

Aluminium

Installation Guide

Products: Vertex



A step-by-step guide to installing your fence

Introduction

Thank you for choosing Fentec Aluminium Fencing. 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

Read this entire install guide before beginning any installation.

For guidance, information or advice, our technical team is available Monday to Friday, 8am to 5pm. Call us on 0800 002 725, or email sales@fentec.co.nz.

Identify soil type/ground conditions to determine the required concrete and footing details.

Be aware of any underground services prior to commencing digging, identify the legal boundary

and check local council regulations on boundary fencing. Contact the local council for more information.

For fencing over 1800mm contact Fentec for guidance.

For F4 (Safety From Falling) or F9 (Restricting Access to Residential Pools) applications, refer to the PS1 for installation details.

Tool List

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

Tools

- Tape measure
- Square
- Shovel
- Line marking paint
- String line
- Spirit or laser level

- Drill/driver
- Hex drive bit *5/16 driver*
- Auger/post hole digger
- Circular saw

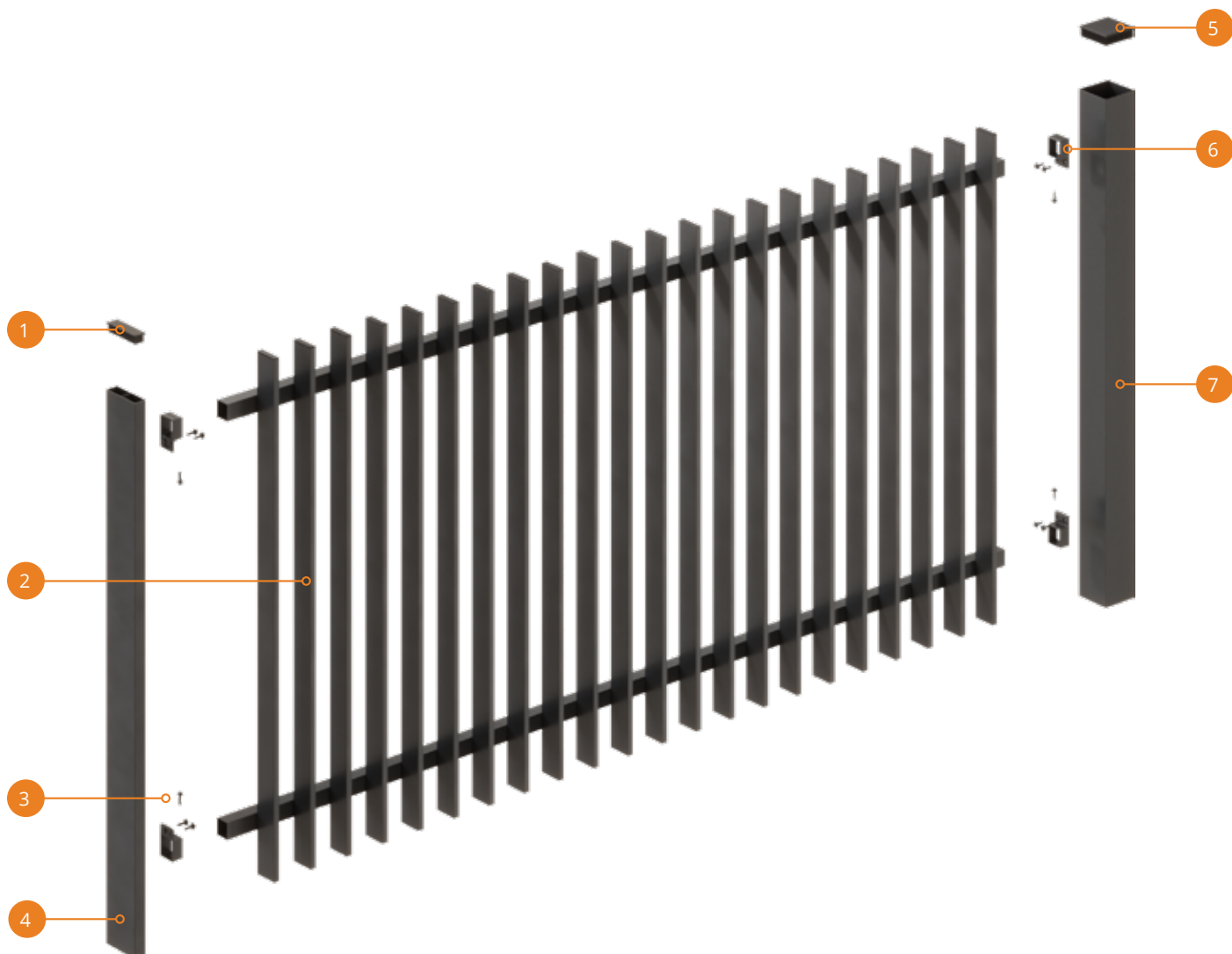
Safety Gear (minimum required)

- Safety boots
- Gloves
- 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

Take care when opening and unloading the package. Ensure all components are accounted for and check it is all undamaged.

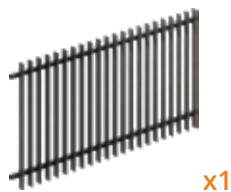


A complete Vertex Fence system consists of:

1. Line Post Caps



2. Vertex Panel



x1

3. Screws



x12

4. Line Posts
110x32mm



5. Corner Post Caps



x2

6. Brackets



x4

7. Corner Posts
100x100mm



Quantity of Line and Corner Posts will depend on application.

Step 1 > Establish fence line

1. Hammer a wooden peg (or similar) into the ground at each end of the fence line. These represent the start and end points of your fence. If there is a corner or a change in direction, put a peg in at each of those points too. **Fig. 1**
2. Tie a string line to the first marker peg, keeping the string line just off the ground. Run the string line along the pegs, from the beginning peg to the end, keeping the string line taut and straight with no sag. **Fig. 2**
3. Once the string line is in place, measure along the line and mark where the post centres will be located with spray paint or a marker peg. **Fig. 3**



Fig. 1



Fig. 2

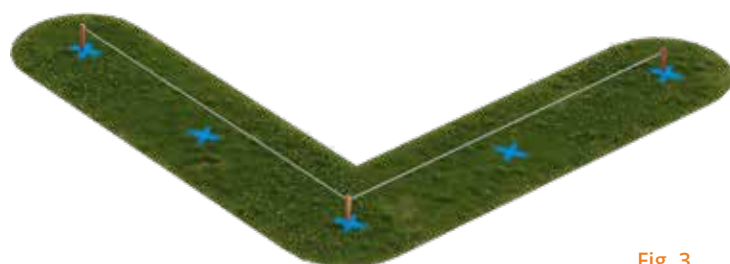


Fig. 3

To create the seamless 'floating' fin profile, Vertex uses 110x32mm Line Posts. For corners, 100x100mm posts are used.

For F4 or F9 compliance the post requirements may vary. Please refer to the Fentec PS1 for guidance when installing in F4 or F9 applications.

To calculate the standard post centres for different post size configurations along the fence line, see **Table A** below for some examples.

Table A: Post centre

Posts configuration	Half width of first post	+	Panel length	+	Half width of second post	+	Clearance for brackets	=	Post Centre (mm)
110x32 + 110x32	16mm	+	2400mm	+	16mm	+	5mm	=	2437mm
110x32 + 100x100	16mm	+	2400mm	+	50mm	+	5mm	=	2471mm
100x100 + 100x100	50mm	+	2400mm	+	50mm	+	5mm	=	2505mm

Post centres may vary for F4 or F9 compliance, please refer to the Fentec PS1 for guidance.

Step 2 > Mark & dig post hole

In-ground Posts

1. After marking post positions, dig the post holes. **Fig. 4**
2. Post hole depth will vary depending on ground conditions and fence height. All post holes should be at least 250mm in diameter, 600mm deep, and should be straight, with the sides either parallel, or wider at the bottom than the top. **Fig. 5**

Post Hole Depths:

Soil type	Min. hole depth	Approx. required concrete (20kg bag)
Clay/Firm Earth	600mm	2 bags per post hole
Sand/Loose Fill	900mm	3 bags per post hole

3. Brace the post into position, ensuring it is straight and level.
4. Pour in the concrete, allow at least 100mm of concrete below the post. Vibrate/compact the concrete to remove any voids.
5. Slope the top of the concrete to allow water to drain away from the post. **Fig. 6**
6. Check the posts are straight and level before the concrete fully sets.



Fig. 4



Fig. 5



Fig. 6

Flanged Posts

1. Ensure the surface is firm, level and free of debris.
2. Align the posts along the surface.
3. Fix the posts into place using the correct type of fixings for the application.

Fixings - indicative.

In concrete: 4x M12 concrete screw bolts with minimum 70mm embedment.

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



Fixing details may vary for F4 or F9 compliance, please refer to the Fentec PS1 for guidance.

Step 3 > Attaching brackets and panels

Once the concrete has set, the panels and brackets can be attached.

The panels can be cut down to fit between posts if required. When cutting down panels, either a hacksaw or a power saw with a sharp diamond tip blade, or similar, is recommended to prevent burning the powder coat finish.

1. Slide the brackets onto the rails, ensuring the tab is pointing down for the top rail. **Fig. 7**
The bracket on the bottom rail can have the tab pointing either up or down.
2. Measure and mark the positions of the brackets on the posts.
For the front of the fins to remain flush with the posts, the brackets will need to be installed offset from the centre of the posts. The bracket will sit almost flush with the back of the post. **Fig. 8**
**There will be up to 5mm of clearance between the back of the bracket and the edge of the post. For a 100x100mm post, the fins will protrude about 5mm.*
3. Ensure the front of the fins are flush with the line posts and check it is all straight and level. **Fig. 9**
4. Screw the brackets onto the posts and then fix the bracket to the rail with the provided tek screws.

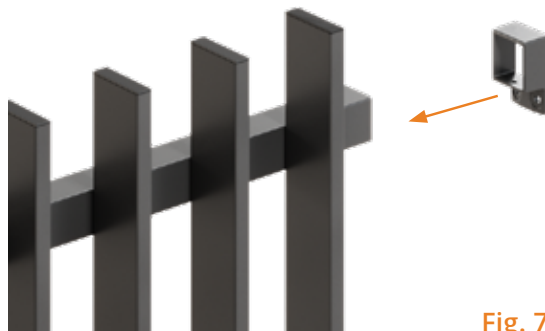


Fig. 7

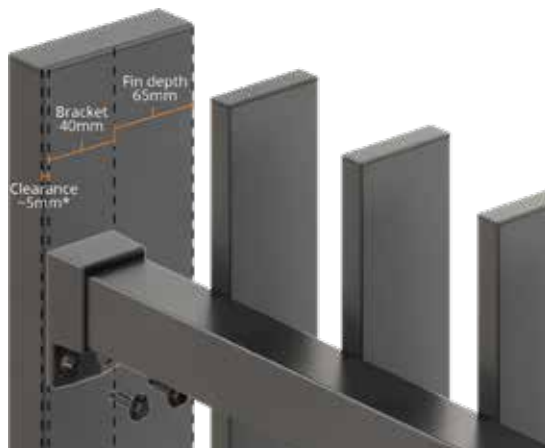


Fig. 8



Fig. 9





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