

# Futurewood® Aluminium Framed Fencing System Fixing Guide



**NOTE:** Before commencing any construction, you should check with all relevant authorities, including neighbours, regarding any permits, design requirements and the location of the fence you are building.

Aluminium posts are designed to be fixed with regular concrete mix (do not use high strength concrete mix or quick setting concrete as this may adversely react with the aluminium).

These guidelines are for guidance only and do not overrule existing relevant building codes.

February 2026

# Fixing Guide

Futurewood® Aluminium Fence Framing System is designed for building a privacy or vertical screen fence using Futurewood® range of EnviroSlat® Screening and Castellated Cladding.

The current product range is suitable for constructing fences up to 1800mm high running on slopes of less than 5 degrees or running parallel with the slope of the land.

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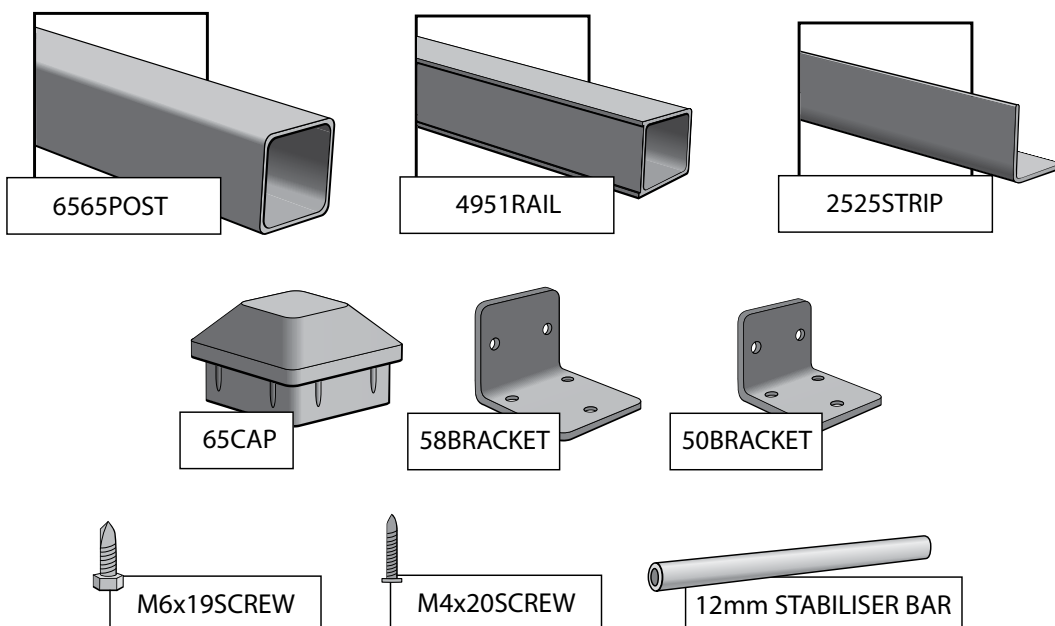
When unpacking the aluminium components leave the clear protective tape on each post/rail for as long as possible during the installation as it will help to guard against accidental marks/scratches from the building process.

This style of fence is designed to be built without using a plinth board and the composite timber castellated cladding or screening is designed to be close to or touching the ground.

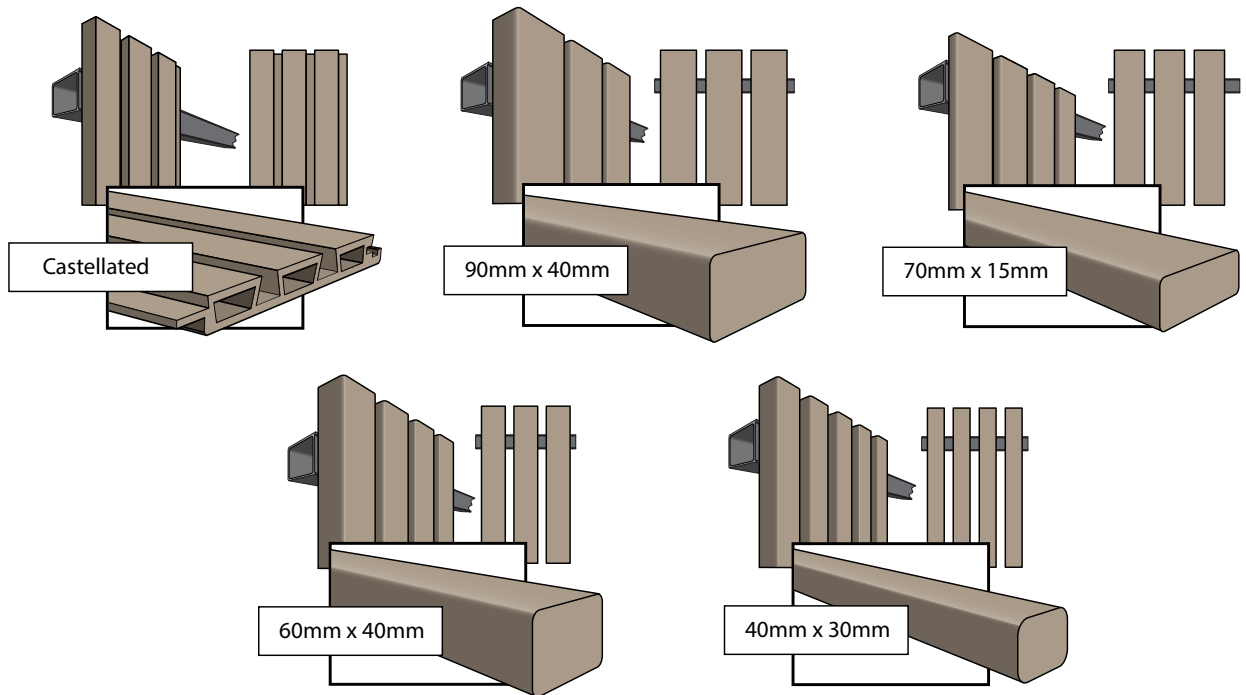
## Step 1 Components

Check that you have received everything on your Sales Order as per the list below.

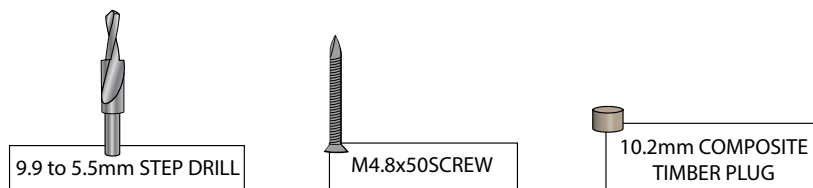
### Futurewood® Aluminium Fence Framing



## Futurewood® EnviroSlat® Fence Cladding



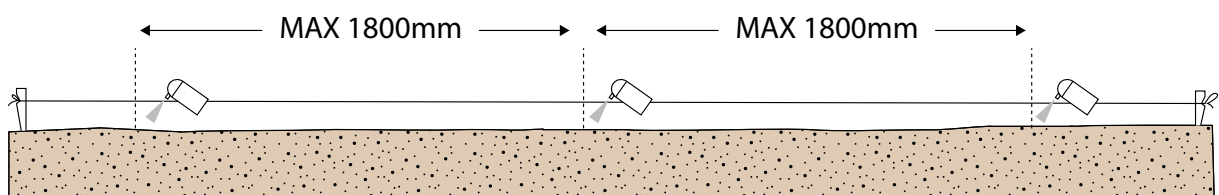
## Futurewood® Concealed Fix Components



## Step 2 Preparing the site

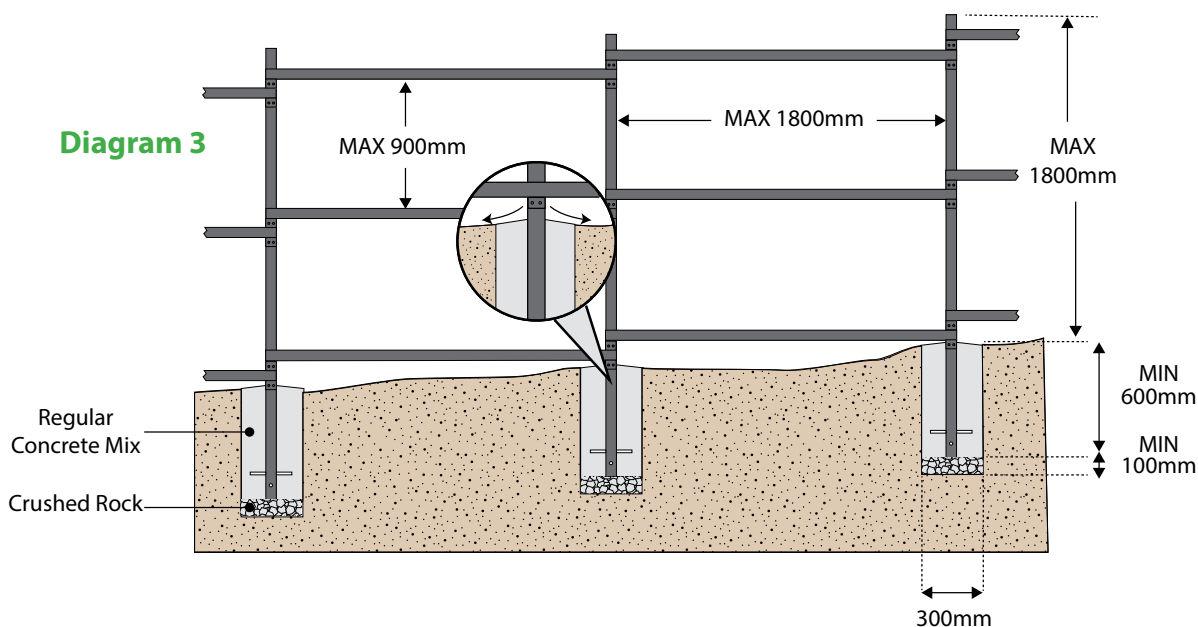
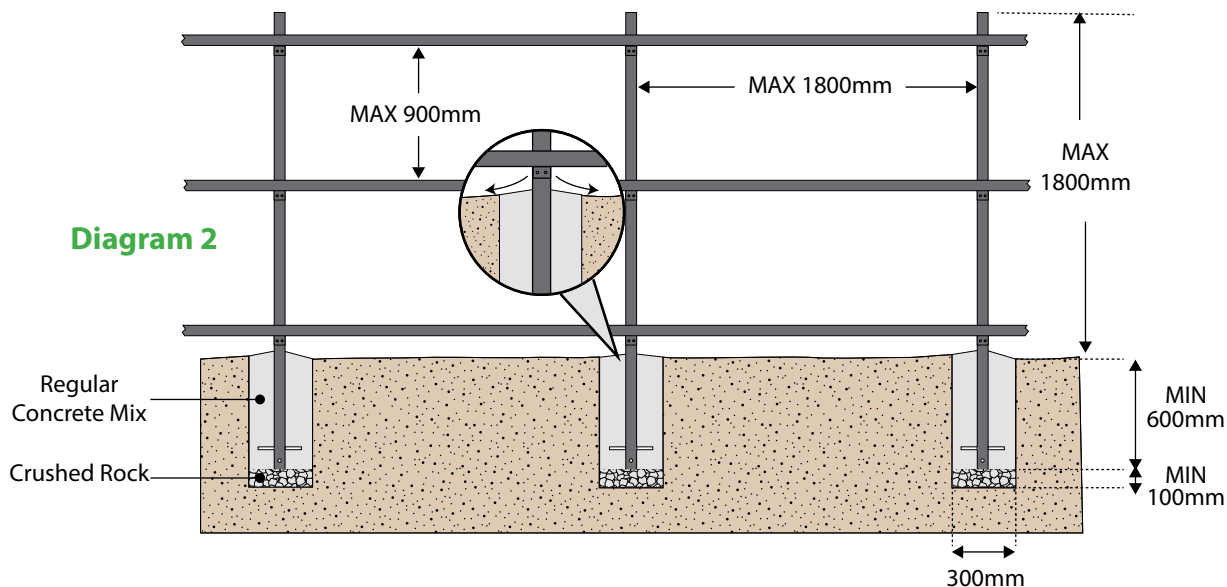
- 2.1** Prepare the area for the fence, removing shrubs and other obstructions and mark out the position of the post holes. Use a string line to mark the position of the fence and then divide the length of the fence by 1800mm to work out how many posts you will need, round up to the next whole number, and then add one more for the last post.
- 2.2** Posts to be installed at a maximum spacing of 1800mm. (Refer to Diagram 1).

Diagram 1

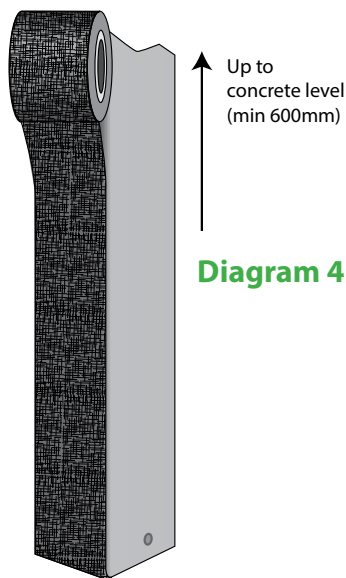


## Step 3 Building the fence frame

- 3.1** The slope of the land will dictate how you build the fence.
- 3.2** The hole should be a minimum of 300mm in diameter and dug to an overall depth of 700mm to accommodate a 100mm deep bed of crushed rock below the post allowing water drainage away from the bottom of the post. The concrete/fill at the top of the hole should slope away from the post so there is no water pooling around the post. (Refer to Diagram 2 and 3)



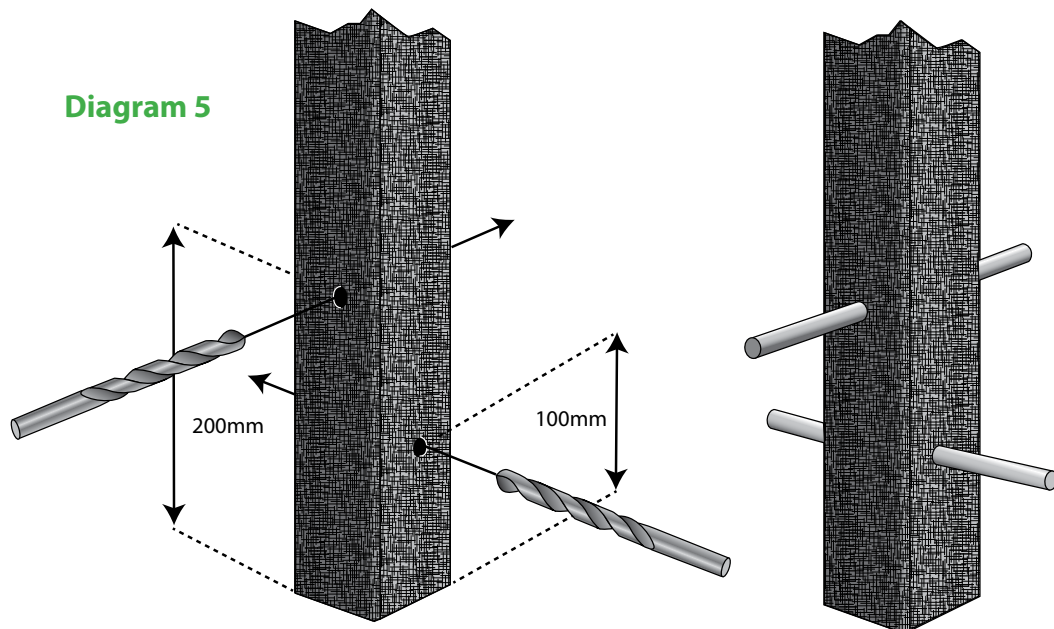
- 3.3** You can run the rails parallel to the ground, so the top/bottom of the fence follows the slope of the land or, for slight contours, you run the fence rails and top of the fence level and the bottom of the cladding is cut at different lengths to suit the contours of the ground below the fence. (Refer to Diagram 2).
- 3.4** If you are planning to install the fence on sloping ground that is greater than 5 degrees, you can run the fence along the slope or have panels that step down the slope. Stepped fences will need longer fence posts (STA). (Refer to Diagram 3)



**Diagram 4**

**3.5** Use the end of the post that has the small hole drilled on one face, within a few millimetres of the end of the post. Remove enough of the protective tape from all 4 sides of the fence posts to allow the application of a good quality PVC or joist tape. This tape should seal off the end of the post and continue covering the post on all four sides for the full height that the post will be in contact with the concrete (600-800mm). **(Refer to Diagram 4).**

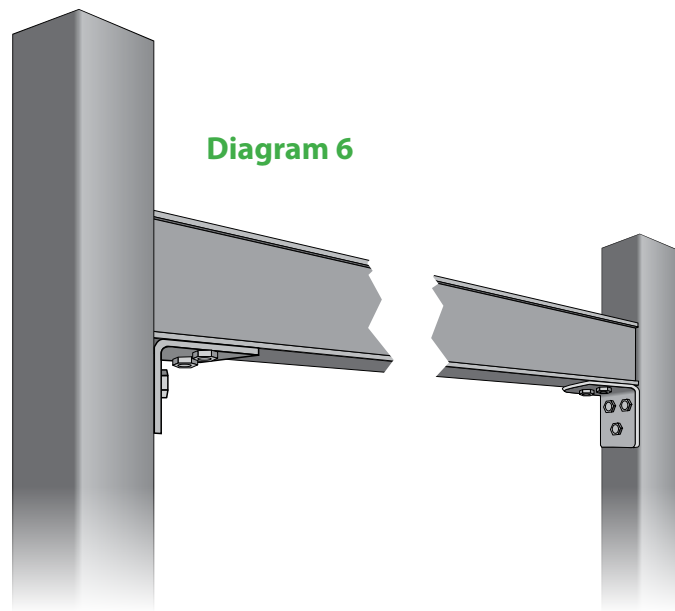
**3.6** Fit the post with two stabiliser bars as follows; Drill a 12mm diameter hole through two opposite sides of the post positioned 100mm from the bottom. Insert a 200mm long section of fibreglass stabilising pipe. Drill a second 12mm diameter hole 100mm above the first, through the remaining two opposite faces of the post, and insert a second 200mm long stabilising pipe. Once set in concrete, this will support the post on all four sides. **(Refer to Diagram 5)**



**Diagram 5**

- 3.7** Insert the post in the centre of the hole and fill around the post with regular concrete mix **(do not use high strength concrete mix or quick setting concrete).**
- 3.8** Use a good quality spirit level on all 4 sides of the post to make sure posts are vertical and aligned. Check regularly while the concrete is setting.
- 3.9** Any concrete residue should be wiped off the posts before it sets.
- 3.10** Posts should be fully set in the ground before installing the rails and the fencing material (minimum set time of 24 hours). The concrete/fill at the top of the hole should slope away from the post so there is no water pooling around the post. **(Refer to Diagram 2 and 3)**
- 3.11** Fence rails and cover strips are sold in 5400mm lengths so you will need 3 full rails for every 3 x 1800mm long sections of the fence and 1 cover strip. You can also use the cover strip to finish off any open edges of the fence.
- 3.12** Mark out the position of the bottom, middle and top rails on the posts.

**3.13** Rails should be fixed to the front of the posts. For panel fences the rails may need to be fixed in between the posts (**Refer to Diagram 6**). Rails should be no more than 900mm apart.

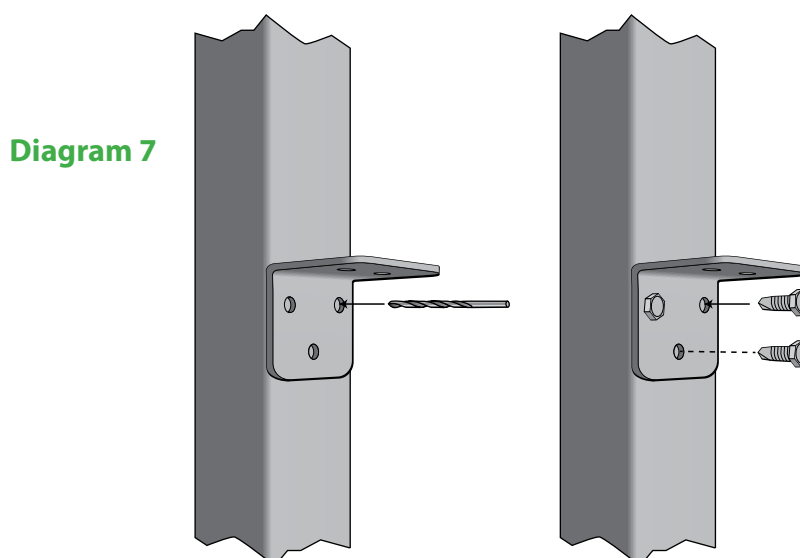


**3.14** The bottom rail can be fixed up to 100mm above the ground and the top rail can be up to 100mm below the top of the fence height.

For an 1800mm high fence the rails would be 800mm apart if the top and bottom rails are fixed this way. (Note: the castellated cladding or screening slats can be close to or touching the ground)

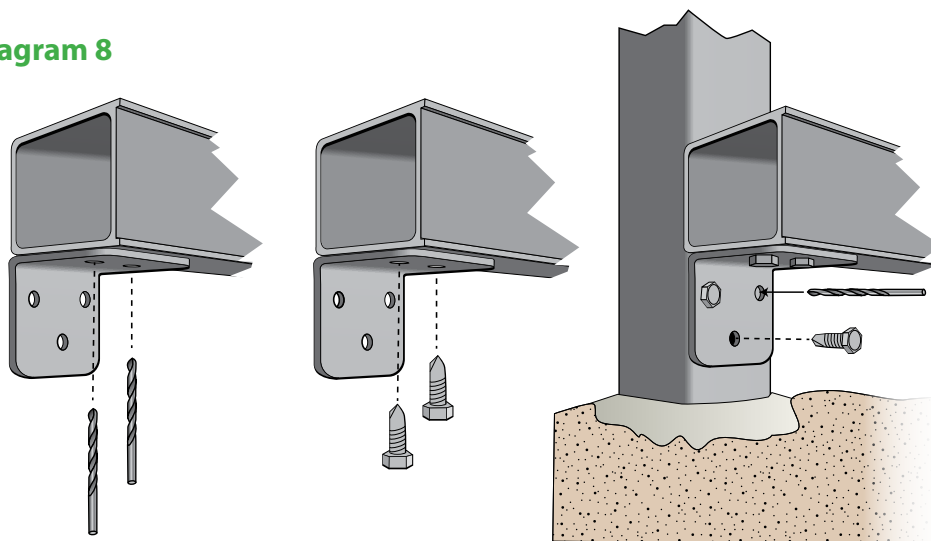
**3.15** Fix the SS brackets to the front of the posts positioned below the bottom line of each rail so there are 3 brackets per post. For fences that are staggered in height down a slope you will need 6 brackets per post, either fixed to the front or side of the posts, depending on the fence design.

**3.16** The brackets are fixed to the posts using 3 hex head screws per bracket through the pre-drilled holes (the posts may need to be pre-drilled with a pilot hole to assist the self-drilling screw) (**Refer to Diagram 7**).



- 3.17** Bottom rail brackets should be fixed to the rail before the rail is fixed to the post given there is limited access to screw up under the rail when it is 100mm or less above the ground. (Refer to Diagram 8).

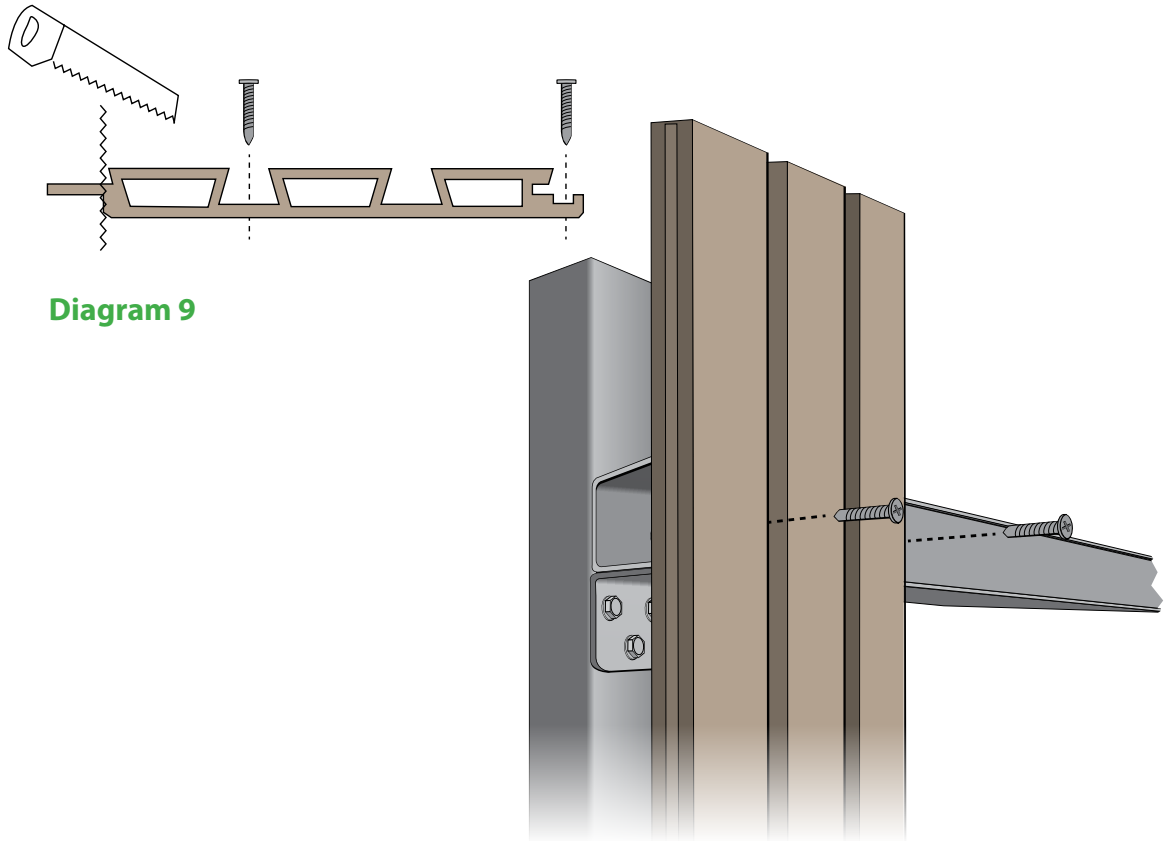
**Diagram 8**



- 3.18** The rails are 5400mm long so they can span up to 3 posts @ 1800mm centres. For fences longer than 5400mm the rails can be butt joined across a post on 1 SS bracket with one screw fixed through the bracket and into the end of each rail. Butt joints should be alternated between posts so that you do not have all 3 rails joining on the one post.
- 3.19** The EnviroSlat® fencing rail has been specially designed with a slightly recessed front face that reduces any moisture due to the smaller surface area between the cladding and the rail.
- 3.20** Fix the rails onto the top of the SS bracket with 2 Hex Head screws with the sloping top running away from the front of the fence.
- 3.21** The rails can be cut off as required at the outside edge of the last post.

## Step 4 Fixing the castellated cladding to the fence frame

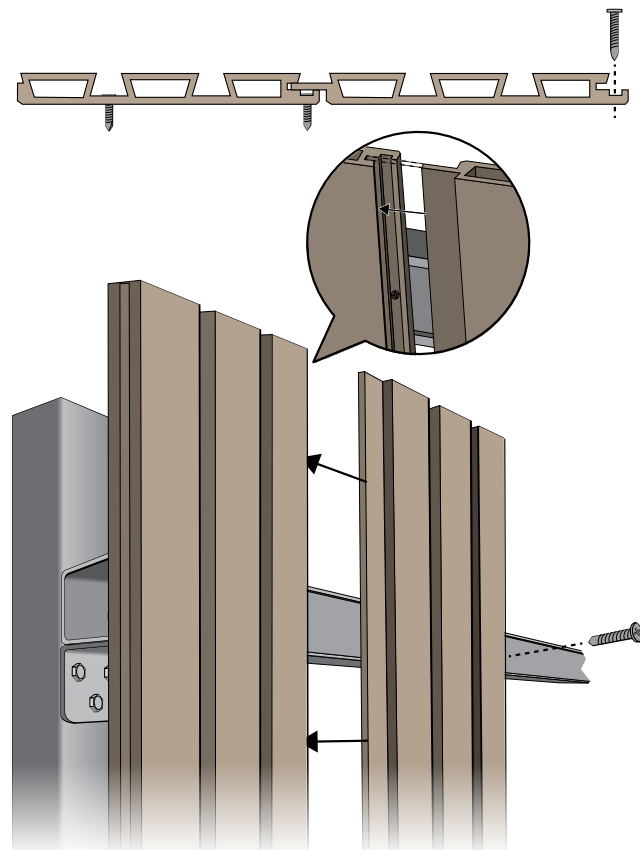
- 4.1** The EnviroSlat® Castellated cladding is supplied in 5400mm long lengths in the colours Midnight, Weathered Stone, or Walnut.
- 4.2** The boards are 265mm wide and cover 240mm. You can cut 3 x 1800mm long boards from a 5400mm board when building an 1800mm high fence.
- 4.3** The M4 x 20 black SS screw is used to fix the castellated cladding to the fence rail and to fix the 25mm angle capping to the back of the cladding to cover the top of the cladding or to cap off a vertical cut edge of the cladding. **The screws are not self-drilling and require a 3.4mm pilot hole.**
- 4.4** Cut off the tongue on the first board (you may decide to use the 25mm aluminium angle to cover this first cut edge, if so refer to point 4.6 below) and use the M4 x 20 screw to fix this board through the first “gap” in the face of the cladding (about 70mm from the edge of the board) and fix the other edge of the board with the M4 x 20 screws fixed through the fixing groove on the edge of the board. Use one screw per rail (six screws for the first board and three screws per board after that). (Refer to Diagram 9).



**Diagram 9**

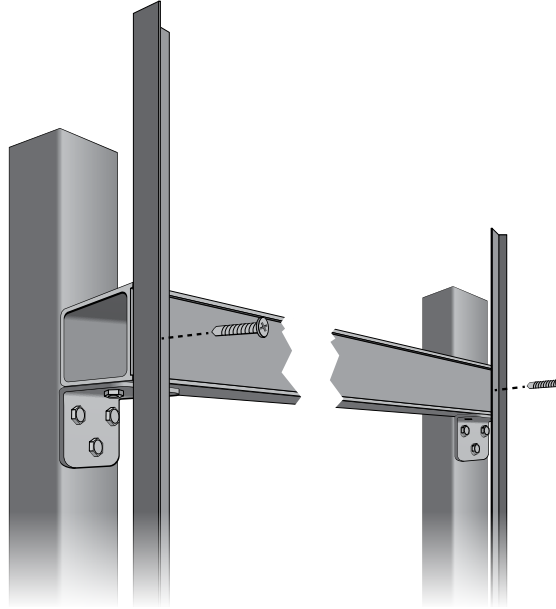
- 4.5** Fit the next board over the top of the first board by inserting the “tongue” into the groove next to the fixing groove on the outside edge of the first board and then fix the outside edge with screws through the fixing groove. **(Refer to Diagram 10).**

**Diagram 10**



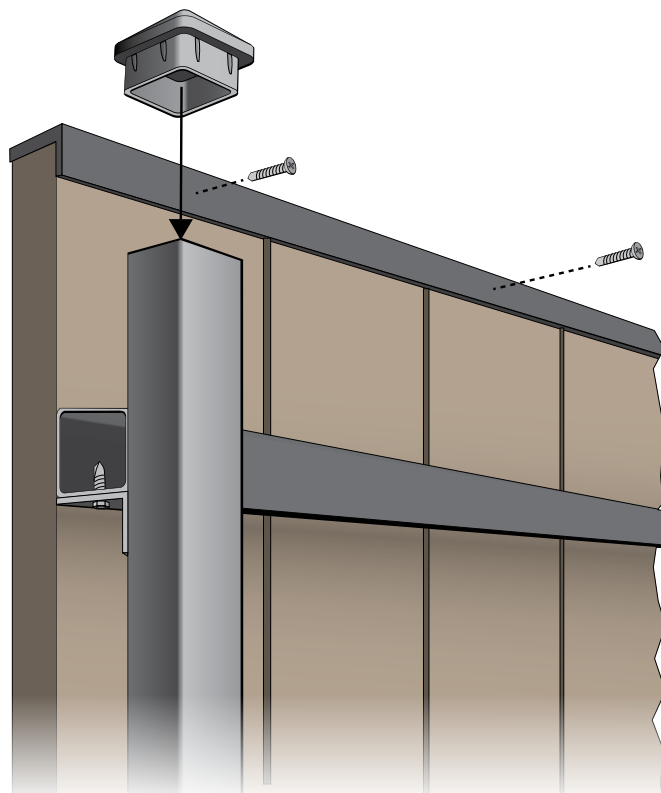
- 4.6** Continue fixing each additional board as above until you come to the end of a section or the end of the fence/gate/gap etc. Repeat the method of fixing the first board for the outside cut edge of the last board. If required you can use the 25mm capping to cover the first cut edge by fixing this to the rail before you fix the first board and by repeating the process before you fix the last board. (Refer to Diagram 11).

**Diagram 11**



- 4.7** The 25mm capping should be fixed at 900mm centres using the M4 x 20mm screws over the top of the cladding and down the back edge (Refer to Diagram 12).
- 4.8** Cut the 65mm Black Aluminium Fence Posts to the desired height (typically below the height of the cladding so that the post with the Black Nylon Fence Post Cap fitted, is not seen from the front of the fence, and then tap the cap into position on top of the post. (Refer to Diagram 12).

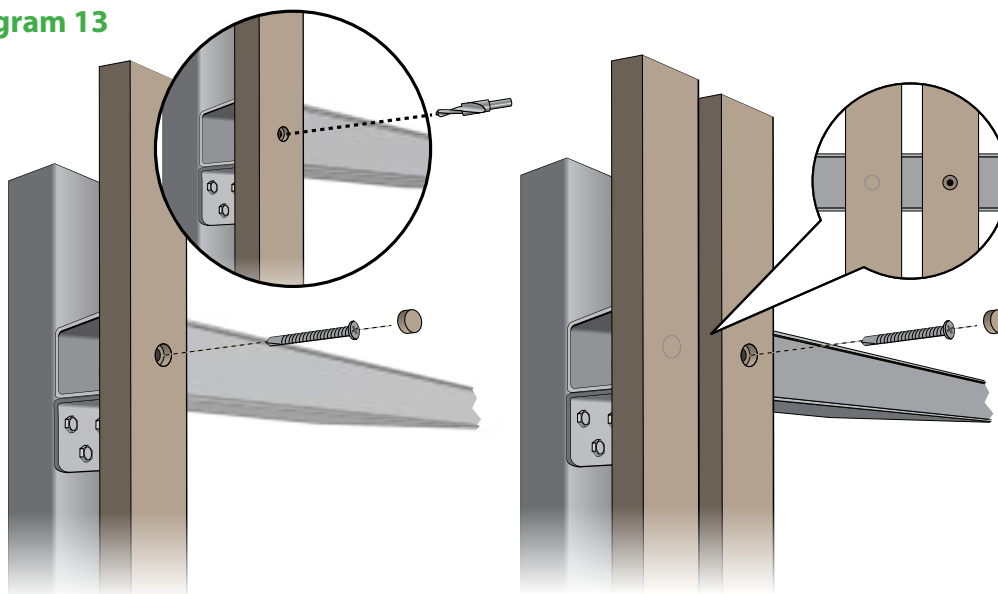
**Diagram 12**



## Step 5 Fixing the batten cladding to the fence Frame

- 5.1 EnviroSlat® composite timber battens or other batten types can be fixed to the aluminium fence frame by screwing the slats directly to the fence rails, with spacing set to suit your preference.
- 5.2 When using the EnviroSlat® 40mm x 30mm or 60mm x 40mm battens you can either face fix the battens using an appropriate screw that will be visible on the front of the battens, or you can fix the battens using the Futurewood® concealed fix option of plugs and screws.
- 5.3 To achieve the concealed fix option, measure one of the battens up against the fence rails in its final position and mark out the middle of each rail on the batten.
- 5.4 Use the stepped drill bit and pre-drill the battens. You only need one screw/plug per fixing point. Drill the larger hole size of 9.9mm to a depth of approximately 10mm and the 5.5mm diameter hole through to the outside of the batten.
- 5.5 Line up the batten against the fence frame to the correct height/position and use the M4.8mm x 50mm self-drilling screw to fix the batten to the fence rail. (the rails may need to be pre-drilled with a pilot hole to assist the self-drilling screw)
- 5.6 Orient the plug so that the grain on the plug lines up with the grain on the batten and tap into place using a rubber mallet (Refer to Diagram 13).

Diagram 13



## Step 6 Gates or other openings

- 6.1 Gates should be fixed between 2 of the 65mm posts. If using an adjustable galvanised or zinc plated gate frame with hinges you will need to use an impervious damp course or other suitable material between the hinges and the fence post to stop any chemical reaction. Any gate frames should have a bottom, middle and top rail at no more than 900mm centres.
- 6.2 Depending on the size and weight of the gate you might need to use a larger fence post and/or a tensioning wire to run from the top of the fence post that the gate is fixed to the bottom of the next fence post.

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Fixing details and specifications may change without notice.

For further information regarding your Futurewood® Aluminium Framed Fencing System, please email at [info@futurewood.com.au](mailto:info@futurewood.com.au)

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