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Produced in association with



The Building Research Association of New Zealand

Please Note:

While the advice and recommendations contained in this brochure have been produced with proper care, they are offered only with the objective of assisting those interested in home improvement projects. PlaceMakers does not accept responsibility for the advice, recommendations, etc. contained herein.

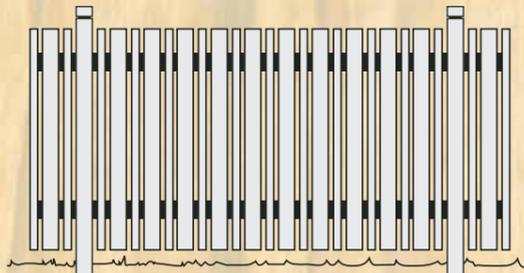
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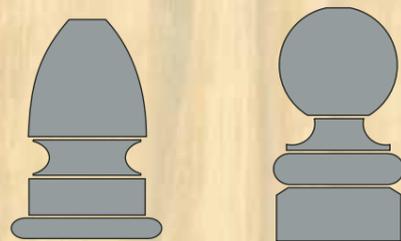


Emphasise the Posts

Fix the rails between the posts, and set them higher than the surrounding palings. A simple groove cut into the top of the posts as a shadow line can provide decoration. It is preferable however to avoid exposing cut timber as its durability may be compromised when not protected by preservatives. Post caps that fit to the top of the fence post are also available in a range of designs.



A board and batten fence with 'exposed' posts



Decorative post heads

Please Note: As with all fences, check with your local council if it borders council property, find out about any height restrictions, and speak with any neighbours the fence will affect.

Option 2

A Horizontal Good Neighbour Fence

These instructions will show you how to build a 1.8 metre high Good Neighbour fence. On this fence, palings are fitted alternately on either side of the rails, so there is no definite back or front. If you are building a fence of a different height adjust these instructions to suit. The following pages will show you how to fix the palings to a completed post structure. The instructions for installing the post section of the fence are given in the *Installing Posts & Rails* brochure. Before you do that please complete the planning section on this page. This will allow you to order the materials required.

Planning Your Fence

1. Measure the total length of your fence and use that measurement in the chart below.

	Example	Your Fence
Length of fence divided by 1.8	12.3m	
Answer =	6.83	
Round up to next full number	7	

2. Take this number and use it in the "Materials Required" chart to work out the total amount of materials required to build your fence. Don't forget to allow extra material if you wish to make gates to match your fence.

Tools

✓ Spade	✓ Hand saw
✓ Stringline	✓ Set square
✓ Tape measure	✓ Hammer
✓ Spirit level	✓ Pencil

Materials

MATERIALS REQUIRED		Quantity required	
100 x 100mm Radiata H4 Treated Post	Number + 1		at 2.7m long
150 x 25mm Radiata H3.2 Treated Palings – horizontal	Number x 25.2		metres in multiples of 1.8m lengths
60mm Hot-dipped Galvansied Flat Head Nails	Number ÷ 3.5		500gm bags
Dricon Concrete	Number ÷ 8.5 bags		25kg bags/post hole
Builders Mix BM20	Number + 1 ÷ 9		cubic metres
Cement	Number + 1 ÷ 1.5		40kg bags

All of the work described on this page can be carried out using these hand tools. Power tools (circular saw, etc) will make some of the work easier but they are not essential.

Below is a completed section of paling fence. The posts are placed 1.8 metres apart measured from centre of post to centre of post. The post spacing is then 1700mm (see *Illustration 1*).

Post Height: 1800mm

**Post Spacing: 1725mm for 100 x 75mm post
1700mm for 100 x 100mm post**

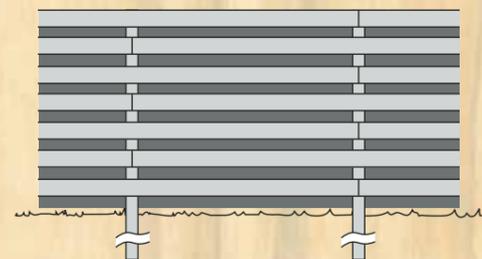


Illustration 1: A completed section of Good Neighbour Fence

Building Your Fence

This fence has 14 palings fixed horizontally in each 1.8 metre section, with 7 palings on each face of the fence. They are spaced 100mm apart so that the last paling finishes 50mm above ground level. If you want different spacings between the palings, adjust the quantities in the 'Materials Required' chart, and the post height, to suit.

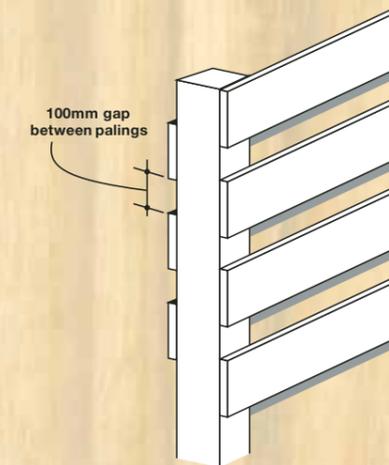


Illustration 2: Spacing the palings

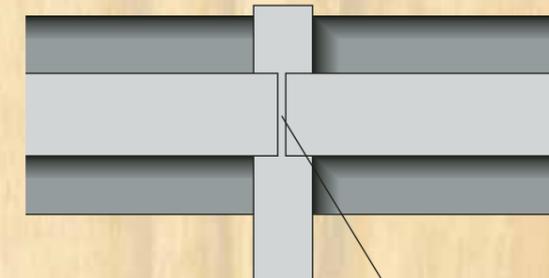


Illustration 3: Leave a gap for movement at the joint. This allows the timber to expand during wet weather

BUILDING A PALING FENCE

YOUR COMPLETE HOW TO GUIDE



PlaceMakers
Know how. Can do.

GETTING STARTED

These instructions are in two parts, showing how to build a vertical or horizontal paling fence.

The instructions in the brochure *Installing Posts & Rails* will show you how to install the posts and rails required to build your new paling fence.

Option 1

1.8 Metre Vertical Paling Fence

These instructions will show you how to build a 1.8 metre high paling fence.

First up, complete the planning section on this page. This will help you calculate the materials required.

Ideas & Inspiration



Planning your Fence

1. Measure the total length of your fence and use that measurement in the chart below.

	Example	Your Fence
Length of fence divided by 2.4	16.5m	
Answer =	6.88	
Round up to next full number	7	

2. Take this number and use it in the 'Materials Required' chart to work out the total amount of materials required to build your fence. Don't forget to allow extra material if you're making a gate.

Materials

MATERIALS REQUIRED		Quantity required	
100 x 100mm Radiata H4 Treated Posts	Number plus 1		at 2.7m long
100 x 50mm Radiata H3.2 Treated Rails	Number x 7.2		metres in multiples of 2.4m lengths
150 x 25mm Radiata H3.2 Treated Palings	Number x 15		at 1.8m long
100mm Hot-dipped Galvanised Flathead Nails	Number ÷ 4		500gm bags
10mm Hot-dipped Galvanised Coach Bolts c/w Nut & Washer	Number x 3		each
60mm Hot-dipped Galvanised Flat Head Nails	Number ÷ 2		500gm bags
Dricon Concrete	Number ÷ 8.5 bags		40kg bags/post hole
Builders Mix BM20	Number + 1 ÷ 9		cubic metres
Cement	Number + 1 ÷ 1.5		40kg bags

Tools

✓ Spade	✓ Hand Saw
✓ Stringline	✓ Set Square
✓ Tape Measure	✓ Hammer
✓ Spirit Level	✓ Pencil

All of the work described on this page can be carried out using these hand tools. Power tools (circular saw etc.) will make some of the work easier but they are not essential.

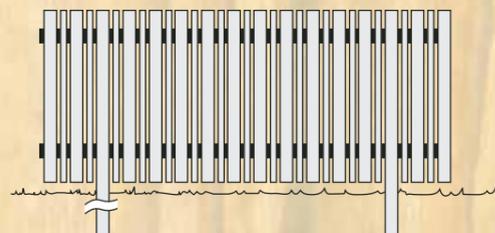


Illustration 1: A completed section of vertical paling fence

Illustration 1

Shows a completed section of paling fence. The posts are placed 2.4 metres apart measured from centre of post to centre of post. 2.4 metres is the maximum safe rail span. The post spacing is then 2.325 metres (2325mm) for 75mm posts, or 2300mm for 100mm posts.

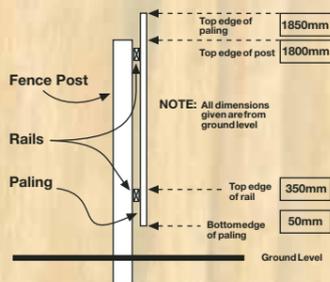


Illustration 2: Section through paling fence

Illustration 2

Shows the heights for setting the posts and rails when using 1.8m long palings. Adjust these figures up or down if your palings are a different length. The height from the bottom edge of the paling to the ground can also be adjusted to your requirements.

Post Height: 1700mm

Post Spacing: 2300mm

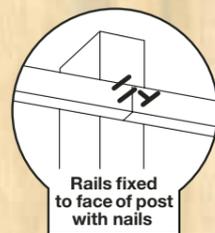
Copy both these figures into the brochure *Installing Posts & Rails* and follow the instructions in that brochure.

Building your Fence

1. Fixing Rails

The fence rails are fixed to the face of the posts. The bottom rail is fixed approximately 250mm from ground level, and the top rails about 70mm down from the top of the post (see Illustration 2 on previous page).

The rails should be fixed with two 100mm hot-dipped galvanised flat head nails at each fixing point. Alternatively, as the preferred option, fix the rails to the post with hot-dipped galvanised coach bolts. Once you have completed fixing the rails to the posts you can begin fixing the paling to the fence. You may also want to paint the posts, rails and palings before you start this final stage. You will get a much better paint finish on your fence if you paint it now.



Rails fixed to face of post with nails

Note:

Alternatively, rails can be halved jointed and fixed to the post with a single hot-dipped galvanised bolt.

2. Paling Spacings

This fence has 15 palings for each 2.4 metre section of fence. The palings are 150mm wide and spaced 10mm apart. If you wish to space them differently adjust the number of palings in the 'Materials Required' chart to suit the new spacing.

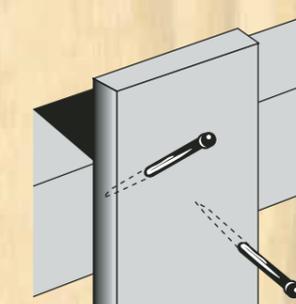
3. Fixing the Palings to the Rails

- Fix the first paling in position at either end of the fence to the correct height. Temporarily fix a paling at the other end of the fence, also at the correct height.
- Run a stringline across the top of the two palings, and pack it with a small block 20mm above the top of the paling. If the fence is long it may be necessary to temporarily fix the palings at the intermediate points, to eliminate any sag in the line.
- Fix the palings to the rails (but don't drive in the nails completely), using a 10mm spacer to separate them by the required distance (see Illustration 5). Fix a 20mm spacer at the top to maintain the level along the fence.
- Use your level to ensure that the paling is vertical (see Illustration 3).



Illustration 3: Use a level to ensure each paling is vertical

- Check the position of the paling and then hammer the nails in completely.
- The paling should be fixed with 60mm hot-dipped galvanised flat head nails, two into each rail. Drive the nails at an angle, skew nail (see Illustration 4) one angling up and the other down.



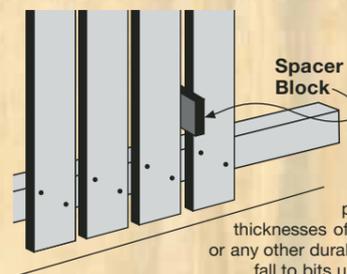
Nailing Hints

Fix the palings by skew nailing. The nails are driven at different angles to stop the palings pulling away from the rail. To stop the paling or rail splitting, make sure the nails are not too close together or to the edge of the timber.

Illustration 4

Note:

Predrilling the holes into the rails will prevent them from splitting.

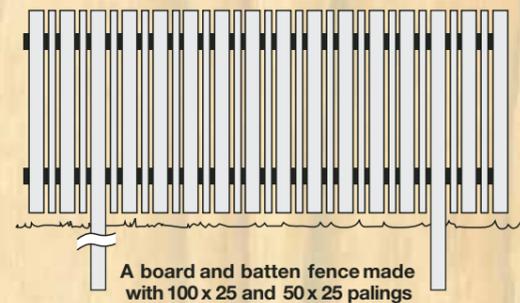


Spacer Block

Spacing the Palings
Make a spacer block to evenly separate palings. Use a couple of thicknesses of hardboard or plywood or any other durable material that will not fall to bits under constant handling.

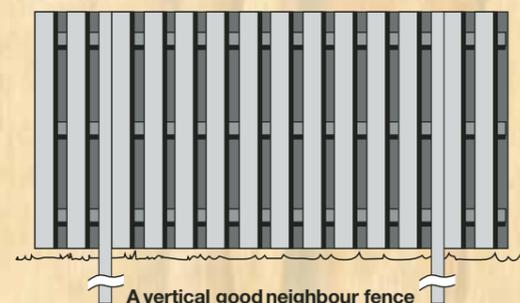
Illustration 5

Design Variations



A board and batten fence made with 100 x 25 and 50 x 25 palings

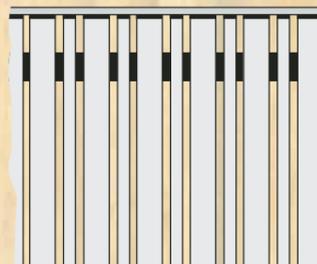
Palings are fitted alternately on either side of the rails, so there is no definite back or front.



A vertical good neighbour fence

Fitting a Capping Rail

A 150 x 40mm capping rail painted in white can provide a perfect contrast to an ordinary paling fence.



A board and batten fence with capping rail