

# Installation

## Picket Fencing System

### REPLAS PICKETS FENCING SYSTEM

Replas Picket Fencing System is strong, durable and attractive. Its design allows traditional or modern appearance to be enjoyed for many years to come without painting or maintenance.

The strength and durability of the solid recycled plastic pickets is achieved by using solid UV-stabilised PolyPropylene (PP) pickets that are securely fastened to galvanised and powder coated steel rails, which are in turn attached to galvanised and powder coated steel posts or other types posts.

For a clean look in domestic applications, pickets are usually attached to the rails from the back using concealed self-tapping screws. In commercial or public area applications, pickets are usually attached to the rails through the front with countersunk socket head screws matching the colour of the pickets. Security screws can also be used for additional vandal resistance (special order required).

Individual pickets can also be attached through the front to existing fixed timber or steel rails. In this case, the top screw goes through a hole in the picket, and the other screw(s) go through slot(s) to allow the pickets to expand and contract with changes in temperature.

### BEFORE YOU BEGIN

Check that you have the correct components and tools. Ensure that you are fully aware of the location of all utilities such as gas and water pipes and underground electrical and telephone cables before you start digging the post holes (in Australia call 1100 if not sure).

### TOOLS AND HARDWARE REQUIRED

- String Line
- Tape Measure
- Drill and adaptors for hex head Tek screws
- Post Hole Digger
- Spirit Level
- Quick setting concrete
- G-clamps, pegs and timbers for propping up the posts while the concrete is curing
- Hack-saw or angle grinder with a steel cutting wheel (if reducing the length of any panels)

### FENCE POST INSTALLATION

#### 1. ESTABLISH THE FENCE LINE

Accurately determine where the fence will run (a surveyor may be required for this) and mark its position using a string line. Stepping is required for changes in ground level. A longer post is used at the step to ensure that it is embedded in the footing to the correct depth. A stepped fence panel should be installed using the same procedure as a standard fence panel except for the position of the bracket relative to the top of the post.

#### 2. DETERMINE SIZE OF POST HOLES

The required footing dimensions depend on the fence height and soil type and should be obtained from a structural engineer. As a rough guide, the depth of the hole should be about half of the height of the post above ground (eg. if the post height is 1200mm above ground, dig 600mm deep holes and use 1800mm long posts). Note that the footings for posts supporting a large gate will need to be deeper than the footings for other posts and longer posts will be required.

#### 3. MARK & DIG POST HOLES

Mark and dig gate post holes with 20mm clearance in addition to the width of each leaf of the gate. Starting from the centre of the gate posts, mark and dig the fence posts holes every 2410mm + the width of the posts (eg. if you are using 65x65mm SHS posts, dig the post positions at every 2475mm). It may be necessary to shorten a panel to obtain the required overall length; for better appearance this shorter fence panel should be positioned adjacent to the end of the fence, a corner or a gate.

#### 4. INSTALL GATE POSTS

(NOTE: all gate posts should be installed before the fence posts)

Insert the gate posts into the holes and prop them up at the required height and spacing. Prepare the concrete mix as per the details on the bag and fill the hole with approximately 150mm of concrete. Using a shovel or pole, agitate the concrete to remove any air pockets. Add a further 150mm and agitate again. This process should be repeated until the hole is full of concrete. Shape the top of the concrete with a trowel so that the concrete surface slopes away from the post to drain water away from it. Check that the posts are still plumb and the right height above the ground in case they have been disturbed and adjust if necessary.

#### 5. INSTALL FENCE POSTS

Using a template, precisely set the spacing between the posts at top and bottom to 2410 ±2mm and concrete them in as above.

**IMPORTANT NOTE:** Load should not be applied to the posts for at least 48 hours while the concrete is curing.

## 6. INSTALL FENCE PANELS

Place the brackets into the ends of the rails. Position the panel at the right height and chock it up. While an assistant is holding the panel in the correct position, lift a bracket to the top inside the rail and screw it to the post using the 2 supplied self-drilling screws. Repeat for the other brackets.

**IMPORTANT NOTE:** The rail brackets have vertical clearance inside the rails to allow the rails to move up and down as pickets expand and contract with changes in temperature. The installer must ensure that each bracket is lifted up to the top inside the rail before attaching it to the post. Failure to follow this instruction may result in damage to the fence panel which will void the warranty.

## OPTIONAL PLINTH INSTALLATION

Note: Minimum 75x75mm or larger posts should be used with the plinth.

Install the panels as per the above procedure but with the following additional steps:

- Place the plinth onto the bottoms of the pickets before positioning the panel between the posts.
- Once the panel is attached to the posts, adjust the plinth so it is level and at the correct height.
- Remove the 2 screws from each end of the plinth and attach the supplied Colorbond<sup>®</sup> angle brackets to the plinth with these screws.
- Attach the angle brackets to posts using the supplied self-drilling screws.

## 7. INSTALL GATES

Fix the hinges to the gate using self drilling screws. Place and chock up the gate in position, making sure the gate is level and at the required height. Attach the hinges to the post using the supplied self-drilling screws. Check that the gate moves freely and then attach the latch and/or drop bolt.

## SPECIFICATIONS

Pickets: 18 ±2mmD x 62 ±0.5mmW  
 Height: 600/800/1200 ±5mm High  
 Head Profile: 7 Standard Designs

Fence Panels: 2400 ±5mm Long  
 Height: 600/800/1200mm High  
 Colours: 9 Colorbond<sup>®</sup> Colours

Fence Rails: 1 40x40x1.6mm SHS  
 Finish: Galvanised & Powder Coated  
 Supplied With: 2x Mounting Brackets  
 4x Self-drilling Tek Screws

Fence Posts: 65x65 or 75x75mm SHS  
 Height: 1000/1300/1800mm High  
 To Suit Panel: 600/800/1200mm High  
 Finish: Galvanised & Powder Coated

Plinth (optional): 2400Wx34Dx113mmH  
 (adds 100mm to fence height)  
 Material: Colorbond<sup>®</sup> Steel

Gates (optional): Single Leaf Pedestrian  
 900mm Wide (920mm gap)  
 Dual Leaf Vehicle Access  
 3200mm Wide (3230mm gap)

1. Panels 1200mm high or lower are supplied assembled with 2 rails; panels over 1200mm high come with 3 rails as standard. Rails are attached 130mm below the top of the pickets and 160mm above the bottom.
2. Gates are supplied pre-assembled except for latches and hinges. Single gates are supplied with 1 catch; double gates are supplied with 1 drop bolt and 1 catch. Additional fittings can be ordered from Design Flow or purchased from your local hardware supplier.
3. Non-standard pickets, rails, fence panels, gates and posts are available on special order.

