

Proudly supplied by

**Resene**

the paint the professionals use



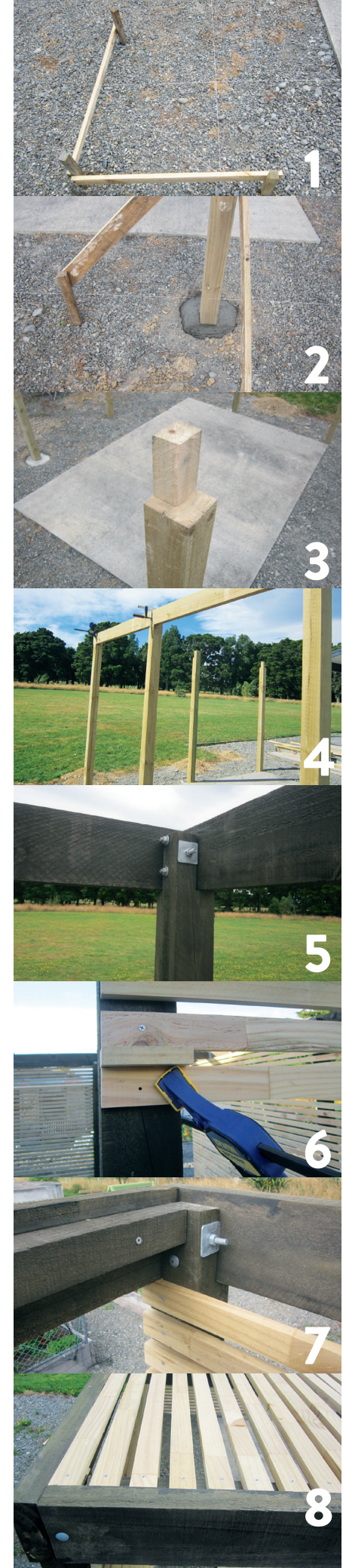
# SWEET RETREAT

*Rose Hughes shows how to build a shady pergola*

## MATERIALS

Our pergola measures 5m x 3.8m, but this project can be scaled to suit your requirements. Before proceeding check with your local council about the applicable building regulations for this project. **You will need:**

- Timber pegs and spare timber for profile and post bracings
  - About 2 x 25kg bags of instant cement per hole
  - 9 x 100mm x 100mm H4 3m posts
  - 2 x 50mm x 150mm H4 bearers x 5.4m
  - 5 x 50mm x 150mm H4 bearers x 4.8m
  - H3.2 treated cavity battens (20mm x 45mm) or similar
  - 8m of 50mm x 50mm H4 pine
  - 12 x 10 x 120mm coach bolts and round washers and 4 x 10 x 150mm coach bolts with washers
  - 2 x 150mm coach screws
  - 8g x 40mm screws
  - 8g x 100mm screws
  - 5 x 52 x 120mm joist hangers
  - Stain (I used Resene Woodsman Wood Oil Stain in Shadow Match)
  - Builder's string
  - Small nail/pencil/tape
  - Clamps
  - Drop saw
  - Skill saw
  - Handsaw
  - Spirit level
  - Hammer
  - Screwdriver/drill and drill bits
- Cost:** approximately \$2000



**1** Mark out roughly where your pergola is going to sit and set up profiles about 500mm back from the corners. Run string lines from your profiles to give you the outside area of your pergola. The outside corner posts will sit where the string lines meet. I used 4 corner posts and 5 mid posts.

**2** Mark and dig 400mm x 400mm x 600mm deep holes for each post. Mix the cement according to the instructions. One at a time, put a small amount of cement in each hole, add the post, brace well and ensure each post is straight. Pour in the cement and tamp down to remove any air. Allow the cement to dry before removing the bracing.

**3** Measure to the underside of the bearer – I chose 2.2m. Mark the first post at this height with a nail; use timber and the spirit level to mark the rest. Do the same 130mm above the first line. Saw off posts at this line. Each corner post and post on the front and back of the pergola will have a 50mm rebate cut into it. Each corner post and side post will have a 30mm rebate. See image 3. Mark and cut with the handsaw.

**4** Measure and cut the bearers. Hold in place with clamps and drill 10mm holes for the coach bolts. For the corner posts, there should be 2 vertical bolt holes for the front and back bearers, and a single hole between for the side bearers. The mid posts should all have 2 vertical holes.

**5** Identify and take down the bearers; stain these and the posts. Once dry, reinstate the bearers and bolt the upper frame together with the coach bolts. The front and back bearers attach with the 120mm coach bolts (apart from the centre front post), and the side bearers with the 150mm coach bolts. The bolts on the back wall should have the heads to the inside.

**6** For the back and side walls, measure the distance between the posts where you want to put the battens. Cut the battens to length, pre-drill and attach using the 40mm screws centered on each post. Use the clamps, spirit level and spacers to ensure the gaps are even and the battens are level.

**7** For the ceiling, measure the side bearers and cut 50mm x 50mm timber to fit; cut 3 to fit as rafters and trim the width back to 130mm using the skill saw. Stain all pieces. Attach the side rails with 100mm screws between the posts, level with the rebate, to create a ledge for the ceiling battens. Centre and hang the side rafters with joist hangers so the lower edge is level with the lower edge of the main bearers. For the central rafter, use 150mm coach screws to join post bearer and rafter.

**8** Cut the ceiling battens to fit, then pre-drill and screw in place using the spacers, working from the back to the front and attaching at the sides and the centre of each rafter. ❖

PHOTOS: ROSE HUGHES