wishing well

HOW TO BUILD A WISHING WELL (Metric and Imperial)



Fun to build!

This medium-size wishing well stands approximately 1400mm (4'-8") high and 600mm (2ft) wide. It is a cross between a small planter and a full-size wishing well, and can be used either as a planter box or a garden ornament. This wishing well is a lot of fun to build and even a DIY beginner should be able to knock it up without too much trouble.

About the timber

The timber used for this project is rough sawn pressure treated pine. Mostly 100x25 (1x4) is used, with the exception of the roof boards which are 150x25 (1x6) and the 'wind up' handle and spindle which are 25x25 (1x1). All timbers are common and readily available at most timber merchants. Rough sawn *means* rough sawn, so widths and thicknesses can vary from piece to piece.

What you will need

- 12 metres (40ft) of 100x25 (1x4) rough sawn pressure treated timber;
- 5 metres (17ft) 150x25 (1x6) rough sawn pressure treated timber;
- 1 metre (39") 25x25 (1x1) rough sawn pressure treated timber;
- 4 metres (13ft) of 35mm (1 1/2") galvanised metal strap;
- 40 stainless steel 50mm (2") long screws;

• two 10mm (3/8") galvanised bolts 60mm (2 1/2") long, and a handfull of 30mm (1 1/4") galvanised flathead nails.

e	The cutting list:
40	a paling (14) 14 pieces 100x25 (1x4) at 400mm (16") long. The palings along with the extended palings form the well wall.
	b extended paling (2) o 2 pieces 100x25 (1x4) at 1200mm (4ft) long overall, with a 45 degree point at one end. The extended palings continue up from the well wall and support the roof.
	C rafter (4) 4 pieces 100x25 (1x4) at 400mm (16") long, cut back one end at a 45 degree angle.
g f s	collar tie (2) 2 pieces 100x25 (1x4) at 400mm (16") long, cut back both ends at a 45 degree angle .
	e roof boards (6) 6 pieces 150x25 (1x6) at 700mm (28") long. This size timber is commonly used for fence palings.
	f 1 piece 25x25 (1x1) at 1000mm (39") long. Cut both the spindle and handle from this piece. This size timber is commonly used for lattice or trellis beading.
3/8") hole in the centre of both pieces. spindle. They can be left square or roo	2 pieces 100x25 (1x4) at 100mm (4") long with a 35mm (1 These pieces can be cut from off-cuts and are used as washers on the unded.
h o 1 piece 50x25 (1x2) on the spindle and takes the handle. It	at 180mm (7") long with a 35mm (1 3/8") hole at each end. This piece fits t can be made from off-cuts.
4 wedges 0 to 20mm (0 to 3/4") thick and 120mm (5") long. These can be cut from off-cuts and are fixed to the topside ends of the rafters.	
35mm (1 1/	2") advanised metal strap, commonly used for diagonal bracing on carport

The Instructions

roofs and decks etc.

Step 1. Cut all the members

Cut out all the members (timber pieces) to the dimensions as explained in **The cutting list** above.



Step 2. Mark and lay out palings

Measure 40mm (1 1/2") down from the top and the same amount up from the bottom of all 14 palings (a) and mark a line. Also mark

corresponding lines on the 2 extended palings (b), making a total of 16 marked boards altogether. Lay all the palings (a) and extended palings (b) next to one another on an even surface, with the bottoms against a straight edge to keep them in a straight line. When laying down, ensure that there are 7 palings (a) in between the 2 extended palings (b). (See diagram below.)



Step 3. Spacing the palings

The distance of the gap between the palings is crucial to forming a good circle. In this instance, the palings are 25mm (1") thick so the gap will be 10mm (3/8"). If the palings are a different thickness, then the gaps will also need to be different. (See **The Gap Equation** for a detailed explanation.)



Therefore: 25mm (1") divided by 2.6 = 9.6mm or near enough to 10mm (3/8"). Hence the gap or spacings between the palings in this project will be 10mm (3/8").

Note: The width of the paling has no bearing on the size of the gap. Whether the palings are 100x25 (1x4) or 200x25 (1x8), the gap will be the same. Only the thickness and the total number of palings matter. 14 palings (a) and 2 extended palings (b) make 16 palings in all. Each paling is at a 22.5 degree angle to the next, and 22.5 degrees times 16 is 360 degrees, which is a circle. Get it? Yep!



Step 4. Fixing the metal strap and forming the circle

Now that the science lesson is over (and the 14 palings **(a)** and 2 extended palings **(b)** are all lying in place on even surface with correct gaps), the 2 metal straps **(j)** can be nailed to the palings using two 30mm (1 1/4") galvanised flathead nails at each meeting. The metal straps will be placed 40mm (1 1/2") down from the top of the palings and 40mm (1 1/2") up from the bottom along

the marks as in Step 1.

When the metal straps are nailed in place to the palings, then flip the structure over and commence rolling it up. If the gaps between the palings are correct, it will form an accurate circle. Overlap the metal straps by 1 paling and nail off. Use a prop to hold everything rigid while nailing the end of the strap.

Step 5. The roof

On a flat surface, make up the two roof frames by first screwing the rafters (c) together at the apex, then screwing the collar ties (d) to the rafters (c). Then nail the wedges (i) to the bottom topside of each rafter. See fig 1 below.

Next, sit the two roof frames upright on top of the two the extended palings (b) and clamp in place. Drill a 10mm (3/8") hole through the collar tie (d) and the extended paling (b) and fasten together using one 10mm (3/8") galvanised bolt 60mm (2 1/2") long for each roof frame. See **fig 2** below.

Screw the roof board (e) to the rafters (c), beginning with the lower roof board (e) overhanging the rafters (c) by about 20mm (3/4"). Then fix the other roof boards (e) in place, ensuring that they are evenly spaced. See **fig 3** below. Also ensure that the rafters (c) and extended palings (b) are parallel.





Step 6. The handle and spindle

Drill two holes in the extended palings (b) 800mm (31") up from the bottom. Make the hole size 35mm (1 3/8") or big enough so that the spindle (f) can easily go through it. We

have chosen pressure treated 25x25 (1x1) square timber for the spindle because it is more readily available and easier to obtain than pressure treated doweling (round rod).

Make up two washers **(g)**, by drilling 35mm (1 3/8") holes in the centre of blocks made up from two pieces of off-cuts 100x100x25mm thick (4"x4"x1"thick). The outside edge of the washer can be rounded or just left square-shaped.

In a similar fashion make up the handle arm (h). Drill a 35mm (1 3/8") hole each end of a 50x25 (1x2) at 180mm (7") long piece of timber.

Now put it together. Thread the spindle (f) through the holes in the extended palings (b). Slide a washer (g) on at each end about 5mm (1/4") away from the extended palings (b) and then put a screw through each washer (g) fastening it to the spindle (f).

Next, slide the handle arm (h) along the spindle (f) until it is against a washer (g), and fasten to the spindle (f) with a screw. Cut off excess spindle (f) and use this as the handle which will also be fastened in the handle arm (h) with a screw.

Note. No floor

This wishing well is sturdy enough to not require a floor. It can be used just as a garden ornament, planters can be placed inside it, or it can be placed over an existing plant.







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