

COMPOSITE SALES

PART OF THE **PBSL GROUP**



 **COMPOSITE FENCING** INSTALLATION GUIDE



WELCOME TO OUR INSTALLATION GUIDE

Our composite fencing boards are provided by top quality UK manufacturer Ecoscape and are made from a combination of recycled high density polyethylene and reclaimed wood fibres. This blend results in a high strength fencing system that is exceptionally weather-resistant.

Each board has a modular design and is dual sided, allowing homeowners to create their unique fence board pattern. The boards have been designed to easily slot on top of each other, making their installation process quick and simple.



CLASS C FIRE RATING



LOW MAINTENANCE



NO ROTTING, SPLINTERING OR WARPING



20-YEAR GUARANTEE



QUICK INSTALLATION TIME

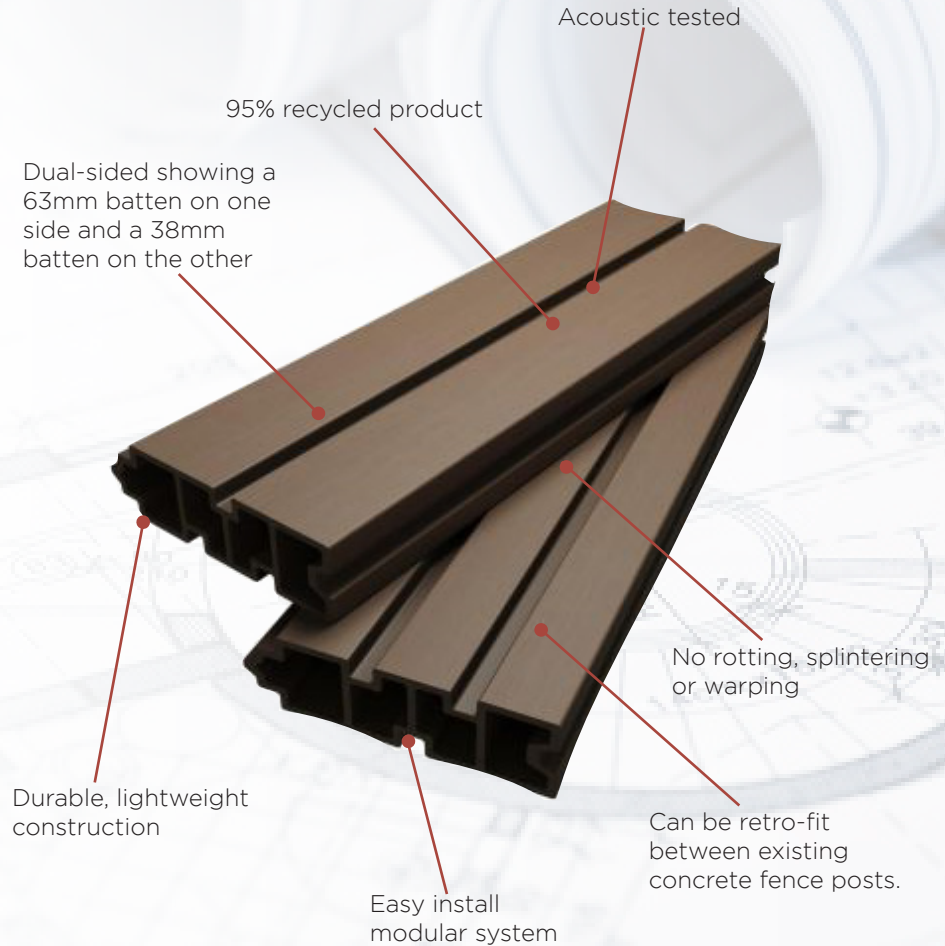


ENVIRONMENTALLY FRIENDLY



The Board

Composite fencing (also known as WPC fencing) from Ecoscape is a smart and innovative boundary solution for domestic and commercial properties. A low-maintenance alternative to timber, these composite fencing panels can add both style and longevity to your outdoor space.



- Each board is 157mm (150mm finished) wide x 45mm thick x 1.83mtr long
- Please note that images are used for illustration purposes only. The actual product may slightly vary from the image supplied.

Accessories



1 Fence end posts are used at the end of a run of fencing to provide an aesthetically pleasing finish on a property. Each post fits easily against the edges of fencing boards.

Inter-fence posts sit between two rows of fence boards in a composite fencing installation. They feature slots on either side that allow them to easily be connected to the ends of fence boards.



2 Corner fence posts are used as a connection point where two runs of fence boards intersect at a 90 degree angle.

Post caps can be used on any Clarity fence post in order to provide an aesthetically pleasing finish to the top of the post.



3 These steel fence post inserts are used to support composite fence posts and are placed and concreted into the ground before said fence posts are placed over them.

This steel base plate is used in conjunction with fixings to firmly secure a steel post insert into position.



4 In a composite fencing installation, the fence top board sits along the very top of the fence and simply slots on top of the highest fence board between two posts.

The bottom rail is placed in between two fence posts before any fence boards are slotted in place in order to provide a robust support for the composite fencing system.

Before you start

Whilst our composite materials are highly durable, we do recommended you follow storage and handling guidelines.

Materials should be stored under cover in shade, kept dry and protected from weather until ready to install. Products should not be stored outside and / or covered with plastic sheeting. All composite products should be stored supported off the ground at 500mm intervals on a flat surface.

Allow the composite fencing to acclimatise for a minimum of 3 days prior to installation.

Installation methods

There are three main methods to installing composite fencing:



GROUND
Into ground or grass with a concrete footing.



SOILD BASE
Onto a concrete foundation or brick wall



RETROFIT
Retrofit into existing concrete posts

Handling

Fencing boards should be lifted and set down with care to avoid damage. Do not slide boards over one another. Fencing boards should be carried in the middle and on their edge for best support when moving. Avoid sliding or dragging any equipment across the board surface to prevent the surface from tarnishing. The fencing boards' exterior should be kept free of construction debris and material to prevent damaging the boards.

Safety

Personal protection equipment (PPE) should be worn at all times when installing composite fencing.

We recommend to wear gloves, protective eye wear, and a dust mask.

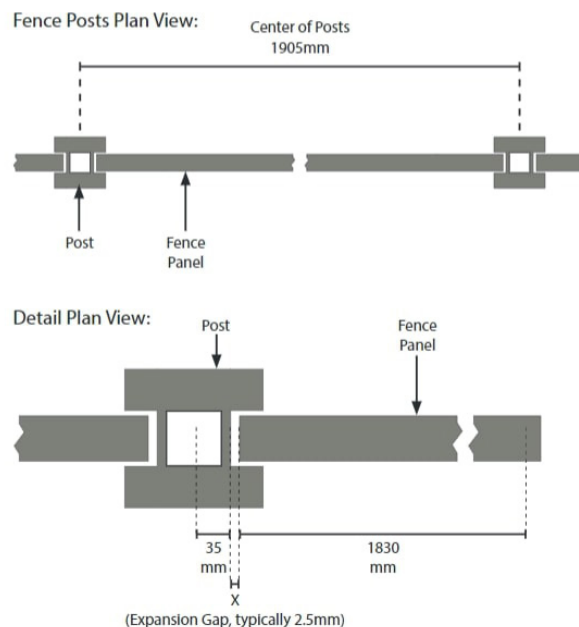


CALCULATING

MATERIALS AND EXPANSION GAPS

To determine how much composite fencing material will be required, you can either use detailed plans and elevations, or follow the method below.

STEP 1. Measure the length and height of your fence. To work out how many fence boards you will need, divide the length of the fence / 1905mm. This measurement is the total width of a panel including the centre of posts as illustrated.



NOTE: As shown on the diagram adjacent, the set out of the fence boards includes an expansion gap to the end of the board (X).

This accounts for minor expansion of the board during hot weather.



The expansion gap value (X) should be as follows:

Air Temperature at time of installation	Expansion Gap (X)
0 degrees	4mm
10 degrees	3mm
20 degrees	2mm
30 degrees	1.5mm

NOTE: - If required, the fence posts can be cut to length using standard woodworking tools. Remember to account for any expansion gap.

STEP 2. Calculate the height

Fence boards are 1830mm in length x 157mm in height but have a finished face of 150mm.

Below is a list showing the number of standard Fence Boards (excluding Aluminium Bottom Rail (45mm assembled height) + top fence board 140mm assembled height = 185mm) needed to achieve a certain height, based on stacking the boards on top of each other horizontally:

- 11no. Boards = 1650mm (+185mm) = 1835mm (approx. 6ft)**
- 9no. Boards = 1350mm (+185mm) = 1535mm (approx. 5ft)**
- 7no. Boards = 1050mm (+185mm) = 1235mm (approx. 4ft)**
- 5no. Boards = 750mm (+185mm) = 935mm (approx. 3ft)**

(Area of 1no. Fence Board = 157 x 45 x 1830 = 0.28 m²)

Typical Example: If your boundary fence is 14 meters long, 1.8m in height, and you're installing on a 15°C day:

Length 14m / 1905mm (Board length, expansion gap & post widths) = 7.34 sections

Number of Fence boards needed - 7 x 11 = 77

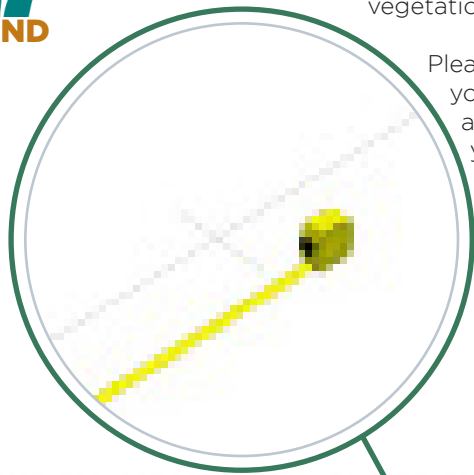
For the 0.34 section of a panel, you will get two fence boards out of one length - So another 6 fence boards are needed for the cut section.

Total Needed:

- Standard Fence Boards = 83
- Posts = 9
- Post Caps = 9
- Aluminium Bottom Rail = 8
- Top Fence Board = 8
- Plastic Clip = 16

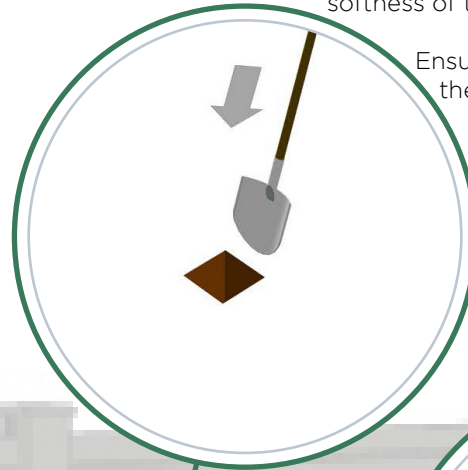


STEP 1 Use a string line to mark out the line of the fence. Make sure the area is clear of any obstacles / vegetation.



Please note that your posts should always be on your side of the boundary.

STEP 2 Dig a hole using a narrow shovel or Fencers Graft to a depth of 600- 850mm depending on the softness of the ground.



Ensure the base of the pit is leveled.

STEP 3 Place the steel insert in the hole and ensure it is straight, using a spirit level. We recommend getting a second person to help you do this.

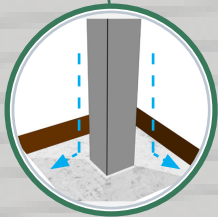
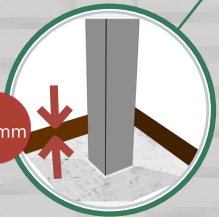


Allow the composite fencing to acclimatise for a minimum of 3 days prior to installation.



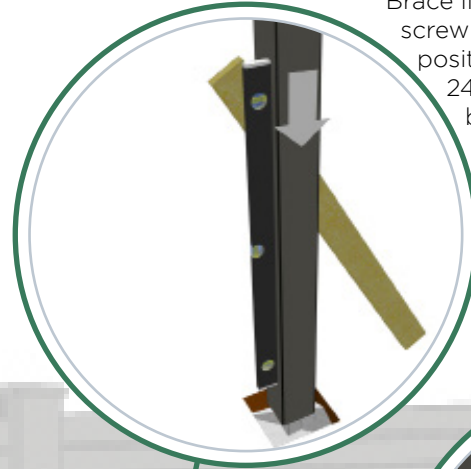
STEP 4 Fill the hole with post mix concrete. We recommend 2.5-3 20kg bags depending on the size of the hole and ground conditions.

Ensure that the concrete is filled to around 25mm below the soil / ground level. Ensure that concrete is angled away from the fence post to aid water run off.

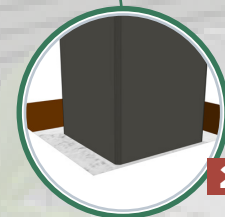
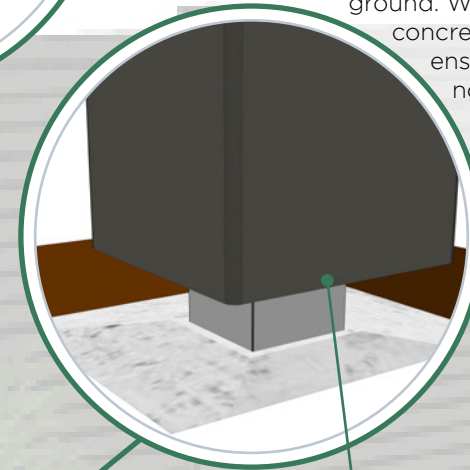


STEP 5 Place the composite fence post over the steel insert. Check the post again to ensure it is plumb and level.

Brace if needed but avoid screwing into the composite post. After 24hrs support braces can be removed, once the concrete has set.



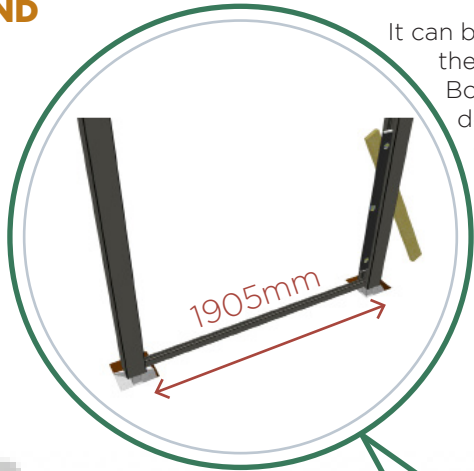
STEP 5a The composite fence post is to sit on-top of the concrete. Only the steel insert is concreted into the ground. Whilst the concrete is setting, ensure the post does not rest on the surface. Use temporary battens if necessary.




24 HRS

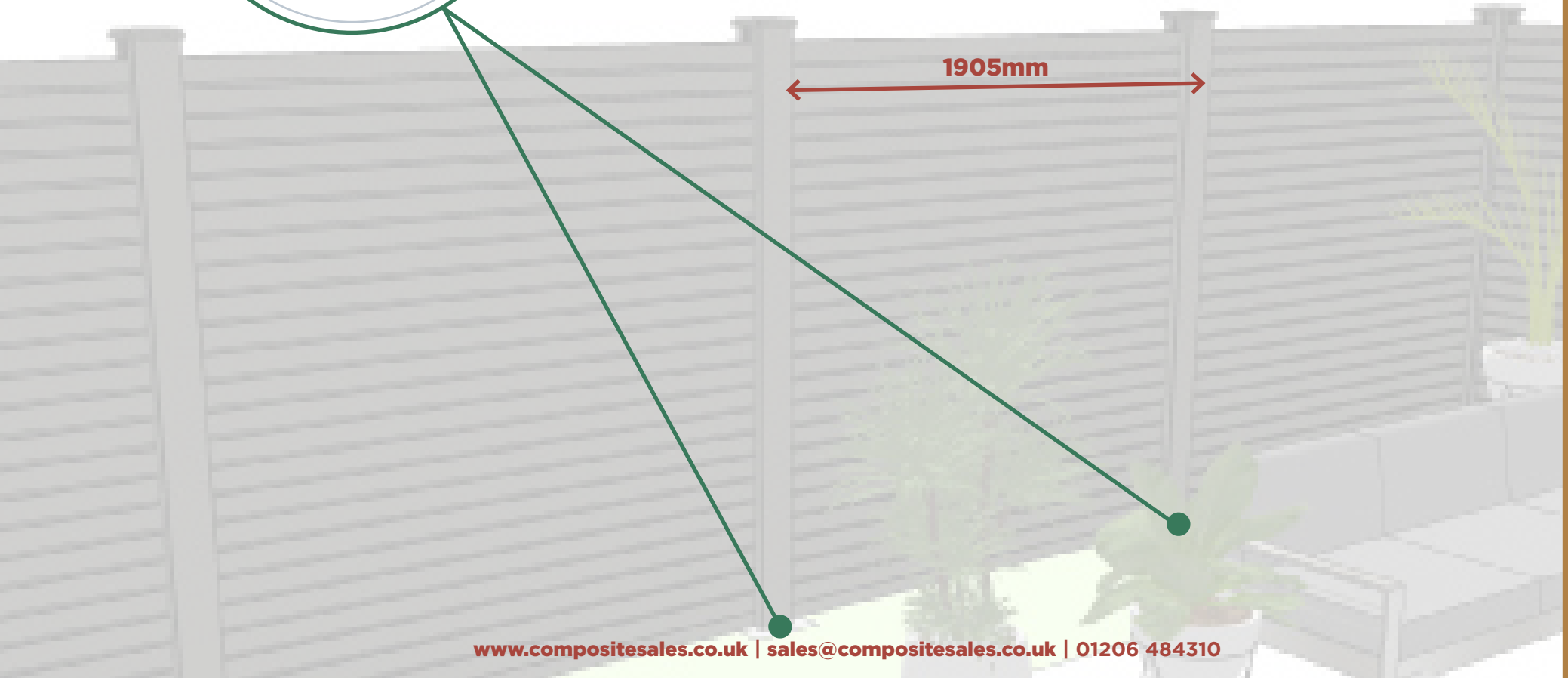


STEP 6 Use a string line to set out the next post and measure the distance to ensure it is correct.



It can be useful to use the Aluminium Bottom Rail to double check the distance and set out. Be careful to not get any wet concrete on the rail itself.

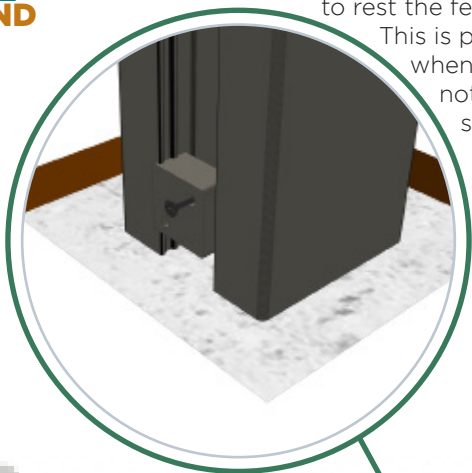

At this point you can either:
Complete the first fence panel by moving to step 7 or;
Continue to set out the remaining fence panels as per step 5.



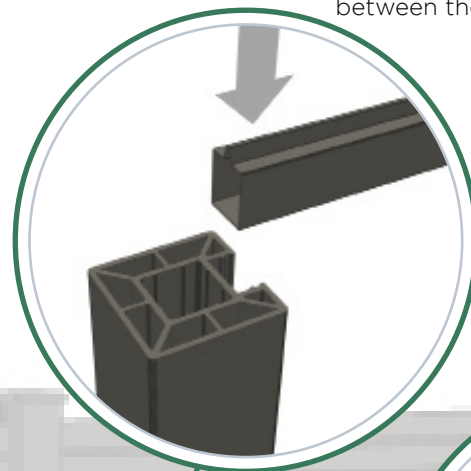


STEP 7 Before installing the bottom rail, you may wish to install the security clips to the bottom of the fence post to rest the fence boards on.

This is particularly useful when the ground is not sufficiently solid.



STEP 8 Place the aluminium bottom rail into the H groove of the fence post and align both ends. Slide the rail down between the fence posts.



STEP 8a Level the aluminum bottom rail. The rail can be sunken into the ground if needed



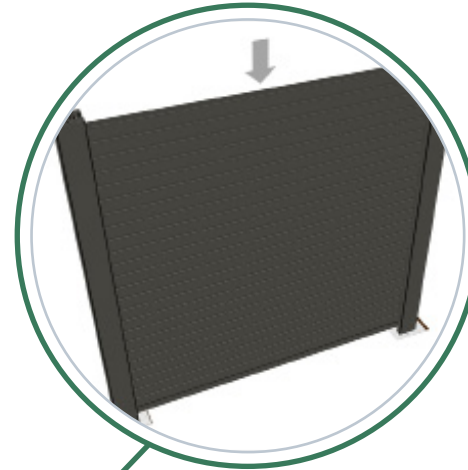


STEP 9 Slot the fence boards between the posts, leaving a gap of 2.5mm between the end of the fence board and the post.

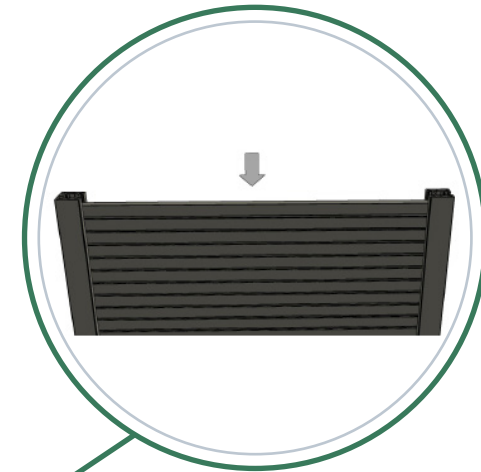
Please see table on page 5 to calculate this expansion gap.



STEP 9a Stack the remaining fence boards.

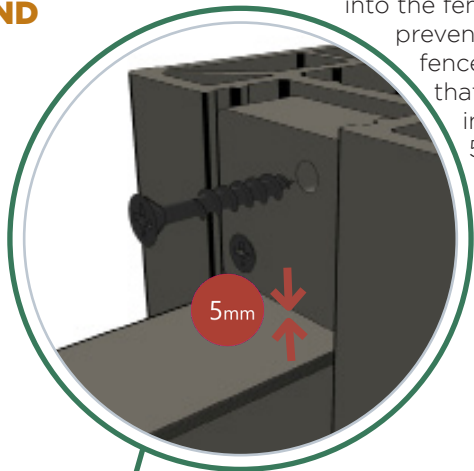


STEP 10 Finish by inserting the Top Fence Panel.

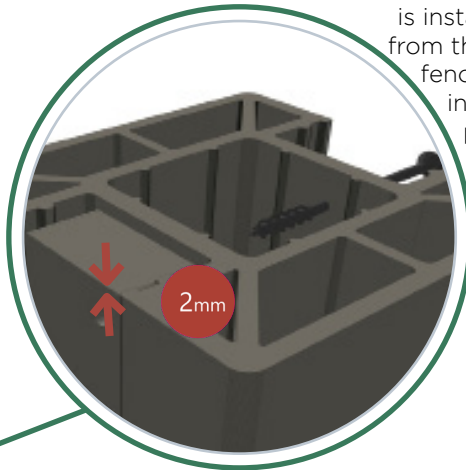




STEP 11 Optional - It is possible to secure the boards in place using a security clip. This is simply screwed into the fence post and prevents theft of the fence boards. Ensure that the clip is installed at least 5mm above the fence board.



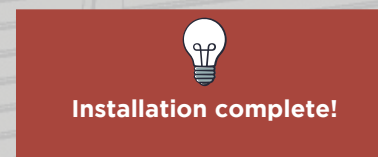
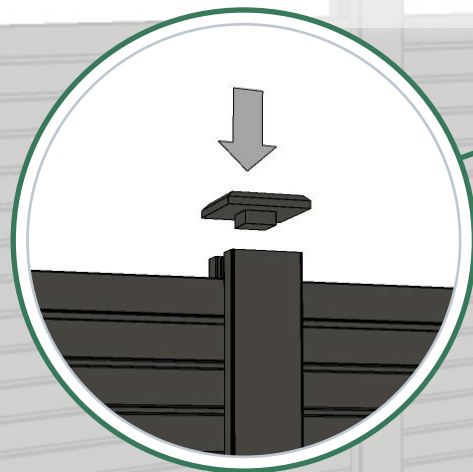
STEP 11a Ensure the hole is pre-drilled and countersunk to achieve a flush finish. This can be done from either side as shown. Ensure that the clip is installed at least 2mm from the top of the fence post to allow installation of the post cap.



STEP 12 Insert the remaining boards and security clips as required.



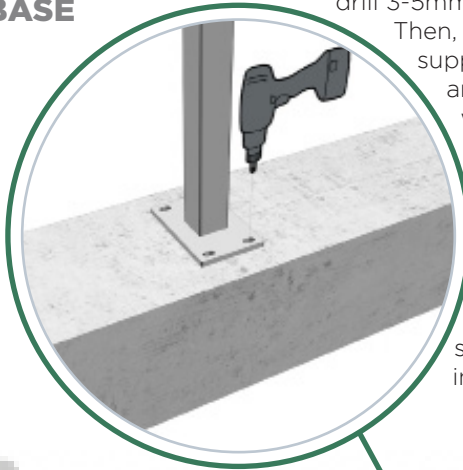
STEP 13 Insert the Post Cap.





STEP 1 Place metal post supports in position, ensuring they are plumb/flat and square to the run of the fencing. First, drill 3-5mm pilot holes,

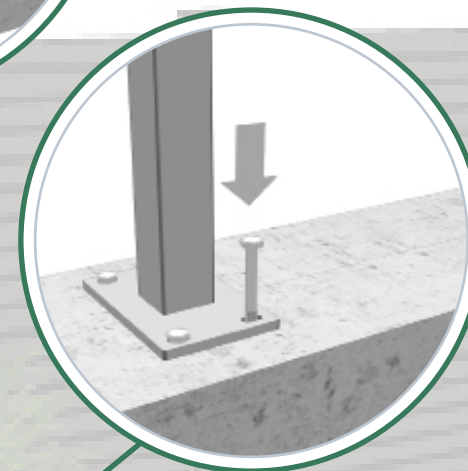
Then, if you are using the supplied M10 x 80mm anchor bolts, you will need to pre-drill the structure to accept these. This should require a masonry drill bit of 13mm or 14mm diameter - depending on the substrate being fixed into.



STEP 2 Ensure the insert is straight and secure. Use steel shims / packers if required.



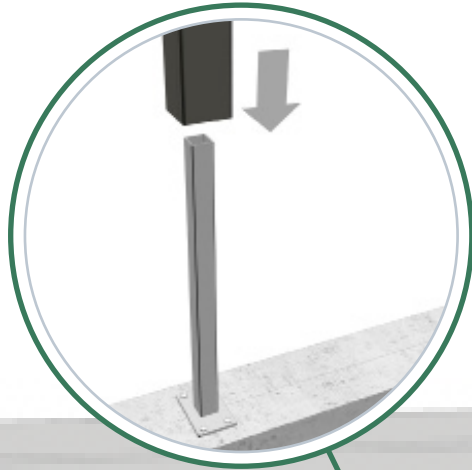
STEP 3 Ensure the bolts have been sufficiently tightened.



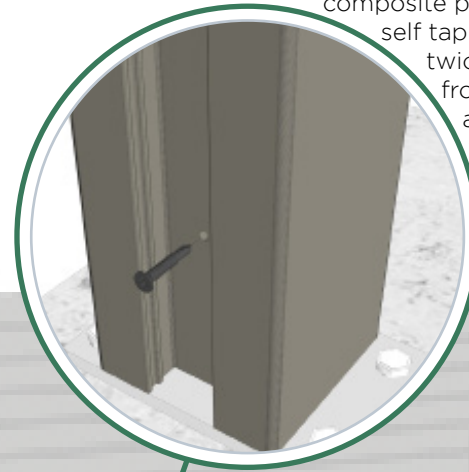
Before starting make sure the wall or footing is in adequate condition. Minimum depth of masonry / concrete must be 150mm thick. PBSL Group cannot take responsibility for inadequate structural foundations.



STEP 4 Slide the fence post over the steel insert.



STEP 5 To secure the composite fence post to the fence base plate, pre-drill through the H section of the composite post and insert a self tapper. Do this twice - 150mm from the bottom and 300mm from the bottom. Self tappers are included with the base plate.

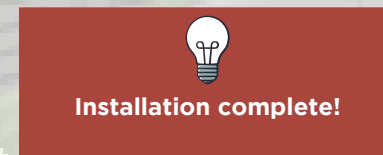
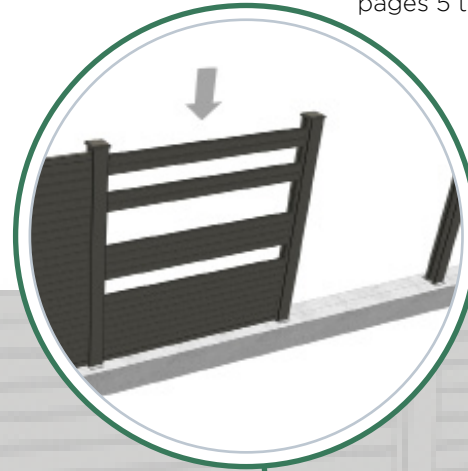




STEP 7 Install the remaining panels and give the fixing bolts one final check to make sure they are tight. Fit the plastic cover caps over the bolts.



STEP 6 Insert the fence boards, secure clips and post caps as per pages 5 to 6.



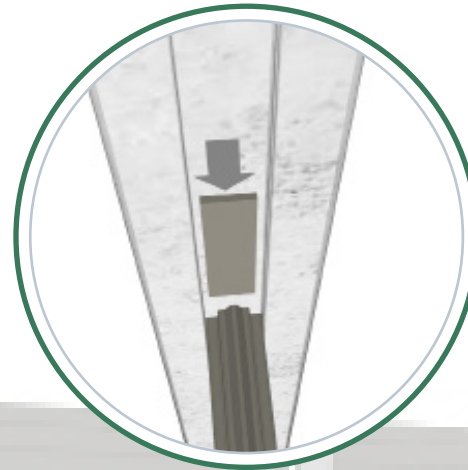



STEP 1 Simply take out your old timber fence panel and replace with the PBSL's composite fence boards.



They just simply stack on top of one another!

STEP 2 Use packers to secure the boards where required.




With our fence boards being 45mm x 1830mm they can be slotted straight into existing concrete posts

(based on a concrete post having a slot at 46.5mm some may vary and will need packing).

Our fences have the same thickness as timber, so no need for wedges or aluminium trims!


Installation complete!