



the age of SWING

How cool is this? Let the kids fly high in a red-hot plane or grab a little air by petal power

All kids love swings, but not all backyards have the right tree to accommodate one – so why not build your own? This set is designed for one swing, but you have a choice of two seats – a pretty flower or a Red Baron biplane.

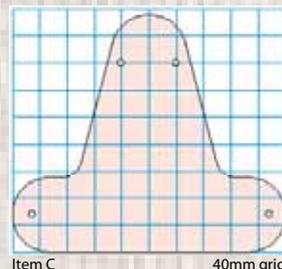
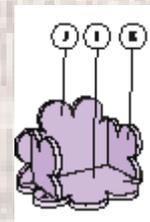
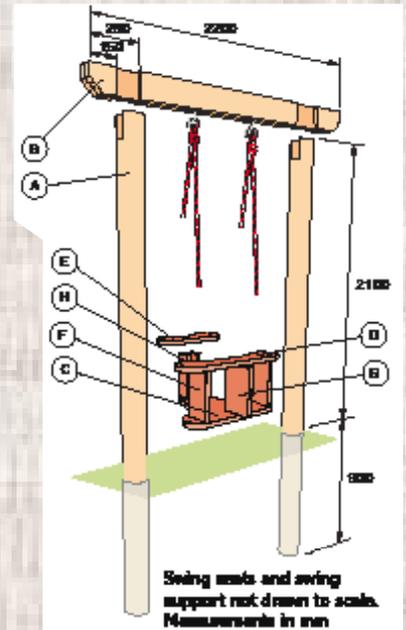
This swing is intended for kids under five years old and the seats simply clip on and off, so you could easily build both types if you like. All up, the cost should be about \$250. Before you start, it's a good idea to check with your local council as to whether there are any restrictions on swings. This project is just over 2m high, so it shouldn't present any problems.

You also need to consider the depth of the holes in the ground. As this swing has only one post on each side, each needs to be embedded to a depth of 900mm, so check with the Dial Before You Dig service first. Visit www.1100.com.au for more information.

GATHER YOUR SUPPLIES

- n A Posts (2) 150mm-dia x 3m H4 treated pine
- n B Beam (2) 140 x 45 x 2200mm treated pine
- n C* Plane seat 400 x 350 x 17mm CD plywood
- n D* Main wing 450 x 110 x 17mm CD plywood
- n E* Tailplane 290 x 110 x 17mm CD plywood
- n F Front struts (2) 190 x 100 x 17mm CD plywood
- n G Fuselage 190 x 120 x 17mm CD plywood
- n H Back struts (2) 190 x 60 x 17mm CD plywood
- n I* Flower seat 380 x 380 x 17mm CD plywood
- n J* Flower back 380 x 320 x 17mm CD plywood
- n K* Flower sides (2) 170 x 170 x 17mm CD plywood

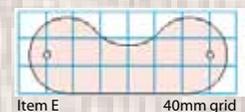
* Starting size before cutting to length or shape



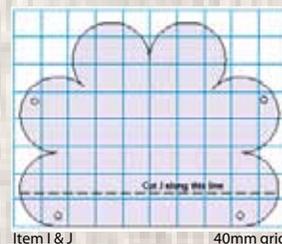
Item C 40mm grid



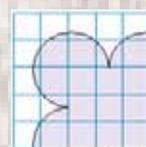
Item D 40mm grid



Item E 40mm grid



Item I & J 40mm grid



Item K 40mm grid

YOU'LL ALSO NEED

Concrete (6-8 bags); spare timber props and pegs; exterior PVA; 45, 75 and 90mm screws; 100mm batten screws; Dulux 1 Step primer, sealer and undercoat; Dulux Weathershield Low-Sheen acrylic in Five Star (orange), True Red and Emperor Jewel (purple); pigtail swing hooks, each with 1 washer and 2 nuts (2); stainless steel snap hooks (2 for each swing seat); 10mm soft-braided polypropylene sash cord (8m for each swing seat); duct tape

When it comes to backyard fun, few



1. It takes only a few hours to build and provides years of enjoyment – now that's one decent swing.

2. The cute little flower seat has four ropes, giving it a slight backward tilt for extra thrills.



Kids swing

HERE'S HOW

To make frame

STEP 1 Decide on a position for the swing. As a general rule, it needs 2.5m in front and should be 1.9m from a garden bed behind. You'll also need to leave at least 600mm between seat and posts. We chose a distance of 1620mm between the inside of posts.

Ensure you're not placing posts over underground pipes or conduits. Dig a pair of 300mm-dia x 900mm-deep post holes. On uneven ground, adjust depth of holes so bottoms are even.



STEP 1

STEP 2 Position posts (A) in holes. Hold a spirit level across the top to check they are level. Adjust holes as necessary.



STEP 2

STEP 3 The beam (B) that slots into each post is a double thickness of 140 x 45mm timber. It will be housed in the top of the post with a bridle joint (a housing in the centre of the post). The beam will also be notched to slot into the post so the 2 will lock



STEP 3

things give as much excitement as a swing



STEP 4



STEP 6



STEP 7



STEP 9



STEP 10



STEP 12



STEP 13



STEP 16



STEP 18



STEP 19



STEP 20

together. To allow for the notched beam, measure 50 and 100mm across the top of each post and draw a pair of parallel lines across the end.

STEP 4 Use clamps or blocks to prevent posts from rolling. Use a power saw with saw blade set to cut as deep as you can, to cut ends of housings.

STEP 5 Mark in the full 140mm depth of housing, then use a circular saw to cut as far as you can down the line, making sure the cuts are square, followed by a handsaw to cut the rest of the way.

STEP 6 Drill out bottom of housings with a 25mm Speedbor to remove bulk of waste. To do this efficiently, you'll need 2 holes centred 13mm up from the bottom line. Work from both sides for maximum accuracy.

STEP 7 Again, working from both sides, chisel out waste so bottom of housing is flat and smooth, right on the 140mm mark.

STEP 8 Cut beams to a length of 2200mm, then place 2 beams together so they are aligned all around. Measure 150 and 290mm from each end and square lines across beams. Screw beams together with 75mm screws to make one 90mm-thick beam, but do not screw between lines.

STEP 9 Turn beam over and draw another set of lines 150 and 290mm in from ends. Set power saw to cut to a depth of 20mm, then cut along waste sides of the 2 lines. Follow with a series of parallel cuts in between to make removing waste easy.

STEP 10 Hammer thin wafers of timber to remove them, then use a chisel to tidy and smooth bottom of housings.

STEP 11 Set posts in holes and fit crossbeam in place. It should slip in firmly but without hammering. Fitting the beam at this stage allows you to rotate posts slightly if they are not quite correctly aligned. Check the level of the crossbeam and identify the higher of the 2 posts.

STEP 12 Use spare timber and pegs to brace the higher post in 2 directions. Once set, check both directions for plumb again, then fill hole with concrete to secure post. If you want the concrete to set quickly, use the fast-setting type. Make sure concrete fills

all voids by rodding it in place. Concrete to just below ground surface.

STEP 13 Check whether crossbeam is level. If it is, concrete other post in place. If not, pour a bag of dry concrete mix into the hole, lift the pole slightly and settle it. Then check again to see if crossbeam is level. When it is, check plumb of the post on its side to see if it needs to kick in or out at the bottom. Adjust so it's parallel with the first post, then start adding more concrete. As the hole fills, align post front to back using level and eyeing to first post you put in.

STEP 14 Predrill and screw through horns of the post into the beam using 100mm batten screws. Let the structure stand as the concrete sets.

STEP 15 While concrete is setting, undercoat frame with a primer, sealer and undercoat, and let dry. Paint 2 coats of Dulux Weathershield Low Sheen acrylic in Five Star or the colour of your choice.

To make biplane seat
STEP 16 Using a jigsaw, cut out curved seat, main wing and tailplane (C,D,E) using the pink 40mm-grid diagrams (see page 186) as a guide.

STEP 17 Mark in centre line of seat (C), then measure 150mm to each side, and square lines across wing parts. Also, mark in 70mm up the centre line from the front. Glue and screw the front struts (F) to the wing so they are centred on the wing and on the line.

STEP 18 Round the front edges of the fuselage (G) with a 20mm radius, then screw fuselage to the seat as well, with its back edge on the 70mm mark. Glue and screw the main wing (D) to the top, using the same spacings.

STEP 19 Mark 15mm to each side of the centre line for the back struts (H). Glue and screw these struts to seat with the back outside corners of struts on curve of the back of the seat. Add tailplane (E).

STEP 20 Select an 11mm drill bit that is slightly larger than the 10mm rope. Using 40mm-grid diagrams as a guide, drill a total of eight 11mm rope holes on the outside of the wings at the top, and closer in towards the struts on the seat itself.

diyswing



STEP 21



STEP 23



STEP 25



STEP 26



STEP 28



STEP 29

STEP 21 Sand the plane, then paint with primer, sealer and undercoat. Let dry, then paint it red.

To make flower seat

STEP 22 Use purple 40mm-grid diagram (see page 186) to mark out seat (I). You can also mark it out by drawing a 380mm square, then draw a flower shape by marking around bases of 1L and 4L paint tins. Cut out flower seat with a jigsaw. Sand to smooth edges.

STEP 23 Use seat as a template to mark out a second flower for back (J), but this time, measure 50mm in from straight edge and cut along this line so back is 250mm high.

STEP 24 Mark a line 50mm in from back of seat, then glue, predrill and screw back to seat with front edge of back on line. If you find this tricky to hold, clamp seat over edge of a bench, then screw on back from underside.

STEP 25 Mark and cut out 2 arm rests (K), then screw to seat and back, spaced 280mm apart. Using 40mm-grid diagrams as a guide, drill 11mm holes 30mm in from front of seat, and behind side at back for the ropes. Sand, then mark in 4 flower centres on seat, back and outside of sides. Paint main part of flower in purple or colour of choice, and flower centre in orange to match frame.

To hang swing

STEP 26 Install pigtail swing hooks spaced 200mm to each side of centre of beam. Drill through with a long 10mm auger bit.

STEP 27 Push pigtail hooks up through holes, add a washers at the top, then wind on 2 nuts. Lock nuts together using 2 spanners.

STEP 28 The rope is a braided polypropylene sash cord which is soft on little hands. Find middle of a 4m length of rope, double it back on itself and tie an overhand knot to form a small loop. Feed on a snap hook, then hang onto pigtail hook. Repeat for a second rope, and you should have 4 equal rope ends.

STEP 29 To feed ropes through holes in seats, wrap duct tape tightly around rope, then cut. The recommended height of bottom of swing for pre-schoolers is 350-400mm from ground. Tie knots to hold swing seats at correct height, ensuring flower swing tilts back slightly so it's balanced when in use.

STOCKISTS:

SWING DESIGNED BY JOHN RAE AND DARREN BAENSCH. TREATED PINE POSTS 150MM, MIDCOAST TIMBER, (02) 9521 8611 OR WWW.MIDCOASTTIMBER.COM.AU TREATED PINE TIMBER; PLYWOOD; SWING FITTINGS; HARDWARE, BUNNINGS WAREHOUSE, (03) 8831 9777 OR WWW.BUNNINGS.COM.AU DULUX 1 STEP PRIMER/SEALER/UNDERCOAT; DULUX WEATHERSHIELD LOW SHEEN ACRYLIC IN FIVE STAR, EMPEROR JEWEL, TRUE RED, DULUX 13 25 25 OR WWW.DULUX.COM.AU QUICK-GRIP CLAMPS AND HAND TOOLS, IRWIN TOOLS, HARDWARE STORES NATIONALLY. POWER TOOLS, BOSCH AUSTRALIA,