

# Installation Instructions - Railings

These instructions relate to all railings.

You will need...

- Tape measure
- Battery drill/screwdriver
- String line
- Setting out pegs
- Safety gloves and goggles
- Spirit level
- Selection of clamps
- Post-hole spade or equivalent for digging post holes\*
- Cement – suitable for setting fence posts.
- Cutting equipment and touch up paint if required.

*\*not required if mounting railings onto concrete using base plates.*

**A MINIMUM OF TWO PEOPLE IS REQUIRED TO INSTALL THIS POST AND RAILING SYSTEM.**

## Step 1

Using the string line and setting out pegs, mark out on the ground the line of the intended fence.

## Step 2

Based on the width of the railing panels supplied, mark the positions of the fence posts. If installing a gate, it is advisable to start with the gate post and expand out towards the first corner and/or end

## Step 3

Using the appropriate equipment, and observing the correct health and safety procedures, dig the holes to the required depth, to accommodate the fence posts provided. If using base plates screwed onto concrete instead of post holes, ensure that the surface is thick enough to accommodate fixing screws and level enough to allow the post to be fixed vertically. A survey of the ground conditions must be carried out in advance to ensure conditions will support all posts, if conditions are too wet or insufficiently compacted please consult a ground works engineer for assistance.

<b>Post Size (mm)</b>	<b>Foundation Sizes (mm) Set in Concrete Length x Width x Depth</b>	<b>Based Plated (mm) Length x Width x Depth*</b>
900	300 x 300 x 600	150 x 150 x 150
1000	300 x 300 x 600	150 x 150 x 150
1200	300 x 300 x 600	150 x 150 x 150
1800	300 x 300 x 600	180 x 180 x 150

*\*refers to the depth all fixings need to be sunk to, and therefore the minimum thickness of the concrete*

All Alexandra base plates come pre-drilled for M16 fixings, and all holes must be used when securing the post to the concrete surface. Thicker posts are available on request, and may be necessary to support gates, which will affect the above dimensions.

## Step 4

Insert the first post into the dug hole and use a spirit level to ensure that it stands vertically.

### Step 5

Add the mixed concrete to the hole around the positioned fence post. Professional installers use postcrete which will be dry in 5-10 minutes, but ensure the post is fixed in the upright position while drying.

### Step 6

Dig the next post hole.

*Do not try and install all the posts at the same time. Instead, work one post and panel at a time, as any errors in the measuring the post distances will be harder to correct once the posts are concreted in.*

### Step 7

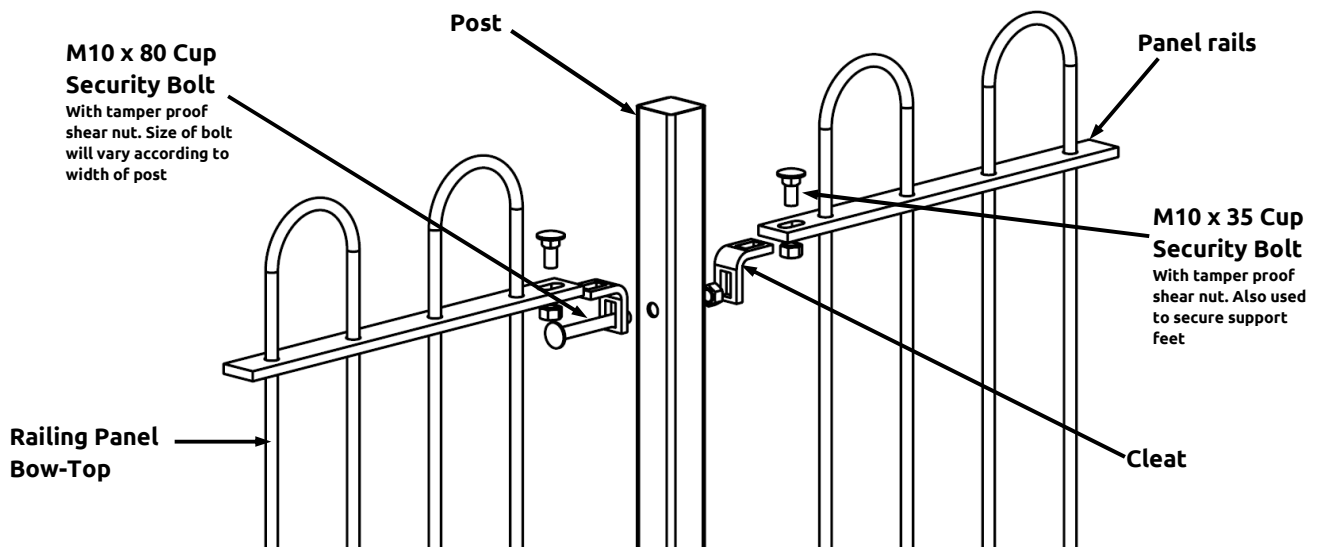
Attach two cleats either side of the predrilled holes in the post using the M10 bolt, securing it in place with the shear nut.

### Step 8

Resting the railing panel rails on top of the cleats secure with the M10 x 35 bolts provided. It will be necessary to brace and support the other end of the panel in order to avoid distortion. When the panel is secured top and bottom against the post, move on to the other end of the panel and repeat the process against the other post.

### Step 9

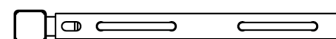
Your fence panel may be wide enough to require support feet. These are attached to the bottom rail using another M10 x 35 bolt.



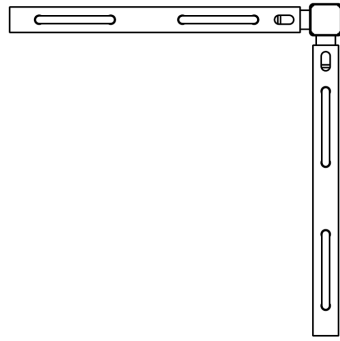
### Plan Views



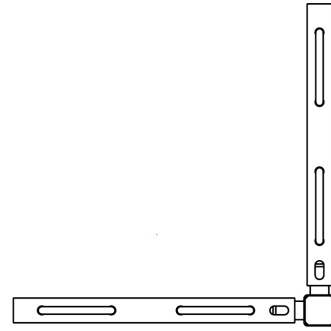
INTERMEDIATE POST



END POST



INTERNAL CORNER



EXTERNAL CORNER

### Step 9

Railing panels may be cut to different lengths using a saw or angle grinder. All bare metal should be recoated with touch up paint.

**WARNING – MAKE SURE YOU USED THE CORRECT SAFETY GEAR WHEN PERFORMING ANY CUTTING ON THE METALWORK.**

### Step 10

If the fencing is required to be stepped to accommodate a gradient, please ensure that the post heights are set correctly to accommodate the drop required.

### Step 11

Ensure all scuffs, marks and cut surfaces, especially ones that expose bare metal, are treated with matching touch up paint.