

Swing Structure

This freestanding swing is a perfect perch for enjoying the garden.

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The wooden part of the structure is not difficult to build if you have intermediate woodworking skills and basic tools. A fabric "roof" keeps harsh sun at bay; the swing is made of cotton canvas and plywood that's softened by a cushion. For best results, use waterproof outdoor fabrics, including awning fabric. That way you'll be worry-free when the rain clouds move in.

You will need:

Paint brush

Measuring tape

Pencil

Circular saw or table saw

Drill

Spade

Level

Scrap timber

Stakes

Carpenter's framing square

Hammer

Paint or stain and polyurethane varnish

[4] 100 x 100mm x 2.5m, Posts (A)

[4] 100 x 100 x 900mm, Top Beams (B)(C)

[1] 100 x 100mm 2.16m, Swing Beam (D)

[4] 100 x 100 x 650mm Roof Braces (E)

[2] 25 x 100mm x 1.98m Roof Beams (F)

[4] carriage bolts with nuts and washers

[4] 25 x 100mm x 1440mm, Lattice Stringers (G)

(12) 25 x 100mm x 826mm, Lattice Slats (H)

Lag screws with washers

Crushed rock (enough for 20cm in the bottom of each post hole, plus more for levelling posts)

Concrete mix for four footings

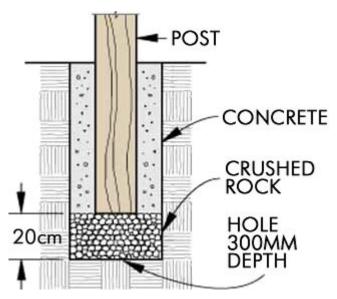
Deck screws

Wood glue

[4] 125mm Eye bolts

Here's how:

- 1. Paint or stain all wood sections, then let dry. Apply polyurethane or other varnish to protect the finish; let dry.
- 2. Using a pencil and circular or table saw, mark and cut half-lap notches in the posts (A) and top beams (B), the centre notch in the top beams (B), and the notches in the ends of



the cross beams (C). Drill counter-bores and pilot holes at the joint locations, then lag-screw and glue each swing frame assembly together.

- 3. Dig post holes approximately 600mm deep, spacing as shown. Pour 20cm of crushed rock in each hole. Set the frame-assembly posts in the holes, and brace them level and plumb with temporary supports fastened to stakes in the ground. Use a level to make sure the frame pieces are on the same elevation. (Add crushed rock to raise the low posts as necessary.) Once the frames are firmly braced, level, and plumb, mix concrete and pour into each hole to ground level. Let set two or three days before proceeding.
- 4. Notch the ends of the swing beam (D) with the saw. To prevent the beam ends from splitting, install carriage bolts as shown in the detail illustration. Fasten the swing beam to the frames with lag screws and glue.

- 5. **Top peak of swing structure.** Mitre one end of each roof brace (E) to 45 degrees. Mark and cut half-lap notches in the square ends, and drill counter-bores and pilot holes for the lag screws. Loosely screw each pair of braces together at a 90-degree angle, then lag-screw the mitred ends in position atop the swing frame assemblies. Tighten the lag screws where the roof braces meet (see photo). Lag-screw roof beams (F) between the roof braces, angling them as shown.
- 6. To make the lattice panels, place the stringers (G) on-centre on a flat surface. Use a carpenter's framing square to keep ends aligned. Fasten a slat (H) to each end of the stringers with deck

screws and glue, then every 240mm along the stringers' length. Position the panels on ends of swing frame assemblies and drive deck screws through the slats to fasten the lattice to the posts.

7. Drill pilot holes in the swing beam (D) to accept the eye bolts for the canvas swing. Also drill pilot holes in the roof braces (E) to accept the eye bolts for the striped canopy; position pilot holes so eye bolts will suspend the roof's top tabs at the peak of the roof braces. Screw eye bolts into holes. Wait to drill pilot holes to suspend the canopy's bottom tabs until you've constructed the canopy.



