VistaWall Slat

Installation Guide

A step-by-step guide to installing your fence

Fentec

Introduction

Thank you for choosing Fentec VistaWall range. This product will provide you with many years of trouble free protection if installed in accordance with the directions outlined in this document.

The recommendations detailed in this guide are formulated along the lines of good building practice. They are not intended to be an exhaustive statement of all the relevant data.

If you have any questions, please contact our Technical Team on 0800 002 725. We are always happy to help in any way we can.

Before you start, read this

This guide does not apply to any fence over 1.8m in height. If your fence is greater than 1.8m, please seek further advice from Fentec.

Describe your site details when ordering materials.

Identify your soil type/ground conditions. Refer to the table in Step 2. This will determine the concrete and footing details required.

Make sure you are aware of underground services before you start digging! These could be gas, electricity, or water mains. Contact your local council for more information.

Check your local council regulations on boundary fencing.

Check the delivered material for the correct number of components and general condition before beginning your installation.

Tool List

Make sure you choose the right tools before you start your fence.

Tools

- ☐ Tape measure
- ☐ Spade
- ☐ Shovel
- ☐ Level
- ☐ String line
- ☐ Concrete
- ☐ Drill

Optional

- ☐ Hacksaw or powered metal cutting saw
- ☐ Post hole digger/auger 300mm
- ☐ Spirit or laser-level

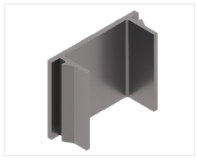
Safety Gear (minimum required)

- ☐ Safety boots
- ☐ Gloves
- ☐ Helmet
- ☐ Eye protection
- ☐ Hearing protection
- ☐ Sun protection

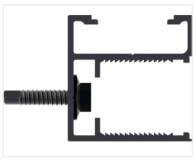
It is recommended that the reader pays particular attention to those items identified as **Important** in this manual to ensure satisfactory long-term performance.

Component List

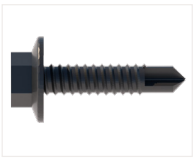
100x16x1780mm slat



18mm slat spacer



30x30mm paling channel



Tek screws

Channel cover clip

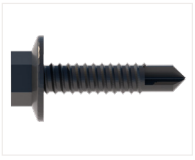
Channel end caps, left & right

Centre support channel – for 2400mm wide panels only

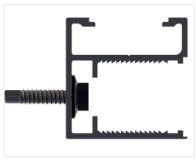
Conversion kit components

To change the orientation of your fence see page 9.

100x16x1780mm slat



Tek screws



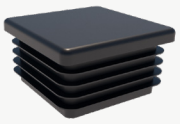
30x30mm slat channel

Required:

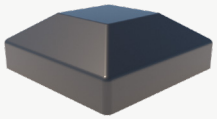
These items below are not included but one type of post and cap are required for installation.

65x65 in-ground post

65x65 flanged post



Plastic knock in cap



Aluminium post cap

Step 1 > Lay out your fence line

a. Determine & mark any legal boundaries and/or underground services.

b. Measure out each fence line & mark the post positions. Determine post centres as follows:

Table A: Post Centre

Slat Length	+	Clearance	+	Post Size	=	Post Centre
E.g. 1780mm	+	20mm	+	65mm	=	1865mm
E.g. 2380mm	+	20mm	+	65mm	=	2465mm

c. If the fence line length does not work out as multiples of the standard panel length, adjust the length of the last section, or the last few sections, to suit & cut panels to fit.

d. Use a string line or laser level to make sure any straight lines are aligned.

Step 2 > Mark and dig post holes

a. Dig post holes using hand tools and/or a powered auger. See Tables A & B for required post-hole dimensions and depths.

Table B: Required post-hole depth into firm earth or clay

Wall Height (mm)	Post Hole Depth (mm)
900	450
1200	550
1500	600
1800	600

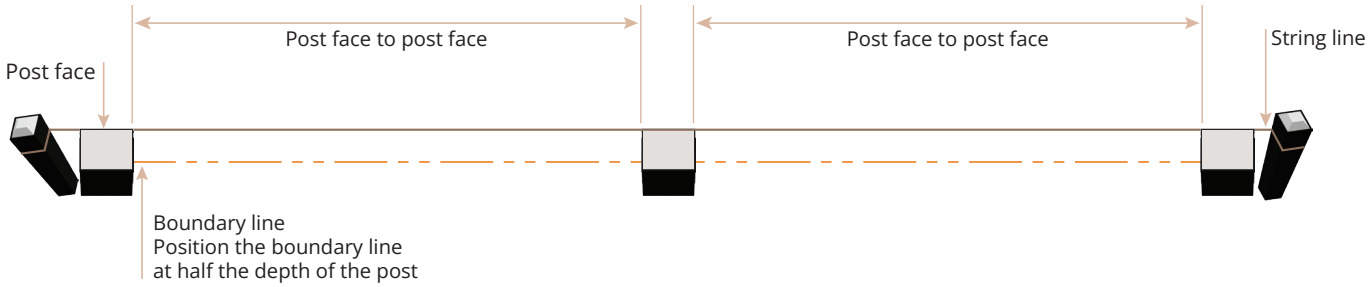
Notes:
For higher walls, you will need engineering advice beyond the scope of this publication.

The diameter of your holes should be large enough to have a minimum of 75mm clearance around the post. Please note that 1800mm is the standard height. Heights lower than 1800mm can be done using these components, with wastage.

When using the vertical conversion kit, post centre may differ depending on desired outcome.

Recommended footing depths listed in this table are for wind regions A & B, plus terrain categories 2.0, 2.5 & 3. If you are building your fence in a cyclonic wind area, on top of a hill, adjacent to an escarpment, on a ridge or in terrain category 1, you will need engineering advice beyond the scope of this publication.

Marking out your post holes



Slat Length	65x65mm Post Hole Centres	In-between Post Measurements
1780mm slat	1865mm	1800mm
2380mm slat	2465mm	2400mm

Standard post centre to post centre guide

The table above allows you to work out what your post centres will be. If you have 2380mm slat [allowing for 10mm either side of the channel] and you are using 65x65mm posts, then you will have an 2465mm post centre to post centre.

This also shows the in-between measurements, should you be fitting your slats between posts other than a 65x65mm profile, i.e, timber posts or concrete blocks.

Step 3a > Installing the posts **for in-ground posts**

a. Place the post into the hole and set the height carefully using a tape measure or, preferably, a laser level. Important: Ensure you allow enough height on the post to allow for slat height + ground clearance (suggest 50-100mm) + additional 10mm clearance for the external cap.

b. Fill the hole with concrete around the post, taking care to keep the slat channel height in the correct position.

c. Check with a spirit level regularly to ensure the post is plumb.

d. Ensure the post remains square to the fence line & does not turn as you place concrete around it.

e. Repeat steps a to d for all posts.

f. Set the spacing of the posts at the length of the slats, plus approximately 5mm clearance (as per Step 1).

TIP: cut a spacer stick out of timber at the correct length between posts.

In-ground posts:

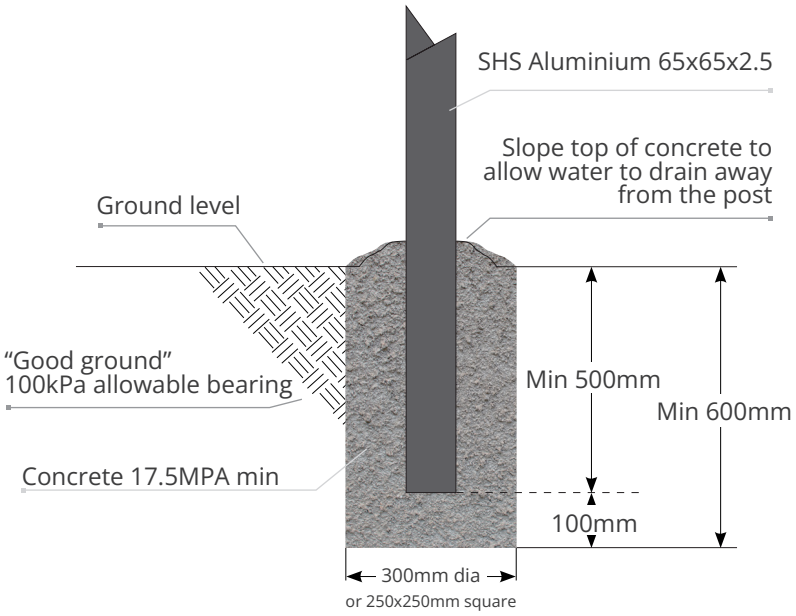
FAP6518	65x65x1800mm
FAP6522	65x65x2100mm
FAP6525	65x65x2500mm
FAP1025	100x100x2500mm

Post sizes are dependent on the application & design requirements.

Posts to be installed in 'good ground' as defined by NZS3604.

Notes:

- For standard 65x65mm (and smaller) aluminium posts, a fairly dry concrete mix can be used which will hold the post in place without any bracing while the concrete dries. However, the site must be revisited before the concrete sets firm to recheck post alignment if required.
- Any heavier posts, (e.g. gate posts), should be concreted in place and braced until the concrete is dry.
- If the fence line follows any contours in the land or the fence line is curved, regularly check the height of the posts as you work down the line to ensure a good visual line along the top of the fence.



Step 3b > Installing the posts **for bolt down posts**

a. Ensure the surface you are bolting the post to is firm, level & clean.

b. Fix the posts in place with four fixings of the correct type for the situation.

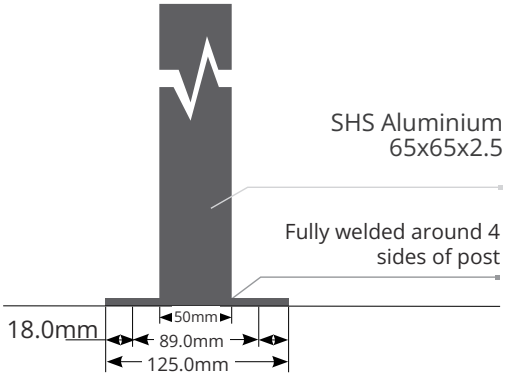
Bolt down post
FAF6513 65x65x1300mm
FAF6519 65x65x1900mm
Post sizes & fixings are dependent on the application & design requirements.

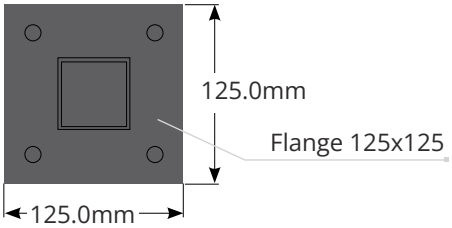
Fixings - indicative

In concrete: 4x M12 HILTI HST stud anchors or similar with minimum 70mm embedment.

In timber: 4x 12mm coachscrews with minimum 120mm embedment.

Note:
When fixing a flanged post to the top of a block wall, we recommend a minimum width wall of 200mm minimum to eliminate the risk of concrete 'blow-out'.





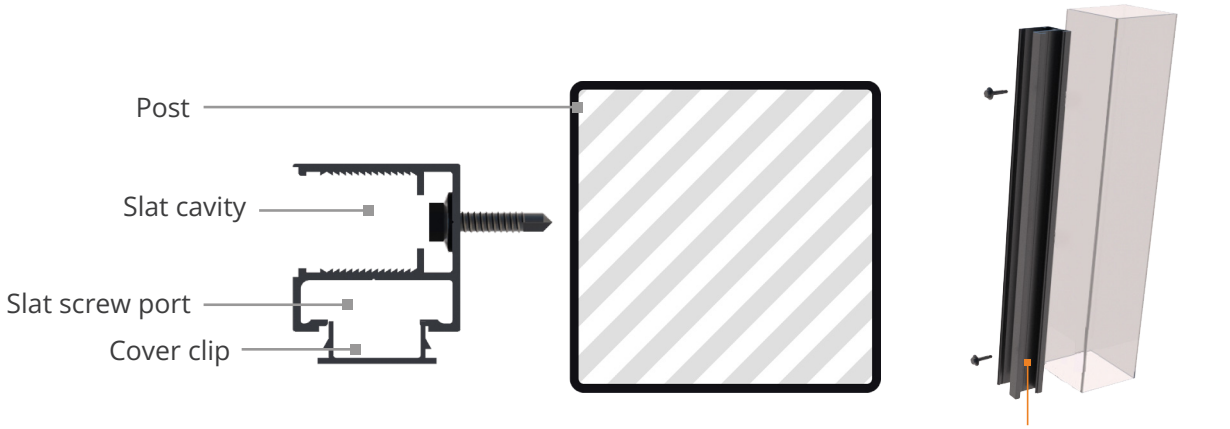
Step 4 > Fitting paling channels

a. If your channels are not the desired length then these will need to be cut, ideally, with a dropsaw to obtain a clean cut without heating the aluminium to a point that it burns the powdercoating.

b. With the use of a tape measure, string line/chalk line, or, if you have access to a laser level, you can mark the heights of the top of your slat channel on your posts.

c. If your site has sloping ground it may be required to step your fence from bay to bay. Once a height has been established for all of your channels, with the tek screws supplied, screw your channel directly to your post whilst keeping the top of your channel at the marks you have made on your post.

d. Your screws should be approximately 300-400mm apart down the length of your channel.



Note:
Make sure the post is elevated 10mm higher than the channel to allow for a post cap.

The slat channel is asymmetrical.

To ensure your fence aesthetically looks correct, make sure the 'screw port side' is all facing the same direction (generally on the inside of your property looks best).

Step 5 > Fitting slats

See vertical conversion guide on page 9 to change the orientation of your fence.

Depending on the height of your slat wall and the number of slats you have, these factors will determine the slat spacings required for your fence. Typically, with the full use of this fence, the 100x16mm slat, we would work on 1 slat per 118mm, thus giving you a 18mm gap between each slat.

If you are doing a lower height than 1800mm or using custom spacings, you will need to divide the height of your wall into the number of slats you have to obtain the spacings for each slat.
E.g. 1500mm high wall with 12 slats = 125mm spacings (25mm between each slat).

When using 2400mm slats, you will need to fix the centre support channel in the centre to provide extra rigidity. It is recommended to do this on the screw port side of the channel. This channel is 30mm wide and 10mm deep with its own cover to hide the fixings.

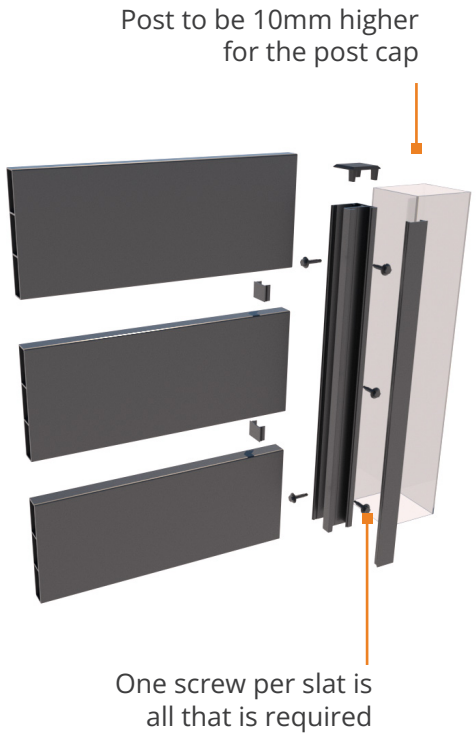
Two methods can be used to set your slats out.

1. The first is to use the spacer provided, which is fixed at 18mm and clips into the channel between each slat and fix each slat individually through the side of the slat channel every 118mm.
2. The second is to cut your own spacer blocks (can be from anything, wood or plastic) and once the first slat has been screwed in place the spacers will be used to separate the slats from one to the next, at your own custom spacings.

Note:
It is important to maintain both parallel and level within each bay. This will ensure a straight looking fence. This can be achieved by using a tape measure to check for the 'parallel' with either the top of the channel or your starting point.

Important:
We do not recommend the slats to be fitted with less than 5mm gaps between each slat.

This may cause capillary action and cause corrosion to the slat system.



Step 6 > Cover clip installation

Once all your slats have been assembled you can now install the cover clip to the channel to hide all visible fixings.

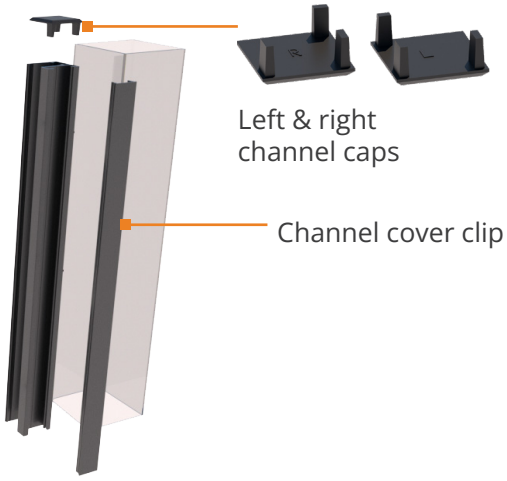
Make sure the cover clip is the same length as your slats channel, then you are ready to insert.

The easiest way to do this is to use either a rubber mallet or the rubber handle of a hammer.

Insert one edge of the cover clip into the channel, then firmly tap in the other edge along the length of the channel until it is all secured in place. If the cover is loose, screw one tek screw at the bottom of the channel to stop the cover dropping out.

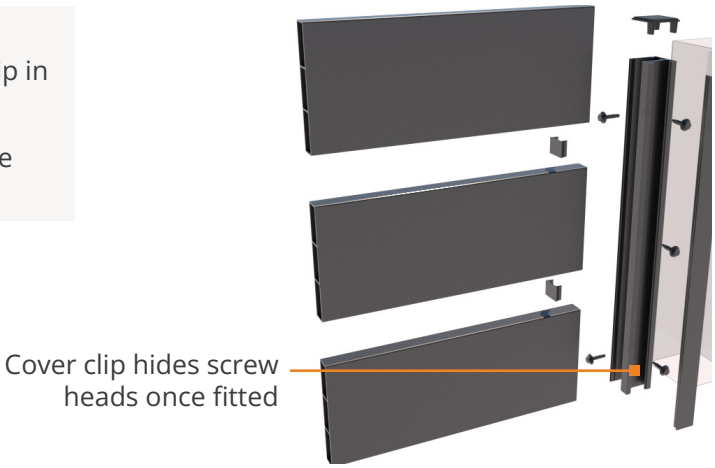
One all the slats have been installed, we have an optional cap to cover the profile of the slat channel. These consist of a left and right hand cap.

Caps are just inserted onto the top of the channel.



Important:
It is important that the object you use to tap the cover clip in with, won't damage the powder coating.

Do not use the metal part of your hammer, this will cause scratches or dents.



Vertical conversion guide

How to convert the orientation of your VistaWall Slat fence.

Important:
Please read this thoroughly before commencing with installation.

Cutting of components prior to install - this will need to be done on-site with a drop saw

The maximum panel height is 1755mm. All vertical slats will need to be cut to achieve your desired fence height. This is based on your vertical channel, minus bottom horizontal slat of 100mm, minus top/bottom channel (allow 20mm).

Note: This is critical to avoid any excess cutting. See table below as an example for 1755mm high panel.

Table C: Panel Height

Slat Length	+	Bottom Slat	+	Top/bottom Channels	=	Panel Height
1630mm	+	100mm	+	allow 20mm	=	e.g. 1755mm

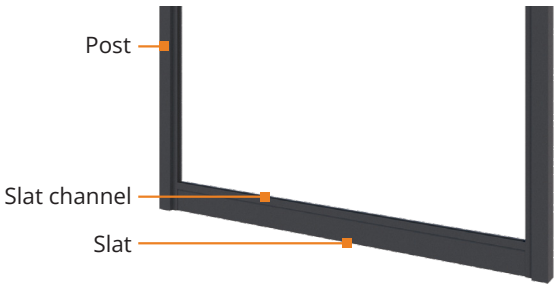
The bottom slat length is determined by post-to-post measurement minus 20mm for vertical channels. e.g., the final measurement of the bottom slat will be 1755mm for a 1775mm panel width.

Trim the bottom channel to the total length of the exposed slat between posts.

Fitting bottom paling

Depending on the total width of the bay, the maximum post width face to face is 1775mm with 18mm spacers between slats (please note you will need to cut the bottom horizontal slat to suit)

Once posts are installed, and vertical channels are fixed off, the additional horizontal slat will need to be cut to suit and screw fixed on either end. Trim channel to the total length of the exposed slat between posts. Screw fix this to the top of the slat, this will become the base of the vertical slats.



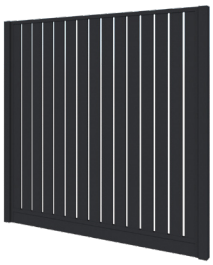
Fitting vertical slats

Starting from one side, fix one slat against one side and work across using the 18mm spacers provided.

Tip: use a strap or similar close to the top of the post to secure the slats prior to fitting the top cap.

Fitting top cap

After fitting all the slats, place the top cap across and screw fit to secure the fence.



Frequently asked questions

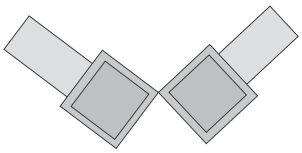
What is the best method to cut aluminium?
For the best results, use a drop saw with an aluminium cutting blade. This will create a clean, square cut. A grinder is acceptable, provided you use a thin metal cutting blade to reduce the risk of burning the powdercoat.

Can this be installed in coastal areas?
Yes, we have a 5 year warranty on our products. If you are in a coastal zone then an increase of cleaning and maintenance will be required. We do not recommend the product to be in direct contact with salt water.

What do I do if I have hard water?
Regular cleaning of your fence will be required to help prevent water spots from appearing. Hard water is corrosive to the powder coating, therefore neglect will cause deterioration to your fence.

Can this be used for a balustrade?
Yes, please visit our website to view the PS1.

How do I set up my posts around angles?
You will need two posts for this. The channel system is required to be square to the posts and palings. This can only be done with two posts side by side.



How does the centre support work?
The centre support channel is used on 2400mm wide slats/panels to provide extra rigidity, the extra slat is screwed to the channel to tie them together.

Can I change the spacing of my slats?
Yes, generally we work to a standard 18mm gap between slats. Depending on the level of privacy you require, you can either close or open the gap to meet your preferred gap size.

Can this product be used as a balustrade over 1m high?
Yes, please visit our website to view our PS1 F4 Building documentation.

View thePS1 F4 Building documentation:

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