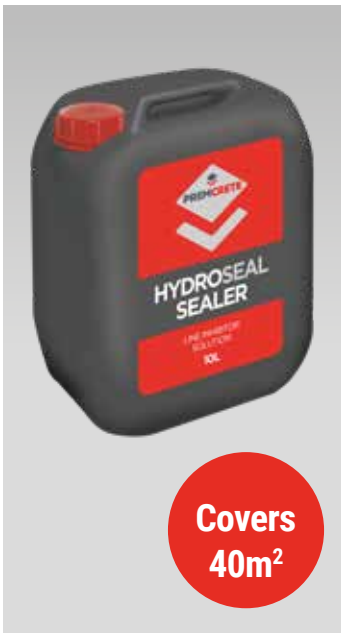


PREMCRETE

HYDROFLOW HP

HYDROFLOW SEALING APPLICATION

Walls and slab should be pressure washed and any debris removed. Hydroseal Sealer should then be applied to the concrete. One 10Ltr tub will cover 40m^2.



HYDROFLOW HP8 APPLICATION

Measure from soffit to base of channel and deduct 20mm.

Cut Hydroflow HP8 membrane to length required.

Apply membrane to wall with studs against the concrete.

HYDROFLOW QS PLUGS APPLICATION

Drill 11mm hole through centre of stud around 70mm deep.

Fix Hydroflow QS plug ensuring it seals firmly to the Hydroflow HP8.

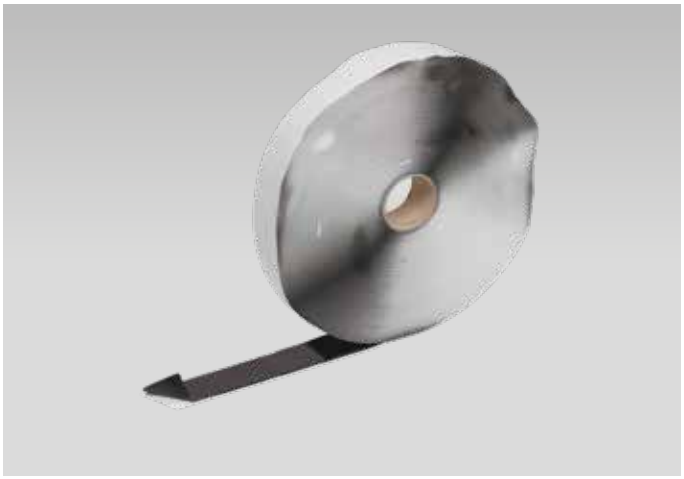
Fix at nominal centres of 600mm and in line with the block courses where relevant.

HYDROFLOW HCR BUTYL TAPE APPLICATION

Laps should be sealed with Hydroflow Butyl Tape, 100mm from the membrane edge.

Remove release paper and firmly push adjacent membrane to bond together.

Ensure laps are placed 200mm from the corner.



Hydroflow Butyl Tape.

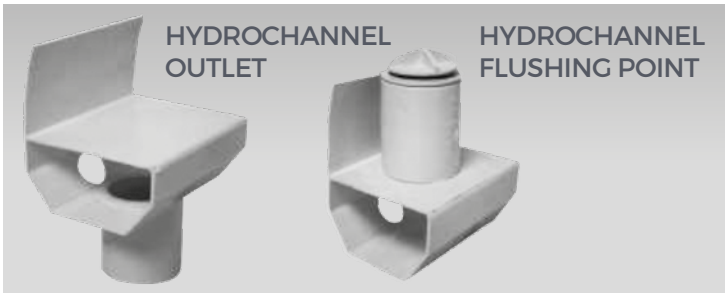
HYDROFLOW CORNER TAPE APPLICATION

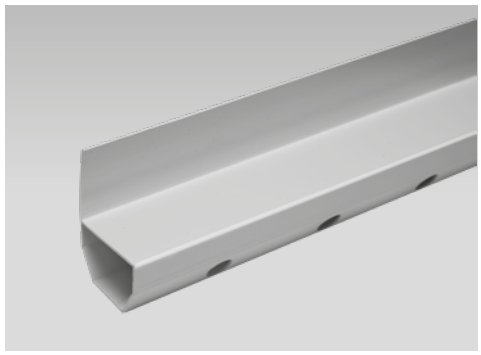
Apply 150mm Strip of Hydroprufe Primer to soffit. Leave to cure.

Using Hydroflow Corner Tape, seal the Hydroflow HP8 to the Hydroprufe Primer. Also overtape each membrane lap with Hydroflow Corner Tape.

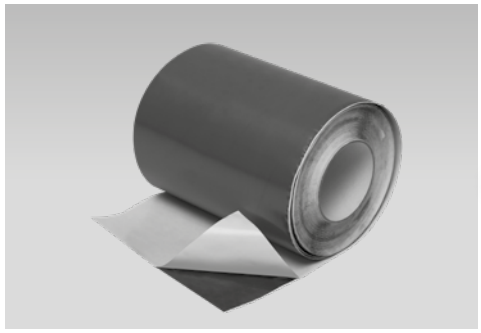
HYDROCHANNEL APPLICATION

HydroChannel outlets should be installed as designed. Hydroflow Flushing Points should be installed at every change of direction or as designed.

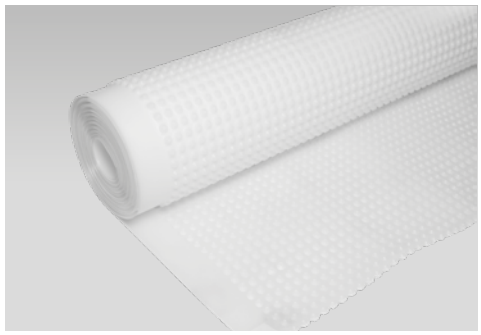




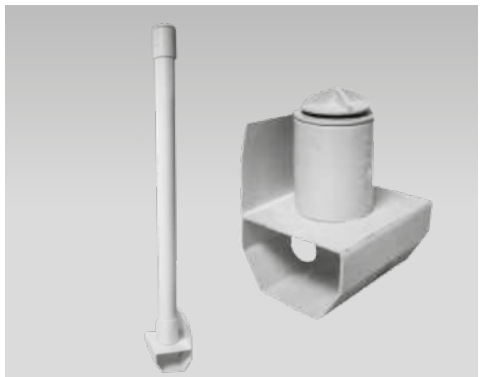
To join Hydrochannel corners, mitre the ends of channel at 45°.



Tape corners using Hydroflow Corner Tape.



Hydrochannel should be installed into the concrete rebate and the flange taped to the Hydroflow HP8.



Hydrochannel Flushing Points can be extended using the flushing point extension piece.

HYDROFLOW DPC APPLICATION

Roll out Hydroprufe DPC and seal to the Hydroflow HP8 using Hydroflow Corner Tape around 300mm above the floor.

Cut a small perforation for the flushing point pipe and tape to the Hydroprufe DPC.
Ensure DPC is firmly taped to the Hydroflow HP8.

Where designed, install engineering bricks at the base of the wall and ensure the perp joints are left open.

5mm diameter wall ties (Screw-in) can be used for brick/blockwork which are threaded into the pilot hole in the Hydroflow QS Plug.

HYDROFLOW HP20 APPLICATION

Recommended minimum access hatch size.

Roll Hydroflow HP20 out on the floor with studs facing down.

Apply strip of Hydroflow Butyl Tape to seal lap of Hydroflow HP20.

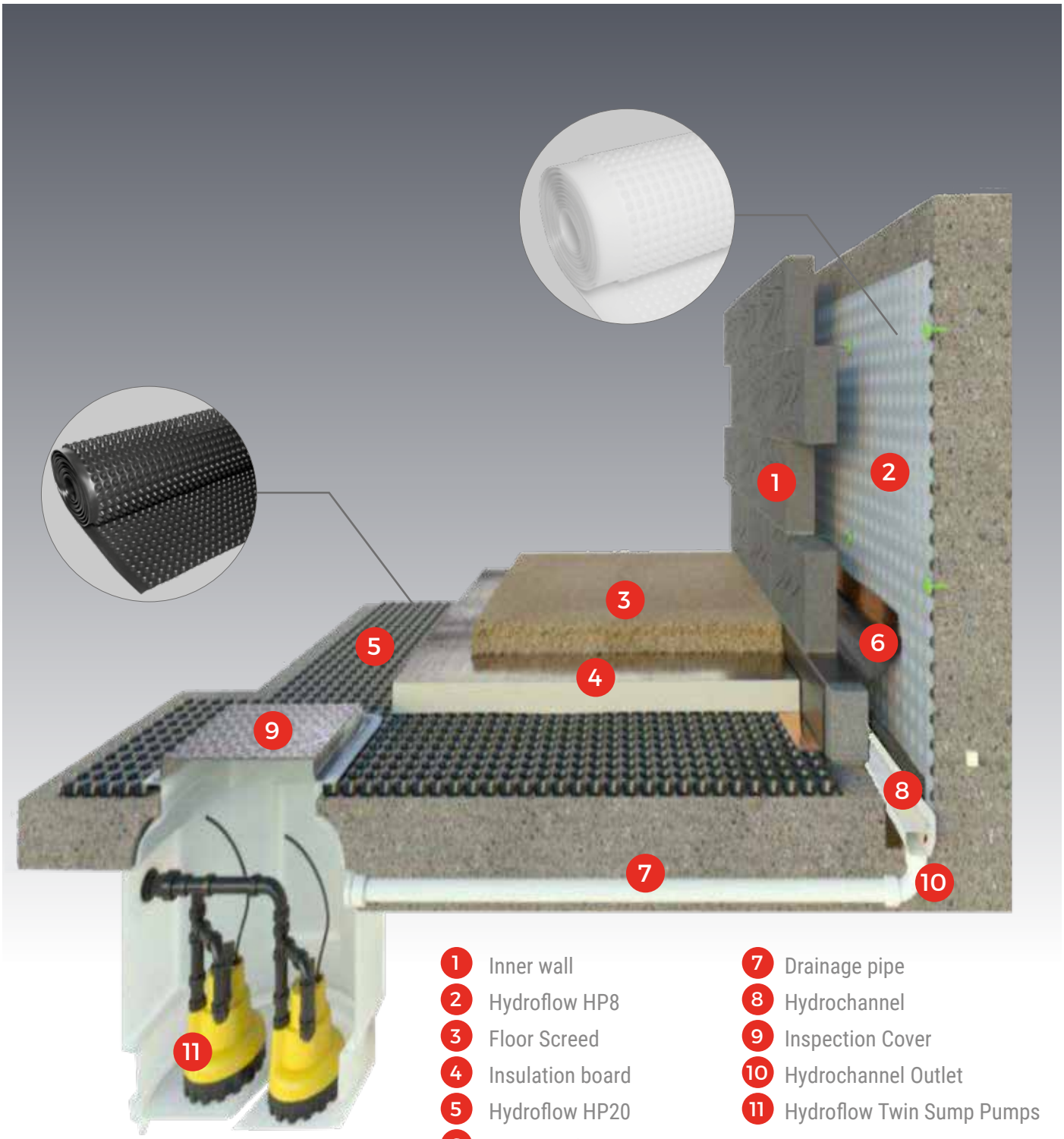
Remove release paper from Butyl tape.

Ensure that Hydroflow HP20 is overlapped by a minimum of two studs and pushed firmly down to ensure the lap is sealed.

Tape the Hydroprufe DPC to the Hydroflow HP20 using Hydroflow Corner Tape.

Once complete, Hydroflow HP20 is ready to receive floor screed.

CAVITY DRAIN ILLUSTRATION



1. Inner wall
2. Hydroflow HP8
3. Floor Screed
4. Insulation board
5. Hydroflow HP20
6. DPC membrane
7. Drainage pipe
8. Hydrochannel
9. Inspection Cover
10. Hydrochannel Outlet
11. Hydroflow Twin Sump Pumps

HYDROSEAL FX

PRODUCT GLOSSARY

- HYDROSEAL FX PREPARATION
- HYDROSEAL FX MIXING
- HYDROBAND 2000 APPLICATION
- HYDROSEAL FX APPLICATION
- HYDROSEAL FX CURING

PREMCRETE

TEKNOCEM
HB50

TEKNOCEM
HBR

TEKNOLEVEL
FS

HYDROBAND
2000

HYDROSEAL FX

CUREAID AC

PREPARATION

Substrates should be thoroughly jet washed to remove loose material.

Use airline to remove standing water.

Break back areas of weak concrete to sound substrate.

Teknocem HB50 is mixed with 3.2 – 3.7Ltrs of water and applied with gloved hand for initial contact coat and build up.

Finish with steel trowel.

To prepare horizontal areas, a diamond grinder or powerful jet washer should be used.

Vertical surfaces should be prepared with Teknolevel FS to achieve pore-free surface.

Apply 50 x 50mm fillet of Teknocem HBR to internal corners. Flush with trowel.

Saturate the substrate with water using a suitable sprayer.

MIXING

Mix one full bag of powder with one full container of liquid – no part mixing.

Pour all the liquid component into the bucket and then add the powder slowly to ensure continuous mixing.

Thoroughly mix for five minutes using mixing paddle.

APPLICATION

Hydroband 2000 should be applied over any areas susceptible to movement.

Brush apply 1mm layer of Hydroseal FX and apply Hydroband 2000 into the coating.

Brush apply a second 1mm coat of Hydroseal FX ensuring the Hydroband 2000 is fully encapsulated within the coating.

Hydroseal FX can be applied by brush or spray application at a thickness of 2mm. Vertical surfaces will need two coats of 1mm. Horizontal surfaces can have one coat of 2mm. Hydroseal FX can be trowelled to a smooth finish.

HYDROSEAL FX COVERAGE GUIDE

PRODUCT SIZE (2 PART)
30LTR

COVERAGE
UP TO 7.5 M^2

CURING

Spray apply Cureaid AC onto surface for areas of exposed coating.

EPOFLEX MMA

PRODUCT GLOSSARY

- EPOPRIME MMA PREPARATION
- EPOPRIME MMA PRIMING
- EPOFLEX MMA MIXING
- EPOFLEX MMA APPLICATION

PREMCRETE
ACADEMY

SCAN HERE TO VIEW OUR
EPOFLEX MMA
DATA SHEET AND
TRAINING VIDEO

PREMCRETE

EPOFLEX MMA

TEKNOCEM
HB50

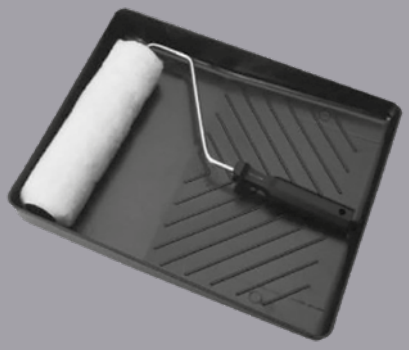
TEKNOCEM
HBR

TEKNOLEVEL
FS

MIXING PADDLE

FIBREMAT

APPLICATION ROLLER



EPOPRIME MMA

EPOFLEX MMA

100MM
PAINT BRUSH

PREPARATION

Prepare any vertical surfaces using a high powered jet washer held 100mm from concrete or diamond grinder to remove any surface laitance and expose the aggregate. Use airline to remove standing water.

Break back areas of weak concrete to sound substrate.

Teknocem HB50 is mixed with 3.2 – 3.7Ltrs of water and applied with gloved hand for initial contact coat and build up.

Finish with steel trowel.

To prepare horizontal areas, a diamond grinder or powerful jet washer should be used.

Vertical surfaces should be prepared with Teknolevel FS to achieve pore-free surface. Flush with trowel.

Apply 50mm x 50mm fillet of Teknocem HBR to internal corners. Flush with trowel.

PRIMING WITH EPOPRIME MMA

LESS CATALYST CAN BE ADDED TO INCREASE PRODUCT WORKING TIME.

Concrete substrates should be primed using Epoprime MMA. This is supplied as a two-component system, base and catalyst. The product should be applied with a brush or roller at a rate of 0.4 – 0.8 Kg/m^2. The surface profile of the substrate will greatly affect the application rate that is achieved.

Allow the primer to cure for a minimum of 45 minutes before application of the Epoflex MMA commences. Primer is not normally required for application to asphalt and tarmac substrates.

EPOPRIME MMA COVERAGE GUIDE

PRODUCT SIZE (2 PART)
1KG, 5KG, 10KG

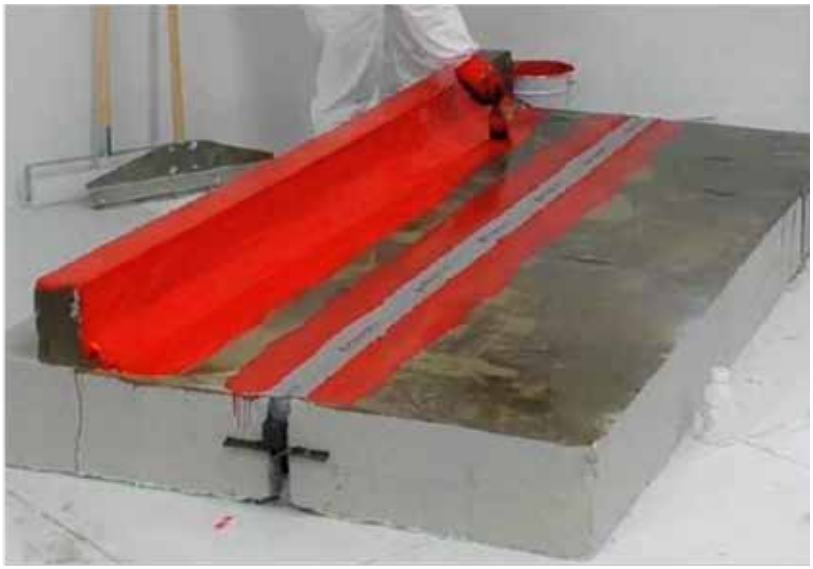
COVERAGE
APPROXIMATELY 2M^2, 9M^2, 10M^2.
@ 2MM THICK

MIXING WITH EPOFLEX MMA

Epoflex MMA is supplied as a two-component system, base and the catalyst. The catalyst should be mixed into the base component using a mechanical mixing paddle for at least two minutes until a uniform consistency Is achieved.

LESS CATALYST CAN BE ADDED TO INCREASE PRODUCT WORKING TIME.

APPLICATION



Epoflex MMA should be applied immediately once mixed onto the prepared substrate using a roller at 0.75kg/m2. Immediately upon apply the first coat 2 applicators should follow with embedding the Fibremat which should be lightly rolled or brushed into the surface to ensure full saturation of the Epoflex MMA into the Fibremat. Once dried the 2nd coat should be applied at a rate of 0.5kg/m^2.

If a non-slip finish is required, then an appropriate quartz aggregate should be broadcast into the freshly applied final coating at a rate of 6-15kg/m^2. Once the membrane has hardened the excess aggregate may be swept off. If the membrane is to be left exposed, then it should be sealed using Eposeal MMA to provide a sealed surface which is easily cleaned. A spiked roller is to be used immediately after spreading the Epolex MMA out to remove all air bubbles.

The Epoflex MMA should be spark tested immediately prior to the drainage membrane being installed to ensure that the coating is defect free.

NOTES & DRAWINGS

HYDROREND

PRODUCT GLOSSARY

- PRODUCTS REQUIRED
- SUBSTRATE – SURFACE PREPARATION
- HYDROREND – MIXING
- HYDROREND – APPLICATION

PREMCRETE

SUBSTRATE - SURFACE PREPARATION

Brick surfaces should be prepared using a sand blaster or high-powered jet washer to remove all coatings and loose material.

The substrate should be thoroughly saturated prior to the application of the Hydrorend. Care should be taken to ensure there is no standing water prior to application.

MIXING

Approximately 2.5 Litres of clean water should be mixed with one 25kg bag to achieve the desired consistency.
The mortar should typically by mixed for 3 minutes.

Hydrorend should be mixed using a forced action paddle mixer.

APPLICATION

Hydrorend should be applied to a minimum thickness of 5mm and a maximum thickness of 50mm ensuring that it is worked into the wall to provide a good bond. The initial coating should be keyed and then left to stabilise prior to applying subsequent coatings.

Cureaid AC should be applied to the surface of the Hydrorend before it has cured.

HYDROREND COVERAGE GUIDE

PRODUCT SIZE
25KG

COVERAGE
UP TO 1.4 M^2 @ 10MM THICK

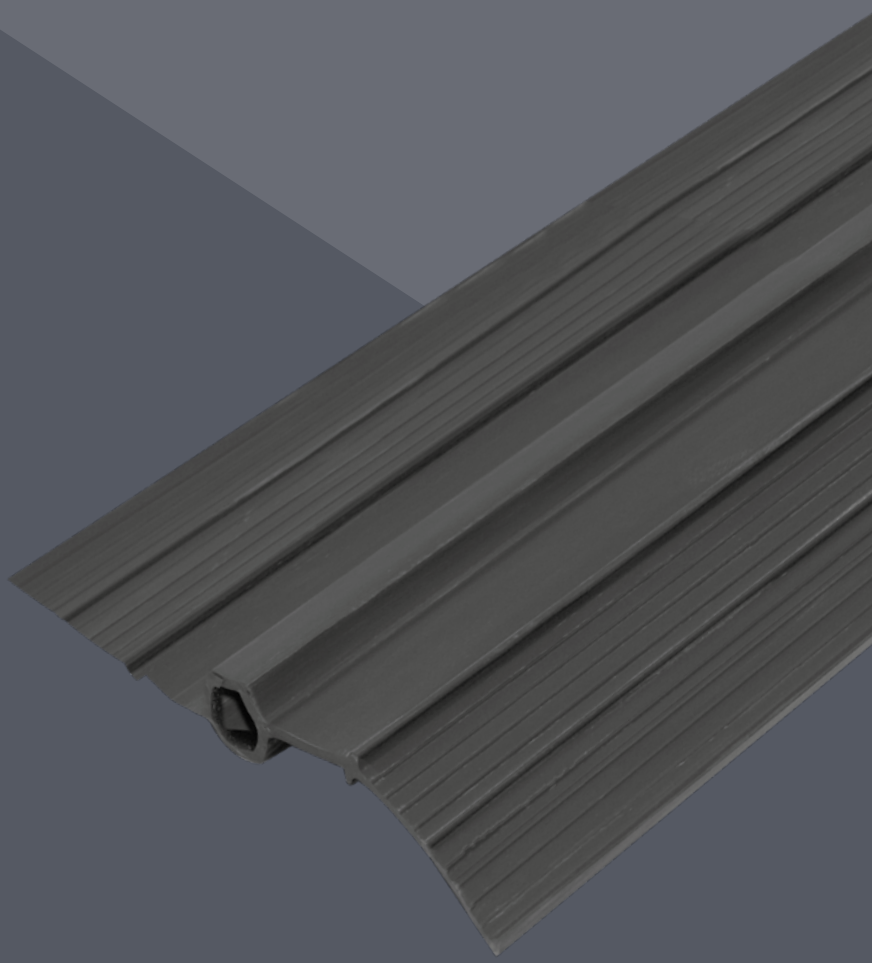
YIELD
14.4LTRS PER 25KG BAG

NOTES & DRAWINGS

HYDROBAR

PRODUCT GLOSSARY

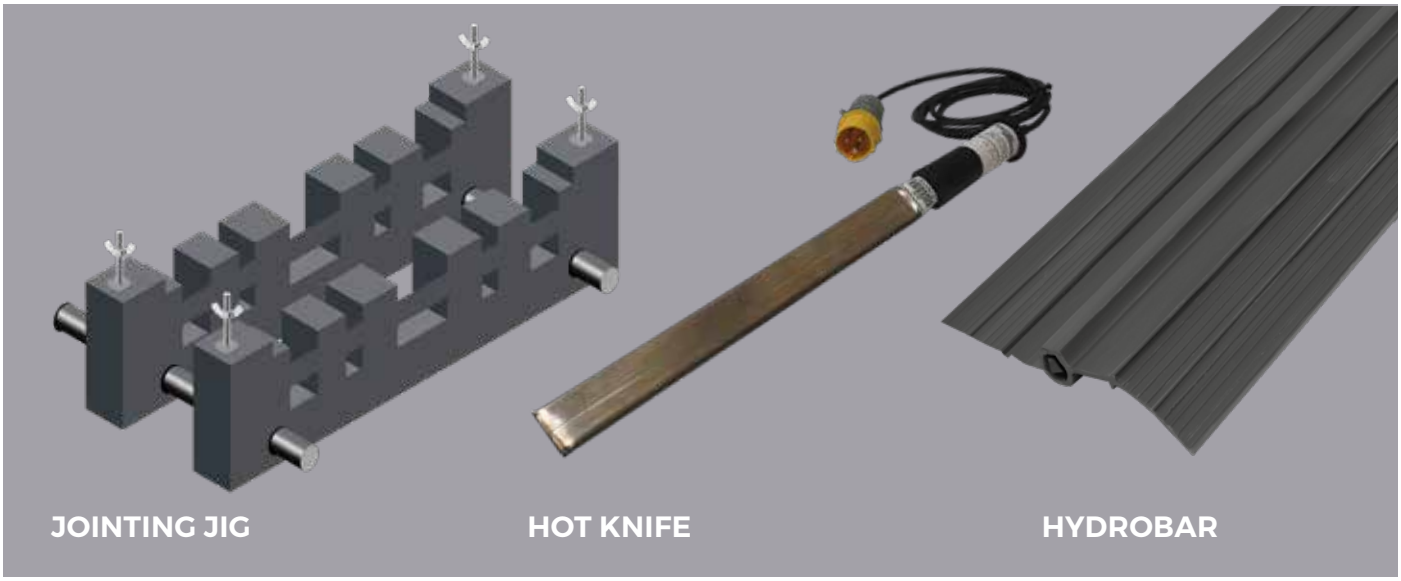
- PREPARATION
- HYDROBAR WELDING
- HYDROBAR FIXING



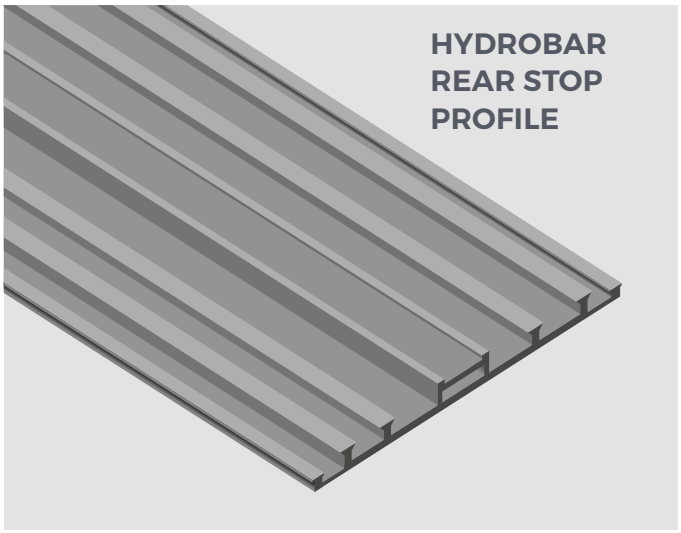
PREMCRETE

HYDROBAR

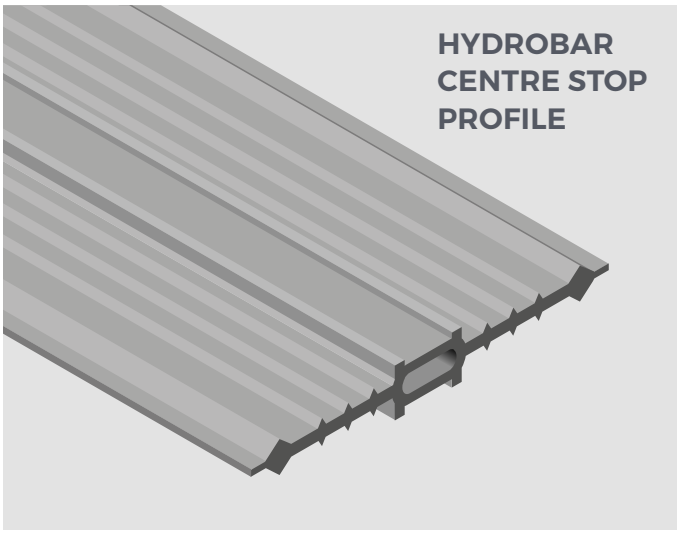
Premcrete recommends Specialist Installers are employed to install this system.
Contact your Project Manager for recommendation of a suitable Specialist Installer.



JOINTING JIG | HOT KNIFE | HYDROBAR

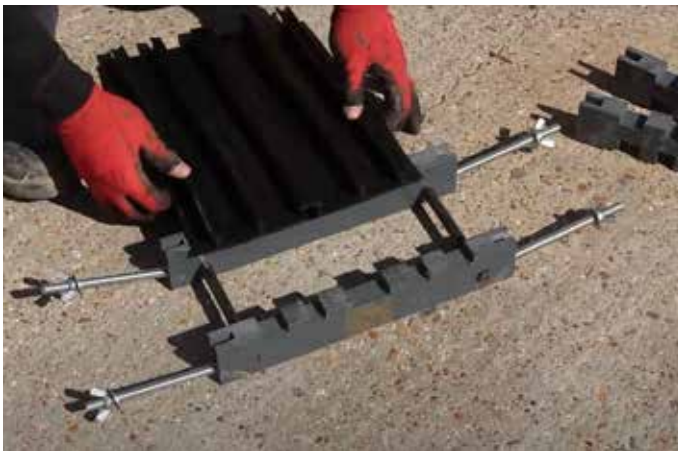


HYDROBAR REAR STOP PROFILE

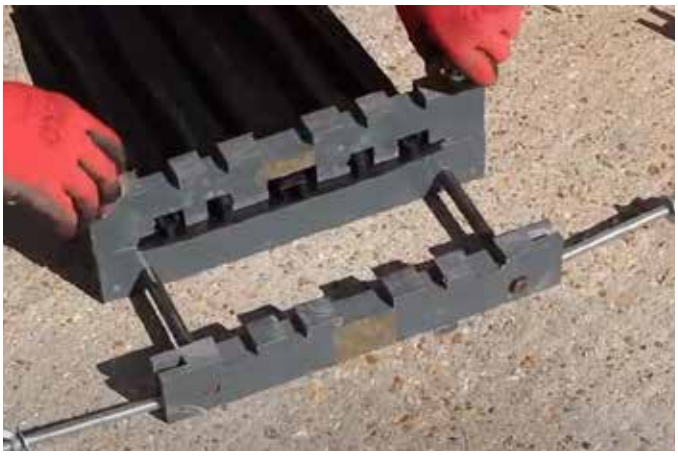


HYDROBAR CENTRE STOP PROFILE

JOINTING PREPARATION



Lay Hydrobar onto the jointing jig.



Tighten jig firmly leaving 10mm of the Hydrobar protruding.

WELDING

Position the hot knife between the ends of the Hydrobar and slide the second Hydrobar into the hot knife.

Once the Hydrobar has begun to melt, remove the knife and slide the joint together to connect the two melted ends. Hold jig firmly for 20 seconds.

Remove the jig and inspect the weld. A small ridge should be along the weld. Ensure that the joint is completely welded with no holes.

FIXING

Hydrobar should only be fixed through the flanges onto a firm flat substrate such as a concrete.

Exafoam board should be Installed against the shutter and then pour the concrete.

NOTES & DRAWINGS

HYDROBAND HP TO MOVEMENT JOINT

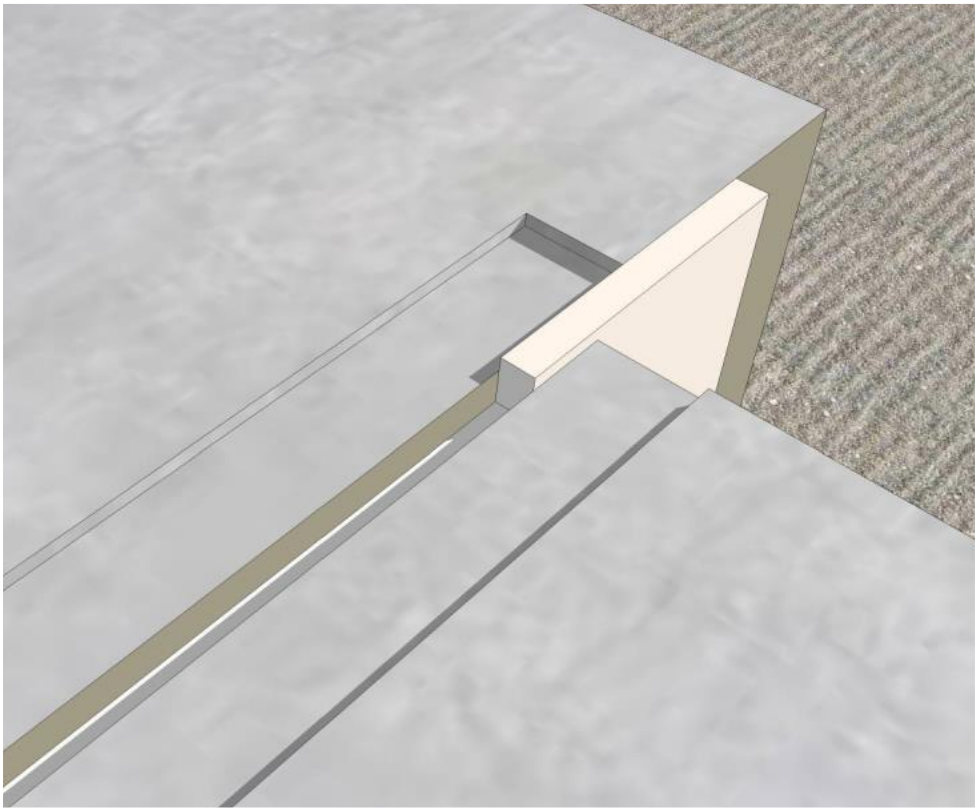
PRODUCT GLOSSARY

- PRODUCTS REQUIRED
- SUBSTRATE PREPARATION PREPARATION FOR PRIMING
- PREFLEX EP MIXING AND APPLICATION
- EPONITE EP MIXING AND APPLICATION
- HYDROBAND HP APPLICATION
- HYDROBAND DPC AND TEKNOCEM HBR APPLICATION

PREMCRETE

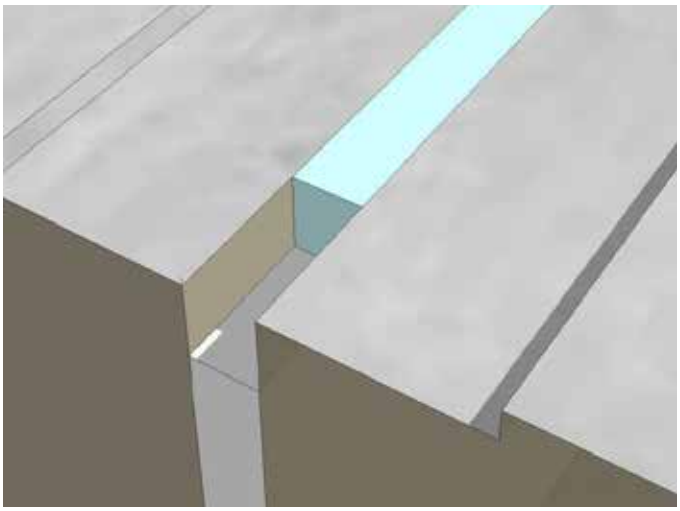
HYDROBAND HP TO MOVEMENT JOINT

PREPARATION



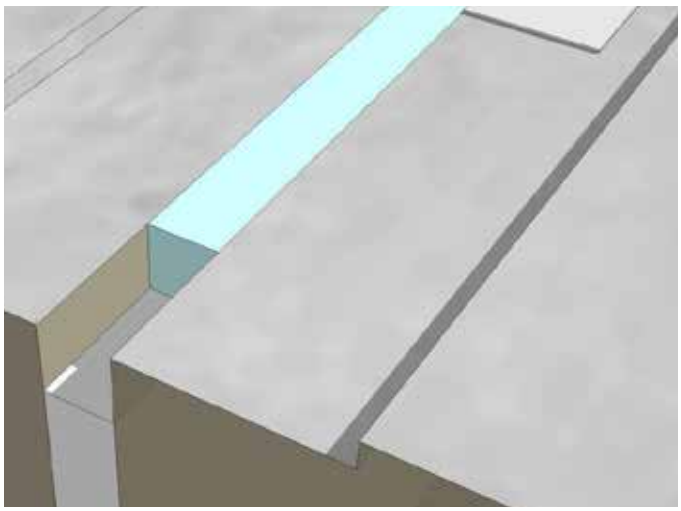
Prepare the area around the movement joint by breaking out a 10mm deep by 150mm wide rebate.
The Exafoam filler should be removed to a depth of 25mm deep to create a square rebate.

PREFLEX EP MIXING AND APPLICATION



Preflex EP is a two component joint sealant which is mixed by pouring the curing agent into the base and mixing thoroughly using a low speed drill and paddle mixer until a uniform consistency is achieved. Fill the rebate with Preflex EP and trowel off 10mm from the top of the concrete. Allow the Preflex EP to cure for a minimum of 24 hours prior before continuing with following stages.

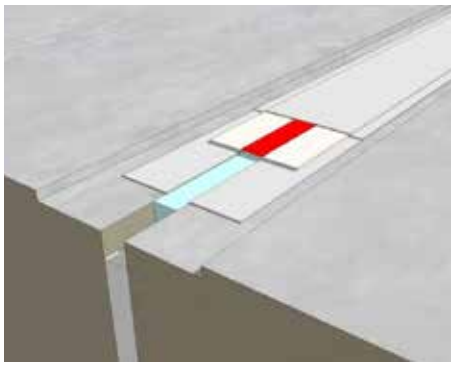
EPONITE EP MIXING AND APPLICATION



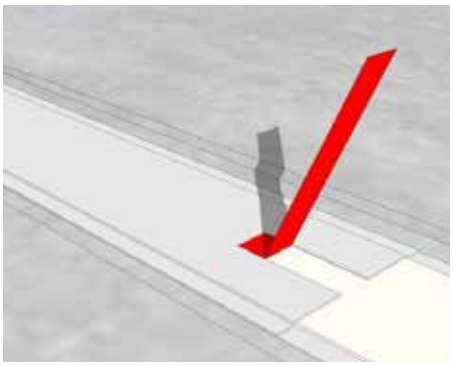
Install a debonding tape over the joint sealant. Eponite EP is a two component epoxy adhesive - base and curing agent. Thoroughly mix together using a slow speed drill with paddle attachment, until a uniform grey mixture has been produced. Apply a 1mm layer of the adhesive extending a minimum of 50mm either side of the 25mm rebate. Ensure the Eponite EP is spread out beyond the width of the Hydroband HP. Once complete, remove the debonding tape to expose the joint sealant and keep clean from Eponite EP.

HYDROBAND HP APPLICATION

Hydroband HP is a thermoplastic membrane, available in a variety of widths.



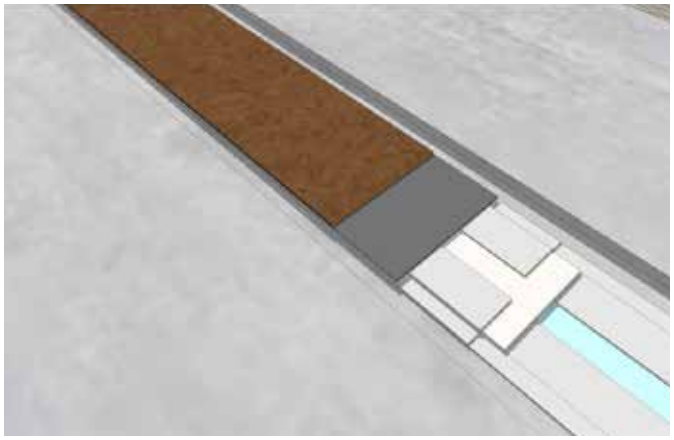
Apply a debonding tape to the centre of the Hydroband HP and then install carefully along the centre of the movement joint. Firmly press the Hydroband HP1 into the Eponite EP ensuring a 'slack' of membrane is compressed into the recessed joint. A small headed concrete nail can be used to pin the Hydroband HP1 into place at this stage if required.



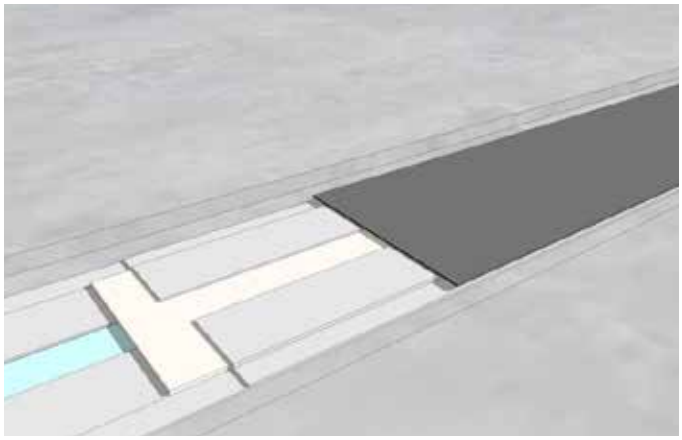
Apply another layer of Eponite EP over the top of the Hydroband HP and then carefully peel off the debonding tape to remove the adhesive from the centre of the Hydroband over the movement Joint. Eponite EP will cure in around 10 – 12 hours.

This photo shows the tape being removed from the Hydroband HP. Removing the adhesive from the centre of the Hydroband will allow it to flex as the joint expands/ contracts.

HYDROPRUFE DPC AND TEKNOCEM HBR APPLICATION

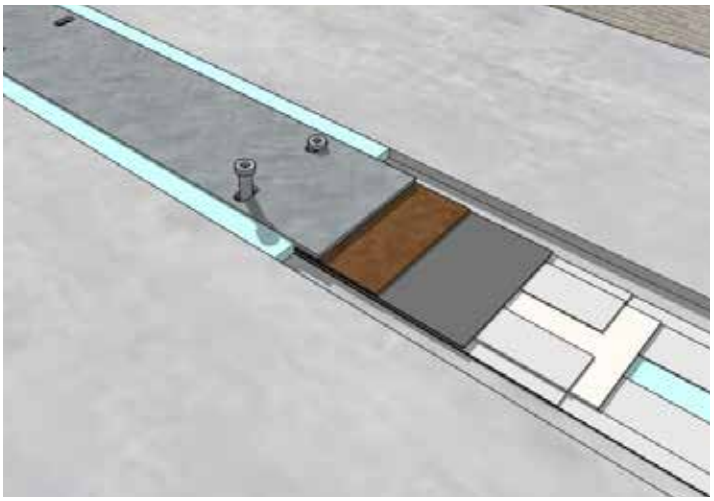


Once the Eponite EP has fully cured, a strip of Hydroprufe DPC should be installed on top as a debonding strip for subsequent layers.

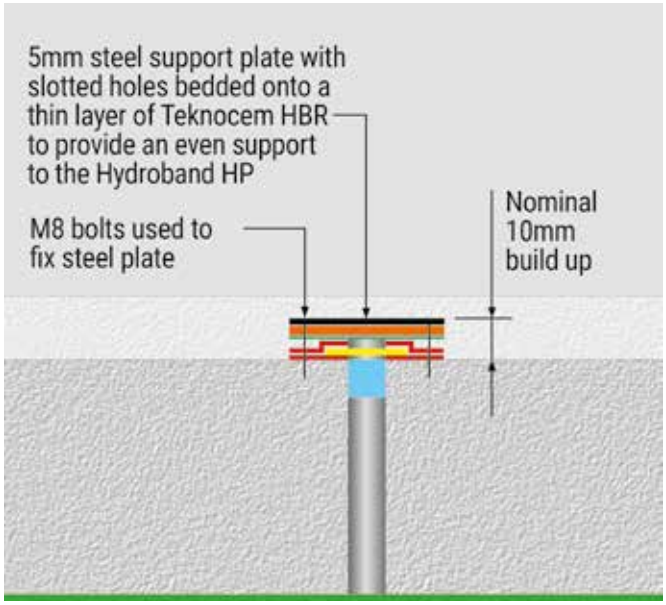


Install a thin layer Of Teknocem HBR on top of the Hydroprufe DPC to provide a bed for the steel plate.

STEEL PLATE APPLICATION



Bed the steel plate onto the Teknocem HBR and fix down firmly through the slotted holes with M8 fixings. Fill in the recesses between the edges of the plate and concrete with a fillet of Preflex EP.

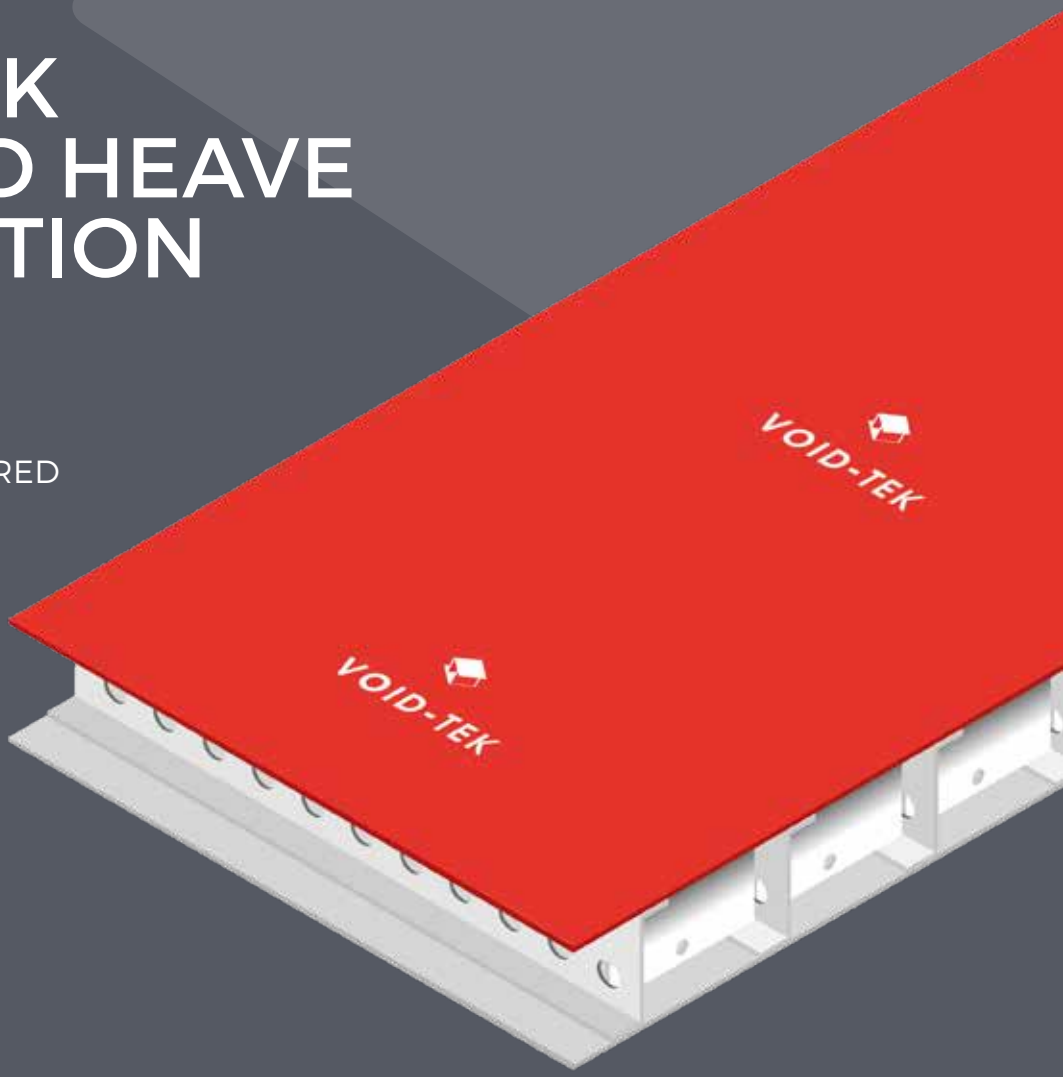


Cross section through movement joint.

VOID-TEK GROUND HEAVE PROTECTION

PRODUCT GLOSSARY

- PRODUCTS REQUIRED
- PREPARATION
- APPLICATION

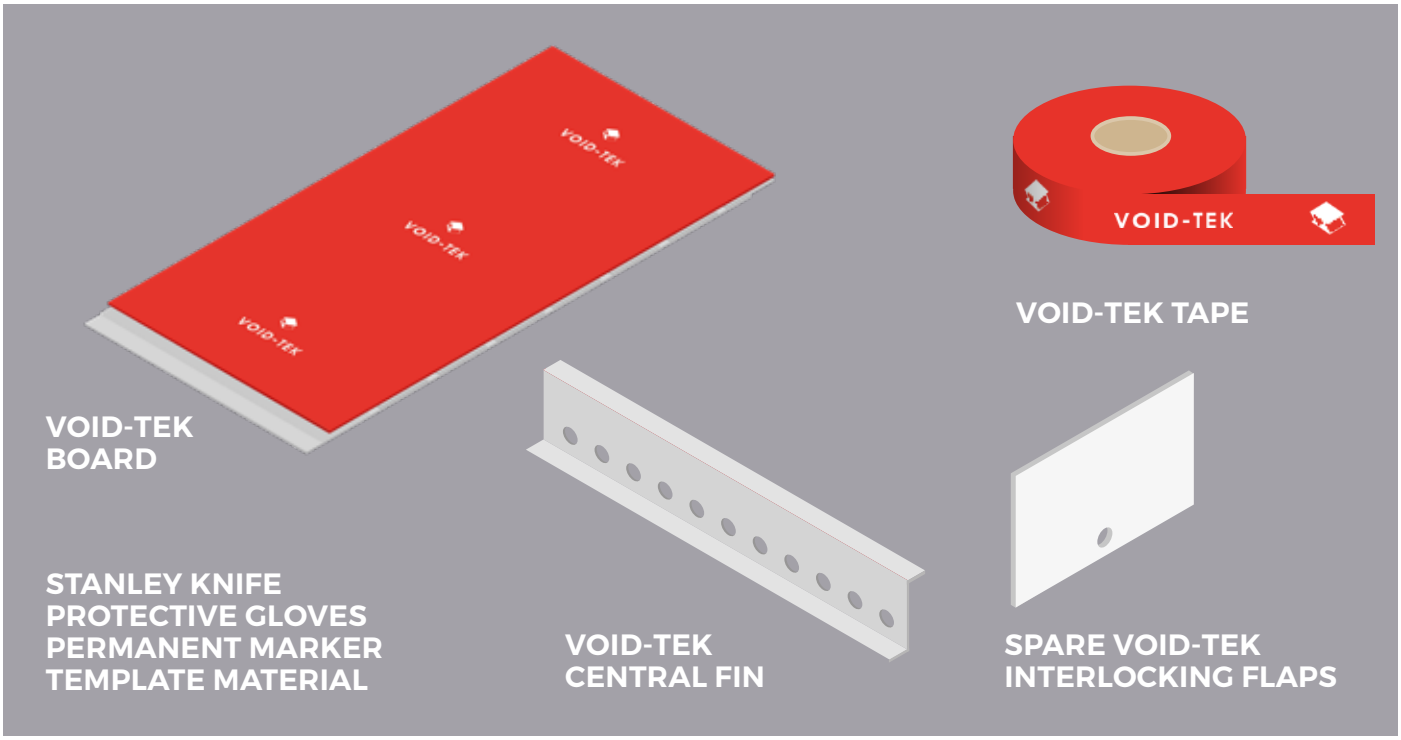


PREMCRETE ACADEMY

SCAN HERE TO VIEW OUR **VOID-TEK** DATA SHEET AND TRAINING VIDEO

PREMCRETE

VOID-TEK GROUND HEAVE PROTECTION



PREPARATION

Place the Void-Tek flat panels near to installation area.

Lift top of Void-Tek panel to full height.

Pull down the interlocking flaps and lock into the slot provided.

Sweep debris from concrete binding surface prior to laying Void-Tek panels.

INSTALLATION

Set out and measure the area intended for Void-Tek positioning.

Accurately measure the pile cap diameter.

Create a template for the pilehead or pile cap and place in position on the Void-Tek panel.

Once in position, mark up the areas to be cut with a permanent marker.

Cut the top of the board with a stanley knife and expose the area below.

PLEASE WEAR SAFETY GLOVES AS MATERIAL CAN HAVE SHARP EDGES ONCE CUT.

Remove the top section to reveal the structure below.

INSTALLATION

If there is a structural fin revealed below, cut it with a stanley knife and also remove the interlocking flap.

Mark out the bottom sheet and cut out with stanley knife. Remove all waste material.

As the structural strength will be compomised, apply the spare interlocking flaps to create new internal supports.

This will ensure the panel is again structurally sound to take the weight of the concrete.

So, the required interlocking flaps are now in place.

To strengthen and support the front edge, cut one of the spare internal fins to size.

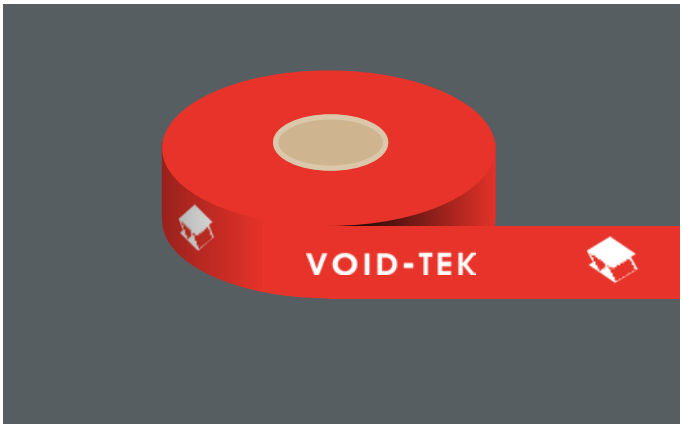
INSTALLATION

Fold and place into position closely to edge of the cut hole.

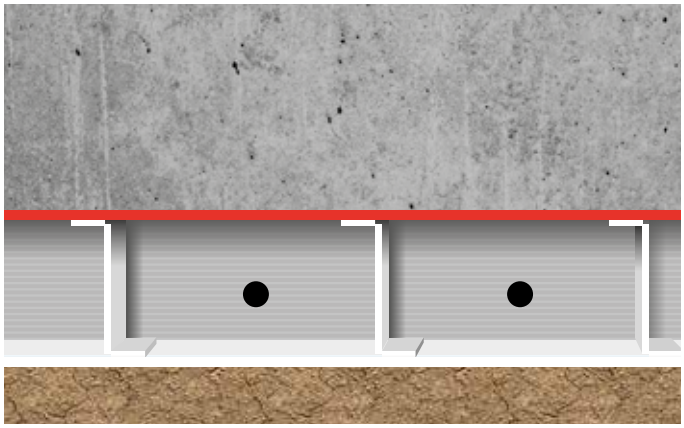
Carry Void-Tek to the installation area with required assistance.

Place in position, lowering over the pile.

Continue to place all Void-Tek panels to cover the required area.



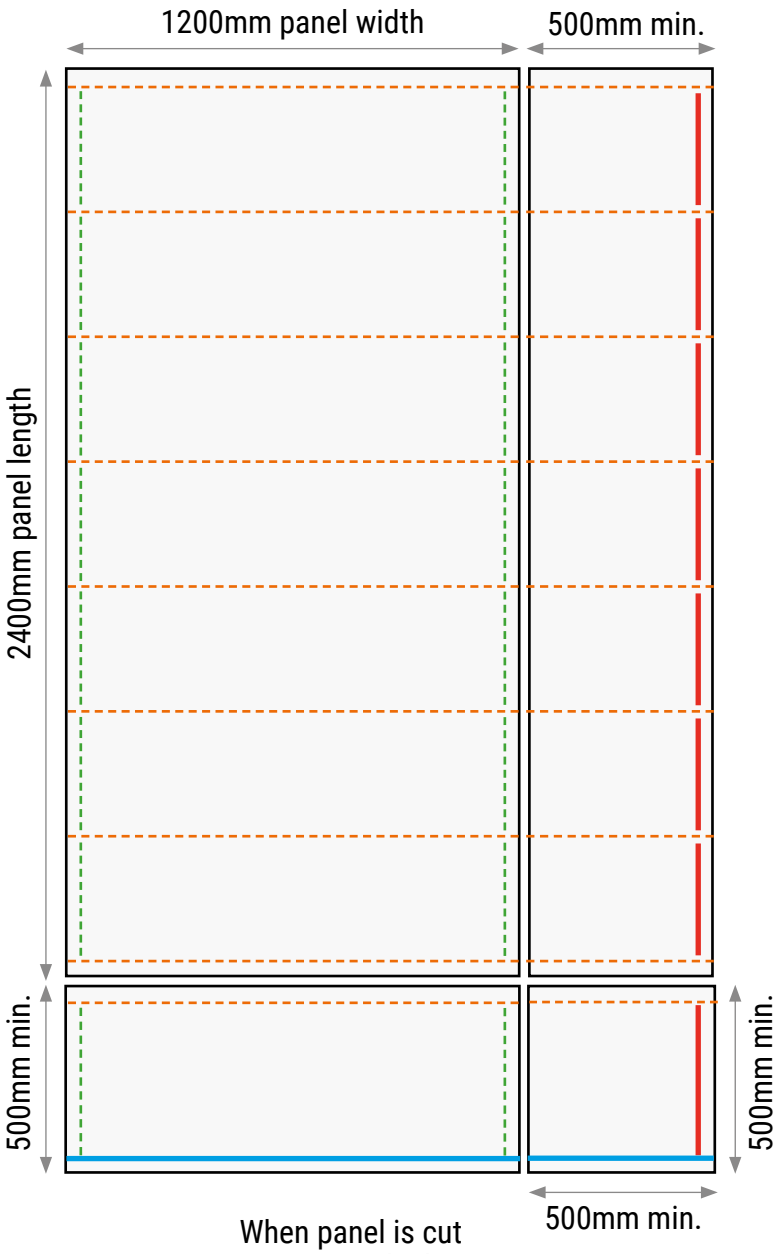
Once all panels are butted together in position, seal all edges with Void-Tek tape.



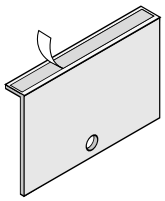
The area is now prepared for the concrete pour.

INSTALLATION

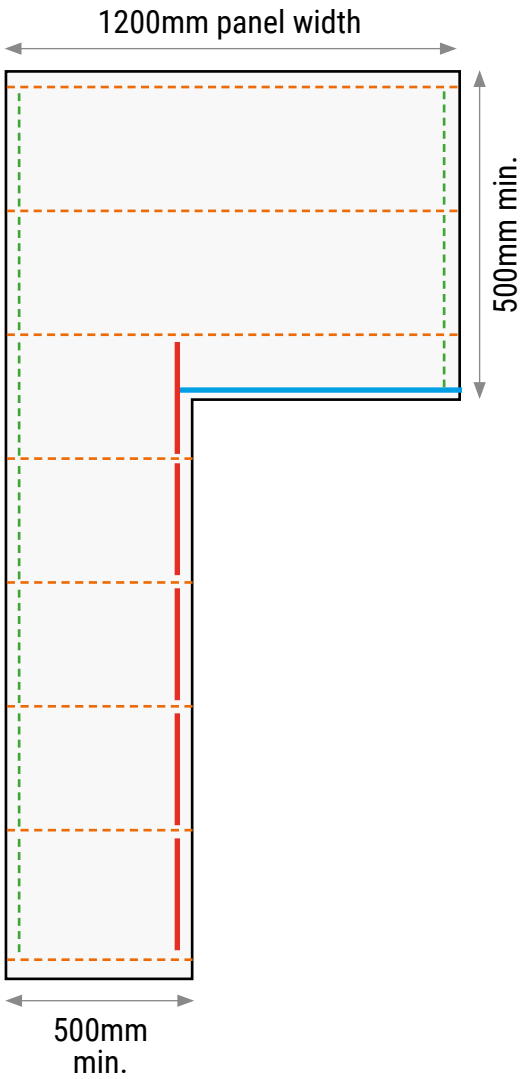
Tolerances for cutting VOID-TEK panels



When panel is cut insert Interlocks between the Fins



Tolerances for cutting VOID-TEK panels



Pre-fitted Structural Fins

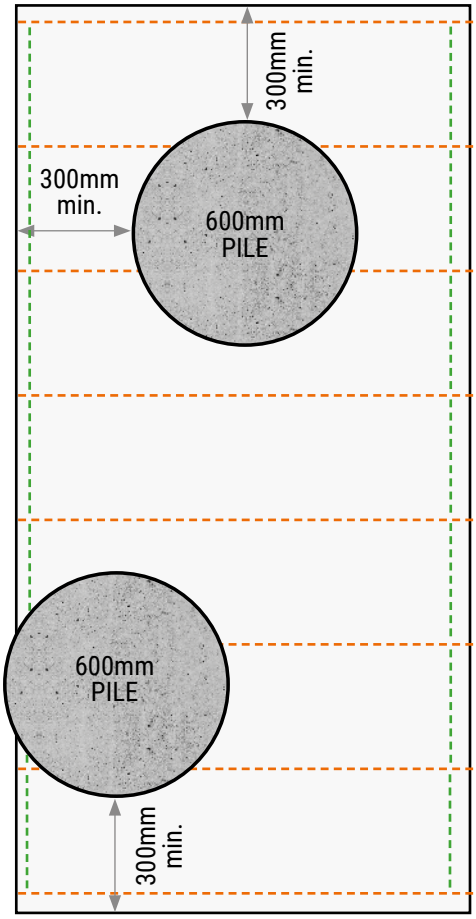
Pre-fitted Interlocks

Replacement Interlocks

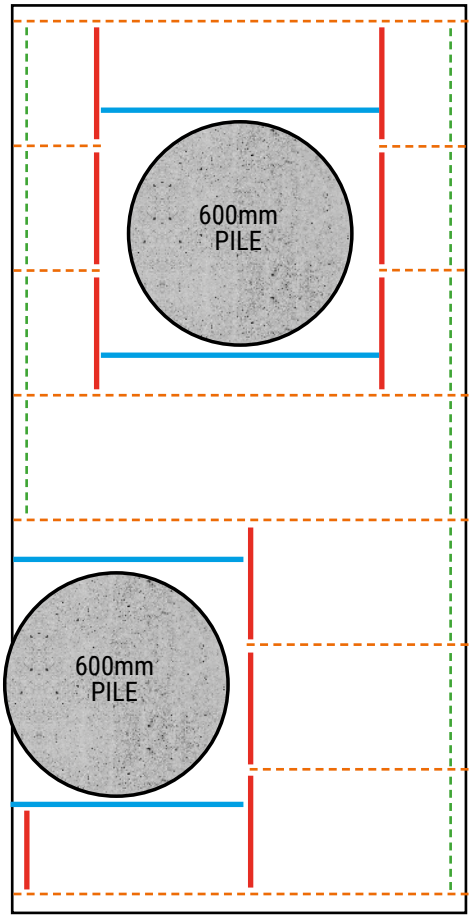
Replacement Structural Fins

INSTALLATION

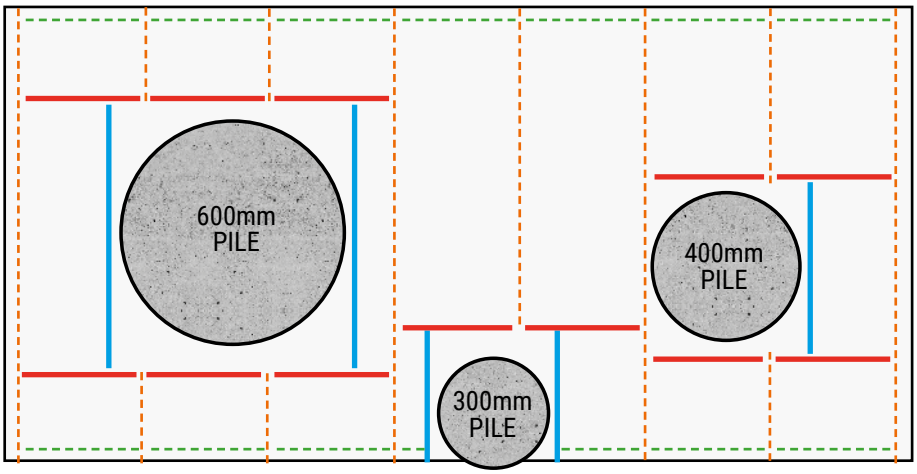
Tolerances for placement around piles



Build up of fins and interlocks around piles



Build up of fins and interlocks around piles of different sizes



NOTES & DRAWINGS

PREMTRAC QUALITY CONTROL PORTAL

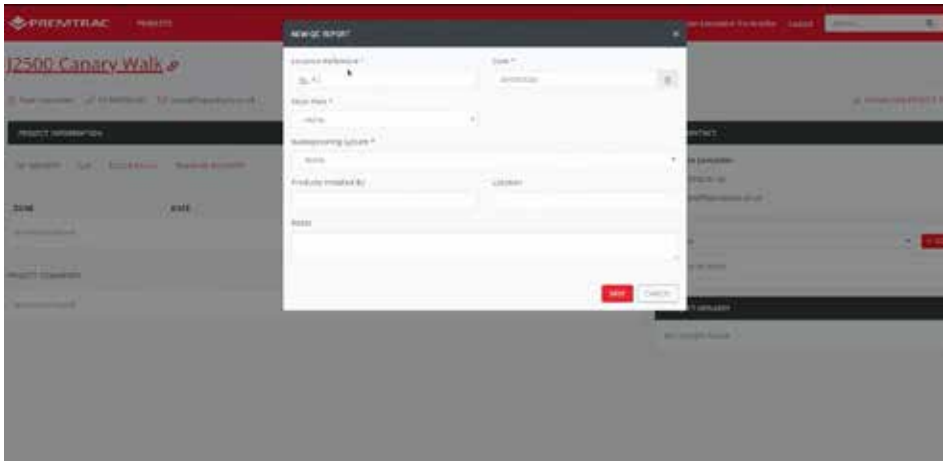
PREMCRETE ACADEMY

SCAN HERE TO VIEW OUR **PREMTRAC** TRAINING VIDEO

PREMCRETE

PREMTRAC QUALITY CONTROL PORTAL

The web portal is of a bespoke design, to assist both ourselves and the contractors for the management of quality on any project.
Upon commencement of a project, any relevant party is provided with login details to be able to access information pertaining to their project.



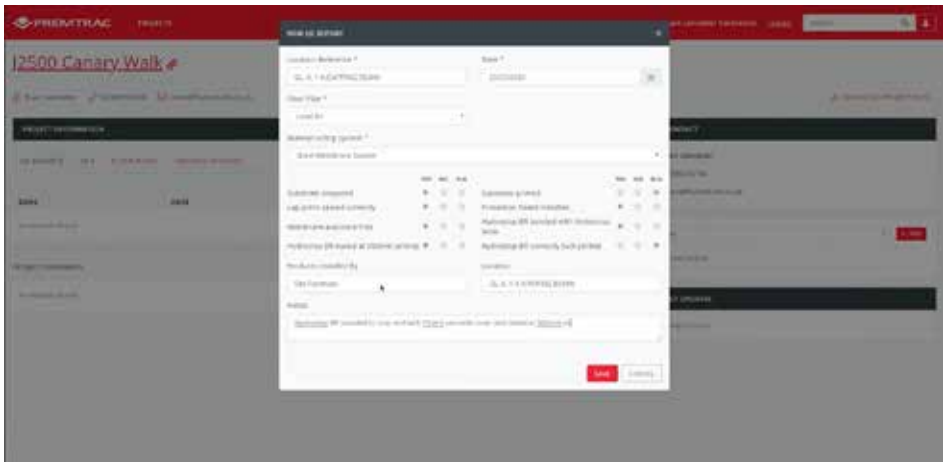
COMMUNICATIONS

All critical project related communications are uploaded onto the portal for all to view and for an accurate record to be kept of the date etc

CONTRACTOR QUALITY CONTROL

As the installation of the waterproofing system progresses, the contractor should login to the Premtrac portal and notify Premcrete of upcoming concrete pours and the like so as to keep the Premcrete technicians updated as to when site visits are required. Once the waterproofing is completed. in a specific zone then the nominated person on site, responsible for monitoring the quality of the installation, will complete the QC report on the system using the Tablet provided by Premcrete.

The Contractor's Quality Checker is responsible to mark up on the floor plan the zone of work that has been completed, within Premtrac, and then complete the electronic quality report. Photographs are then attached to specific points on the floorplan showing the quality of workmanship. Once completed, it is saved and can then be viewed on the portal as linked to the specific zone. The floorplan can be "drilled into" to access photographs and QC reports for any given zone as the work is completed.



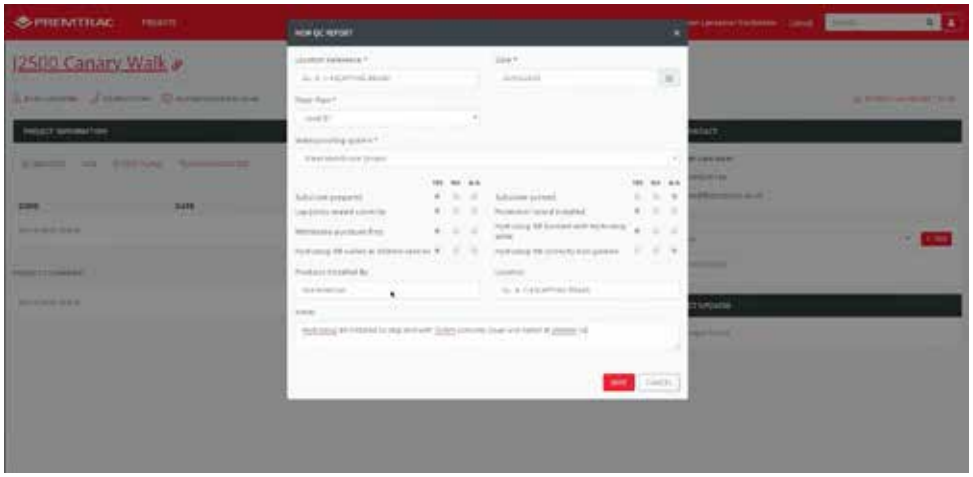
When any report is completed, everyone linked to the project receives a notification email with a link to the report. The Premcrete technician responsible for the project can then monitor the installation as it proceeds.

PREMCRETE QUALITY CONTROL

Premcrete technicians visit site frequently (with particular emphasis at the outset of the project) to monitor the installation of the waterproofing system. Premcrete complete a QC report for each visit, in the same way as described above. Again, all reports are fully traceable, and photographs are attached to the floor plan accordingly.

NON-CONFORMANCE REPORTS

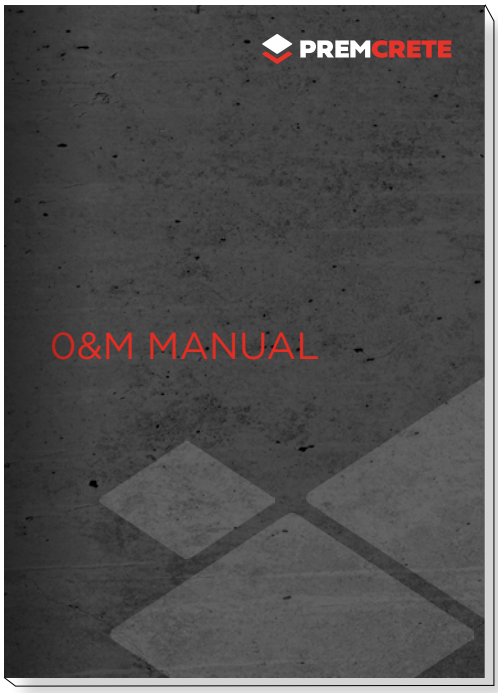
Any non-conformances that are found by Premcrete during site visits are recorded using the Premtrac system. An electronic report and photographs of the issue is recorded by Premcrete using the NCR module within Premtrac. This is issued to the contractor who is then responsible to close out the NCR report by correcting the issue and submitting photographic evidence that the issue has been resolved. The Premcrete technician receives an electronic copy of the report and can then close out the NCR once complete. There is a register on Premtrac showing all NCRs and what date they have been closed out.



PROJECT COMPLETION

Once the project has been completed, all information stored on the Premtrac Portal can be downloaded as a single zip-folder for use in compiling the O & M manual. Information included in the final download is as follows:

- Technical datasheets
- Method statements
- Technical drawings
- Photographs
- Safety datasheets
- Training registers
- QC Reports
- Non-Conformance Reports
- Non-Conformance close-out Reports
- Floor plan with cross reference to QC
- Reports and photographs
- All Project Correspondence.



THAT SHOULD COVER IT...
NOW YOU KNOW HOW.

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