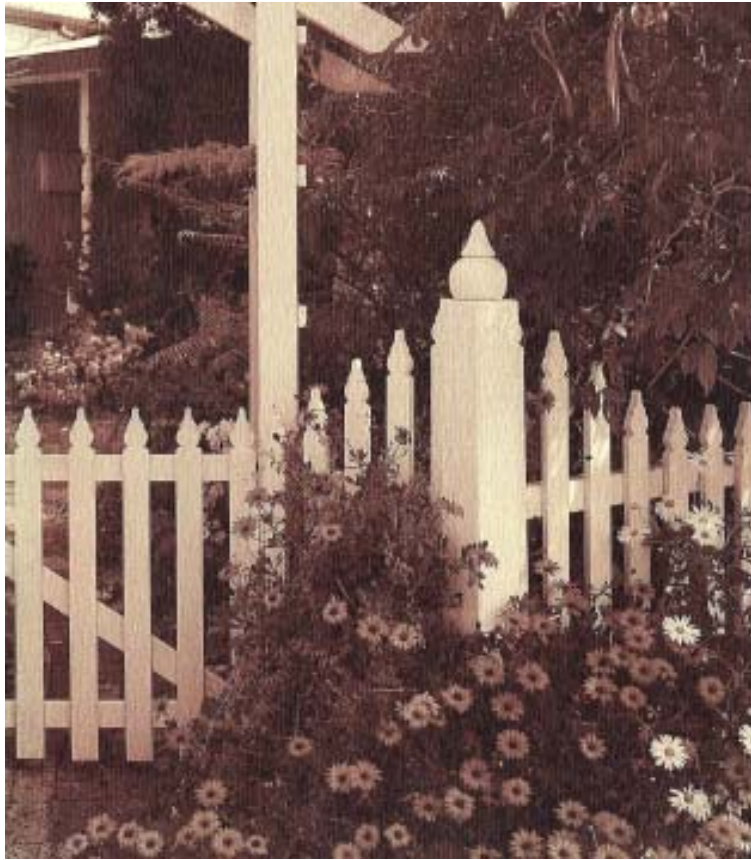


BUILD YOUR OWN FENCE

## IRISH TIMBER PRODUCTS

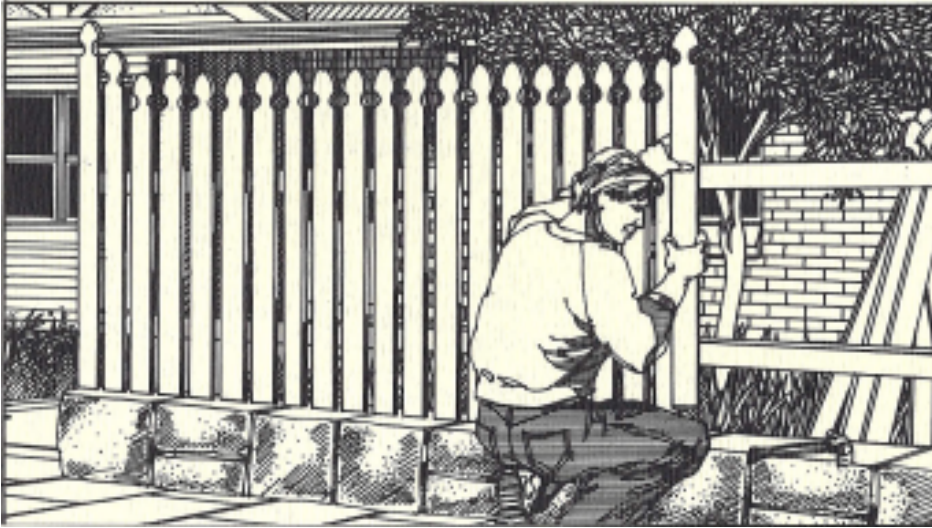


[www.itp.ie](http://www.itp.ie)

David 087 2250151

# BUILD YOUR OWN FENCE

## Introduction

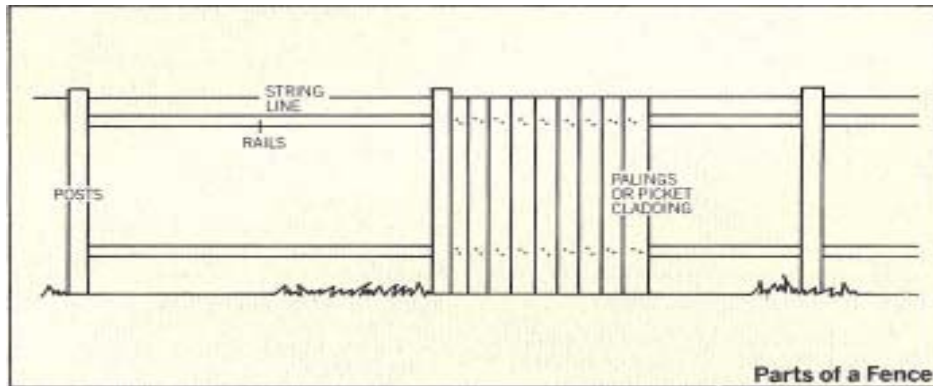


Timber fencing has always been popular and particularly suits the outdoor lifestyle enjoyed by so many Irish people. Timber fences are more easily adapted to personal requirements, and easily become a natural extension to other outdoor wooden structures such as pergolas and decking. As well, timber has a natural resilience and its colour is preferred. Many practical and decorative fence styles can be built using a simple post and rail structure. The close butted paling fence is popular but small changes to the way the palings are placed can produce a functional yet decorative privacy screen, security barrier or garden background.

This D.I.Y. booklet describes how to erect the basic post and rail fence or screen framework. Simple additions or claddings can be fixed to this framework to completely change its style or appearance to suit your garden.

# BUILD YOUR OWN FENCE

## Getting started.



Talk to your boundary neighbor and ask your local Council on whether they have any special requirements for the erection of the fence.

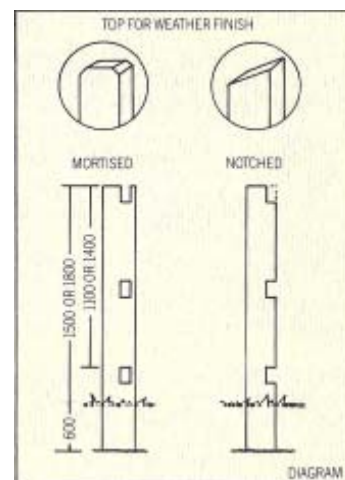
Will you choose pickets (see through) or overlapping palings for privacy?

Appraise the site and be aware of any underground cables, tanks and drains.

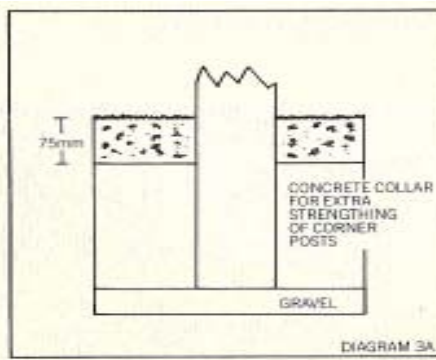
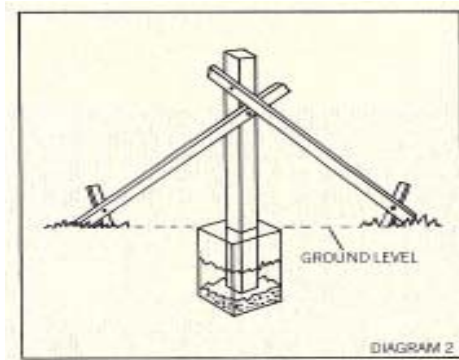
Measure the fence and obtain a quote for the cost of materials. Your neighbor may share the cost of a boundary fence

For design and calculation of quantities remember that 1200mm and 1500mm high screens and fences have at least two rails. Any 1800mm screens should have at least three rails to give satisfactory rigidity or impact strength to the cladding.

If you have any problem with deciding on components, or simply want some advice, ask the trained staff at Irish timber products (0872250151)



# BUILD YOUR OWN FENCE



## Step 1 - Positioning the fence.

Mark the position of any corner, end or finishing posts, gate posts or any post at the point where the fence changes direction. Check the required height of your fence. Cut these 'marker' posts to this height, and notch or motise for the location of the connecting rails. (Diagram 1).

**IMPORTANT Remember to add (600mm) to the length of the posts to allow for the foundations (in the ground).**

Dig a hole, at least 600mm deep, for each of the marker posts. Position your posts. Be sure to centre the posts over the agreed line the boundary fence is to run. Strongly brace these posts in position with two palings. Check that they are in line and vertically plumb (See Diagram 2), before backfilling firmly (See Diagram 3A). **Step 2 - Siting the intermediate posts.** Run a line of string between the two end posts. The line should be at the top of the posts, at the height that you want the fence to be and on the face side. This procedure ensures that the finished fence is straight.

Note Now you have to decide how far apart the support posts will be. **DIAGRAM 3A**

Remember that they should not be further apart than 2.4 metres. For convenience, the distance between the posts should be divisible by 300mm. On short garden fences it is preferable to have uniform panel lengths.

On long boundary fences, it is common to have most of the panels at maximum length with a few shorter sections at less visible ends of the fence (i.e. back corner of yard) to make up the total length. Example: A fence is 50 metres long  $50 \text{ divide by } 2.4\text{m} = 20.8$  The alternatives are (a) 21 panels at 2.38m, or say (b) 17 panels at 2.4m plus 4 panels at 2.3m. Now, measure along the string with a tape measure. Mark the point on the string where the centre of each intermediate post will be. Put a straight edge and a spirit level against the marks. (See diagram 4). Make sure the straight edge touches the ground. Adjust the bottom of the straight edge until the spirit level reads plumb. Now, put a peg in the ground up against the face of the straight edge. This peg will be at the facing edge of the post. Do this for every intermediate post.

## BUILD YOUR OWN FENCE

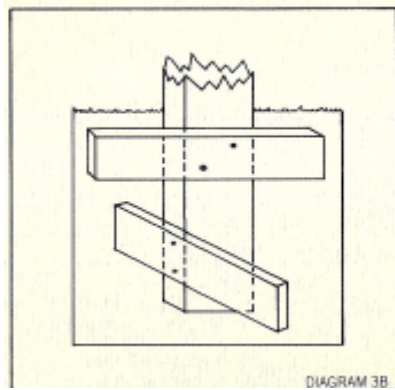


DIAGRAM 3B

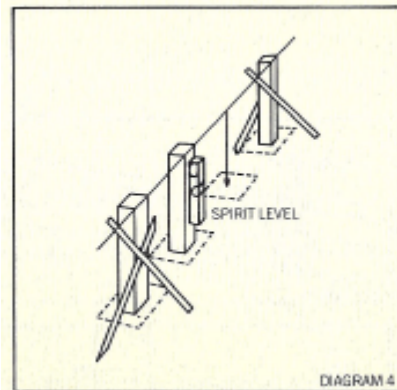
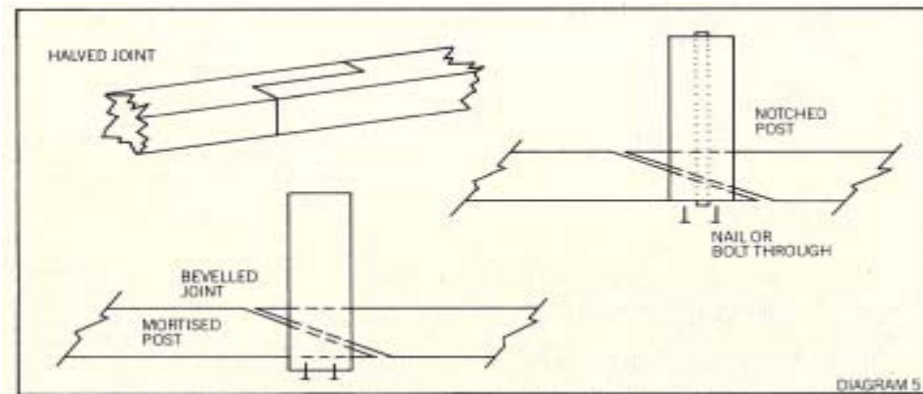


DIAGRAM 4

**Step 3** - Setting up the intermediate posts. For each post, dig a hole 600 mm deep. Excavate the hole straight and plumb with the peg as its true centre. Extra care in hole digging will be of benefit when the posts are aligned. Ensure that the base of the hole (at correct depth for post) is firmly packed but relatively free draining. Ram-packed pebbles, gravel, broken bricks etc. in the base of the hole can help to avoid the risk of the post standing in a pond of water. The next step is to erect the intermediate posts. First decide what contour the top of the fence is to follow. On a flat site it will obviously be straight and parallel to the ground. On a moderately sloping site or one having marked changes of contour the method shown in (Diagram 6A) is usually adopted. The palings or height gauges can be adjusted until a pleasing line has been achieved.

With the string line set to its final height the posts may now be cut to length. Place a post adjacent to each hole. One by one, stand each post in its hole upside down. Mark it where it touches the string, take it out of the hole and cut the excess length. It is important that the length is cut off the bottom so the top of the post looks good. At this stage each post should also be mortised or notched to receive the rails. With preservative treated timbers, brush coat any freshly exposed surfaces with preservative solution. Note You might want to number the posts and the holes so there's no chance of them getting mixed up. If you are working in soft sandy soil it is advisable to fit cleats to the base of the intermediate posts so that maximum stability is obtained. (See Diagram 3B).

## BUILD YOUR OWN FENCE

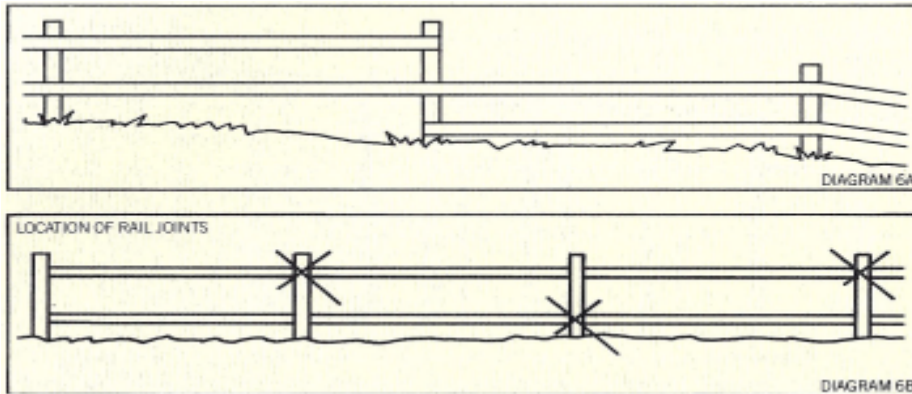


**Step 4** - putting the rails on. Each rail should be long enough to go through two posts. For example, if the distance between the posts is 1.8 metres, the rails should be 3.6 metres long. Note The rails should be a sliding fit in the mortise or notch housing. Decide which way you want to cut the joints of the rails. (See Diagram 5). Cut the first top rail only to a half length. For example, if the distance between the posts is 2.1 metres, cut the first top rail to 2.1 metres.

- A. Plumb and brace the first intermediate post.
- B. Slide in the one span top rail. Nail or bolt it to the first marker post and the first intermediate post. (Diagram 6B) .
- C. Plumb and brace the third post, and slide in the full length (two span) bottom rail. Nail/Bolt it to the three posts.
- D. Plumb and brace the fourth post .Slide in the next (full length) top rail.
- E. Check the plumb of the second and third posts before nailing/bolting this top rail in.

By now you will have seen the pattern that you should use. Continue this until you have reached the end. You will require another half length rail to finish at the other end.

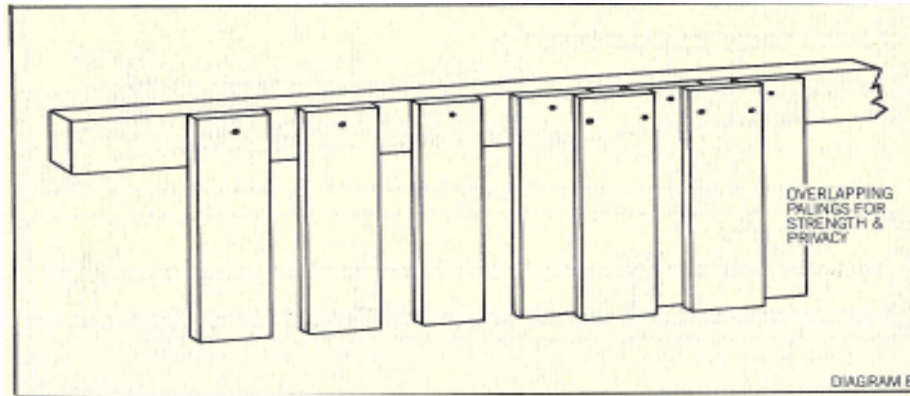
## BUILD YOUR OWN FENCE



Note This procedure aims to have 'staggered' rail joints so that only at the end of a two rail fence will both rail joints occur on the same post. (See Diagram 6B).

Now to correctly align the face of the intermediate posts, the fence must be straightened along the string lines. Each post must now be adjusted to the string line for height by adding or removing some filling, or ramming it harder in the hole. Align its face edge with the string line and plumb its face edge by adjusting the bottom of the post in the hole. (Use a spirit level). Carefully back-fill around each post and ram as the filling is placed in position, continually checking that the ramming has not moved the post from its proper position. For extra strength, concrete around corner or finishing posts and gate posts. (Any mowing strips could be formed up and poured more easily at this point.) The basic frame is finished and should be painted or treated with preservative before any cladding is fitted.

# BUILD YOUR OWN FENCE



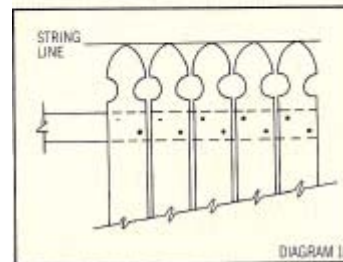
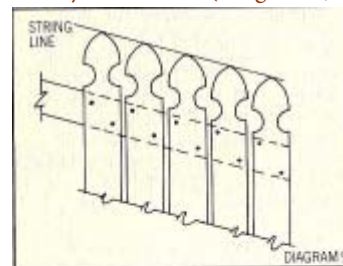
**Step 5** - Cladding the fence. While fixing cladding align each paling or picket with the line of the top string. Put in one nail at the top and keep each paling/picket plumb - check this with the spirit level. When plumb, double nail each paling/ picket firmly to the rails. (Diagram 8, 9, 10) Note Palings should not be embedded in soil but should finish clear of the ground. The fence building is complete.

Well done!

## **Step 6** - Finishing Touches

Now it's time to talk to your paint shop expert about the right timber paint or stain.

**Note** Priming or sealing exposed end grain in notches and mortises or rail joints before construction will increase life of fence structure. Stains or paints which provide a water repellent coating to the fencing timber, will greatly assist in extending the decorative life of all timber fences.





## BUILD YOUR OWN FENCE

Your shopping list	Item no or size	length	No. of	Unit price	cost
1 CORNER POSTS					
2 INTERMEDIATE POSTS					
3 RAILS					
4 PALINGS					
5 PICKETS					
6 BOLTS, NUTS AND WASHERS (for rails thru posts)					
7 SCREWS or NAILS (galv. for palings/pickets)					
8 CONCRETE PREMIX PACKS (1, per footing)					
9 CREOSOTE (if timber post is set in ground)					
10 FENCE PAINT					

Note: For long life, all metal components should be made of galvanised steel. Visit your hardware store for advice on exterior paint.

TOOLS I WILL NEED	Item no or size	length	No. of	Unit price	cost
11 SPIRIT LEVEL OR LINE LEVEL					
12 CLAW HAMMER					
13 CHISEL 25mm					
14 ADJUSTABLE SPANNER					
15 SAW, ELECTRIC OR HAND					
16 ELECTRIC DRILL AND BITS					
17 LADDER					
18 SAW HORSES OR STEP-UPS					
19 SHOVEL OR SPADE					
20 TAPE MEASURE					
21 SET SQUARE					
TOTAL					

Use this checklist to see if you've got all you need. If you need any advice or materials for building a fence, don't hesitate to call Irish timber products and ask the timber experts.

They'll be pleased to help you in anyway.