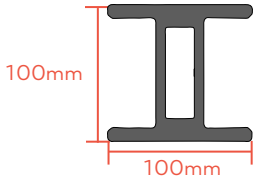
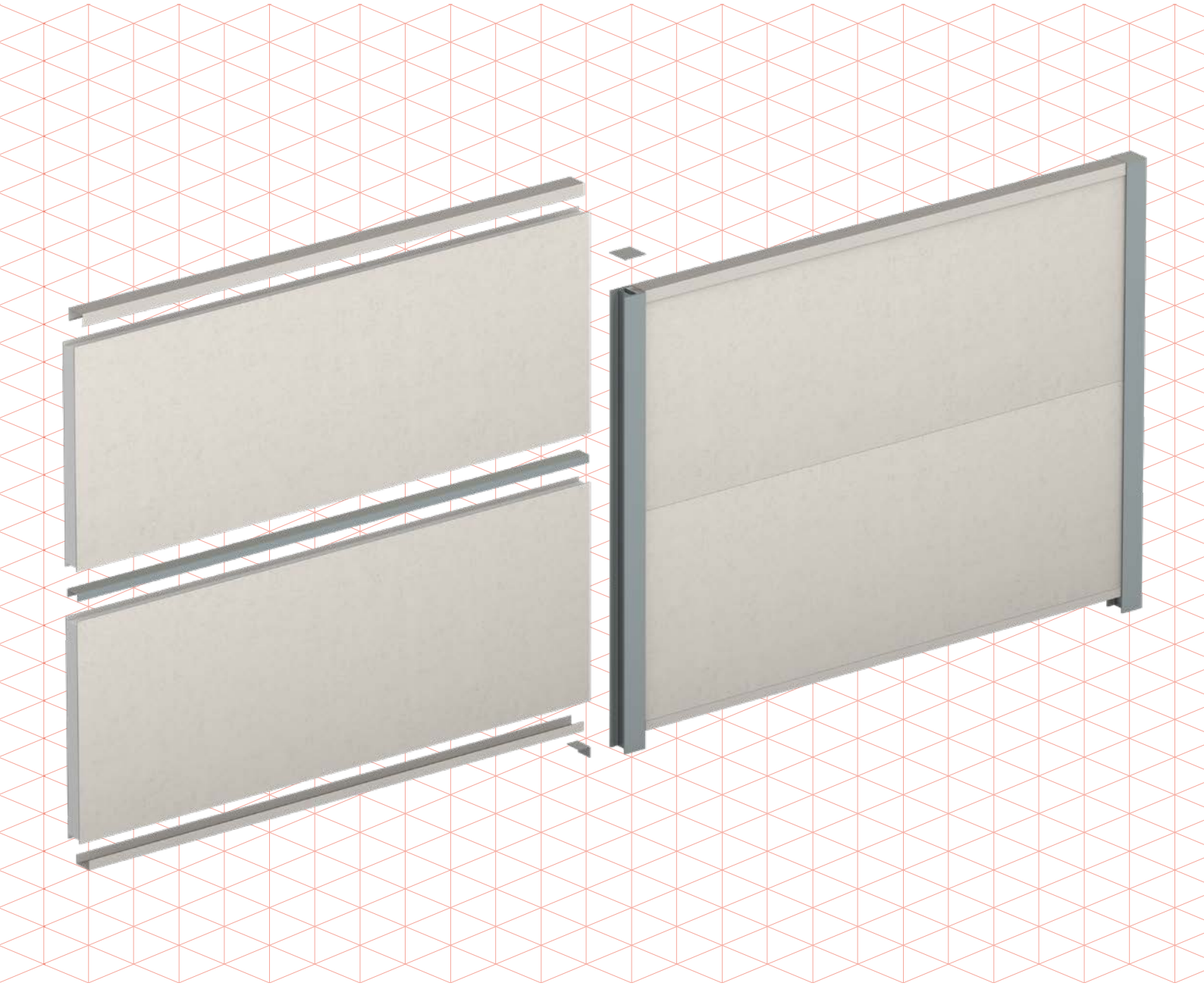
INSTALLATION GUIDE

TRENDWALL™



ALUMINIUM POST



810280VWA

MODULARWALLS®

THANK YOU FOR CHOOSING TRENDWALL.

AS THE INDUSTRY LEADERS IN COST EFFECTIVE, ACOUSTIC WALLS AND FENCES, WE ARE CONFIDENT THIS PRODUCT WILL STAND THE TEST OF TIME AND WITHSTAND THE ELEMENTS, IF INSTALLED IN ACCORDANCE WITH THESE GUIDELINES.

TRENDWALL™ POST

NOTE
It is recommended that the reader pays particular attention to items identified as a NOTE in this manual to ensure a satisfactory installation and that the long term performance of the products.

For correct finishing of your modular wall, you must paint or seal the entire wall system within 30 days of installation.

CONTENTS

BEFORE YOU START

The recommendations detailed by ModularWalls in this guide are formulated along the lines of good building practice. They form a "common-sense" approach and are not intended to be an exhaustive statement of all the relevant data. Further, as the success of projects depend on factors outside the control of ModularWalls (e.g. quality of workmanship, particular design, detail requirements, etc.), we accept no responsibility for, or in connection with, the quality of the projects or their suitability when completed.

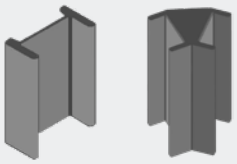
If you are in any doubt please seek independent advice or contact ModularWalls. We are always happy and available to answer questions regarding installation procedures, no matter how small or insignificant you think they may be. 7 day technical and installation advice is available on 1300 556 957.

7 DAY A WEEK TECHNICAL AND INSTALLATION ADVICE IS AVAILABLE BY PHONING 1300 556 957 AND SELECTING THE AFTER HOURS OPTION

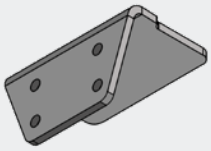
COMPONENT LIST

1. Mid Post

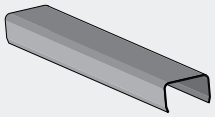
2. 90° and 45° Connection



3. Support Bracket

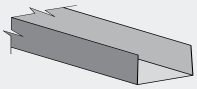


4. Panel Joining Profile

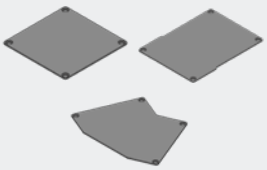


5. Post Infill

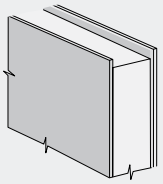
6. Capping Channel



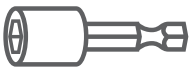
7. Post Tops



8. Wall Panel

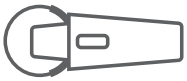


TOOLS NEEDED



5/16" Hex Bit

Drill/Driver



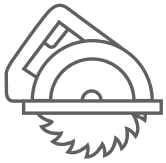
Angle Grinder

Square

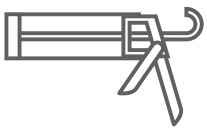
Spirit Level

Shovel

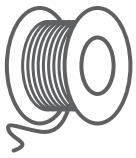
Line Marking Paint



Circular Saw

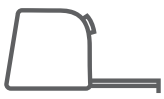


Caulking Gun



String Line

Post Hole Digger



Tape Measure

STEP 1: HOLES

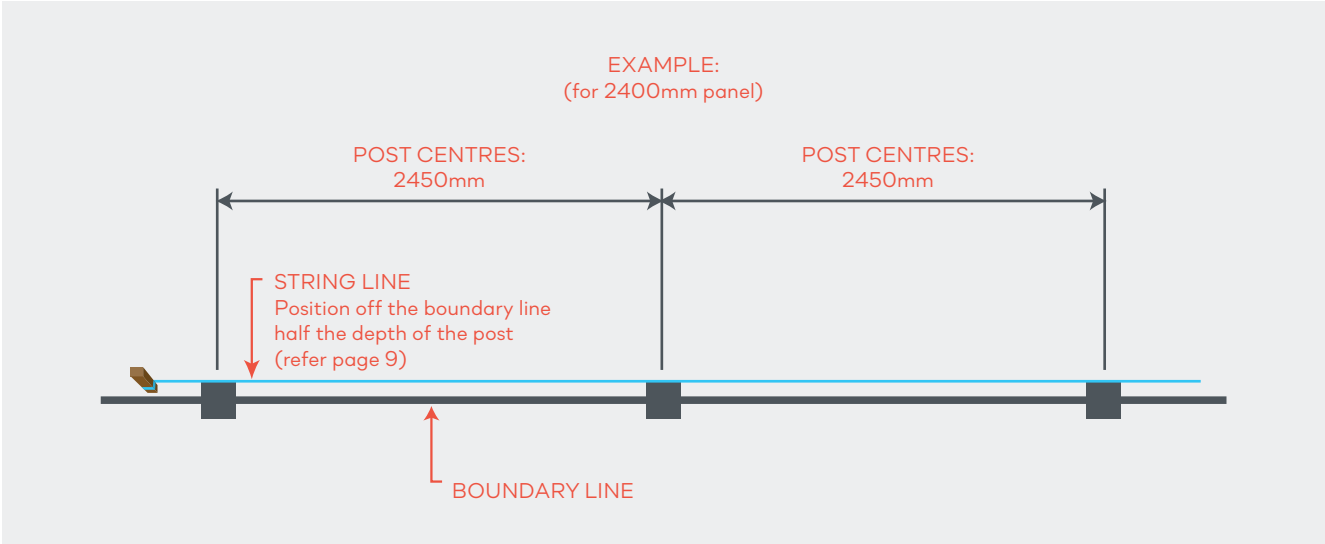
DETERMINE BOUNDARY LINE, POSTHOLE CENTRES & DEPTHS

Please read the wind region and post hole depth charts carefully prior to starting your installation.

We recommend you plan your wall set out/post position on a piece of paper first to save unnecessary digging. Where installation is to take place on uneven or sloped ground, you should also consider the instructions listed under "Additional Information" towards the end of this guide.

Accurately determine the boundary line to where the fence will be installed and mark this with a string line as per the diagram below. In cases where the boundary line is unknown or unclear, a surveyor will need to be engaged.

NOTE: The diagram below is for reference purposes only & shows the wall splitting the boundary line; this may not always be the case and will depend on your individual circumstances.



Standard post centre-to-centre measurement when using a 2400mm panel will be 2450mm minimum (plus 5mm extra is an allowable tolerance i.e 2455mm). This will give you the required clearance when installing the wall panels.

NOTE: Wall panels may be trimmed by a circular saw if necessary to fit within exact measurement (panel cutting procedure is detailed on page 23 of this guide).

STEP 1: HOLES

FOOTING DEPTHS

2.45m Post Centres

Wall Height	Depth in 100kPa Bearing Clay Soils	Depth in 60kPa Bearing Sand Soils	Depth in 100kPa Bearing Clay Soils	Depth in 60kPa Bearing Sand Soils
	Wind Regions A & B (Terrain Categories 2.5 and 3)		Wind Region C (Terrain Categories 2.5 and 3)	
900	450mm	550mm	650mm	750mm
1200	550mm	650mm	750mm	850mm
1500	600mm	700mm	850mm	950mm
1800	650mm	800mm	N/A	N/A
2100	700mm	900mm	N/A	N/A
2400*	800mm	1000mm	N/A	N/A

3.05m Post Centres

Wall Height	Depth in 100kPa Bearing Clay Soils	Depth in 60kPa Bearing Sand Soils	Depth in 100kPa Bearing Clay Soils	Depth in 60kPa Bearing Sand Soils
	Wind Regions A & B (Terrain Categories 2.5 and 3)		Wind Region C (Terrain Categories 2.5 and 3)	
900	550mm	700mm	800mm	900mm
1200	700mm	800mm	900mm	1050mm
1500	750mm	900mm	1050mm	1100mm
1800	800mm	1000mm	N/A	N/A
2100	900mm	1100mm	N/A	N/A
2400*	1050mm	1250mm	N/A	N/A

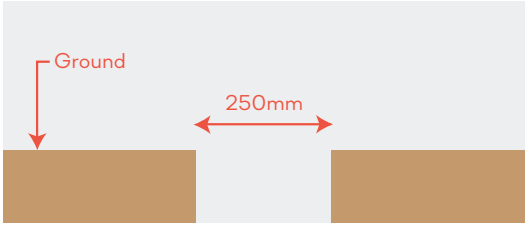
* Strengthening member is required

WIND REGION A
WIND REGION B
WIND REGION C
WIND REGION D

Proven wind load performance means your wall will withstand all nature can throw at it.
Rated and suitable for regions A & B, terrain categories 2.5 & 3.
Details above available on request from ModularWalls™.

NOTE: Footing sizes are provided as a guide only. Final design parameters should be subject to the review of geotechnical conditions.

All footing diameters are 250mm.



NOTE: For the two footings adjacent to a non returning 'free end' or gate, embedment depth is to be increased by an additional 150mm.

Use minimum 20 MPa concrete mix.

STEP 2: POSTS

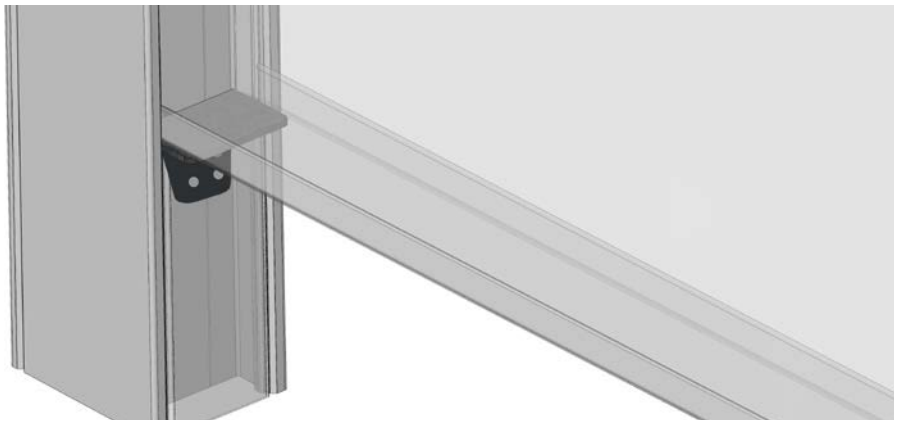
FIXING THE BASE BRACKETS TO THE POST

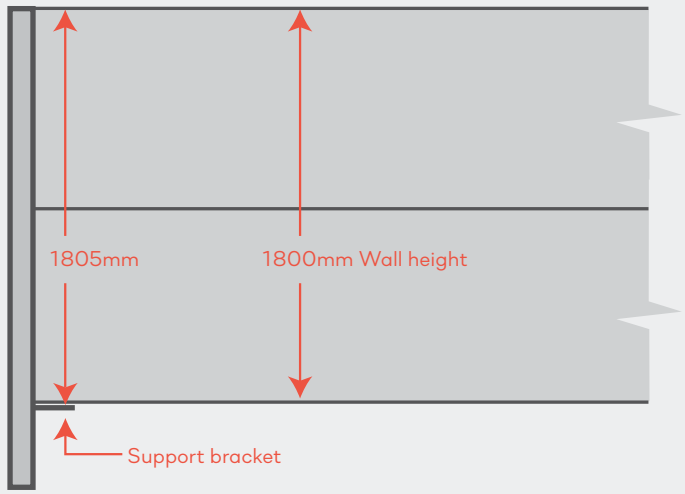
Attach the panel support bracket onto the post with the hex head screws supplied.

Either slide the bracket down from the top, or twist it into position with the fixing holes facing downwards (typically).

The measurement from the top of the post to the top of your bracket should be your final wall height plus 5mm. This 5mm will allow for panel joins plus the thickness of the capping channels.

Example: an 1800mm high wall will have the brackets set at 1805mm from the top of the post.





USING EXPRESSED JOINTS?

If you are using the Expressed Joint feature, please refer to **page 17** for specific bracket instructions.

USING PEAKED POST TOPS?

If you are using our Peaked Post Tops, please refer to **page 18** for specific bracket instructions.

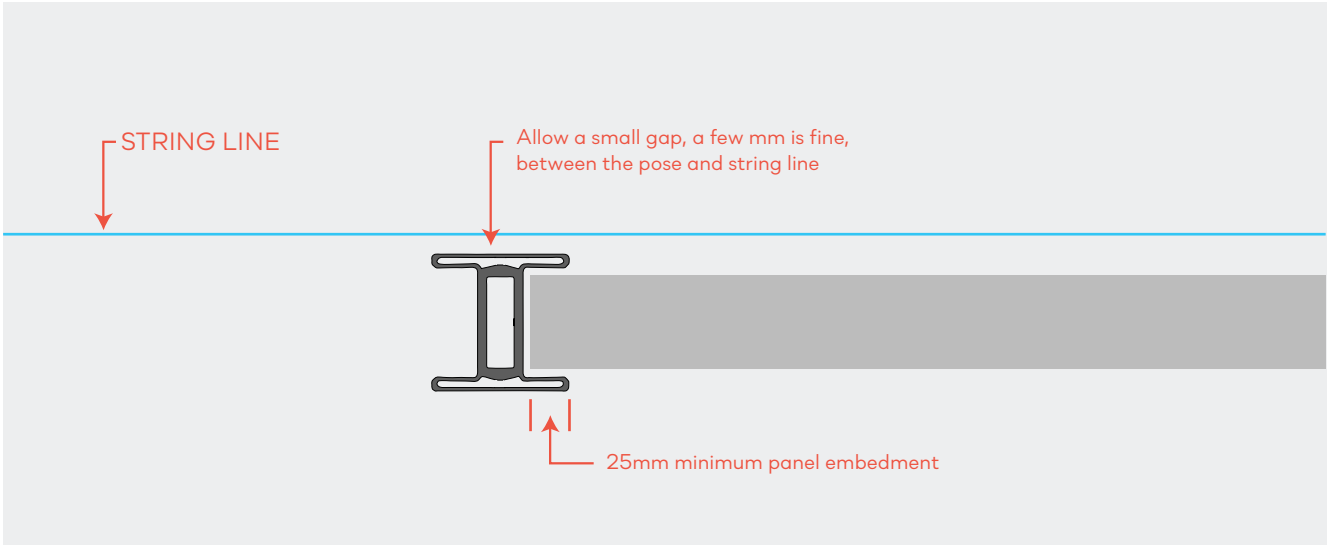
INSTALLING ON SLOPING GROUND?

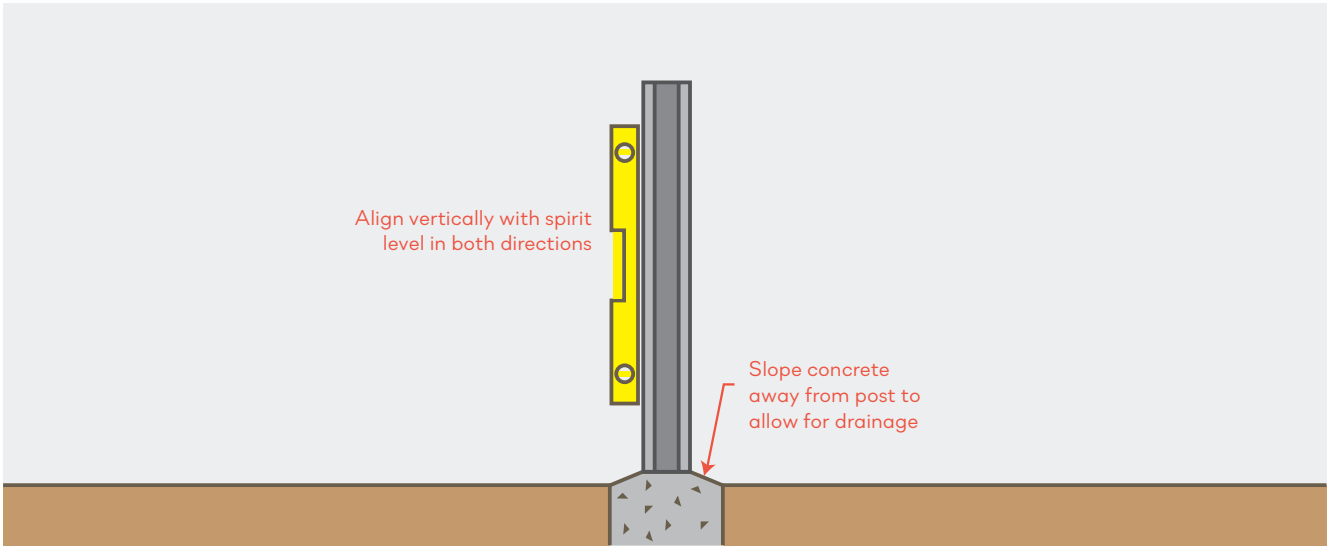
If you are stepping or raking your wall on sloping ground, please refer to **page 20** for specific bracket instructions.

STEP 2: POSTS

POST FITMENT & ALIGNMENT

Working to a string line on the face of the post, insert the first post into the hole and gradually pour in the concrete (mix as per the manufacturers recommendations). Continually check the post alignment with a spirit level as the concrete is being poured.

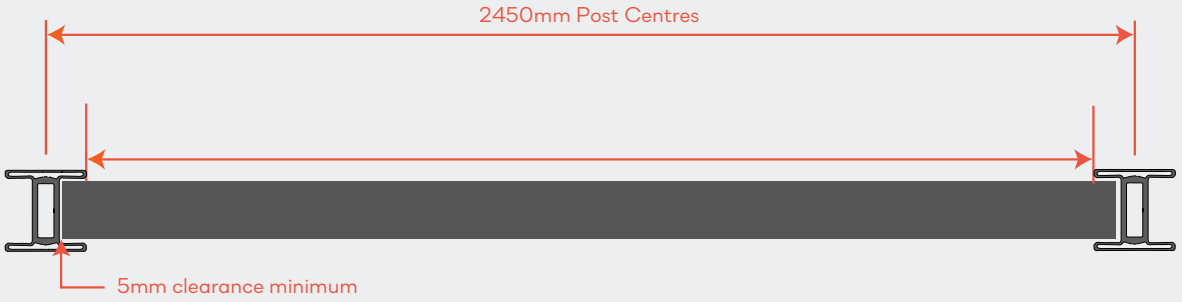




STEP 2: POSTS

SPACING CONSECUTIVE POSTS

The centre to centre measurement is 2450mm when using a 2400mm panel. We recommend that you cut a "spacer" bar for easily checking your post centre-to-centre layout. A piece of 2"x4" pine or similar will suffice.



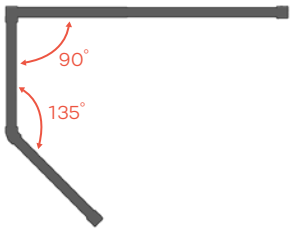
This example is based on a 2400mm panel being installed

STEP 2: POSTS

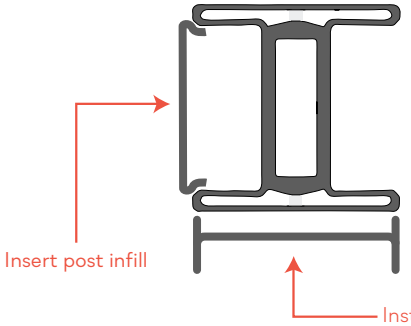
SPACING CORNER POSTS

To create a corner post, install the 90º profile over the face of the mid post, for the new run, and insert a post infill over the exposed recess of the corner post.

90° and 45° configurations



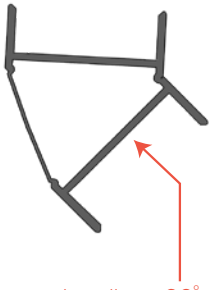
90° post



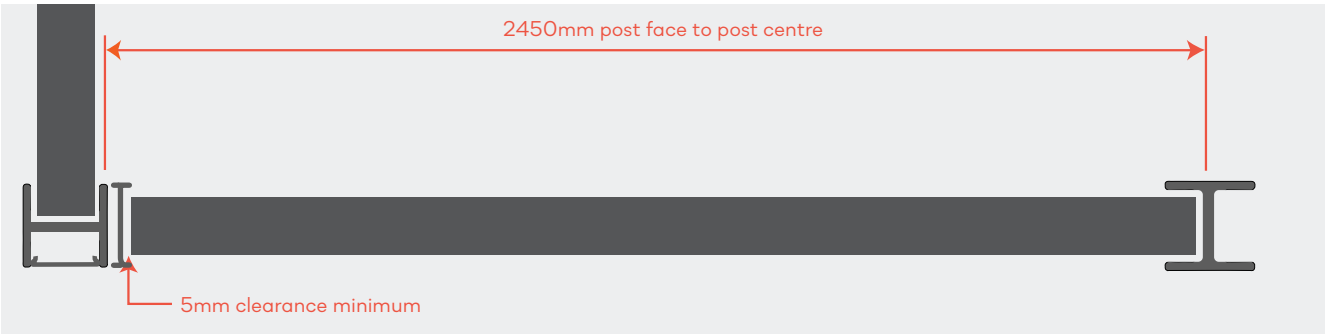
NOTE: Once essembled, secure profiles to each other with supplied tek screws.

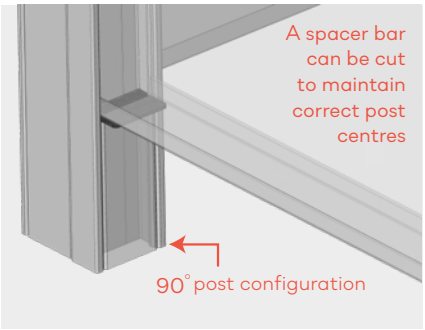
NOTE: This will affect your typical post centre measurement.

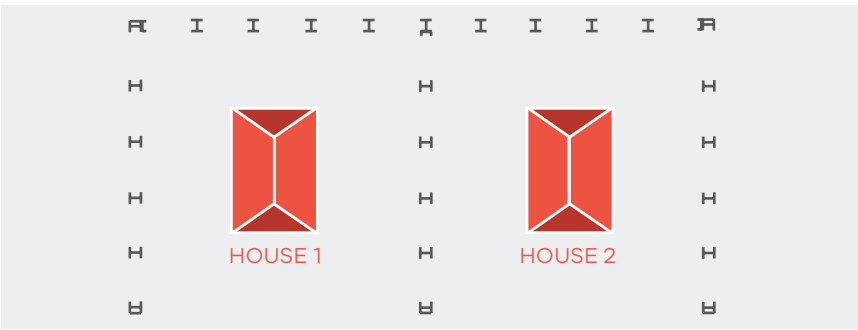
45° post



The centre to centre measurements will now also be slightly different for this post; see below diagram.







STEP 3: PANELS

INSERTING WALL PANELS ONTO BASE CHANNEL

Place your base channel onto the brackets. The base channel should enter the post by at least 5-6mm from the post face on each side. For a 2400mm panel, the supplied base channel is 2362mm, which is 12mm longer than the post face to post face measurement.

This 6mm will allow for expansion and contraction without exposing the end of the capping channel past the face of the post.

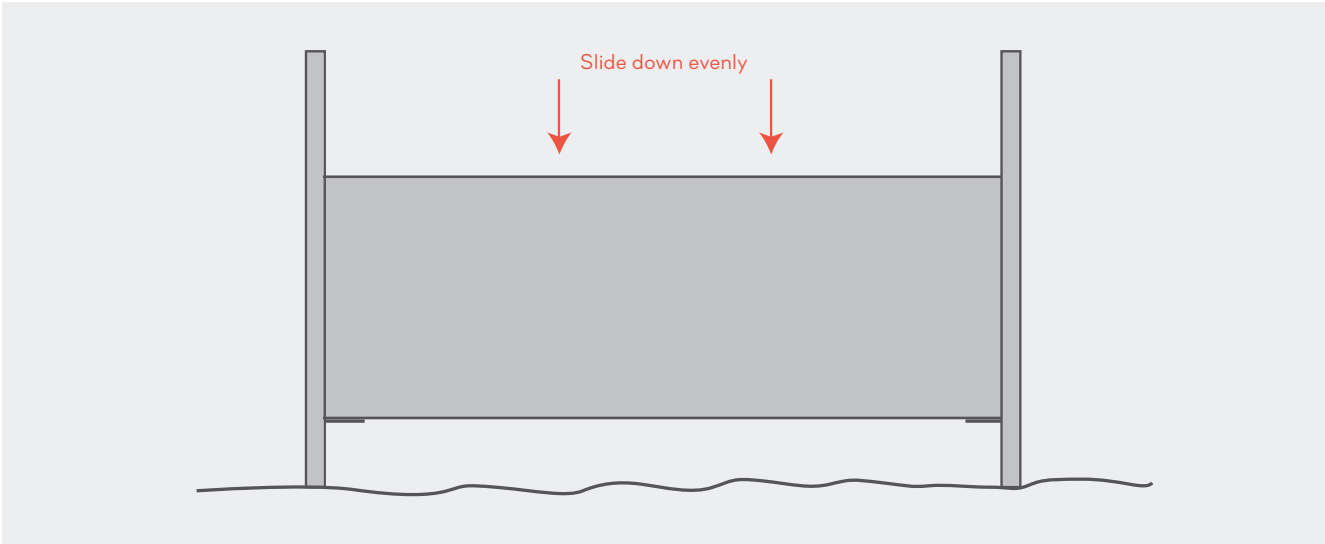
Apply 'FLEXIT' or similar along both internal radiuses of the base channel, as shown in the picture below. This adhesive will make contact with the fibre cement sheets once the panel is seated.

Then with one person at either end, lift the panel vertically and insert it into the top rebates of the post. You may need a small platform to stand on to achieve the required height.

Next, carefully press the panel down onto the base channel making sure you have not caught any of the fibre cement edges on the lip of the base channel. Once seated, pull up on the base channel to ensure it is fully seated against the panel.

NOTE: The panel must be guided down at an even and level rate or it will jam.

NOTE: Always take special care if working from heights or lifting objects above your head.



INSTALLING ON SLOPING GROUND?

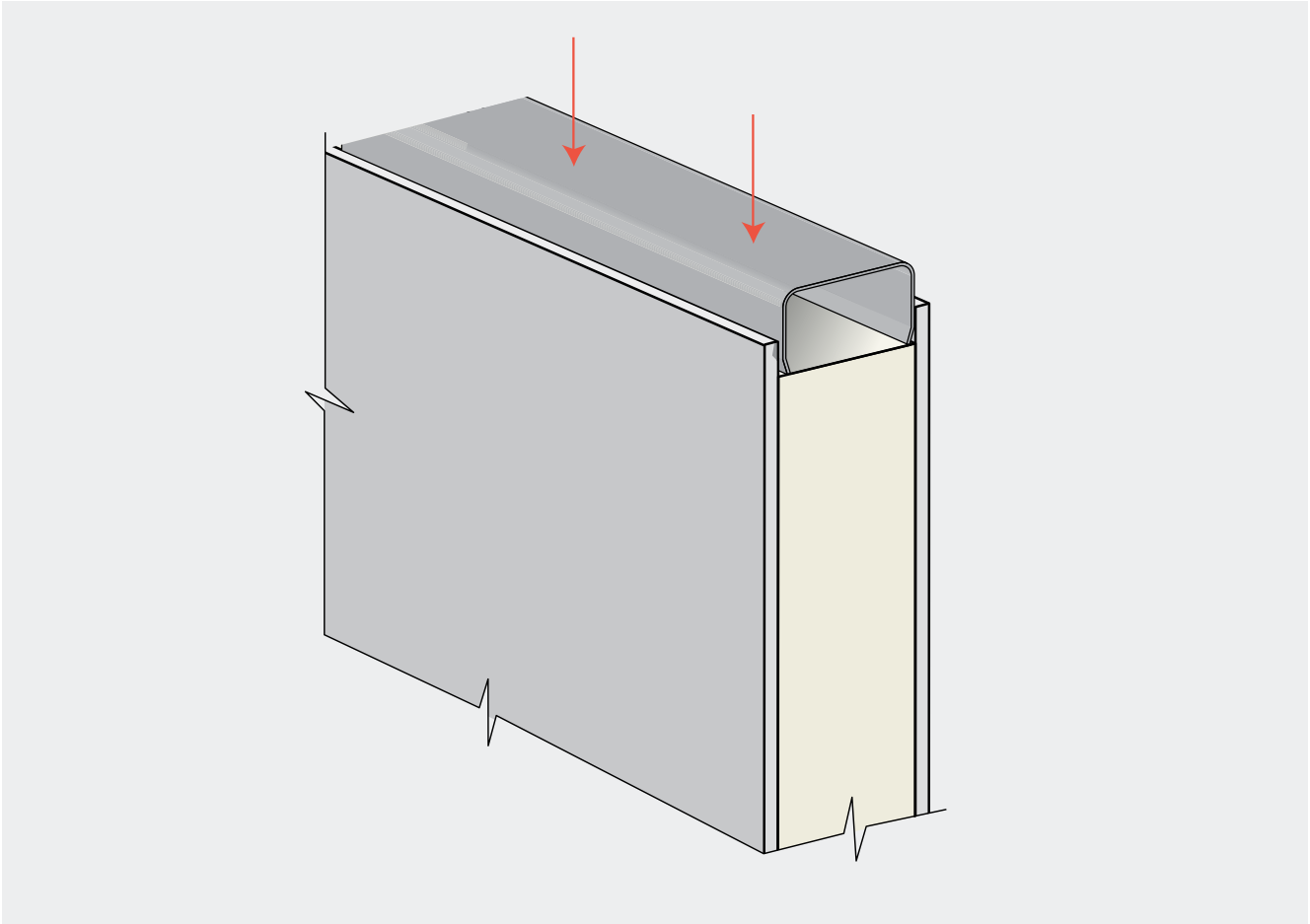
If you are stepping or raking your wall on sloping ground, please refer to **page 20** for specific instructions.

STEP 3: PANELS

JOINING PROFILE

Insert the joining profile into the bottom panel making sure it is seated all the way down against the polystyrene core.

NOTE: The panel joining profile is 2400mm long regardless of your panel length, i.e if you have a 3000mm panel, position the joining profile centrally.



USING EXPRESSED JOINTS?

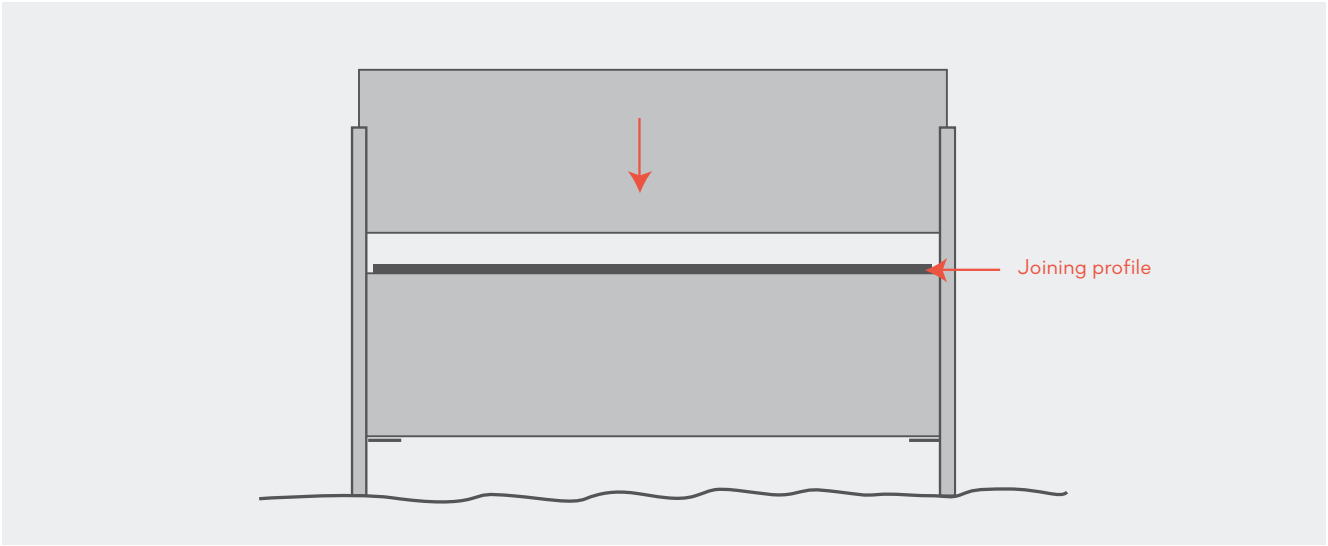
If you are using the Expressed Joint feature, please refer to **page 17** for specific instructions.

STEP 3: PANELS

INSERTING CONSECUTIVE PANELS

Guide the second panel down on top of the base panel and press down to align the panels together with the joining profile. Once the top panel has been installed you can now install the top capping channel.

NOTE: If they do not seat together with light downward pressure it may be necessary to 'tap' the top panel down using a heavy block of wood in a 'pivoted slapping action' to bring it together completely.



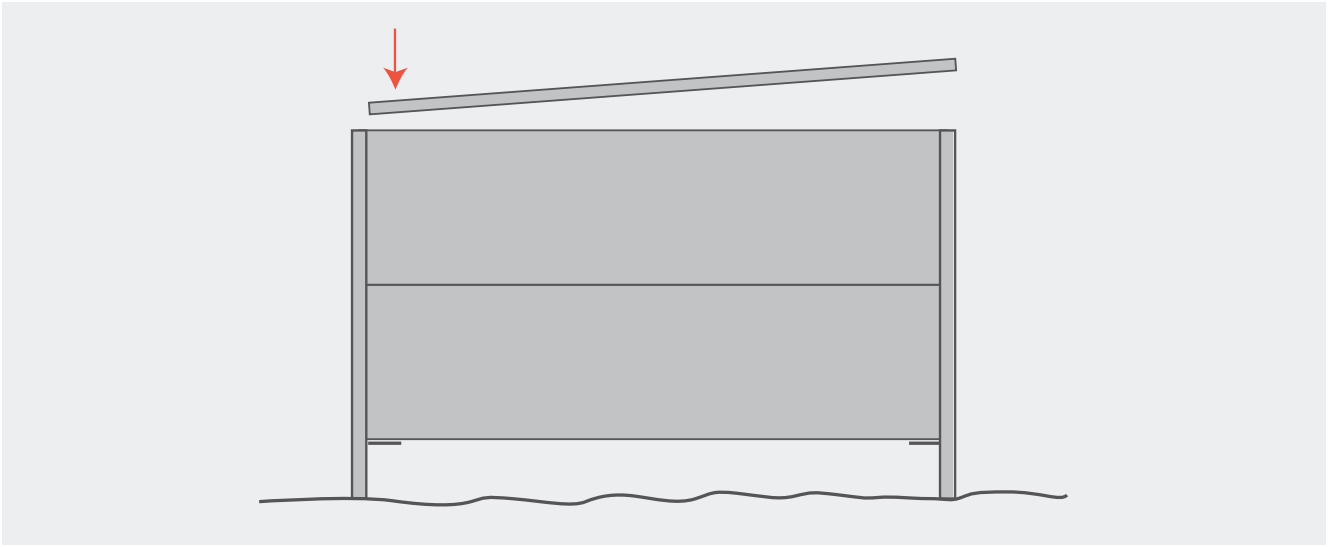
STEP 4: FINISHING

TOP CAPPING CHANNEL

Once the top panel has been installed you can now install the top capping channel.

With a correctly spaced post, the capping channel will not need trimming to length. It will fit inside the post at either end by approximately 5mm - 7mm from the face of the post. Should you need to cut a capping channel to length, measure the inside dimension from post face to post face, and add 12mm.

NOTE: Apply a bead of liquid nails to the inside radiuses of the channel before fitment.



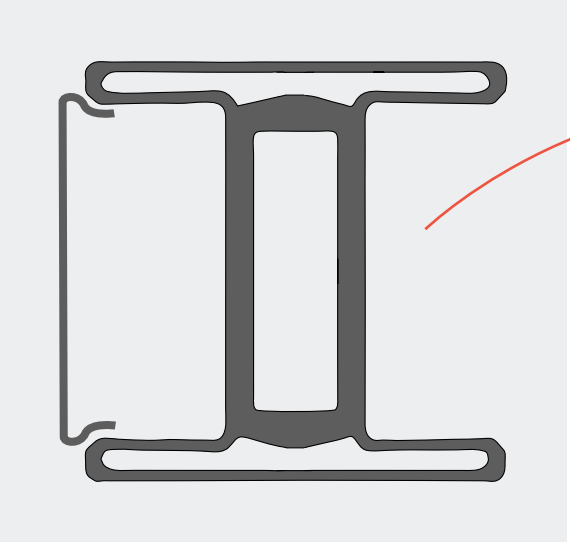
STEP 4: FINISHING

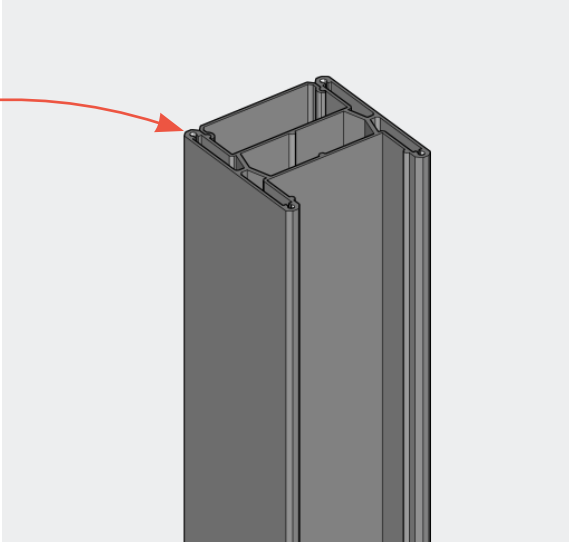
POST INFILLS & TOPS

POST INFILLS

Use a post infill to hide any exposed recesses in the posts; these occur at the end posts and where there are steps.

NOTE: Where your wall is stepped, this insert can be cut to size to suit the step and inserted in the exposed recess.





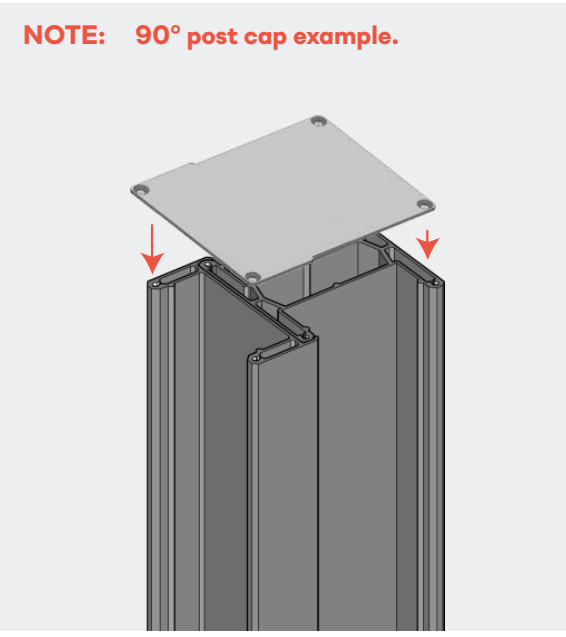
POST TOPS

Making sure your panel is either level or slightly below the top of the post, position the aluminium post cap and fix down with supplied screws.

USING PEAKED POST TOPS?

If you are using our Peaked Post Tops, please refer to **page 18** for specific bracket instructions.

NOTE: 90° post cap example.

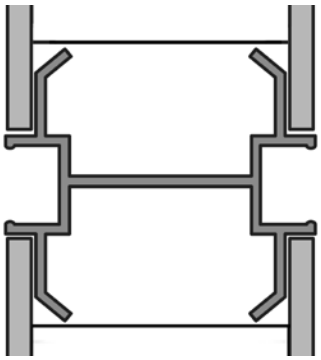


ADDITIONAL

EXPRESSED JOINTS BETWEEN PANELS

An Expressed Joint is used to create an architectural feature by providing a 10mm rebate between horizontal panels.

See example below of an 1800mm highTrendWall with Expressed Joints. This 1800mm high TrendWall is made up of 3 x 600mm panels.



1. SETTING YOUR BRACKET HEIGHT

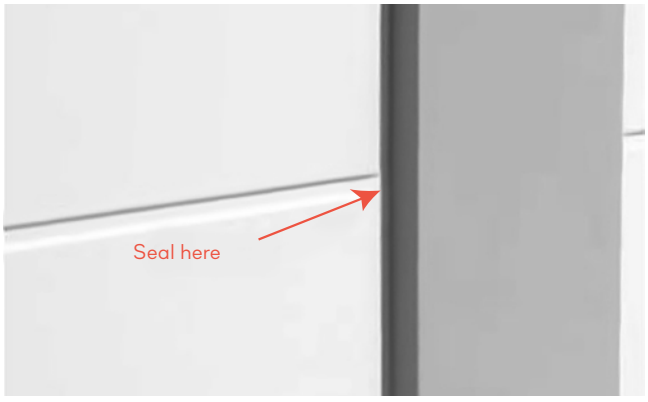
For every Expressed Panel Joint you need to add 15mm on top of your normal bracket height as outlined in Step 3.

EXAMPLE: You are installing an 1800mm high wall as per the guide given in step 3. This measurement from the top of post to the bracket is 1805mm. If you are installing an expressed joint this will increase by 15mm (per joint) to 1820mm. If you you had two expressed joints on an 1800mm wall as per the picture below you will need to add 30mm.

NOTE: If you are using Peaked Post Tops and Expressed Joints, then you also need to leave an additional 20mm for the post to protrude above the panel, as these post tops are fitted externally, over the post. Please refer to page 18 for further details.

2. INSTALLING THE EXPRESSED JOINT JOINING PROFILE

Install the Expressed Joining Profile in between the horizontal panel joins by simply pushing it into place between the external skins of the lower panel. Guide the top panel down over the profile in a similar manner as outlined in Step 7.



3. SEALING

To prevent water ingress, seal between the inside of the rebate and the post junction with an exterior grade 'paintable' sealant upon completion, such as FLEXIT or Sikaflex PRO.

ADDITIONAL

PEAKED POST TOPS

A Peaked Post Top is an aesthetic customisation exclusive to our TrendWall system.

This post top is fitted externally, over the post, which requires the following installation adjsutments:

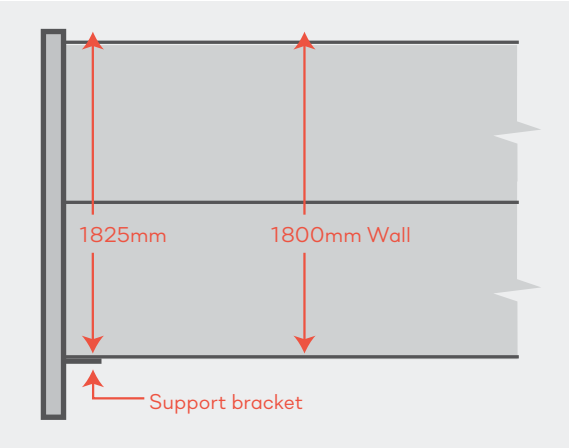
1. SETTING YOUR BRACKET HEIGHT

For Peaked Post Tops, you need to add 20mm on top of your normal bracket height, as outlined in Step 3.

EXAMPLE: You are installing an 1800mm high wall, as per the guide given in step 3. The measurement from the top of post to the bracket is 1805mm.

If you are installing a Peaked Post Top, then you will increase this by 20mm to 1825mm.

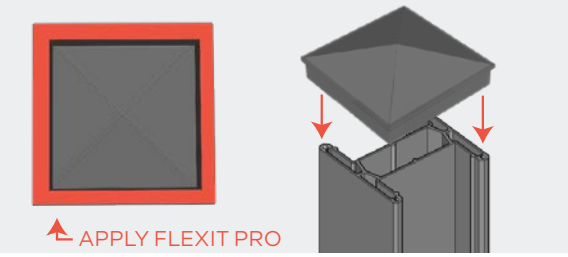
NOTE: If you are using Peaked Post Tops and Expressed Joints, then you must leave an additional 15mm for every Expressed Joint you have; please refer to page 17 for further details.



2.1 INSTALLING PEAKED POST TOPS – MID POSTS

Apply FLEXIT/Sikaflex PRO to all four inside faces of the Peaked Post Top, so it will make contact with the post when installed.

Once dry, the sealant will prevent the post top from being removed.



2.2 INSTALLING PEAKED POST TOPS – 90 DEGREE POSTS

You will still set your mid-post bracket height, as per step 1.

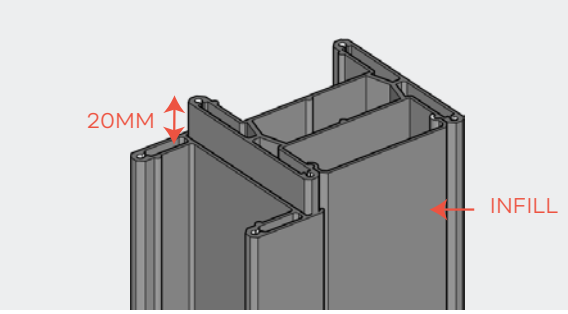
However, the 90 degree corner profile that is slid over the mid post (which then forms a 90 degree post) needs to be left 25mm from the top of the mid-post – please refer to drawing.

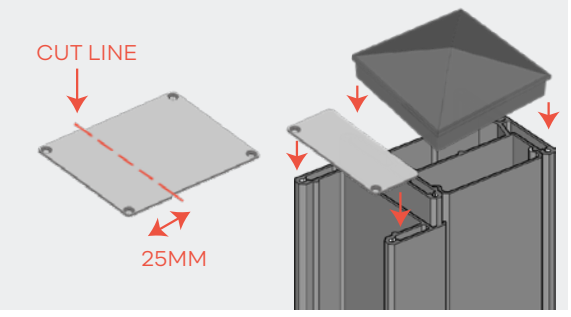
This is to allow the Peaked Post Top to sleeve over the mid-post profile (as designed); in this way, the 90 degree profile will not interfere with it.

The measurement is 25mm (not 20mm), as you will also be placing an aluminium cap (for waterproofing) on top of the 90 degree profile only.

Take the standard 90 degree flat aluminium cap you have been supplied and cut it, as shown in the image. Screw this onto the 90 degree profile, then fit the Peaked Post Top.

NOTE: Peaked Post Tops not suitable for 45 degree posts.



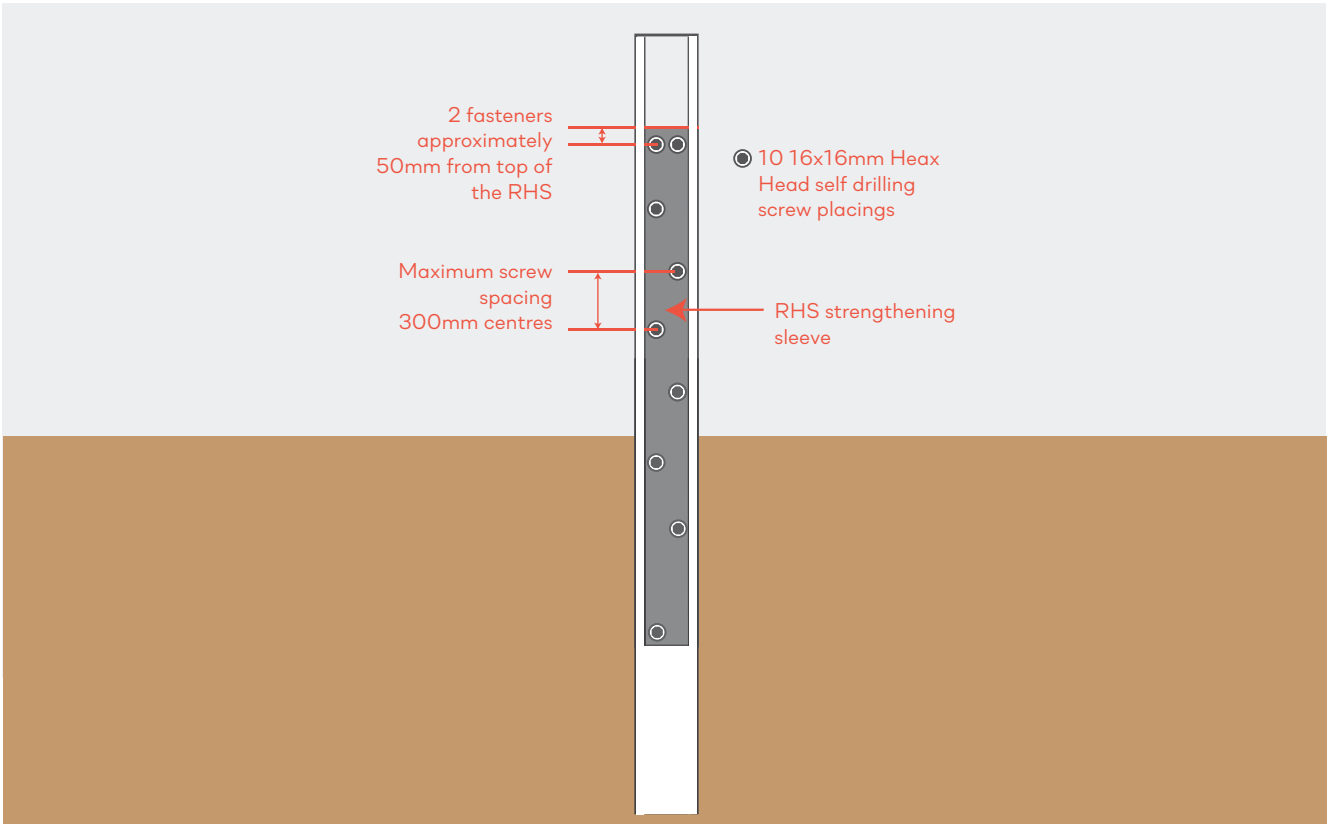


ADDITIONAL

ASSEMBLE WITH RHS STRENGTHENING SLEEVE (APPLICATION DEPENDANT)

Slide RHS strengthening sleeve inside the post. The strengthening sleeve should be positioned 50% above ground and 50% below.

Screw the post and RHS together starting with a double screw at the top approximately 50mm down and then in an off-set pattern at a maximum 300mm centres from then on.



NOTE: Screw pattern to be replicated through both sides of the post

ADDITIONAL

STEPPING OR RAKING YOUR WALL

This will generally be the most complex part of any installation. Please take the time to draw it out on a piece of paper before setting any posts in the ground. Having to remove posts that are concreted in can be very disheartening! And remember we are always here to help you get it right so if you are unsure please ask.

There are three methods for dealing with sloping ground. The examples below are based around an 1800mm high wall.

METHOD 1

Stepping the bottom of your panels and maintaining a minimum 1800mm wall height at one end and a taller wall height at the low end of the slope.

NOTE: This will leave a void/gap under one end of your wall panels.

METHOD 2

Raking/cutting the base panel and maintaining a maximum 1800mm wall height.

NOTE: This will leave no void/gap under your wall panels but will reduce your wall height at one end.

METHOD 3

Raking/cutting the base and maintaining a minimum 1800mm wall height at one end and a taller wall height at the low end of the slope.

NOTE: This will leave no void/gap under your wall panels but will increase your wall height at the lower end of the slope above 1800mm. A longer base panel is required for this method and as such should be a consideration at the time of ordering.

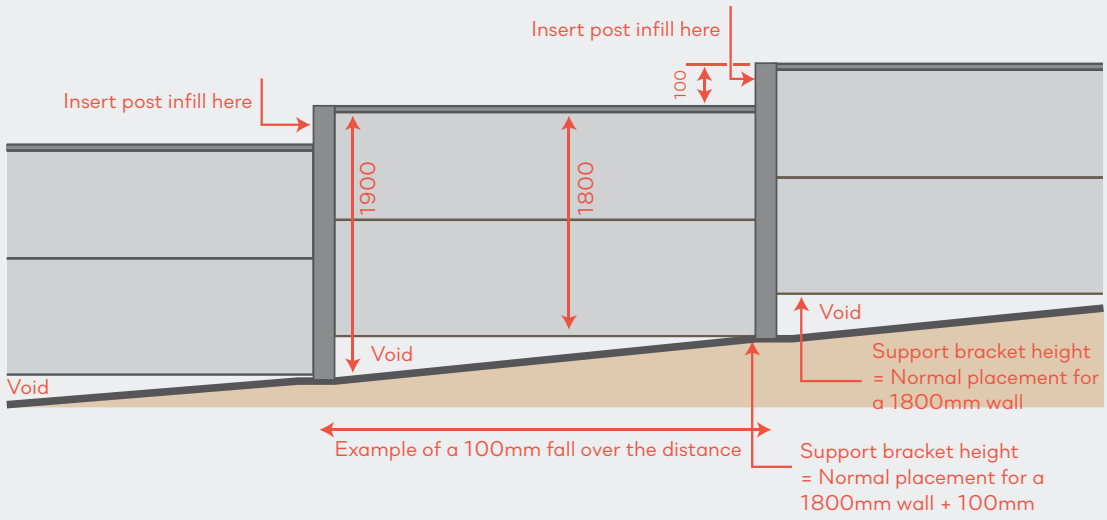
ADDITIONAL

STEPPING OR RAKING YOUR WALL

STEPPING METHOD 1 - MAINTAINING A MINIMUM 1800MM WALL HEIGHT

As pictured below it should be noted that you will be left with a void at the low end of the slope but you will maintain a minimum 1800mm wall height. In most cases on gradual slopes this void won't be large and can either be left as is or planted in front of.

1800-1900mm high wall shown



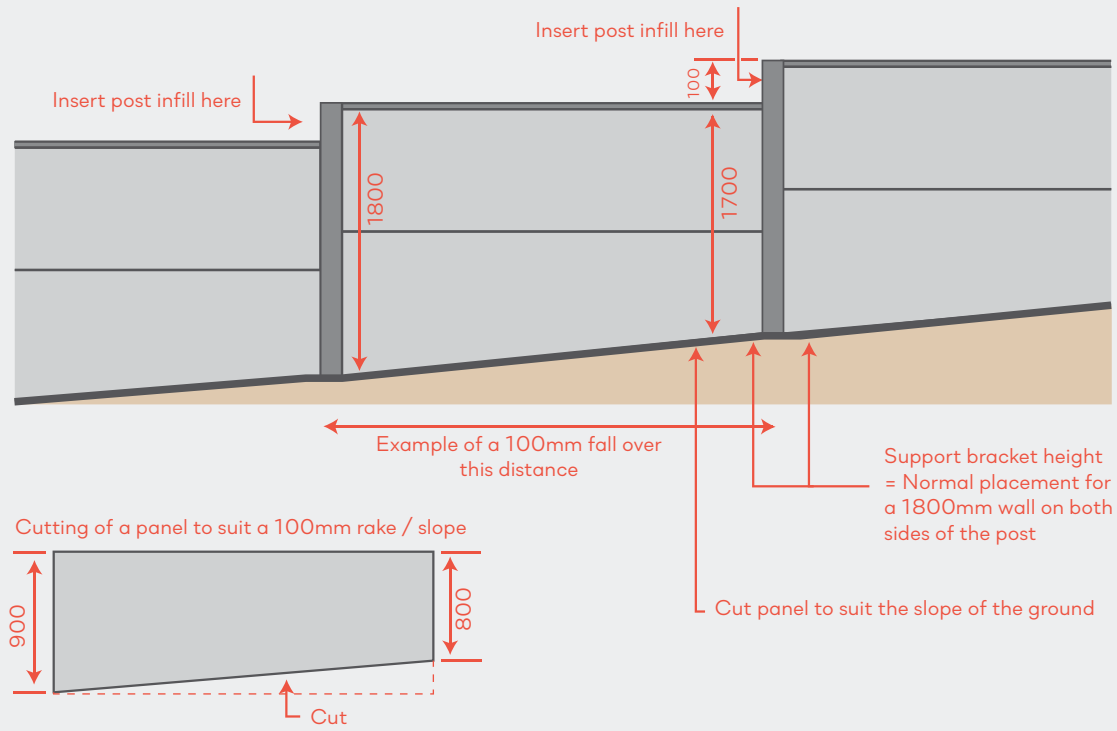
ADDITIONAL

STEPPING OR RAKING YOUR WALL

STEPPING METHOD 2 – RAKE/CUT YOUR BOTTOM PANEL TO THE SLOPE USING 1800MM WORTH OF WALL PANELS

You will maintain a maximum height of 1800mm wall height – As pictured below it should be noted that your wall height at the high side of the slope will be reduced by the amount of the rake – in this situation 100mm.

1700-1800mm High wall shown



ADDITIONAL

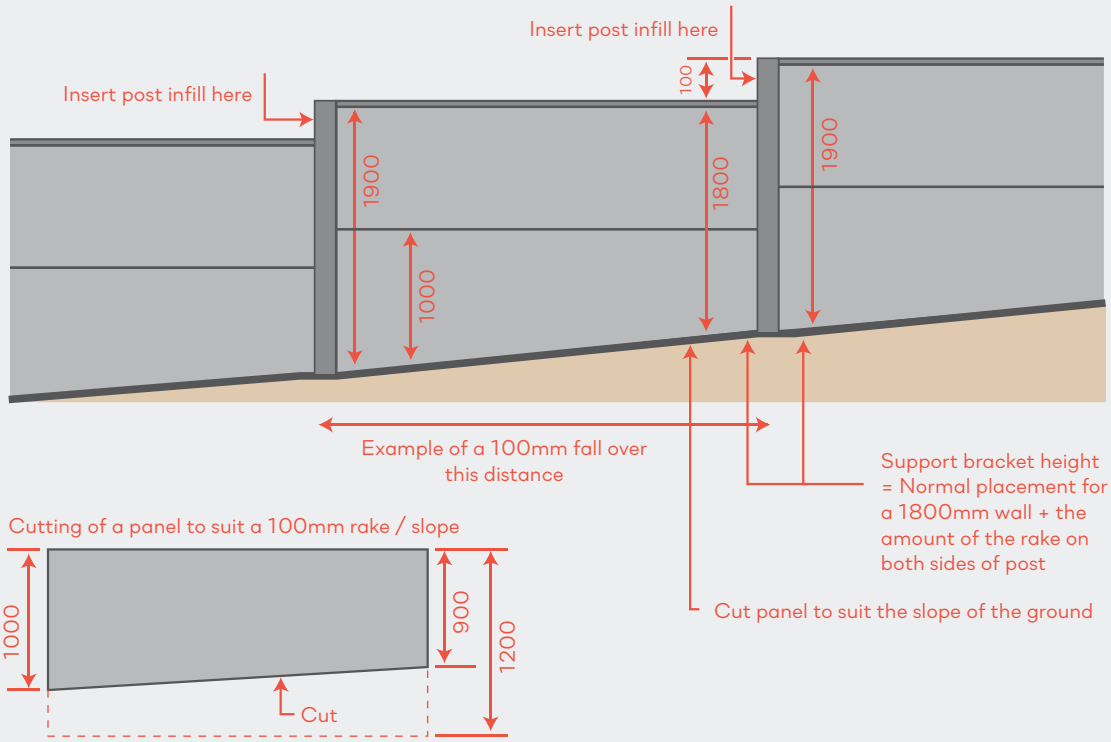
STEPPING OR RAKING YOUR WALL

STEPPING METHOD 3 – RAKE/CUT YOUR BOTTOM PANEL TO THE SLOPE USING 2100MM WORTH OF WALL PANELS TO MAINTAIN A MINIMUM 1800MM WALL HEIGHT.

You will maintain a maximum height of 1800mm wall height – As pictured below it should be noted that your wall height at the high side of the slope will be increased by the amount of the rake – in this situation 100mm.

Depending on the additional height gained by doing this you may require deeper footings and longer posts. Please contact us for specific advice before installation.

1800-1900mm High wall shown



ADDITIONAL

CUTTING POSTS, TRIMS & PANELS

CUTTING POSTS AND TRIMS

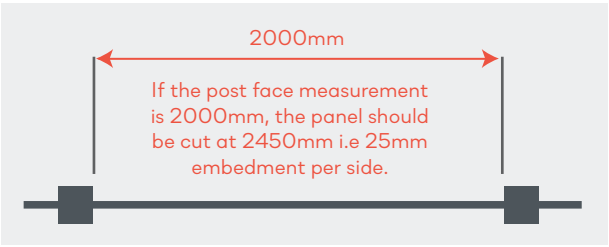
If you need to cut a post for any reason, please take note of the following:

- Be sure to wear appropriate safety wear, such as safety goggles and ear muffs.
- Mark accurate measurements around all sides.
- Use an angle grinder with a 1mm cutting blade.
- Best practice is to cut over grass or protect the floor surface, as the swarf (shavings) from the cut may create rust marks if not cleaned up well.
- Treat the cut end with a cold galvanising spray.
- Where possible, place the cut end of the post into the foundation to ensure a level finish with post capping.

CUTTING PANELS

If you are raking the top or bottom of your wall, or have had to position your posts shorter than the standard centres, you will need to cut your panels down.

To cut panels to length, take the face-to-face measurement of your posts and add 25mm panel embedment per side i.e. the panel should go minimum 25mm into the post rebate.



- Be sure to wear appropriate safety wear, such as safety goggles and ear muffs.
- Place the panel so it is level and well supported.
- Mark both sides of the panel with a pencil line.
- Unless you have a circular saw with a minimum 80mm depth cut, you will need to cut one side and then flip the panel and cut the other - a standard timber blade will suffice
- If you are cutting one side first, set the depth of the blade to half of the panel thickness; this way, the core will still be strong enough support the end of the panel and allow you to flip the panel without risk of breakage. Have a second person support the last cut, as pictured.

ADDITIONAL

TERRAFIRM™ RETAINING PANEL

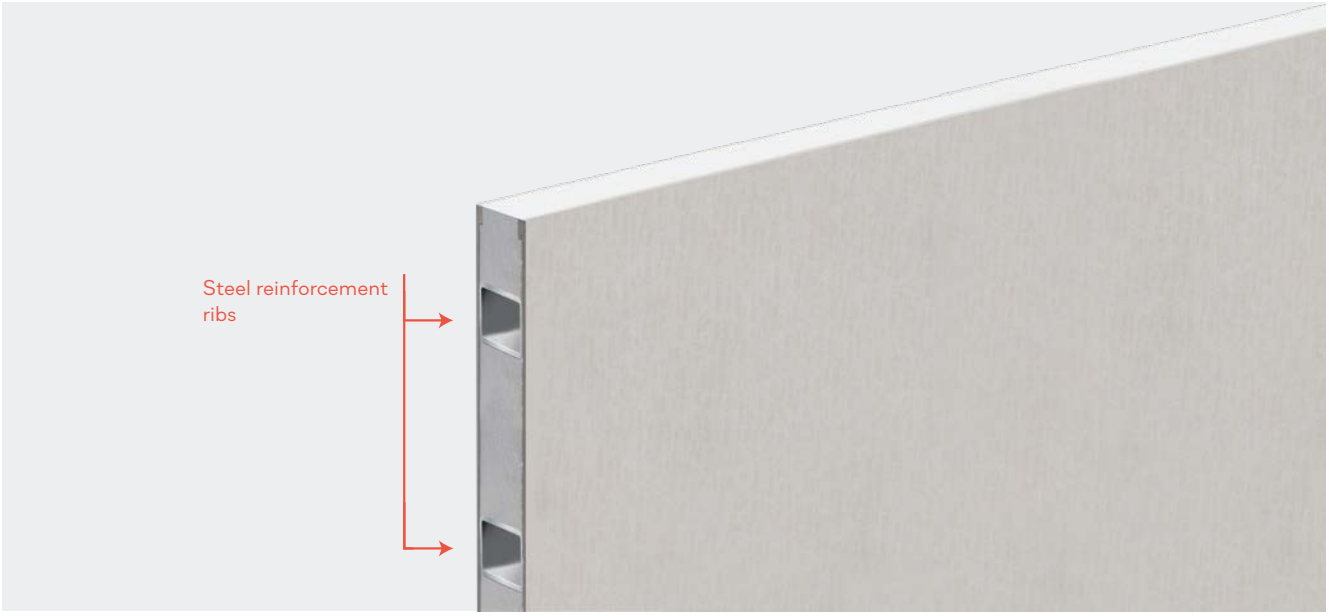
TERRAFIRM RETAINING PANELS

TerraFirm retaining panels include horizontal steel reinforcement ribs; therefore, you cannot cut the ribs with a typical circular saw blade. If you need to cut the TerraFirm panel horizontally, use a circular saw and avoid the reinforcement ribs. If you need to cut the panel in length, cut through the steel ribs using one of the following methods:

Angle Grinder – Metal Cutting Blade: when using an angle grinder with a suitable depth metal cutting blade, a small home grinder will typically require a cut from both sides of the panel. Cut through the fibre cement skins first with an appropriate diamond tip blade on your angle grinder.

Angle Grinder – Friction Blade: use an appropriate friction blade on an angle grinder designed for metal and fibre cement cutting.

Circular Saw – Cold Cut Blade: ensure you use a suitable cold cut blade designed for cutting ferrous metals (available from all hardware stores) *Always follow the PPE instructions as these blades can eject metal shavings during cutting.



ADDITIONAL

TERRAFIRM™ RETAINING PANEL

TERRAFIRM RETAINING

At times, a difference in ground levels can occur on opposite sides of a TrendWall installation. TerraFirm Retaining has been designed for use in these circumstances, providing a seamless appearance whilst holding these soil loads at bay. TerraFirm Retaining provides a solution to backyard soil retention up to 750mm that is robust and elegant.

APPLICATION

The TrendWall post integrated with the TerraFirm Retaining Panel is ideally suited for:

- Replacement of an old timber or colorbond fence that is leaning away from the retained embankment
- New housing developments or subdivisions with uneven ground levels between blocks
- Stand-alone planter boxes, raised garden beds or terraced lawns

SPECIFICATION

TerraFirm Retaining consists of:

- Composite reinforced TerraFirm Retaining Panel
- Size: 2400mm (L) x 600mm (H) x 75mm (W)
- Weight: 22.9kg

ADDITIONAL

TERRAFIRM™ RETAINING PANEL

ASSEMBLING OF STRENGTHENING SLEEVE

This booklet previously instructs on the correct methodology of installation of the strengthening sleeve of TrendWall posts.

During this step any post that will be performing a retaining function will need the addition of structural strengthening sleeve installed, as per drawing number SE11 which can be found earlier on in this guide.

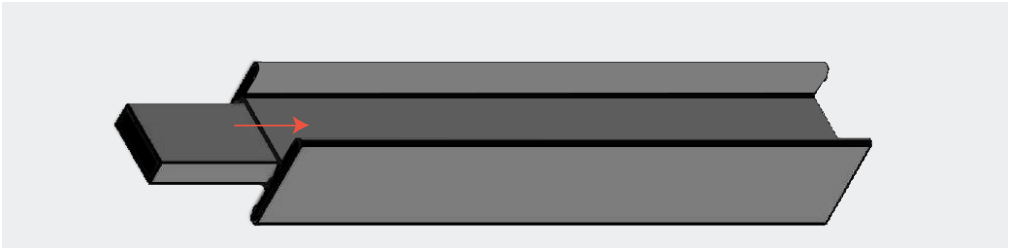
Snapshot from page 19

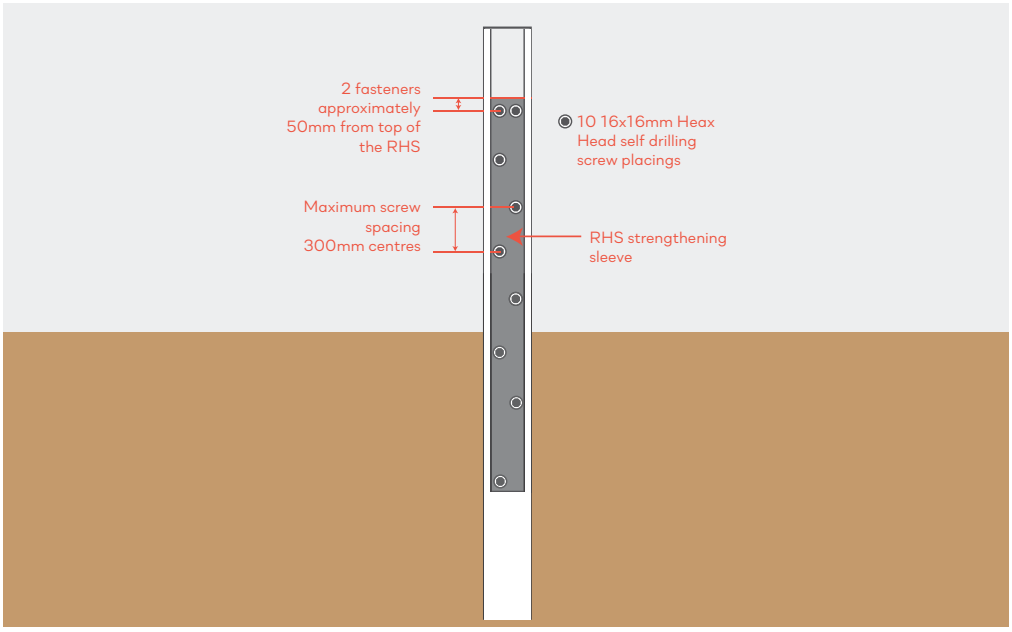
OPTIONAL

ASSEMBLE WITH RHS STRENGTHENING SLEEVE (APPLICATION DEPENDANT)

Slide RHS strengthening sleeve inside the post. The strengthening sleeve should be positioned 50% above ground and 50% below.

Screw the post and RHS together starting with a double screw at the top approximately 50mm down and then in an off-set pattern at a maximum 300mm centres from then on.





NOTE: Screw pattern to be replicated through both sides of the post

ADDITIONAL

TERRAFIRM™ RETAINING PANEL

Step 5 (page 12) of this booklet instructs on the correct methodology for installing the base capping channel.

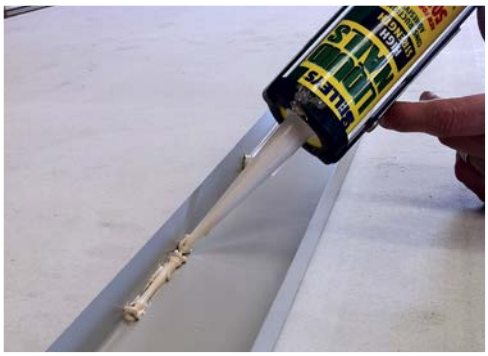
Snapshot from page 12

STEP 3: PANELS

INSERTING WALL PANELS ONTO BASE CHANNEL

Place your base channel onto the brackets. The base channel should enter the post by at least 5mm from the post face on each side.

Apply 'liquid nails fast grab' or similar along both internal radiuses of the base channel. This adhesive will contact with the fibre cement sheets once the panel is seated.

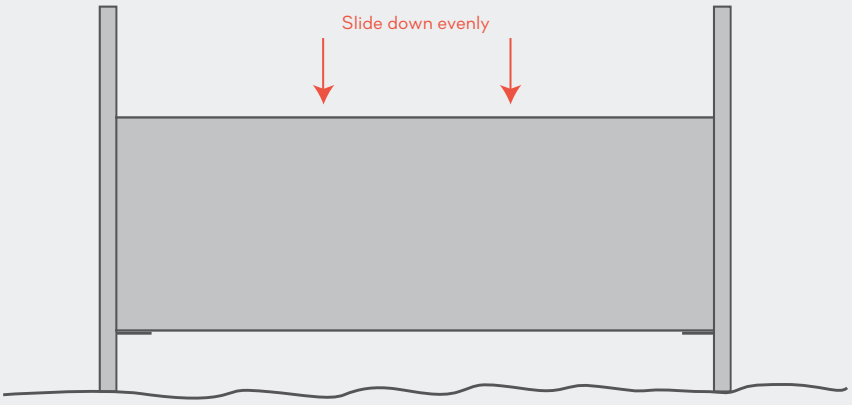


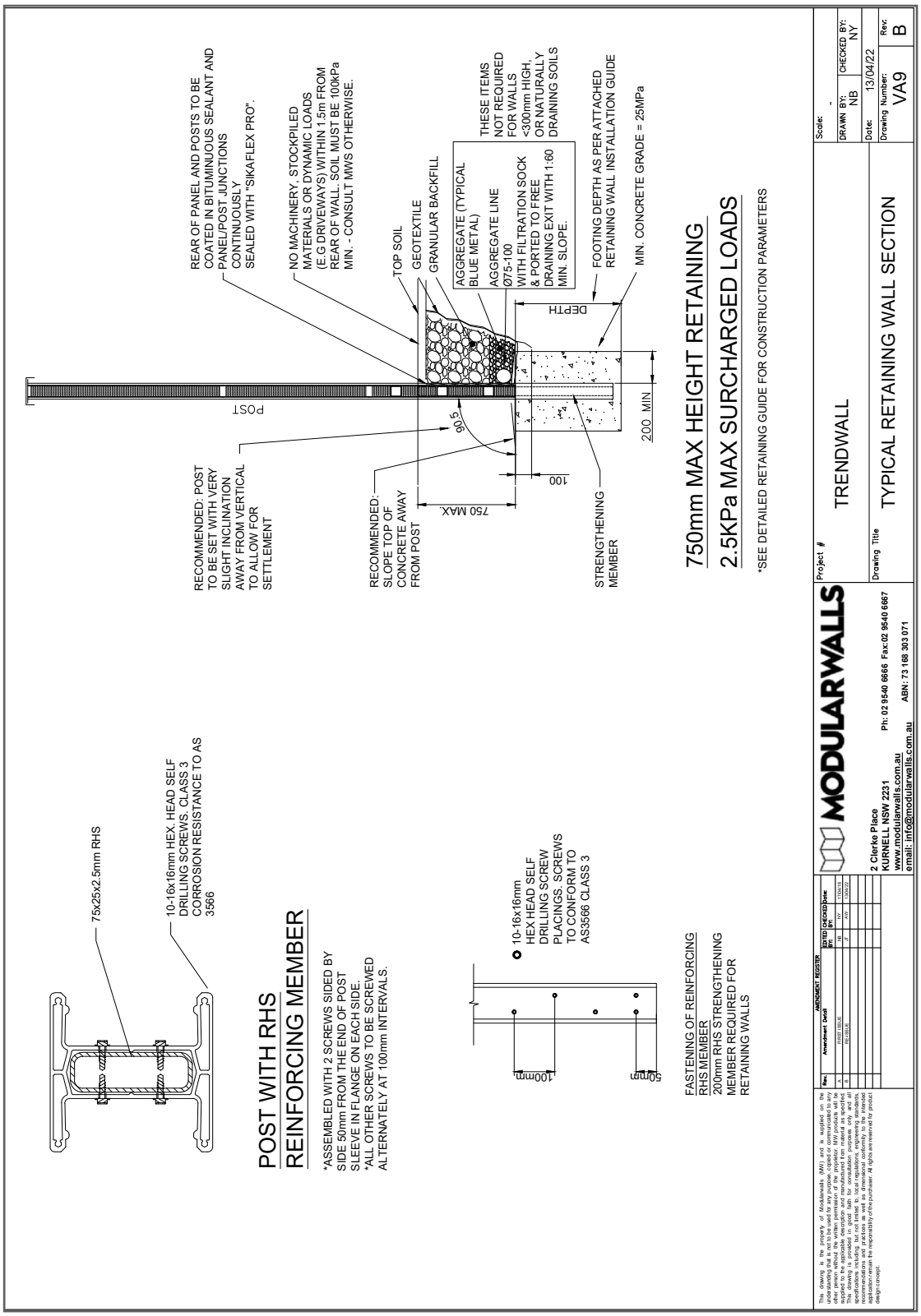
Then with one person at either end, lift the panel vertically and insert into the top rebates of the post. You may need a small platform to stand on to achieve the required height.

Carefully press the panel down onto the base channel making sure you have not caught any of the fibre cement edges. Once seated pull up on the base channel to make sure it is fully seated against the panel.

NOTE: The panel must be guided down at an even and level rate or it will jam.

NOTE: Always take special care if working from heights or lifting objects above your head.




75x25x2.5mm RHS
10-16x16mm HEX. HEAD SELF DRILLING SCREWS. CLASS 3 CORROSION RESISTANCE TO AS 3566
POST WITH RHS
REINFORCING MEMBER
*ASSEMBLED WITH 2 SCREWS SIDED BY SIDE 50mm FROM THE END OF POST SLEEVE IN FLANGE ON EACH SIDE.
*ALL OTHER SCREWS TO BE SCREWED ALTERNATELY AT 100mm INTERVALS.
10-16x16mm HEX HEAD SELF DRILLING SCREW PLACINGS. SCREWS TO CONFORM TO AS3566 CLASS 3
100mm
50mm
FASTENING OF REINFORCING RHS MEMBER
200mm RHS STRENGTHENING MEMBER REQUIRED FOR RETAINING WALLS
REAR OF PANEL AND POSTS TO BE COATED IN BITUMINUOUS SEALANT AND PANEL/POST JUNCTIONS CONTINUOUSLY SEALED WITH "SIKAFLEX PRO".
NO MACHINERY, STOCKPILED MATERIALS OR DYNAMIC LOADS (E.G DRIVEWAYS) WITHIN 1.5m FROM REAR OF WALL. SOIL MUST BE 100kPa MIN. - CONSULT MWS OTHERWISE.
TOP SOIL
GEOTEXTILE
GRANULAR BACKFILL
AGGREGATE (TYPICAL BLUE METAL)
AGGREGATE LINE Ø75-100 WITH FILTRATION SOCK & PORTED TO FREE DRAINING EXIT WITH 1:60 MIN. SLOPE.
THESE ITEMS NOT REQUIRED FOR WALLS <300mm HIGH, OR NATURALLY DRAINING SOILS
DEPTH
FOOTING DEPTH AS PER ATTACHED RETAINING WALL INSTALLATION GUIDE
MIN. CONCRETE GRADE = 25MPa
200 MIN
POST
RECOMMENDED: POST TO BE SET WITH VERY SLIGHT INCLINATION AWAY FROM VERTICAL TO ALLOW FOR SETTLEMENT
RECOMMENDED: SLOPE TOP OF CONCRETE AWAY FROM POST
750 MAX
100
STRENGTHENING MEMBER
750mm MAX HEIGHT RETAINING
2.5KPa MAX SURCHARGED LOADS
*SEE DETAILED RETAINING GUIDE FOR CONSTRUCTION PARAMETERS
Rev. Amendment Detail AMENDMENT REGISTER DATED BY: CHECKED BY: Date:
A INITIAL ISSUE 19 NY NY 17/04/18
B REVISED 4 NY NY 13/06/22
This drawing is the property of Modularwalls (MW) and is supplied on the understanding that is not to be used for any purpose, copied or communicated to any other person without the written consent of Modularwalls. The drawing is to be supplied to the applicable description and manufactured from material as specified. This drawing should be read in conjunction with all relevant engineering documentation and specifications including but not limited to, local regulations, engineering standards, recommendations and practices as well as dimensional conformity to the intended application. It is the responsibility of the purchaser. All rights reserved. © protect design-concept.
MODULARWALLS
2 Clarke Place
KURNELL NSW 2231
www.modularwalls.com.au
email: info@modularwalls.com.au
Ph: 02 9540 6666 Fax:02 8540 6667
ABN: 73 168 303 071
Project #
TRENDWALL
Drawing Title
TYPICAL RETAINING WALL SECTION
Scale: -
DRAWN BY: NB
CHECKED BY: NY
Date: 13/04/22
Drawing Number: VA9
Rev: B

ADDITIONAL

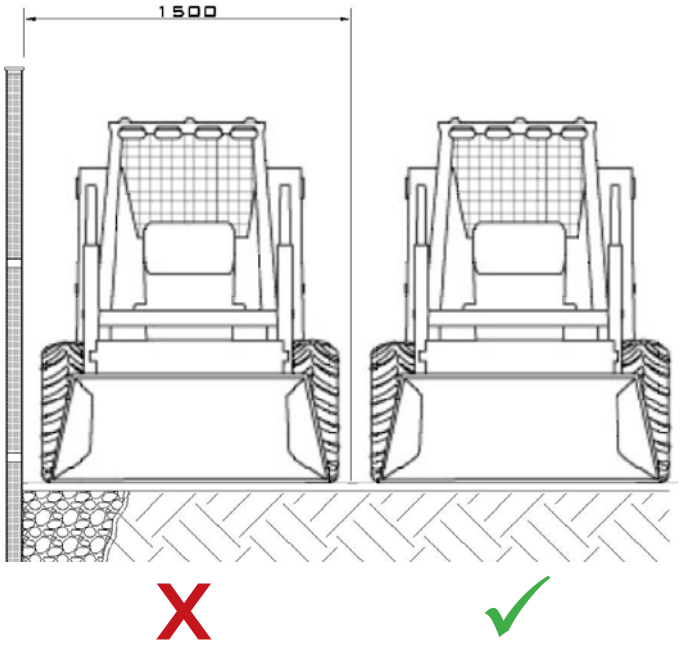
TERRAFIRM™ RETAINING PANEL

CONSTRUCTION PARAMETERS

The following conditions must be observed for all TrendWall with TerraFirm Retaining installations:

Soil height / surcharge -	Maximum height that can be retained = 750mm with a 2.5kPa surcharge load.
Wall height -	Maximum wall height above upper ground level = 1800mm (wind region dependent)
Post spacing -	Maximum centre-to-centre post spacing = 2450mm.
Footing Diameter -	Minimum footing diameter = 350mm.
Footing Depth above -	Minimum footing depth = height of retained soil + one third the height of any free standing wall. FOR EXAMPLE: a wall which is retaining 750mm of soil and extends an additional 1500mm above the retained soil level would require a minimum footing depth of: 750 (retaining height) + 1500/3 = 500mm. Overall footing depth required is 1250mm.
Post embedment -	50-100mm less than actual footing depth, to prevent the post from directly sitting on the soil.
Soil type -	Minimum lateral Soil Bearing Capacity (SBC) = 100kPa. Additionally, soils with (foundations) moisture reactivity above 'Class S' are not suitable for use with the TrendWall Retaining system without additional engineering assessment.
Surcharge Loads -	**Loads placed on the upper retained ground level are limited to pedestrian activity only. Stockpiled materials, additional raised garden beds, driveways or adjacent buildings are not permitted within 1.5m from the rear of the wall, unless otherwise specified by ModularWalls.** **Backfill material is not to be compacted or vibrated.**

REQUIREMENTS



ADDITIONAL

TERRAFIRM™ RETAINING PANEL

TerraFirm Retaining has requirements that are no different to any other retaining wall of similar size. The process of properly finishing the back of your wall is done in 3 easy stages of:

- Coating/Sealing
- Drainage
- Backfilling

The materials and procedure for each of these steps is described below.

CONSTRUCTION PARAMETERS

The following applies to any section of the wall that is to be buried by backfill material.

Using a commercial grade polyurethane sealant (e.g. FLEXIT), seal the junction between the posts and panels full length at the rear of the wall.

Apply a water proofing sealer to the required area of the posts and panels. Any commercial waterproofing or bituminous product designed for such use will suffice. TrendWall uses and recommends SikaTite BE which is available from most hardware stores. Where the wall is to be backfilled for only part of its height, apply the sealing product to 100mm above the intended fill level. Posts should be coated on their rear face as well as the support bracket and base channel.

A layer of plastic sheeting can also be used to line the back of the wall to provide an extra membrane and also to protect the bitumen coating during backfilling. Heavy Duty 'Builders Plastic' (200um thick), for example, is suitable. Position the plastic sheeting so it will cover the areas of the wall that are to be backfilled.

NOTE: Any plastic sheeting should not compromise the drainage capability of the wall.

DRAINAGE

A retaining wall without adequate drainage will act as a dam with the potential to damage the wall. This applies to running water that is both above and below the ground surface.

The ground behind the wall should be suitably contoured to prevent surface water being trapped.

At the base of the wall it is recommended that an Agricultural Line (75mm – 100mm Diameter) be used to allow under ground seepage to escape. A line fitted with an external filter-sock is recommended to reduce silt entering the line. Place the Agricultural Line on top of the 'Base layer' of aggregate (refer to the 'Backfilling' section & the typical section drawing on the previous page).

Position the Agricultural Line to allow it to connect to a free-draining outlet (Eg: stormwater or to daylight). Directing of the Agricultural Line through the wall panel for the purpose of draining is not recommended but can be done if no other draining method is possible.

ADDITIONAL

CONNECTION OF TRENDWALL™ TO OTHER FENCE

STEP 1

Insert TrendWall fence connector into the post by sliding the 75x25 RHS sleeve down to just below level height. See Figure 1 and 2 below.

STEP 2

Affix post to TrendWall fence connector via 10-16x16mm self drilling screw placings. See Figure 3 below.

STEP 3

Slide TrendWall post cap over the fence connector and secure as required.

STEP 4

Attach fence by others to the connecting fin protruding from post. See Figure 4 below.

NOTE: screws to conform to AS3566 Class 3 at minimum

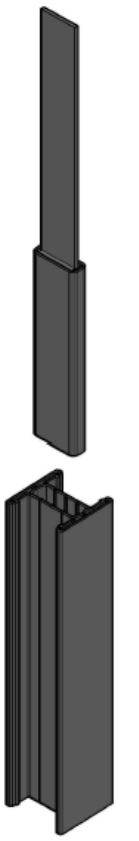


Figure 1

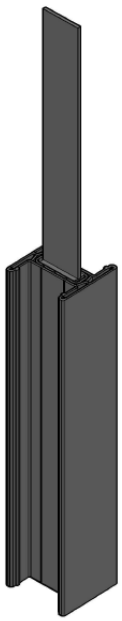


Figure 2

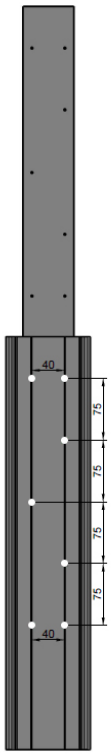


Figure 3

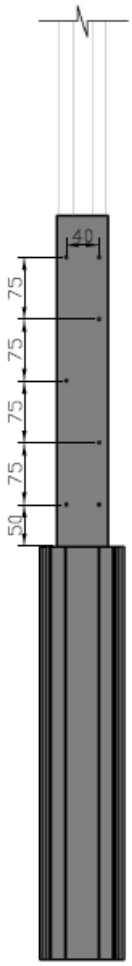


Figure 4

NOTES:

WITH A REPUTATION FOR QUALITY AND INNOVATION, MODULARWALLS® PROVIDES REVOLUTIONARY WAYS TO CREATE STYLISH AND COST-EFFECTIVE WALLS AND FENCING.

7 DAY TECHNICAL AND INSTALLATION ADVICE IS AVAILABLE BY PHONING 1300 556 957 AND SELECTING THE AFTER HOURS OPTION

www.modularwalls.com.au

MODULARWALLS®