

# TIMBER DECKING

## SKILL LEVEL



Careful measuring and cutting is required when constructing a timber deck. It would be helpful to have an assistant for some stages of the work.

## SAFETY FIRST

Wear work gloves to avoid splinters, and safety goggles to protect eyes when using power tools. Dispose of treated wood off-cuts as ordinary household waste. Treated wood should not be burned in open fires, barbecues, stoves or fireplaces. Avoid inhaling sawdust.

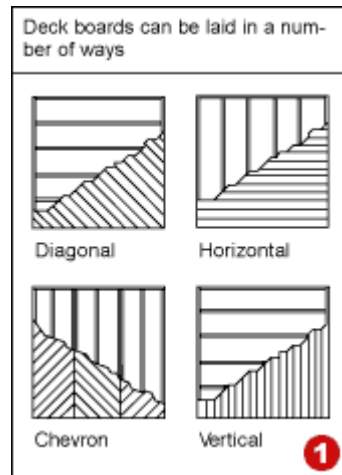
Pre-treated wood is perfectly safe and poses no risk to people, animals and plants, and is safe enough for children to play on.

## INTRODUCTION

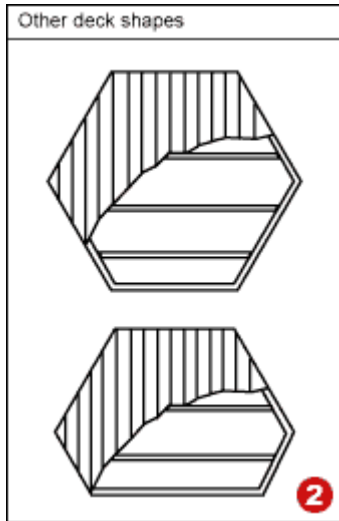
Timber decks offer a natural and attractive outdoor living space for dining, entertaining or simply relaxing.

For an alternative to a patio, a timber deck is a useful addition to your garden. Design and construction is relatively easy - all you need to do is construct a frame from joists and add deckboards to create a flat patio. Additional posts, handrails and spindles create the complete deck look.

## 2 - Planning & design



First you should choose a location for your new deck that takes the sun and prevailing winds into account. Then decide whether your deck should be free-standing within your garden or linked to your house.

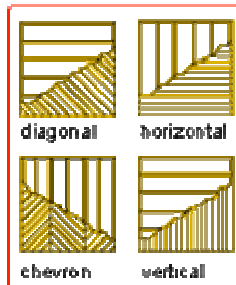


Decide on the shape and size of your deck - deck boards can be laid in a number of different ways and more ambitious deck shapes are possible: the only limit is your ingenuity. It is important that you decide on the deckboard layout before assembling the support joists as some patterns will affect the spacing and number of joists, for example a double joist will be needed for a chevron style layout.

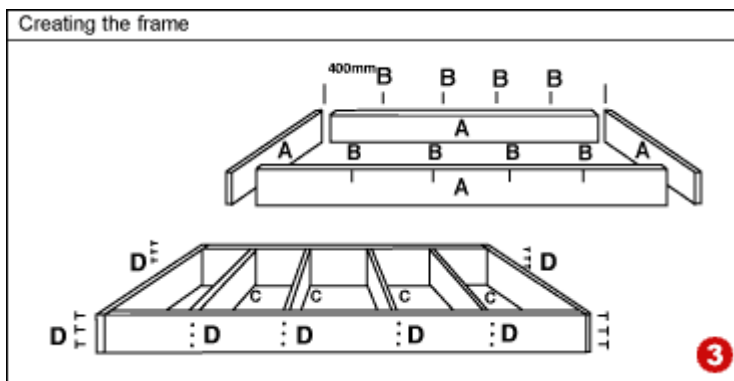
Mark out the area to be occupied by your deck with wooden pegs and string: this will help you to visualise the size of the finished deck and serve as a guide for preparing the site. If the site you have chosen is lawned, then it is recommended that the turfs are removed and the site is level.

You can prevent the growth of unwanted vegetation under your deck by covering bare ground with black plastic sheeting, followed by gravel.

### 3 - Creating the frame



Deck boards can be laid out in a number of ways. It is important that you decide on the deckboard layout before assembling the support joists as some patterns will affect the spacing and number of joists, for example a double joist will be needed for a chevron style layout.



**Step 1:** Cut the joists (**Diagram 3 - A**) that will form the sides of the deck to the size you require.

**Step 2:** Mark the position of the floor joists (**Diagram 3 - B**) at 400mm intervals.

**Step 3:** Cut the deck floor joists (Diagram 3 - C) to length and treat all cut ends with end seal preservative.

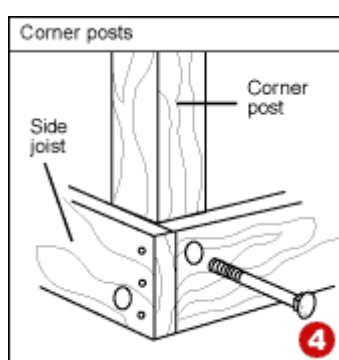
**Step 4:** Place the side and floor joists in the position where the deck is required.

**Step 5:** Assemble the framework using 75mm screws in pre-drilled holes, three screws per joist end (**Diagram 3 - D**).

If you just require a flat deck area you can now proceed to 'Laying the deck-boards'.

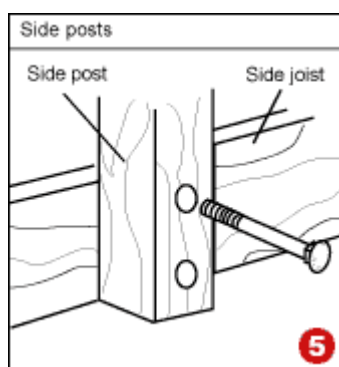
#### 4 - Fitting posts, rails & spindles

The safety and beauty of your deck can be enhanced by railings. These railing sections, fitted between posts, should be assembled and then fixed into position onto the framework.

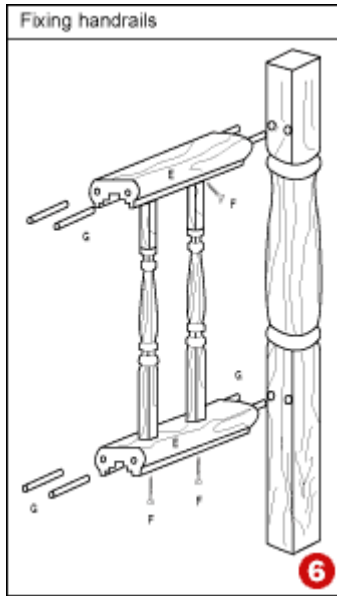


Corner posts will be required at 1200mm intervals on straight sections, fixed directly to the joists of a flat deck.

**Step 1:** Fix the corner posts first, using coach bolts to fasten them to the inside of each corner.



**Step 2:** First mark the position of the posts on the side joists, then bolt the side posts to the inside of the joists.



**Step 3:** Measure the distance between the two post positions and cut the top and bottom handrails (**Diagram 6 - E**) to length.

**Step 4:** Measure the length of the spindles to fit between the top and bottom handrails and cut to size to allow the top handrails to be 900mm above the finished deck surface, and bottom rails 75mm above the deck.

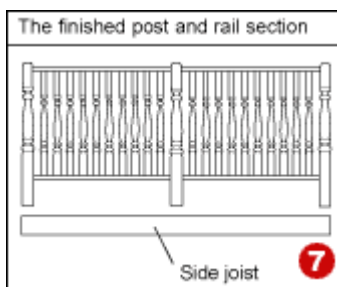
Fix the spindles at 100mm centres to the top and bottom rails using 50mm screws, fixed from the underside of each rail (**Diagram 6 - F**).

**Step 5:** To fix the section of railing to a post, first unbolt and remove the posts.

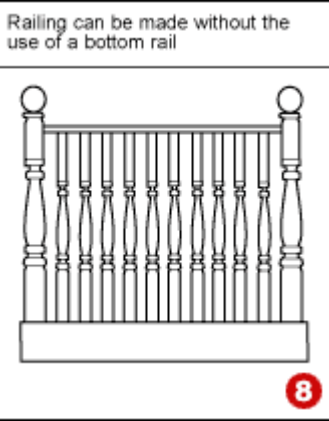
Drill two 12mm diameter holes, 38mm deep in the ends of the top and bottom rails.

Drill corresponding holes on the posts, allowing for the bottom rail to be 75mm above the surface of the deck after the deck boards have been fixed.

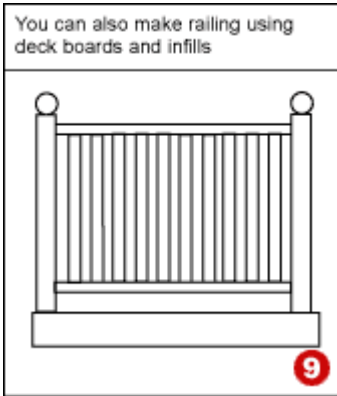
Join the railing assembly to the posts with glued dowels. For best results, use a concealed dowel fixing (**Diagram 6 - G**).



Manoeuvre the finished post and rail section into its position and secure to the joists with bolts.

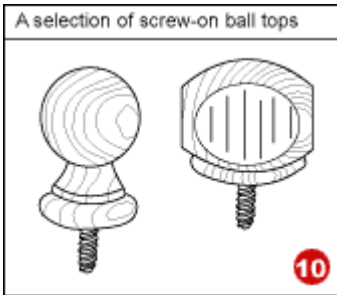


As an alternative, you can create railings without the use of a bottom rail. Posts and top rails are assembled and fixed as before. The spindles are then fixed with screws to the rail and the deck after the deck boards have been fitted.



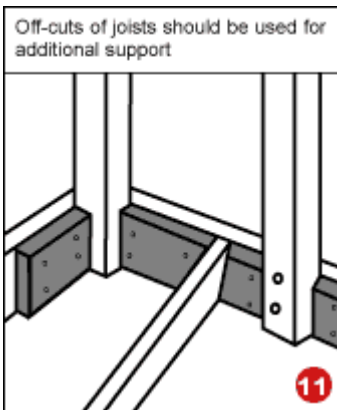
Make sure that the height of the top rail from the finished deck is exactly that of the spindles you have bought, if you don't want to cut them.

You can also make railings using deck boards and infills.



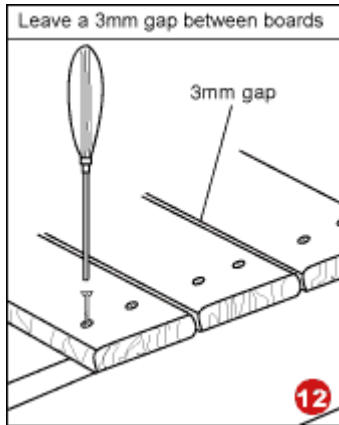
**Step 6:** Finish the posts by adding a screw-on ball top.

**Step 7:** When all the post-and-rail assemblies have been fitted, complete your deck by fixing the deck boards.



Off-cuts of joists should be used to provide additional support for posts and subsequent decking boards around the posts.

## 5 - Laying the deck boards

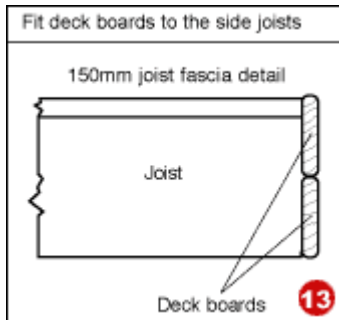


**Step 1:** Cut deck boards to the length required and brush all cut ends with end seal.

**Step 2:** Place the first board flush with the face of the joist at the front of the deck and fix, using two 50mm screws in pre-drilled holes in each board.

**Step 3:** Install the remaining boards in a similar way, leaving a 3mm gap between boards.

A 50mm nail is approximately 3mm in diameter.



**Step 4:** Finish off your deck by fitting deck boards to the side joists. These serve as a fascia and conceal the ends of the deck boards. For best results the corners of these fascia boards can be mitred.