

JH Termite Barrier (TB) Installation Manual

JH Envirtech Pty Ltd ABN 36 163 906 241



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JH Termite Barrier (TB)

Structure

JH Termite Barrier (TB) consists of a quality controlled –

Upper layer

High impact resistant polyethylene patterned laminate with a thickness of 200 microns and coloured with a distinguishing green pigment. Nominal weight $170 - 200 \text{ g/m}^2$. The sheet is to be laminated tightly at all points to the middle layer modulus fibre blanket.

Middle layer

A quality controlled manufactured non-woven modulus fibre blanket comprising polypropylene fibres. Nominal weight 150g/m², thickness (unweighted) max .6mm.

Precisely impregnated with the Pyrethroid (Deltamethrin) with a quality-controlled loading of 1g/m² minimum; with target loading of 1.45g/m².

Lower layer

Vapour resistant polyethylene laminate with a thickness of 100 microns and white pigment. Nominal weight 80g/m². The sheet is to be laminated tightly at all points to the middle layer modulus fibre blanket.

Finished Product

To be rolled with white LDPE layer on the outside of the roll.

No cardboard tubes down centre of rolls.

Packed in solar resistant plastic bags; one roll per bag or 3 rolls per bag.

JH TB Advantages

The JH Termite Barrier (TB) has distinct advantages.

- 1. JH TB has the ability to KILL termites when they come into contact with the Deltamethrin impregnated modulus fibre.
- 2. JH TB which has Detamethrin impregnated into its modulus fibre REPELLS termites before they are able to reach the critical entry paths into building structures.
- 3. JH TB with its toughened physical outer layers encapsulating the Deltamethrin impregnated modulus fibre acts as a durable PHYSICAL TERMITE BARRIER
- 4. JH TB with its toughened polyethylene outer layers acts as a Damp Proof Course / Vapour Barrier when incorporated in the JH TB full under slab and perimeter termite protection system.



Chemical Foundation

Deltamethrin is the active ingredient encapsulated within the JH TB sheets, a Pyrethriod / termicide / insecticide, Delamethrin when in the JHTB matrix has an exceptional 50-year life expectancy, coupled with its recognised attributes in the control of termites. This has led to the JH Termite Barrier's registration with the Australian Pesticides and Veterinary Medicines Authority (APVMA Approval Number 80846). JH TB Chemical Testing and 50- year life expectancy testing / verification carried out by PGR International Pty Ltd.

Security

JH TB protects the most valuable asset, that most Australian families have acquired for their future prosperity and security 'there home'. The fact that the majority of household insurance companies will NOT insure against the ingress of subterranean termites into a dwelling has led to the BCA making it a requirement that an approved termite protection system be installed when a *primary building element* of a Class 1 and 10 building is considered susceptible to termite attack.

Flexibility

JH TB is able to be /cut /joined/ moulded/to encompass the complex building designs which are required to accommodate the demanding geographic landscapes found in Australian.



Figure 1



Compliance

JH TB is approved as an alternative solution in accord with the Building Code of Australia (BCA). The approved Assessment Method demonstrates that independent scientific evidence has been produced to prove that JH TB meets the Performance Requirements and/or the Deemed-to-Satisfy Provisions of the Australian Standards AS 3600 Series – Termite management.

Efficacy trials undertaken by Further Research and Consulting Pty Ltd has demonstrated that JH TB may be used in accord with, and meets, the requirements of:

AS 3660.1-2014 Termite Management – Part 1: New building work.

AS 3660.2-2014 Termite Management – Part 2: In and around existing building and structures.

AS 3660.3-2014 Termite Management – Part 3: Assessment criteria for termite management systems.

AS 2870-2011 Residential slabs and footings.

AS 3600 Concrete structures.

AS 4773.1-2010 Masonry in small buildings, Part 1: Design

AS 4773.2-2010 Masonry in small buildings, Part 2: Construction

AS/NZS 4347:1995 Damp Proof Courses and Flashings

Independent trials, conducted by PGR International Pty Ltd, in accordance with the requirements of the Australian Standard AS 3660.3.2014 Termite management Part 3 Assessment criteria for termite management systems; show that the JH TB should remain as an effective termite measure for a minimum of 50 years.

JH TB meets the performance criteria of section 1 Clause 1.3 of AS 3660 – 2014 Termite management Part 1, New building work in accordance to AS 3660 – 2014 Termite management Part 3 Assessment criteria for termite management systems and NCC 2019 BCA Volume One 2019 (NT B1.4(i)-(ii)) (durable notice).

JH TB also meets the BCA performance and assessment requirements BCA Class 2 and Class 9 Buildings – Volume One: BP1.1(a), limited to (b)(xv) and BCA Class 1 and Class 10 Buildings Volume Two: P2 1.1(a), limited to (b)(xv), QLD P2.1.3(a)

JH TB meets the performance criteria of AS/NZS 4347:1995 Damp Proof Courses and Flashings / Methods 1, 4, 5, 6 and 9

JH TB also meets the BCA 2019 performance and assessment requirements BCA Class 2 and Class 9 Buildings Clauses: Volume One: F1.9(b)(i), SA F1.9(b) and BCA Class 1 and Class 10 Buildings Volume Two: 3.3.5.7(a), SA F1.9(b)

JH TB has APVMA Registration /Label Approval No: 80846/101770 Contains Pyrethroid / Deltamethrin which has a proven track record in deterring termite attack.

CodeMark Certification (SAIG-CM20096)

HIA Green Smart Member

Global Green Tag / McV Eco- Preferred Certified

PGR International Pty Ltd - JHTB Sheet - 50 Year Life Expectancy accelerated testing.



Authorised Operators / Training

To become an accredited JH TB authorised operator, you must have undergone both theoretical and practical training by a JH TB Accredited Trainer.

Authorised Operators / Registration

It is essential that the JH TB Accredited installer must be a Certified Pest Controller with current Pest Controller Licence and current Professional Indemnity. Any Certified Installer who decides for whatever reason to terminate their trade/skill in Pest Control after being trained by JH Envirtech must provide to JH Envirtech in writing of their intention. JH Envirtech requires notification of cancellation or non-renewal of professional indemnity. Pest controllers may not install JH TB without current professional indemnity or public liability. All JH Envirtech trained operators will be registered with JH Envirtech Pty Ltd after demonstrating adequate competency to carrying out practical installations.

Technical Support

JH Envirtech provides professional technical support for all aspects of termite management including design specifications and installation issues which may be encountered on difficult building sites. JH Envirtech Pty Ltd Head Office is based in Sydney NSW

Builders Responsibility

It is the builder's responsibility to ensure that -

- 1. All through slab penetrations are in there correct and final position prior to being treated with the JH TB
- 2. All ground works are correctly prepared and the concrete slab meets the requirements of AS 2870-2011 Residential slabs and footings
- 3. Has a comprehensive understanding of the JH TB to ensure the barrier is not compromised by other trades during and after installation.
- 4. To contact the JH TB Operator if the barrier has been compromised and requires any rectification.
- 5. Ensures all JH TB certification / warranty paperwork is passed onto the client at the time of the building hand over.

JH TB Warranty

JH TB carries a 50-year manufactures product warranty when installed as detailed in the correct manner as outlined in the JH Termite Barrier Installation Manual and by Authorised JH Termite Barrier Accredited Installers

Home Owners Responsibility / Annual Inspections

It is the homeowner's responsibility to ensure that annual inspections are carried out by a professional timber pest inspector in accord with the requirements of the Australian Standard Series AS 3660 *Termite management*. This is essential to maintain the security of the home from subterranean termite damage and to maintain the Manufactures Product Warranty. If subterranean termite damage should occur through failure of the JH TB the warranty covers both structural and decorative timbers.



JH TB Installation Process

- 1. All service penetration (water pipes, electrical conduits, waste sevice pipes, GPO, gas ect) extending through the re-enforced concrete slab are to protected wth JH TB Collars, Wraps or JH Termistop PVC Hard Collars (Ref Page 66)
- 2. Prior to the concrete pour, liase with the builder to establish the positioning of JH TB to all areas requiring protection i.e. (external and internal walls, internal block or brick step-downs, retaining walls, construction joints in concrete slab ect).
- 3. Liase with the builder / bricklayer to establish the number of brick courses that are to be layed before the positioning of the JH TB, Damp Proof Course and flashing. This will determine the width of the JH TB strip required for the installation, though this may vary due to step downs in brickwork levels.
- 4. Ensure all internal and external corners are securley nailed and glued to the concrete slab, this is to avoid damage and movement during the standing of the wall frames.
- 5. Install JH TB strips to all areas requiring protection, fixing the JH TB stip in place with, Tensor Grip C40 Pressure Sensitive Spray Adhesive (JH TB strip is to be glued the full length of the join between concrete slab & JH TB) and fastened with 15-30mm concrete pins at approximatley 350mm centres.
- 6. Ensure ALL 50mm corner overlaps and joins in the JH TB are securley glued and taped with (Tensor Grip C40 Pressure Sensitive Spray Adhesive) and (Schaffer & Co Butyl Tape K9940 or Tessa 4688 Cloth Tape)
- 7. Ensure that the JH TB strips will reach the outside edge of the brickwork and glued into place on the brickwork for Bearer & Joist installations.
- 8. Carefull attentention should be taken to areas such as window sills, doorways and garage openings.
- 9. Ensure that sheets installed over brick piers with threaded rod should be installed tight over the rod with no gaps around threaded rod. (see *Figure 10*)
- 10. Liase with the builder to establish the timing of re-visits to the site in cases where driveways may need treating and in some cases the positioning of JH TB for access ramps, patio's, paths, columns ect.
- 11. Position the metre box sticker, only when you are prepared to sign off on the JH TB installation and supply the builder, council, home owner and JH Envirtech with the required installation certificates, (JH TB Installation Certificate, Certificate of Compliance, Warranty Conditions).



JH TB Collars & Tube



JH TB Rolls

Figure 2 Figure 3



JH TB Collar Installation

Pipe penetration (Plumbing, electrical, telecommunication and gas) may be treated with either JH TB Collars, JH TB sheet wraps or JH Termistop PVC Hard Collars (Ref Page 66)

Pipe / Service Penetrations

Pipe penetrations can be protected with either JH TB Collars, JH TB Stips wrapped and glued to service pipes or JH Termi Stop PVC Hard Collars.

JH TB Collars are available in two sizes, 120mm for pipes up to 100mm diameter, and 60mm for pipes up to 50mm diameter. For larger pipes, two 120mm Collars may be cut at the seam and joined together (glued). They MUST be secured in place using two cable ties.

JH TB Collars

Take care when Installing JH TB Collars, not to overstretch or place unnecessary pressure on the joint seals. Secure JH TB Collars to the pipe with a cable ties, position the cable ties near the base and top of the Collar tube, and tighten with a set of pliers. Ensure there are no gaps between pipe and JH TB Collar.

Where JH TB Collars are used in conjunction with whole of slab installations, the JH TB Collars should be taped horizontally to the full under slab JH TB Sheet to complete the moisture membrane.



Figure 4



JH TB Collar Installation Details

- 1. Position JH TB Collar over pipe and slide down till collar flange sits on plastic vapour barrier.
- 2. Secure JH TB Collar to pipe with two cable ties, the first at base of the collar the second approx 50mm above the first.

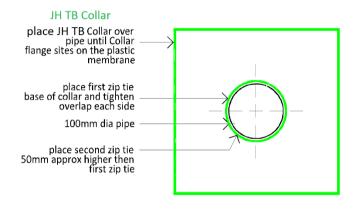


Figure 5

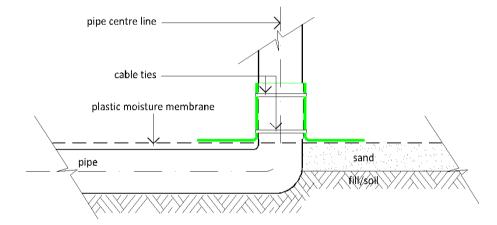
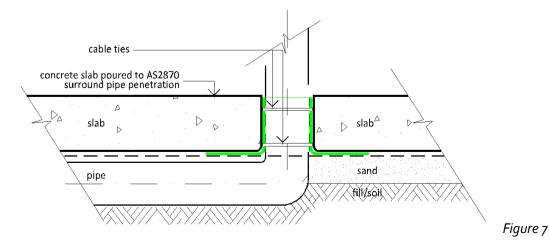


Figure 6





JH TB Wrapping / Electrical Conduits Installation Details

Wrap JH TB sheet around all electrical conduits penetrating the slab for a length of about 300mm. The JH TB should remain visible after the concrete pour on any conduit. Ensuring the wrapped JH TB sheet overlaps before positioning the cable ties or gluing the sheet to the conduits.

Cable ties at either end of the JH TB wrapped sheet may be used to secure the JH TB wrapped sheet to the pipe, the JH TB wrapped sheet will extend through the concrete slab at either end. Where conduits are in clusters, each pipe must be wrapped individually. When wrapping conduits with JH TB sheet material the white side of the JH TB must be facing outwards.

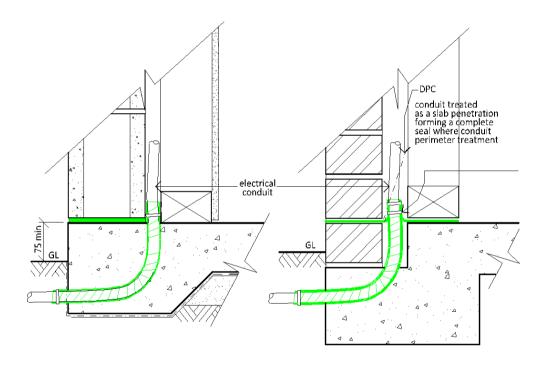


Figure 8



Horizontal Penetrations

A horizontal penetration is a right-angle insertion into the slab. It usually occurs where a service penetration goes through an edge beam or structural beam. This may allow concealed termite entry through any hollow building materials holding the service penetrations in place (e.g. copper or PVC pipe). All such hollow structures must be treated with JH TB tubes or collars prior to concrete pour. In some cases, the JH TB may be required to be fitted to the outside of the concrete slab due to positioning of pies after the concrete slab has been poured. See diagram below.

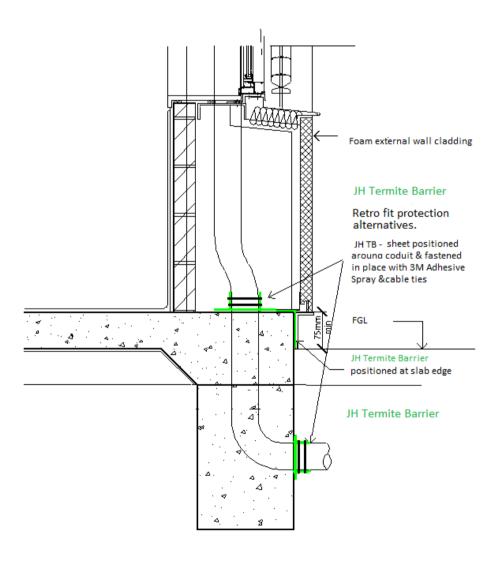


Figure 9



Multiple Penetrations

This is where there are several service penetrations that are close to each other. Often these consist of different pipe sizes. JH TB Collars, Tubes or wrapping the pipes in JH TB Sheet cut to size are ideal in these cases. Treat each penetration separately with JH TB Collars / Tubes or moulded sheet.





Figure 10 Figure 11



Figure 12



JH TB Perimeter Protection.

When JH TB is installed in conjunction with AS 2870: *Residential slabs and footings – Construction* and AS 3600: *Concrete structures*. When fixing the JH TB to the perimeter of the concrete foundation it will become a continuous termite perimeter barrier.

JH TB Perimeter installations are to be strictly adhered to as displayed in the JH TB Manual and the Australian Standard AS 3660 Termite management Part 1: *New building work*.

A BCA approved damp-proof course will be positioned above the JH TB.

Consultation with the builder / home owner is highly recommended (Note: the builder may not be responsible for the landscaping and paths), this should take place prior to the positioning of the JH TB to establish where the finished ground levels (for the full perimeter of the building) will be aligned in relation to the concrete rebate and brickwork. This will include but is not limited to areas such as concrete paths / driveways / access ramps / patios / car ports / stairs / garden beds / land scaping etc.

In some situations the Damp-proof course will be positioned under the first course of brickwork, in this situation the bottom of the weep-holes will be directly above the concrete rebate, this situation will require special consideration as the weep-holes may be easily compromised by subterranean termites.

Where the installation may be compromised by a build-up of soil at the weephole level or rendering of the bricks, it is recommended that either a 75mm pavement / mowing strip is installed this will be in conjunction with the JH TB extending under the mowing strip or 75mm of the vertical slab edge is exposed.



Figure 13



JH TB Slab Edge Rebate - Detail

One Brick Rebate

JH TB perimeter strips will be require to be nailed at 300 – 400 mm intervals with concrete clouts or Ramset concrete nails and glued to the concrete slab, so that it will be positioned below the bottom plate of the framing timbers (in brick veneer construction) or below brickwork (in cavity brick construction) this will allow the JH TB to be securely held in place until the external brickwork is laid. The flexibility of the JH TB allows any excess barrier to be placed into the wall cavity.

When positioning the JH TB strip, align one edge of the strip with the outside edge of the concrete rebate and extend the other edge to the top of the concrete slab, fasten the edge that extends to the top of the concrete slab with concrete clouts or Ramset Nails and 3M Super 74 Spray Adhesive.

A BCA approved damp-proof course will be positioned above the JH TB.

Consultation with the builder / home owner is highly recommended (Note: the builder may not be responsible for the landscaping and paths), this should take place prior to the positioning of the JH TB to establish where the finished ground levels (for the full perimeter of the building) will be aligned in relation to the concrete rebate and brickwork. This will include but is not limited to areas such as concrete paths / driveways / access ramps / patios / car ports / stairs / garden beds / land scaping etc.

In some situations the Damp-proof course will be positioned under the first course of brickwork, in this situation the bottom of the weep-holes will be directly above the concrete rebate, this situation will require special consideration as the weep-holes may be easily compromised by subterranean termites

Where the installation may be compromised by a build-up of soil at the weephole level or rendering of the bricks, it is recommended that either a 75mm pavement / mowing strip is installed this will be in conjunction with the JH TB extending under the mowing strip or 75mm of the vertical slab edge is exposed.

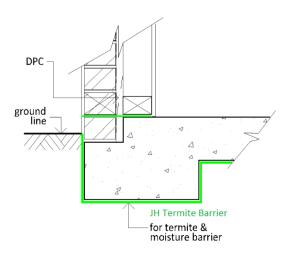




Figure 14

Two Brick Rebate

JH TB perimeter strips will be require to be nailed at 300 – 400 mm intervals with concrete clouts or Ramset concrete nails and glued to the concrete slab, so that it will be positioned below the bottom plate of the framing timbers (in brick veneer construction) or below brickwork (in cavity brick construction) this will allow the JH TB to be securely held in place until the external brickwork is laid. The flexibility of the JH TB allows any excess barrier to be placed into the wall cavity. If for any reason the brick course cannot be laid at this stage, JH TB may be folded up and pinned temporarily to the timber frame, this will save the JH TB being damaged by other trades.

A BCA approved damp-proof course will be positioned above the JH TB.

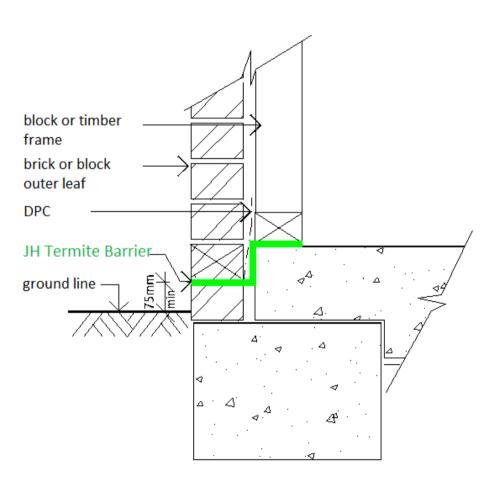


Figure 15



JH TB Joins / Repairs

When joining the JH TB Strips, a minimum 50mm overlap is required at all perimeter joins, at all internal and external corner overlaps or where a repair patch is required. All JH TB joins / overlaps are to be glued into position with 3M Scotch-Weld Non-Flammable Foam Fast 74 NF Spray Adhesive or equivalent.

Always ensure JH TB will be laid above the proposed level of any future landscaping etc., and prior to the laying of concrete mowing strips and pavements if the latter are required or planned.

Where external walls are face brick and the mortar is pointed, the JH TB strip is laid 3 – 5mm back from the edge of the brick.



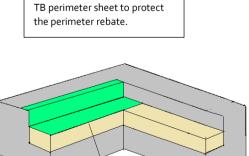
Figure 16



Figure 17

JH TB Corner Detail's (Internal)

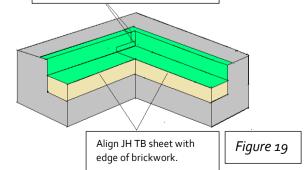
Select & position the require JH



Align JH TB sheet with edge of brickwork.

Figure 18

Extend JH TB sheet 50mm past internal rebate & cut horizontally at corners of rebate. Overlap 50mm extensions & fasten into position with clouts or 3M Adhesive Spray.

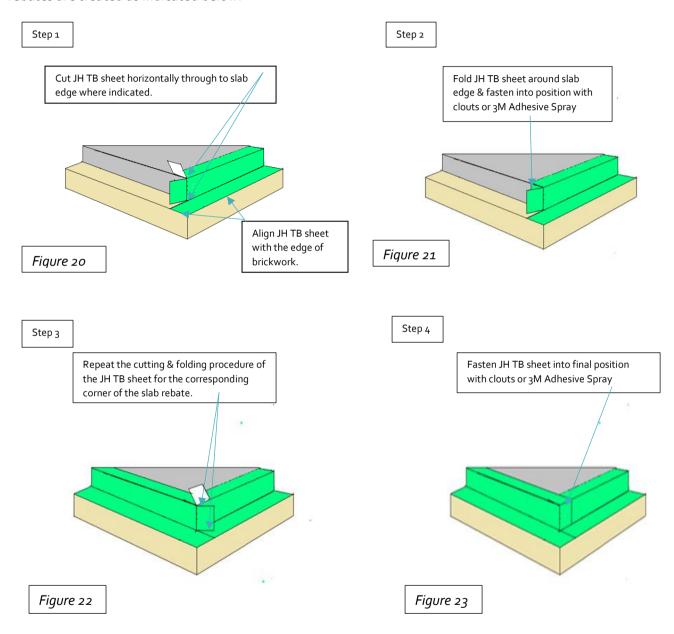


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JH TB Corner Details (External)

Select and position the required size JH TB perimeter sheet to protect the perimeter rebate. Ensuring all external rebates are treated as indicated below.



NOTE: JH TB Pre -formed Internal and External Corners may be used (ref page 67 for details).



JH TB Inspection Zones

The Australian Standard AS 3660.1 2000 Termite management – New building work, refers to a 75mm inspection zone between the exposed edge of a termite barrier system in the outer wall of a building and the finished ground level (FGL) beneath it.

The purpose of this inspection zone is to ensure that an unobstructed, visual surface exists to allow for easy identification of subterranean termite mud-tubes on the outer wall structure during a termite inspection. It was decided at the time by the Standards Committee that a distance of 75mm (the depth of one standard building brick) would allow for changing grade levels due to gardening activities in adjacent soil, the depth of growing grass and so on, while still leaving sufficient un-obstructed surface to allow for efficient inspection.

With installations of JH TB, where hard surfaces such as concrete, paved pathways, patios, driveways and paving exist this inspection zone may be reduced to a minimum distance of 25mm between the outer exposed edge of the termite barrier system and the top surface of the concrete or paving, a 25mm distance is considered adequate to allow for identification of termite mud-tubes by those trained to do so. This is particularly important where the reduced step-downs in doorways and windows occur.

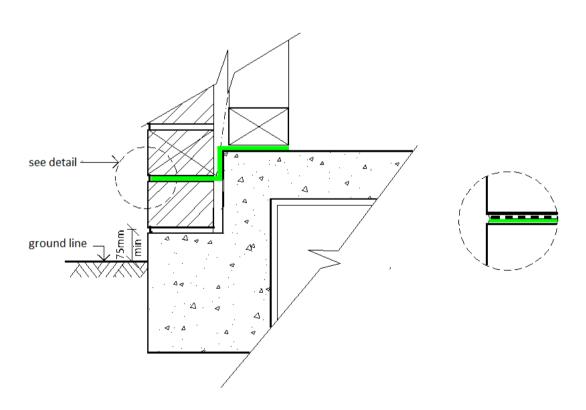


Figure 24



JH TB Render Detail

Where the external brickwork is to be rendered over, the JH TB is to be set back from the edge of the brickwork and a vee joint is to be inserted into the render at the level the JH TB. This will create an area that the subterranean termites will have to bridge round with their mud tubes.

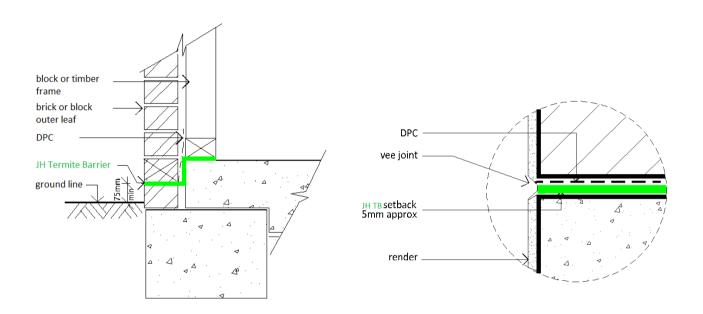


Figure 25

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JH TB Knock-out block Installation Detail

Position a 150mm wide strip of JH TB to the top of the concrete slab, cutting the JH TB from the inside at each tie down rod to allow the positioning of the strip.

Individual tie down rods may be treated with 150 x 150 mm squares of JH TB, by punching a 3mm hole in centre of the square and then sliding the square over the tie down rod ensuring that the JH TB is a tight fit around the tie rod. Tape or glue the square into position on top of the JH TB perimeter strip.

All electrical, telecommunication and plumbing services are to be treated with JH TB Collars and Tubes prior to the concrete pour. As an alternative tie down rods may be treated at this stage as well by positioning JH TB tubes around each tie down rod.

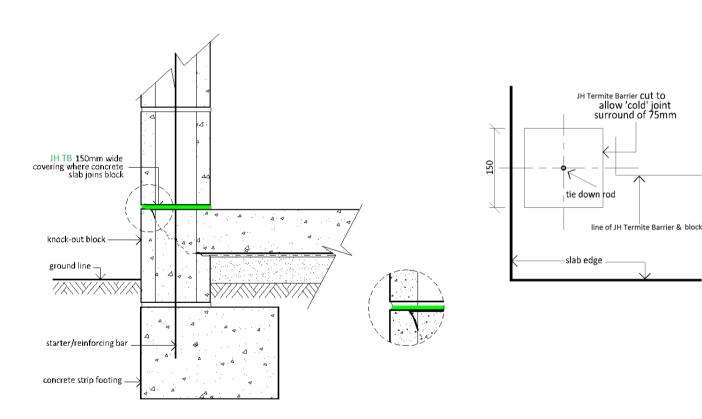


Figure 26



JH TB Brickwork Edge Detail

The JH TB may be required to be finished flush with the brickwork or set back 3-5mm where the mortar joints in the brickwork are to be of a raked finish (see below).

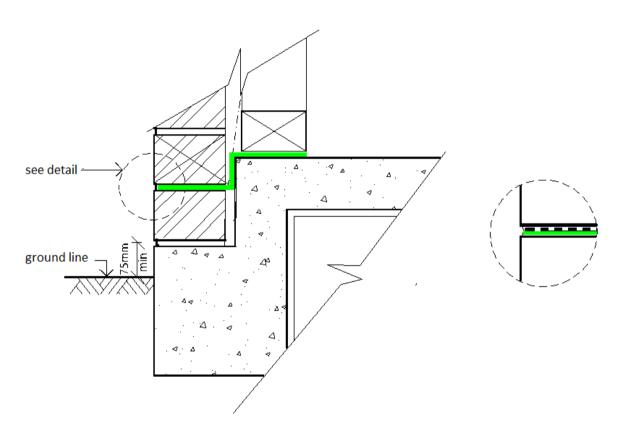


Figure 27



JH TB Full Under Slab Termite Protection & Moisture Barrier Details

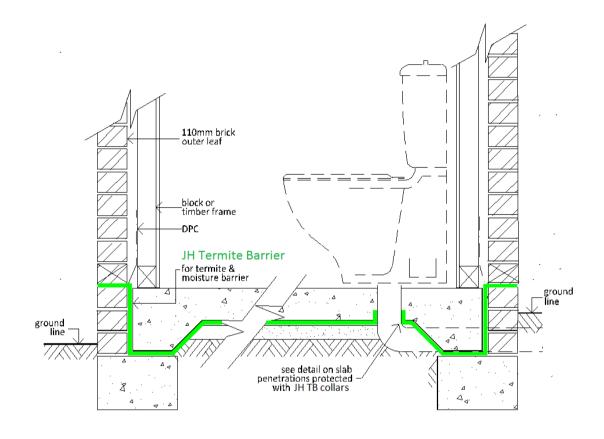


Figure 28

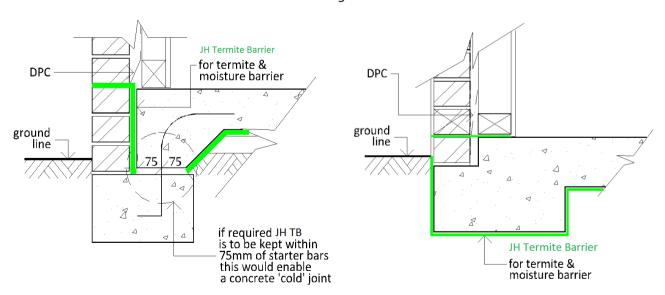
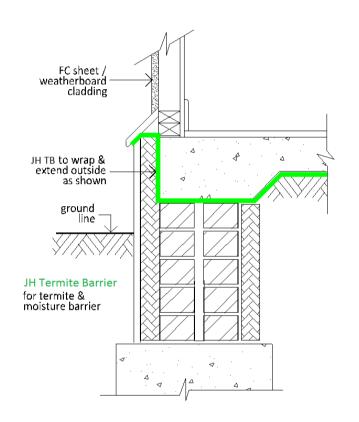


Figure 29 Figure 30



Full Under Slab Termite Protection & Moisture Barrier Details Con't



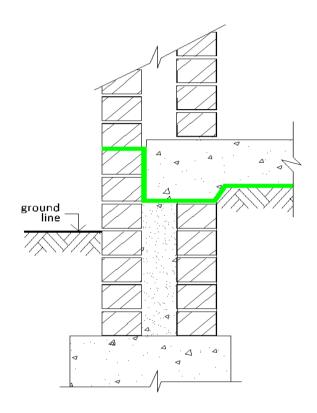


Figure 31 Figure 32



JH TB Step Downs Installation Detail

Steps downs between concrete floors need to be completely protected with JH TB

Before installing JH TB you need to clean off any excess mortar from the top layer of bricks and continue down the vertical face of the internal brickwork. This allows for JH TB to be fitted between the edges of the concrete slabs and to completely cover the bricks. A suitable length of JH TB is used on internal or external corners (if required) and is secured to the brickwork with clout nails or spray adhesive. The perimeter JH TB is then cut to shape and positioned between the internal/ external corners, overlapping the prepositioned corner pieces by 50mm and secured into position by clouts and spray adhesive.

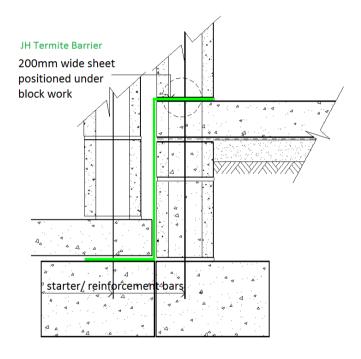


Figure 33



Figure 34







Figure 35 Figure 36





Figure 37 Figure 38



JH TB Paving, Garage / Driveway and Concrete Path Details

With installations of JH TB, where hard surfaces such as concrete, paved pathways, patios, driveways and paving exist this inspection zone may be reduced to a minimum distance of 25mm between the outer exposed edge of the termite barrier system and the top surface of the concrete or paving a 25mm distance is considered adequate to allow for identification of termite mud-tubes by those trained to do so. This is particularly important where the reduced step-downs in doorways and windows occur.

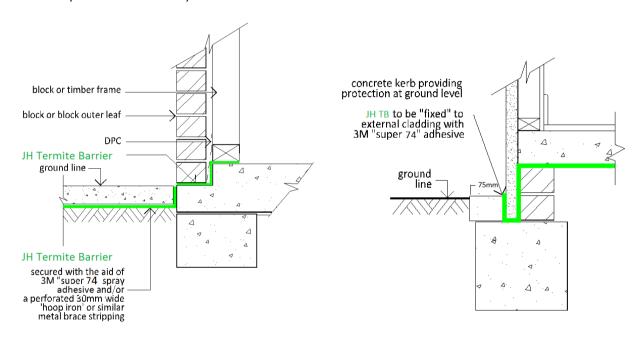


Figure 39 Figure 40

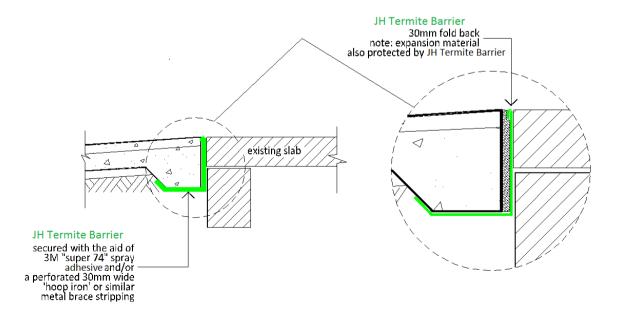


Figure 41

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JH TB Retaining Wall Installation Details

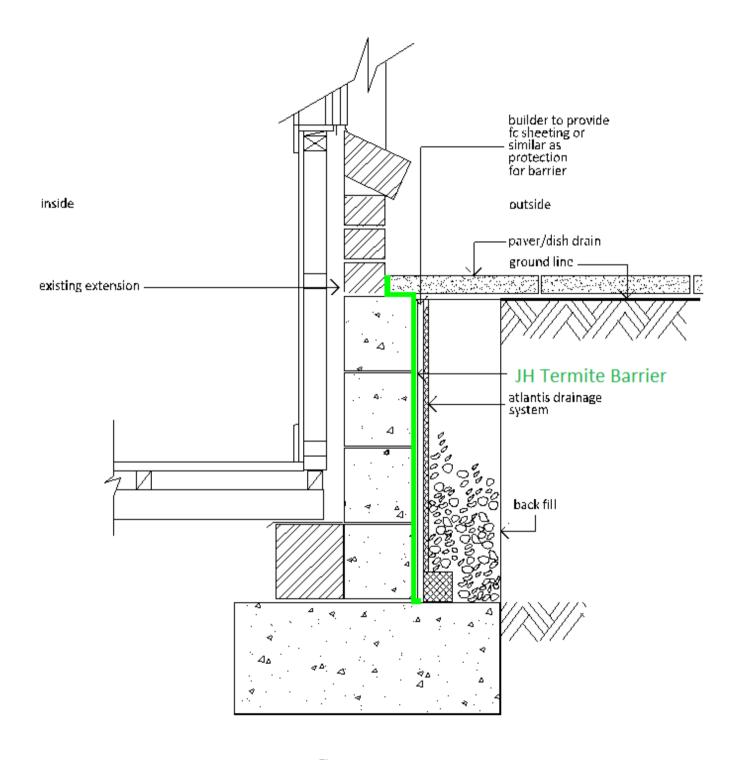


Figure 42



Retaining Walls Cont.

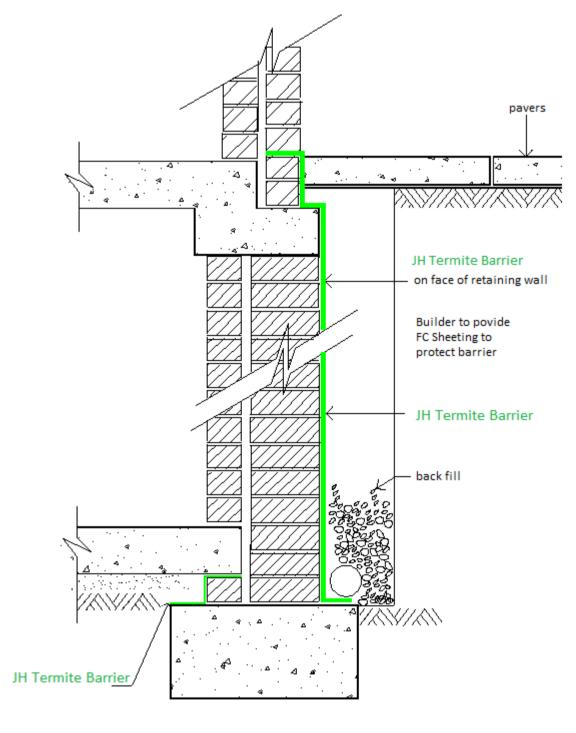


Figure 43



Retaining Walls Cont.

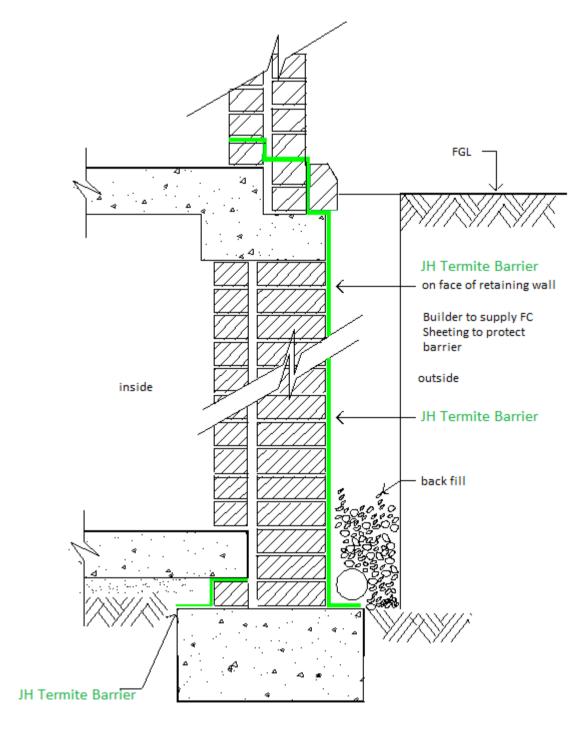


Figure 44

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Retaining Walls Cont.

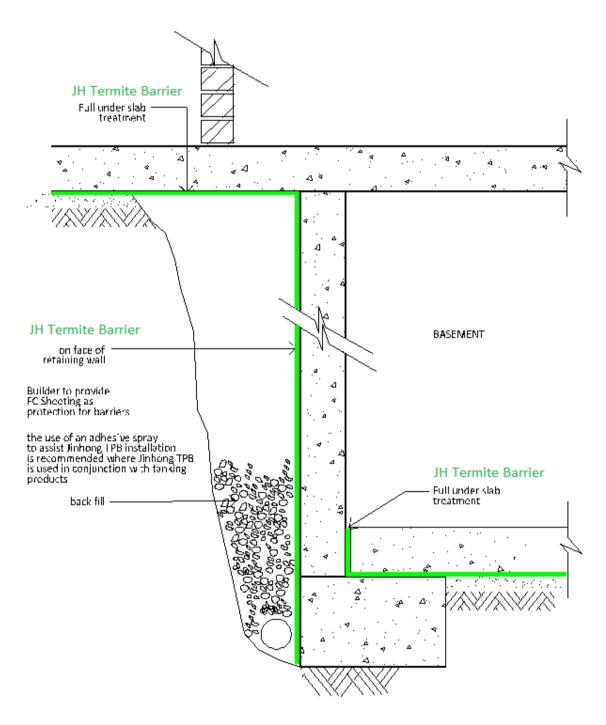


Figure 45

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Retaining Walls Cont.

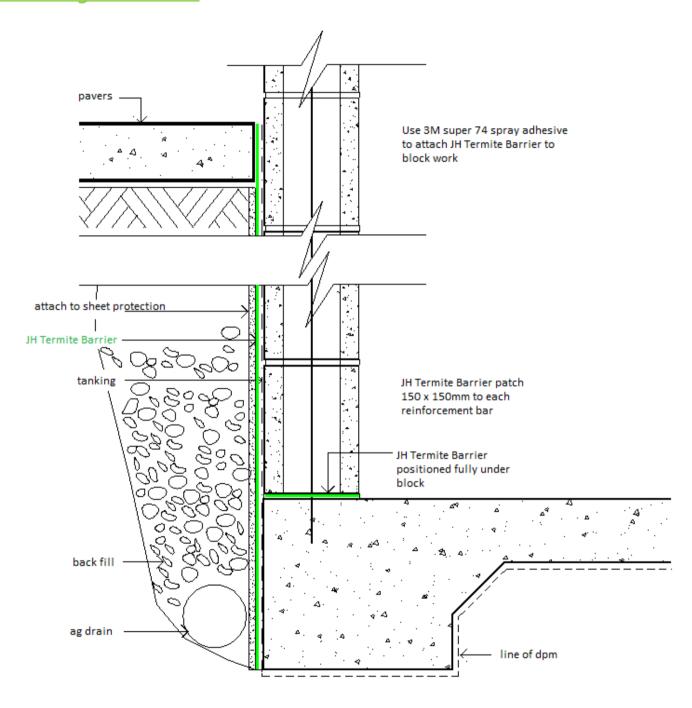


Figure 46



Retaining Walls Cont.

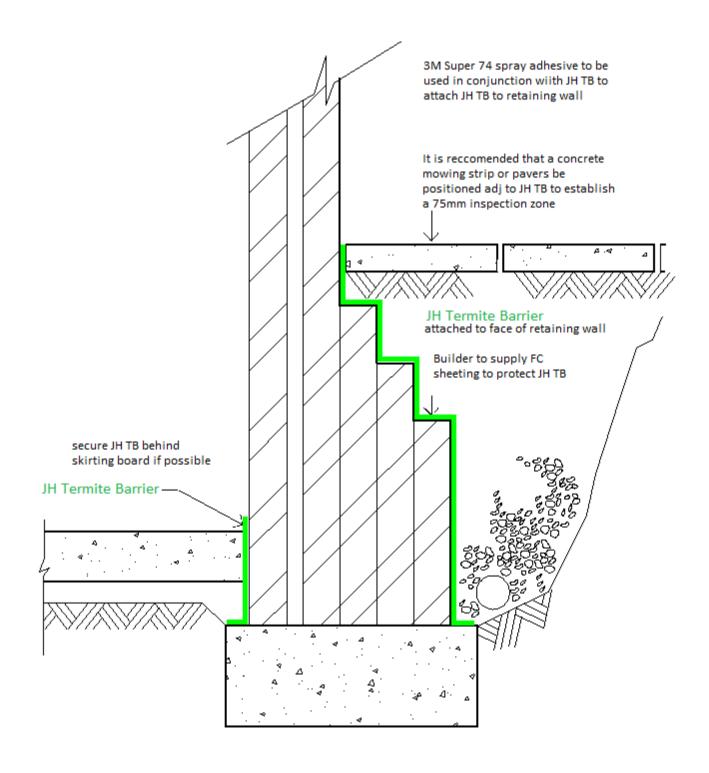


Figure 47



JH TB Retaining Walls Cont.

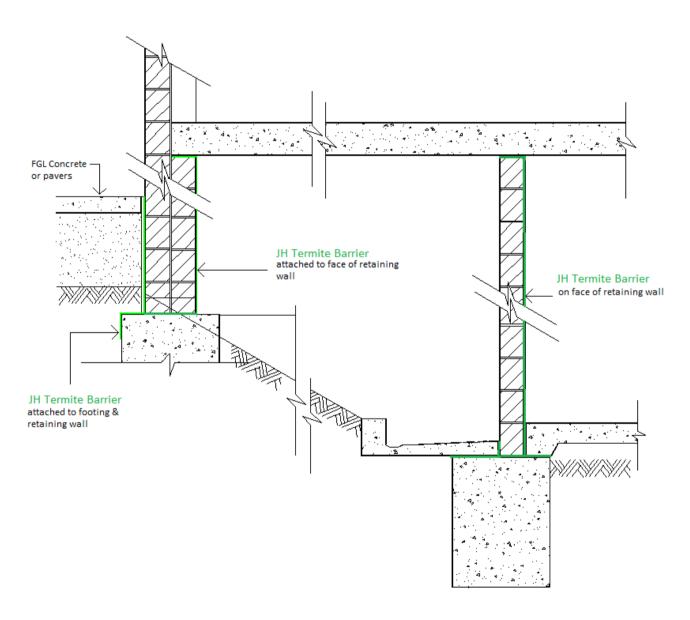


Figure 48



JH TB Zero Building Alignment Installation Details

Where zero building alignment is require JH TB may be used to protect the new building from termite infestation coming from the existing building. This will require the permission of the existing building owner to allow the existing building being sheeted with 1500mm sheets of JH TB, it will be required to overlap the sheet by 50mm and glue the overlapped sheets with 3M spray adhesive. Galvanized hoop iron and concrete nails may also be used to fasten the JH TB to the existing building or 3M spray adhesive.

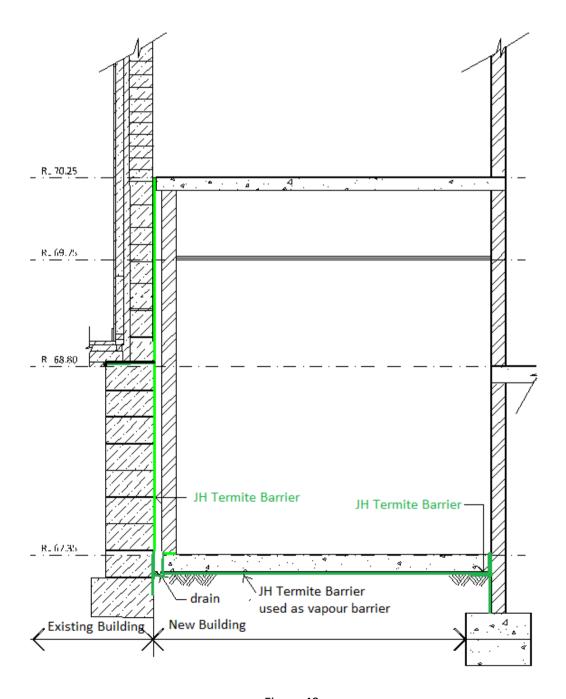


Figure 49



Zero Building Alignment Con't

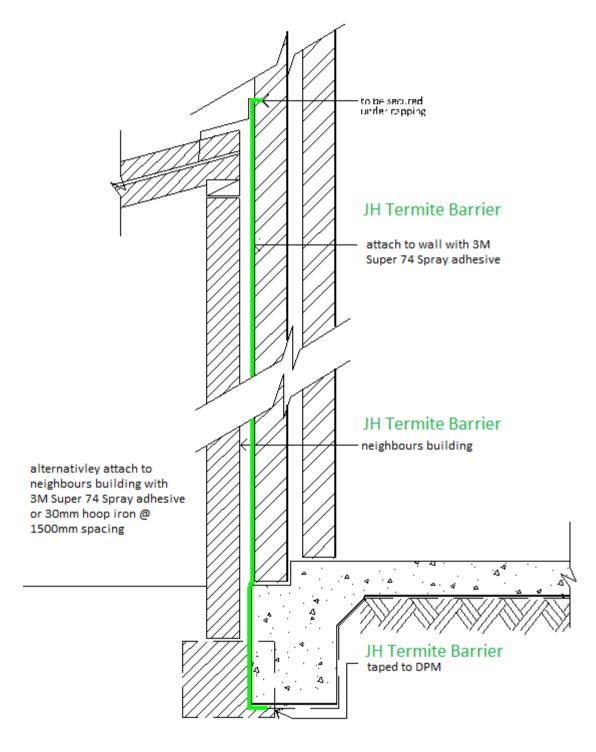


Figure 50



Zero Building Alignement Con't

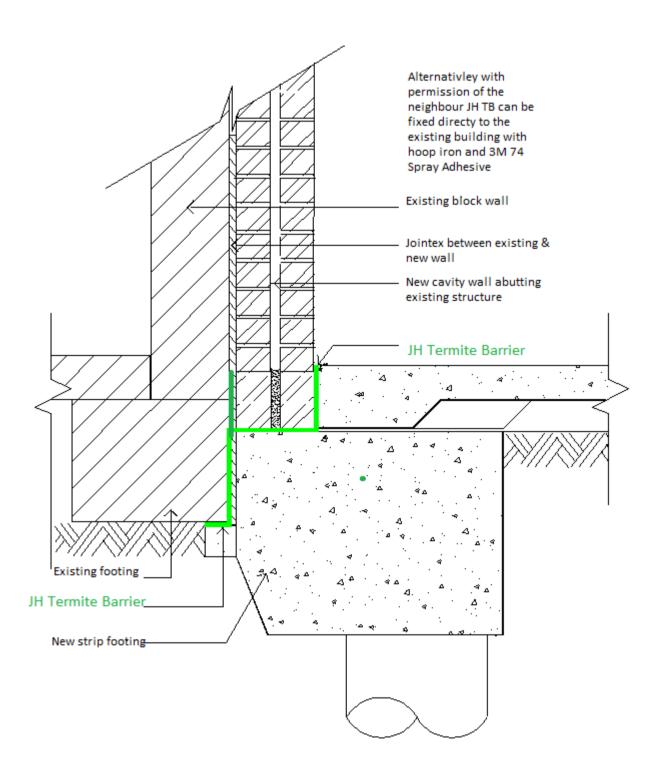
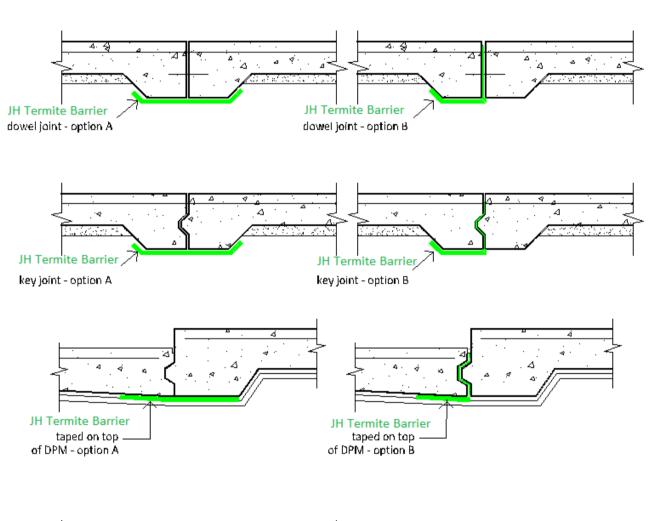


Figure 51



JH TB Construction Joint Installation Details

Strips of JH TB are to be positioned and taped to the moisture barrier or fastened to the vertical face with 3M adhesive spray for the full length of the concrete joint to be treated. It is recommended that the JH TB extends past the extremeties of the concrete joint being treated to allow its conection to the JH TB perimeter sheet.



JH Termite Barrier saw joint

Figure 52



JH TB Infill Slab / Using brickwork as formwork Installation Detail

Install JH TB to top and internal face of brickwork ensuring that the JH TB sheet laps onto the concrete footing, fasten the JH TB sheet into place by using concrete clouts into the mortar joints or 3M spray adhesive. The 50mm overlapping joins are to be secured with 3M spray adhesive and cloth tape.

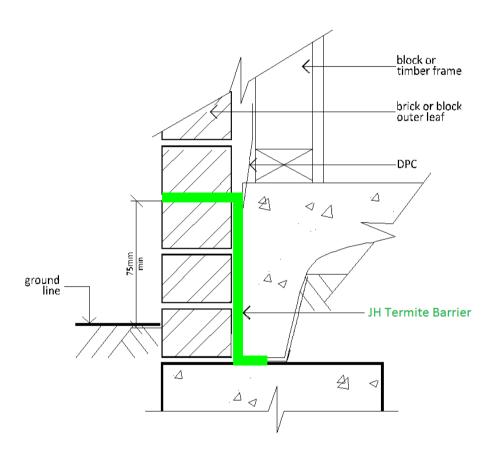


Figure 53



JH TB Commercial Installation Details

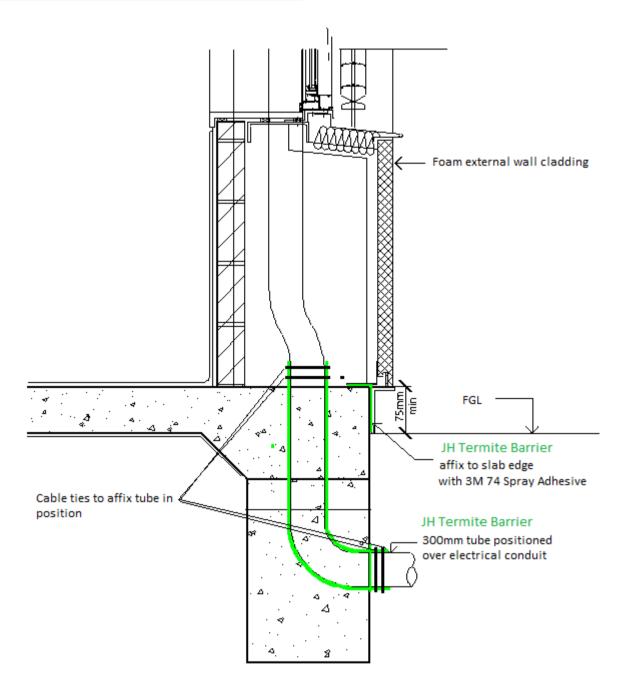


Figure 54



Commercial Installation Details Cont.

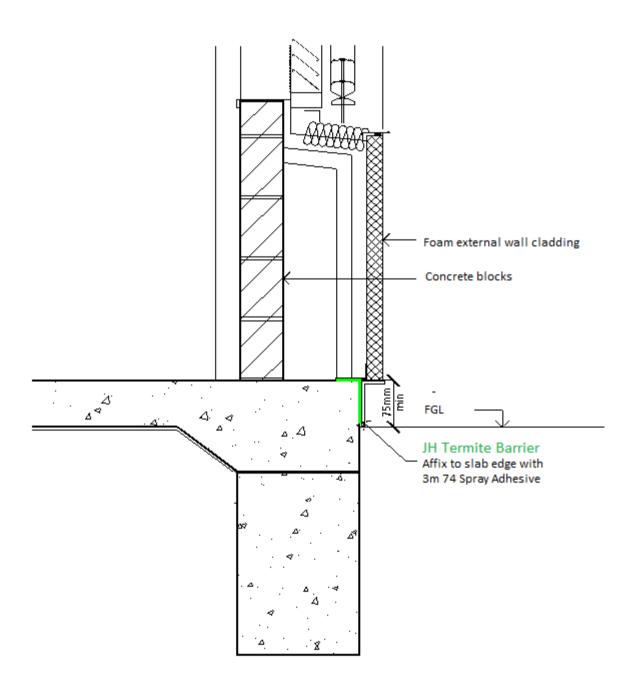


Figure 55

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Commercial Installation Details Cont.

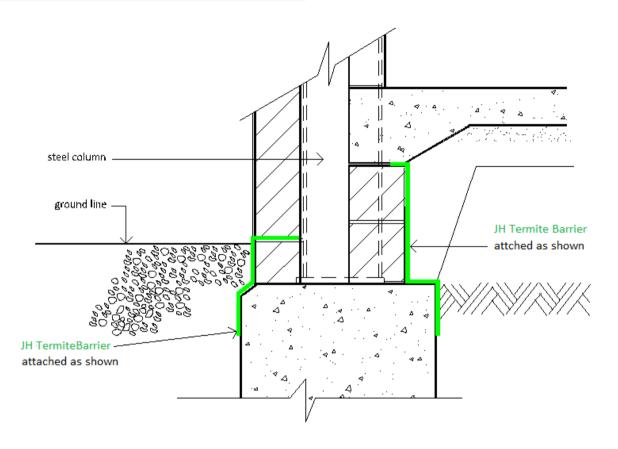


Figure 56

Plan View

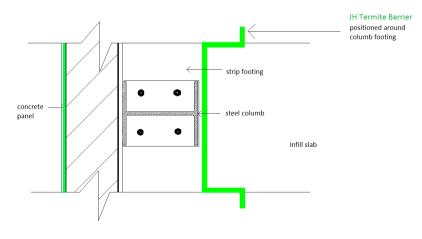
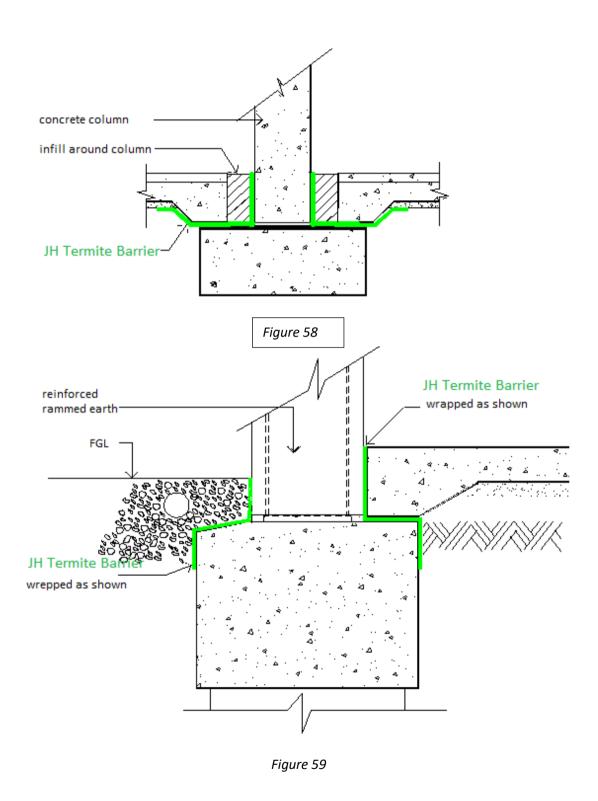


Figure 57

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JH TB Commercial Installations Details Cont.



Page **43** of **67**

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JH TB Commercial Installation Details Cont.

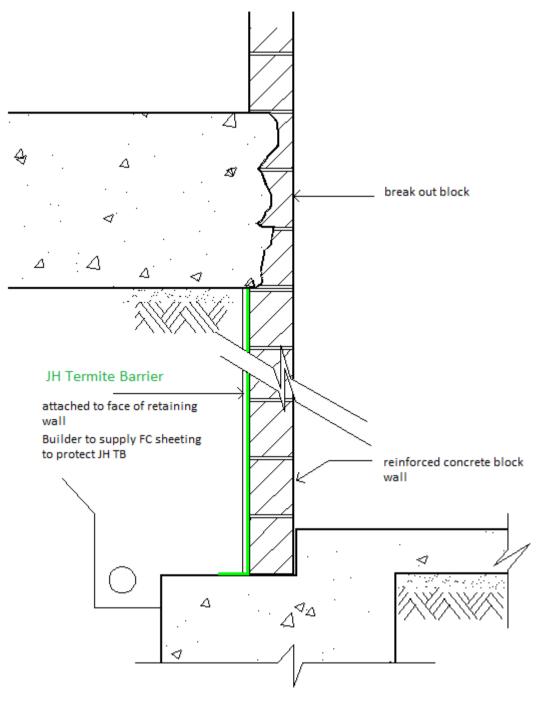


Figure 60



JH TB Commercial Installation Details Cont.

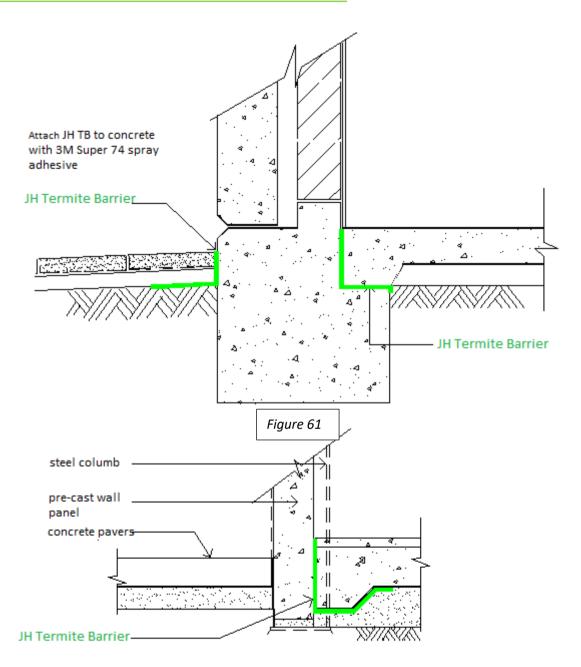


Figure 62



JH TB Commercial Installation Details Cont.

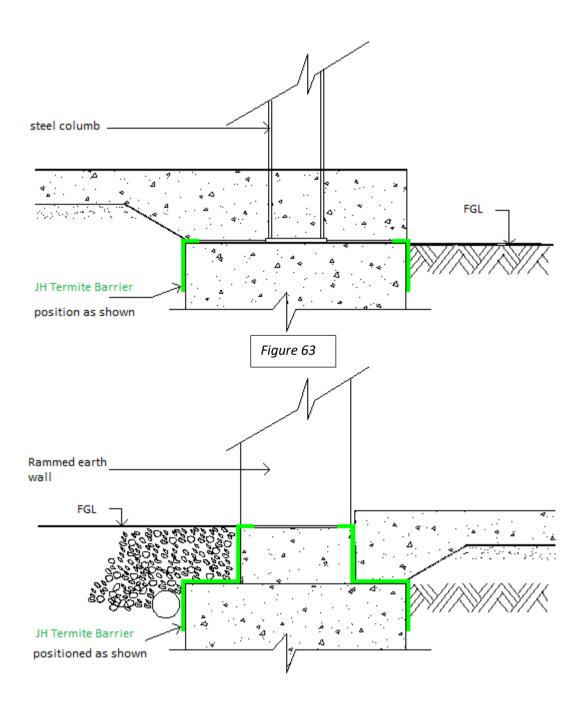


Figure 64



JH TB Hebel Installation Details

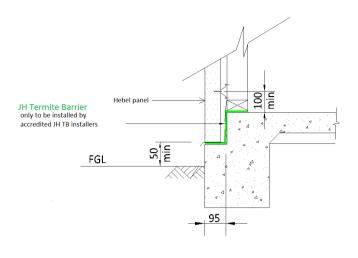


Figure 65

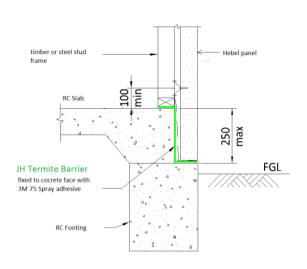


Figure 66

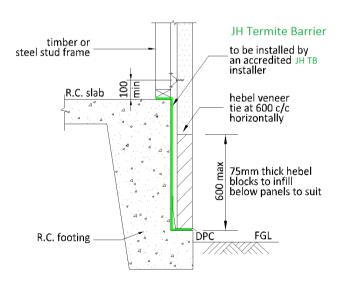


Figure 67

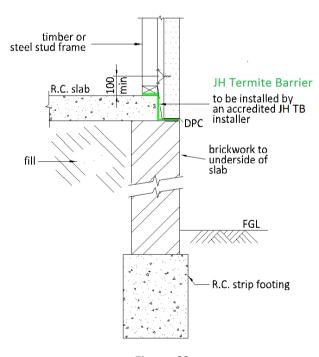


Figure 68

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JH TB Hebel Installation Details Cont.

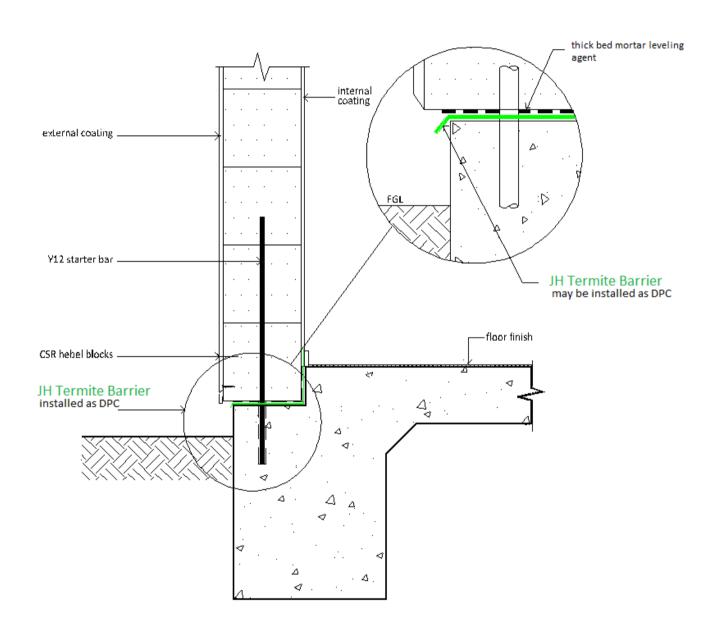


Figure 69

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JH TB Hebel Installation Details Cont.

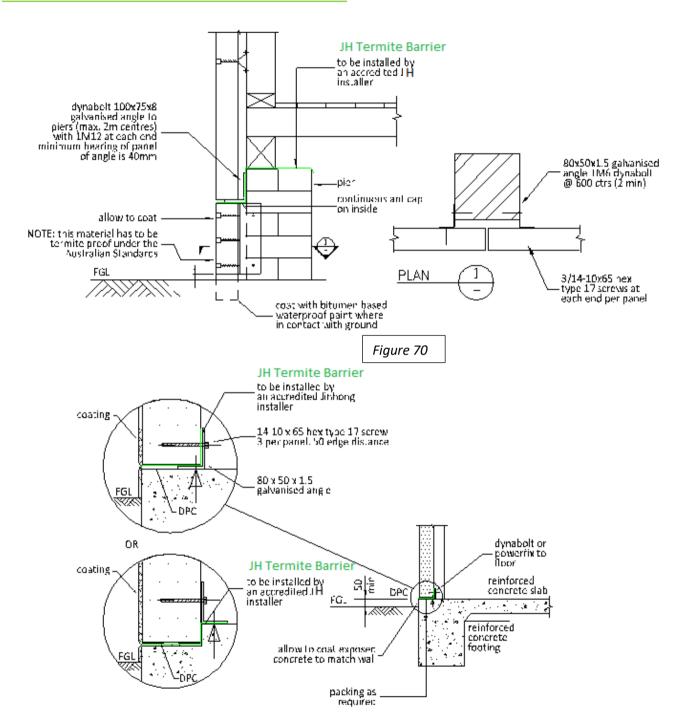
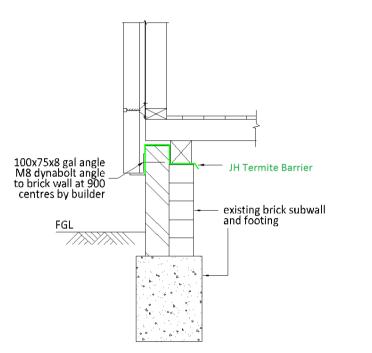


Figure 71

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JH TB Hebel Installation Details Cont.



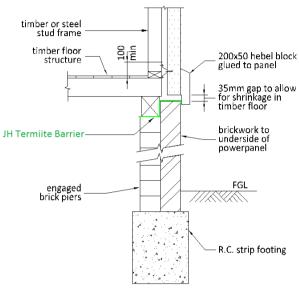


Figure 72 Figure 73

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JH TB Bearer & Joist Installation Details

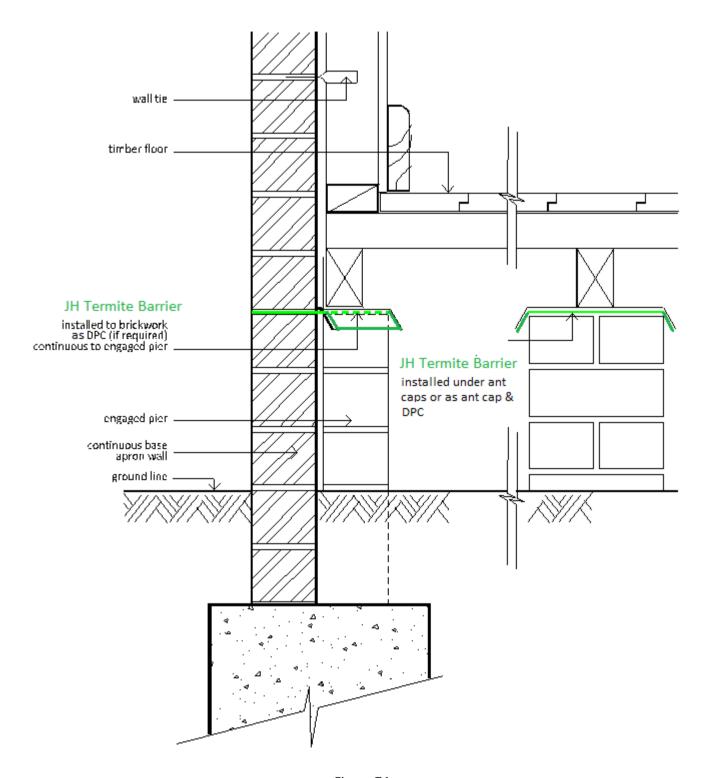


Figure 74

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Figure 75



Figure 77



Figure 79



Figure 76



Figure 78



Figure 80



JH TB Renovation Slab Installation Details / Zero entry door detail

JH TB strip used as replacement expansion material for deteriorated construction joint caulking. The use of the JH TB will still allow concrete slab movement as well as stopping the ingress of subterranean termites.

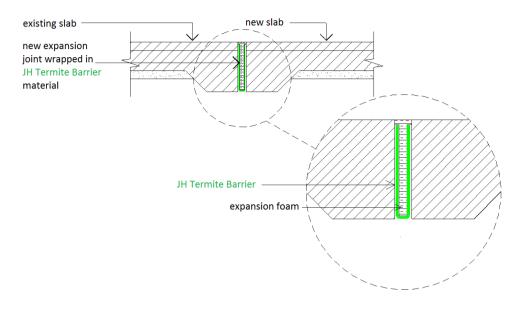


Figure 81

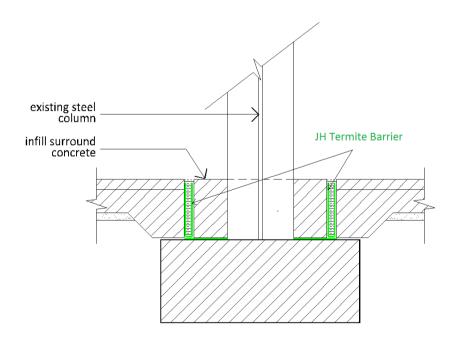
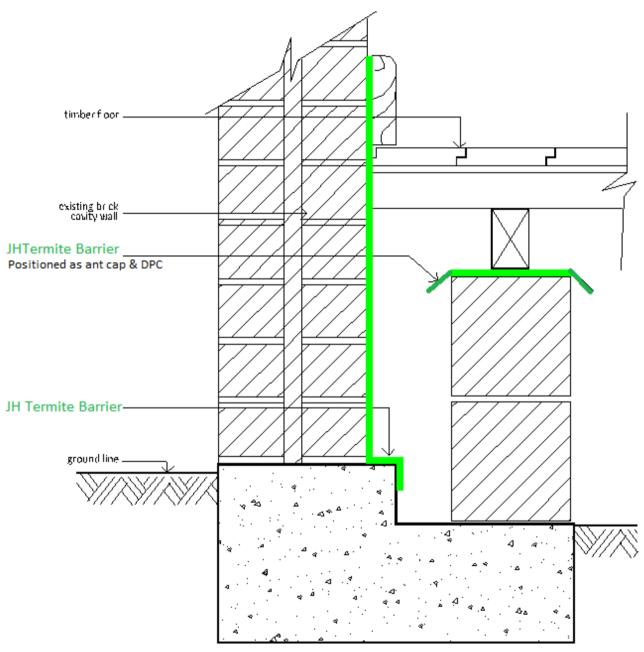


Figure 82

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JH TB Renovation Bearer & Joist (Timber Replacement Detail)



Note: before any new work commences it is a condition or Australian building standards to have completed a termite inspection of the existing structure

Figure 83



JH TB Renovation (Replacement Timber Floor) Installation Detail

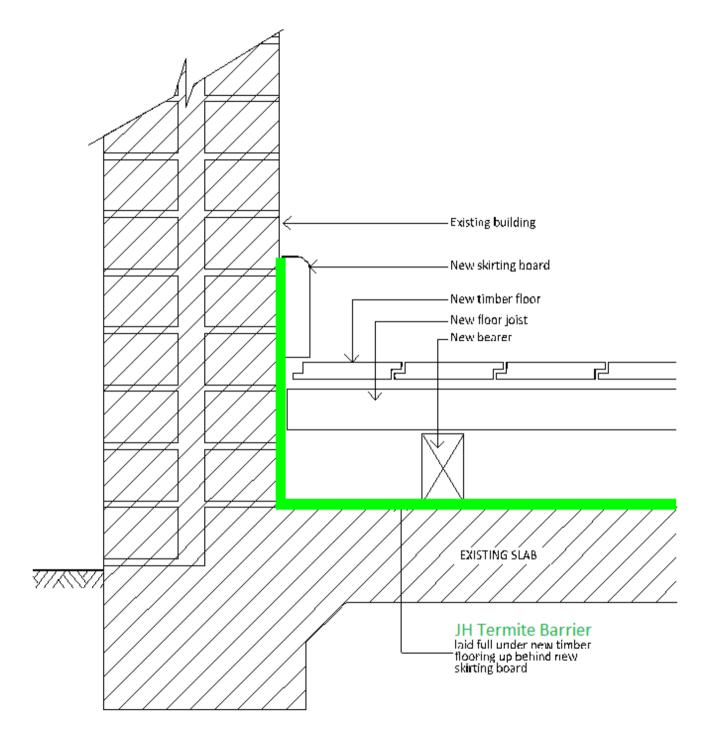


Figure 84

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JH TB Renovation Floating Floor Installation Detail

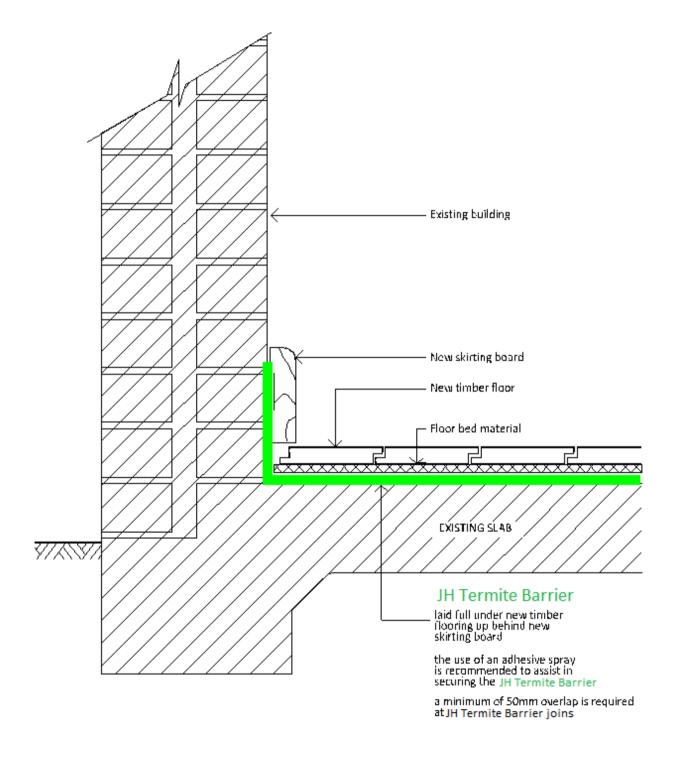


Figure 84

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JH TB Door Sill Installation Details

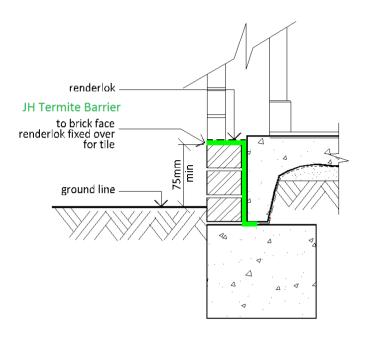


Figure 85

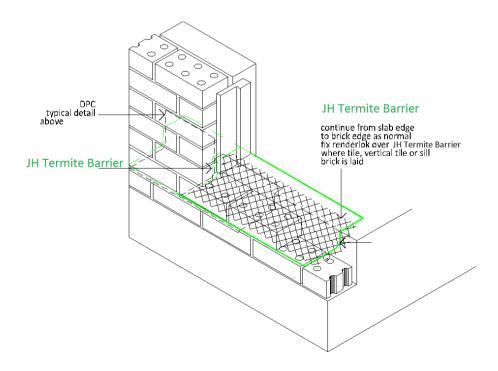


Figure 86

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Figure 87

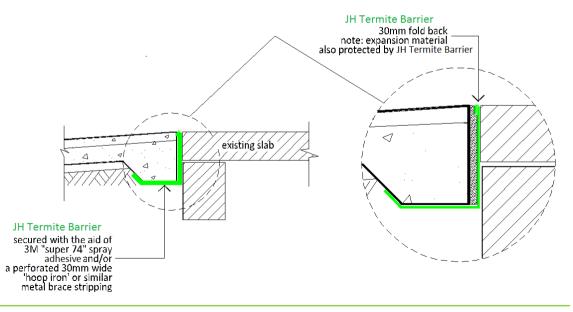
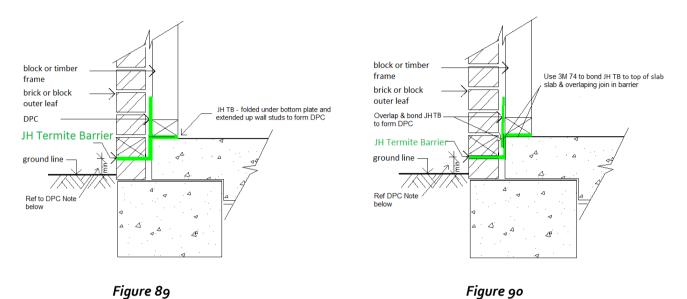


Figure 88

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JH TB / DPC Installation Detail



NOTE

When JH TB is to be used as a DPC the following AS 4773.1 -2010 Claus 14.8.2 is to be implemented

14.8.2 Damp-proof courses

Damp-proof courses (DPCs) shall be provided to protect all masonry against rising ground water. The DPC shall be placed as low as possible in the wall and in no case higher than the finished floor level.

The position of the DPC shall be not less than -

- (a) 150 mm above the adjacent finished ground level;
- (b) 100 mm above sandy well-drained areas that extend to the full depth of the footing system;
- (c) 75 mm above the finished paved or concreted area; or
- (d) 50 mm above finished paved or concreted area and protected from the direct effect of the weather by a carport, veranda or similar structures.

Note: Cavity flashing can also act as a DPC to prevent the upward or downward passage of moisture within masonry.

NOTE: Due to wide ranging construction methods in the building industry, not all installation details are able to be covered in the JH TB installation manual, for any variations in construction methods not found in the JH TB installation manual, contact the manufacturer for technical advice.



Recommended Equipment

- Cutting Tool / sharp cutting knife, for cutting JH TB.
- Wiltshire Stay-Sharp Scissors (or similar).
- 3M 8979 Performance Plus Duct Tape (preferred) or Tessa 4688 Black Cloth Tape for joins.
- 3M Scotch-Weld Non-Flammable Foam Fast 74 NF Spray Adhesive or Tensor Grip C40 Pressure Sensitive Spray Adhesive (preferred) (or similar).
- Cable Ties (approx. 400mm & 100mm) for sealing JH TB Collars and wraps to pipe penetrations.
- Builders square (to assist with the accurate measuring & cutting of the JH TB)
- Hammer and concrete clout nails (20mm).
- Nail Gun (recommended) with 15-20mm nails.
- Tape Measure for accurate measurements.
- Measure Wheel.
- Bolster (to clean down brickwork)
- Course bristle & banisters brush to clean concrete.
- Rubber gloves for handling products (if installer has any adverse reaction to Deltamethrin.- ref to product SDS)
- PPE to satisfy OHS requirements.

Paperwork / Warranty Process

The JH TB Authorised Operator:

- 1. Installs JH TB as detailed in the JH Termite Barrier Installation Manual.
- 2. Arranges for placement of 'NCC 2019 Durable Notice' in Electrical Meter Box and inside cupboard door in kitchen BCA requirement for (QLD).
- 3. Completes the Part A & B Site Installation / Certificate of Compliance Report, along with JH TB site installation diagram...
- 4. Provides the builder/property owner with JH TB 50-year Warranty Information: Certificate of Installation / Compliance Report / Warranty Activation Form



JH TB Site Installation Report / Certificate of Compliance

H Termite Barrier (TB) * Installation Report No.: * Accredited Installers Name: * Accredited Installers JH TB Number:				vom	JH Envirtech Pty Ltd ABN 36 163 906 241 Certificate of Installation / Compliance Physical Termite Barrier AS 3660.1 2014 Ph: 0427979790 NOTE: Annual inspections required / Ref T&C Pt 3			
Pest Controllers I								
				ed to JH Envirte	ech PTY L	TD by the end of o		th.
. Accredited Installation Company Details:					Mobile: Phone:			
Name:	ad.			City		STATE Pho	ne: Post Co	ode
Address: Stre Date of Installati				City				
Address of prop		ne protected f	rom term	ites:				
Address: Stre		oc protected i		City		STATE	Post	Code
Builder's Name				•		Contact N	umber:	
Property Owner		e:				Contact N	umber:	
Property Owner			ct Addres	s (if known):				
Address: Stre				City		STATE	Post	Code
Name of Counc	il Area	which proper	ty is with	in:				
Installation type		Pre	or Post		ion / Full	or Partial JH To	ermite Bar	rier treatment
PENETRATIO	NS [□ PVC ×		Elect. ×	Phone >	× Wat	er ×	Total:
Batch Num	bers:							In
PERIMETER	10	JH TB	L/m	Ret Wall	m^2	Step Down	L/m	☐ Piers ×
	- 11			1		1 (c. 1876) lā		
Batch Num	bers:			-				
OTHER:		v to be prote	cted. prer		nstallation F		Number:	NO
OTHER: Has the site/job. Signature of JH Signature of Ov	/propert	taller: Builder:		pared to JH TB II		Requirements: I	ES	NO vate:
OTHER: Has the site/job. Signature of JH	/propert	taller: Builder:		pared to JH TB II		Requirements: I	ES	eate:
OTHER: Has the site/job. Signature of JH Signature of Ov	/propert	taller: Builder:		pared to JH TB II		Requirements: I	ES	eate:
Has the site/job. Signature of JH Signature of Ov D. Draw plan view LEGEND:	/propert	taller: Builder: r installation		pared to JH TB II		Requirements: I	ES	eate:
Has the site/job. Signature of JH Signature of Ov D. Draw plan view LEGEND: PVC \\\ Elect.	/propert TB Ins wner or of your Perime Piers	taller: Builder: r installation ter		pared to JH TB II		Requirements: I	ES	eate:
Has the site/job. Signature of JH Signature of Ov D. Draw plan view LEGEND: PVC \\\ Elect. \\ WWater \\	/propert TB Ins wner or of your Perime Piers No Barr	taller: Builder: r installation ter		pared to JH TB II		Requirements: I	ES	eate:
Has the site/job. Signature of JH Signature of Ov D. Draw plan view LEGEND: PVC \\\ Elect. \\ WWater \\	/propert TB Ins wner or of your Perime Piers No Barr	taller: Builder: r installation ter		pared to JH TB II		Requirements: I	ES	eate:
Has the site/job. Signature of JH Signature of Ov D. Draw plan view LEGEND: PVC \\\ Elect. \\ WWater \\	/propert TB Ins wner or of your Perime Piers No Barr	taller: Builder: r installation ter		pared to JH TB II		Requirements: I	ES	eate:
Has the site/job. Signature of JH Signature of Ov D. Draw plan view LEGEND: PVC \\\ Elect. \\ WWater \\	/propert TB Ins wner or of your Perime Piers No Barr	taller: Builder: r installation ter		pared to JH TB II		Requirements: I	ES	eate:
Has the site/job. Signature of JH Signature of Ov D. Draw plan view LEGEND: PVC \\\ Elect. \\ WWater \\	/propert TB Ins wner or of your Perime Piers No Barr	taller: Builder: r installation ter		pared to JH TB II		Requirements: I	ES	eate:
Has the site/job. Signature of JH Signature of Ov D. Draw plan view LEGEND: PVC \\\ Elect. \\ WWater \\	/propert TB Ins wner or of your Perime Piers No Barr	taller: Builder: r installation ter		pared to JH TB II		Requirements: I	ES	eate:
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Has the site/job. Signature of JH Signature of Ov D. Draw plan view LEGEND: PVC \\\ Elect. \\ WWater \\	/propert TB Ins wner or of your Perime Piers No Barr	taller: Builder: r installation ter		pared to JH TB II		Requirements: I	ES	eate:
Has the site/job. Signature of JH Signature of Ov D. Draw plan view LEGEND: PVC \\\ Elect. \\ WWater \\	/propert TB Ins wner or of your Perime Piers No Barr	taller: Builder: r installation ter		pared to JH TB II		Requirements: I	ES	eate:



JH TB Terms & Conditions

Terms and Conditions

DISCLAIMER OF LIABILITY TO THIRD PARTIES:- This Certificate is made solely for the benefit of the owner/builder named on the face of this Certificate and no liability or responsibility whatsoever is accepted to any third party who may rely on the Certificate either wholly or in part. Any third party acting or relying on this Certificate whether in whole or in part does so at their own risk.

- This JH Termite Barrier (TB) is dependent upon the provision of a complete JH TB physical termite barrier around the structure(s). If this JH TB is in any way disturbed, then entry by subterranean termites is possible.
- It is the responsibility of the builder to ensure that the site is properly prepared in accordance with the Australian Standard AS 3660.1.2014 before the JH TB is installed.
- 3. The Australian Standard AS 3660 strongly recommends inspections at intervals not exceeding 12 months. Where the termite risk is high, or the building type is susceptible to termite attack, more frequent inspections (3-6 months) should be undertaken. Termites can still build around physical barriers, but they can then be detected more readily during routine inspections by an expert in termite management.
- 4. This treatment only applies to the protection of the structure(s) as detailed on the face of this Certificate against attack by subterranean termites. It does not provide for protection against any other pest/s. In particular it does not provide any protection against "dry wood termites", FAMILY: KALOTERMITIDAE.
- 5. This JH Termite Barrier can be rendered ineffective due to building alterations, renovations, additions (including pergolas, awnings, veranda's etc; introducing infested materials, off cuts and formwork left on site, materials stored against the building, disturbing external gardens pathways, etc adjacent to the areas protected and through establishing lawns and/or garden beds adjacent to the protected areas. (Such changes to the property are likely to breach or bridge the termite barrier). Where such changes occur further protection is essential. Precautions must be taken to ensure that the JH Termite Barrier is not damaged in any way.
- 6. With a concrete slab on ground structure, it is important that the edge of the slab remains exposed and is not covered up by garden materials, e.g. soil, pine bark or similar. Air vents or weep holes must never be blocked.
- 7. Do not use untreated timbers for garden beds or retaining walls as they may attract termites. Increased moisture or poor ventilation will also provide conditions for increased risk of termite attack.
- 8. In the event of any controversy or claim arising out of, or relating to the Certificate, it will be settled by arbitrations in accordance with the rules of the Institute of Arbitrators Australia. Any judgements from such arbitration shall be binding upon both parties.

IMPORTANT: If you become aware of any breaches to the JH Termite Barrier or changes to the building structure, such as those detailed above, you should immediately contact the Pest Management Firm who installed your JH Termite Barrier.

It is your responsibility to ensure that the inspections, strongly recommended by the Australian Standard AS 3660, are performed. Please contact you JH TB installer for further details.

VERY IMPORTANT INFORMATION: The Australian Standard AS 3660 Termite Management provides details for minimising the risks to buildings from termite attack, and methods for treatment to control termite infestations. The provision of a complete termite barrier will impede and discourage termite entry into buildings. It cannot prevent termite attack. Termites can still bridge or breach barriers but they can be detected more readily during routine inspections.



JH TB Termite Protection Notice (Durable Notice)

JH Termite Barrier (TB)

Address Suite 40, L2, 89-92 Jones Street, Ultimo, NSW 2007 Phone: 0450 622 882

JH TB PROTECTION NOTICE

IMPORTANT

This Building has the JH TB system installed. JH TB complies with AS 3660.1.2014 & Termite Barrier NCC 2019 BCA Volume One 2019 (NT B1.4(i)-(ii)) (durable notice). JH Envirtech P/L warrants the product providing the installation is carried out by an accredited Pest Controller trained by JH Envirtech P/L

YES / NO

PERIMETER CAVITY TREATED

PENETRATIONS TREATED	YES / NO
FULL UNDER SLAB TREATED	YES / NO
DATE APPLIED / INSTALLED	
INSTALLER	
COMPANY NAME	
CONTACT PH NUMBERS	

CAUTION – Disturbance by others after date of installation could render the JH TB VOID. If in doubt please contact the JH TB Installer above or contact JH Envitech office 0295642199 Ensure the barrier is 75mm min above gardens and 25mm above paths.

NOTE – It is the building OWNER'S responsibility to arrange visual inspections by an expert in Pest Control management at ANNUAL intervals to check for possible ingress of Subterranean TERMITES. $ABN-36\ 163\ 906\ 241$



JH TB Training Assessment

Applicants Name						
Company Name						
Company Address						
Office Phone						
Fax						
Mobile						
Email						
Web Site	www					
Theoretical Asse	essment Q.1					
Question 1.1	To become an Accredited JH TB Installer are the following documents required and copies of each document supplied to JH Envirtech?					
	 a) Pest Control Licence (current) b) Professional Indemnity Insurance c) Public Liability Insurance 	(Yes / No) (Yes / No) (Yes / No)				
Question 1.2	Does the installer require the following from the builder / home owner before the positioning of the JH TB takes place.					
	 a) All through slab penetrations are in their final position b) All ground works are correctly prepared & vapour barrier positioned c) Has a sound understanding of the JH TB installation system d) To contact the JH TB Installer if Barrier is compromised after installation 					
	 e) Establish where all FGL's / Paths / Driveways / Garden Beds / Retaining Wa f) Understands the Terms & Conditions of the JH TB Warranty g) Understands requirements of AS 3660 Termite management h) Concrete slab meets AS 2870-2011 Residential slabs & footings i) Has sound understanding of the required inspection zones 	(Yes / No) (Yes / No) (Yes / No) (Yes / No) (Yes / No)				
Question 1.3	Is the JH TB Installer / Company required to have a sound understanding of the following and able to complete the following paperwork?					
	 a) JH TB Installation Manual b) JH TB use as a DPC as per AS 4773.1 -2010 Claus 14.8.2 c) JH TB Site Installation / Certificate of Conformity Report d) JH TB Termite Protection Notice (Meter box sticker) e) Form 16 (BCA QLD Requirement) Only 	(Yes / No) (Yes / No) (Yes / No) (Yes / No) (Yes / No)				



Practical Assessment Q.2

NOTE:		Does the JH TB Installer have a sound understanding of the following installation process outlined in the JH TB Installation Manual?						
Question 2.1		JH TB Collars / Wrapping of Pipes with Sheet - (Through slab collar sizing and installation requirements for);						
		 a) Plumbing waste / water p b) Electrical / Gas / Telecom c) Available Collar sizes 6 on d) Multiple Penetrations (in 	munication / Tie Down B nm, 120mm, & sheet wra	•	(Yes / No) (Yes / No) (Yes / No) (Yes / No)			
Question 2.2		JH TB Full Under-slab treatment.						
		a) Is JH TB able to be used fb) Does JH TB require a 5onc) Do JH TB over-laps require	(Yes / No) (Yes / No) (Yes / No)					
Question 2.3		JH TB Perimeter Treatment						
		a) Does JH TB require correb) Is the JH TB Installer requ	(Yes / No)					
		 b) Is the JH TB Installer require to establish the external wall finish of the Building with the builder to establish the positioning of the JH TB c) Does JH TB require a 50mm overlap at all joins at internal & external 						
		Corners. (Yes d) What are the minimum heights the JH TB should be positioned above; circle corn height.						
		Garden Beds Normal Finished Ground Paved Areas Doorways Concrete Paths Access Ramps	25mm or 75mm 25mm or 75mm 25mm or 75mm 25mm or 75mm 25mm or 75mm					
Question 2.4		Are the following (areas for special attention) when installing JH TB						
		 a) Retaining walls b) Internal wall step-downs c) Construction Joints d) Garage Door Openings (ve) e) Doorways f) Access Ramps / Paths / D 	•		(Yes / No) (Yes / No) (Yes / No) (Yes / No) (Yes / No) (Yes / No)			
Applicants	Name		JH TB Trainers	Name				
	Signature			Signature				
	Date	//		Date/				



JH PVC Hard Collar

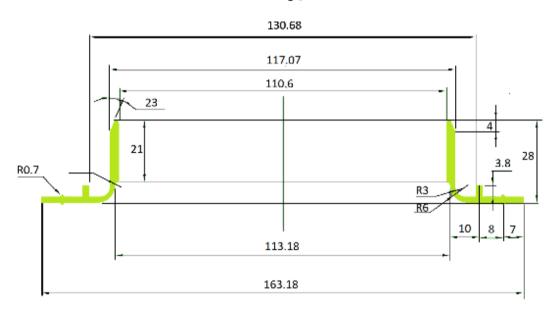
PVC – Plastic Collar meet the requirements AS 3660.1.2014 and AS3660.3.2014, having a minimum thickness of 1 mm and a minimum annular width of 15 mm and minimum height against the pipe or service of 20 mm as well as a minimum hardness Shore D 80 (instantaneous).

AS 3660.1.2014 / Section 3 - 3.2 (f) / Section 5 - 5.2 (g), Section 5 - 5.3.6

AS 3660.3.2014 / Section 7 - 7.5

To be installed as depicted in Figure 91 & 92 prior to concrete pour.

Fig 91 (below)



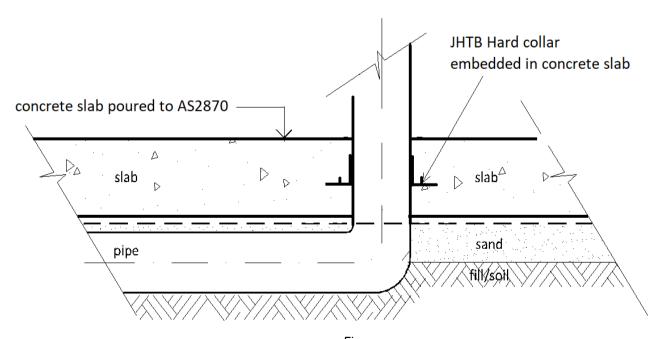


Fig 92

JH TB Internal and External – Pre-formed Corners

Install Internal & External Corners with glue and nails, position perimeter runs through to installed corners allowing for 50mm overlaps / gluing and taping at all joins.







Figure 94

To request more information regarding JH Termite Barrier:

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