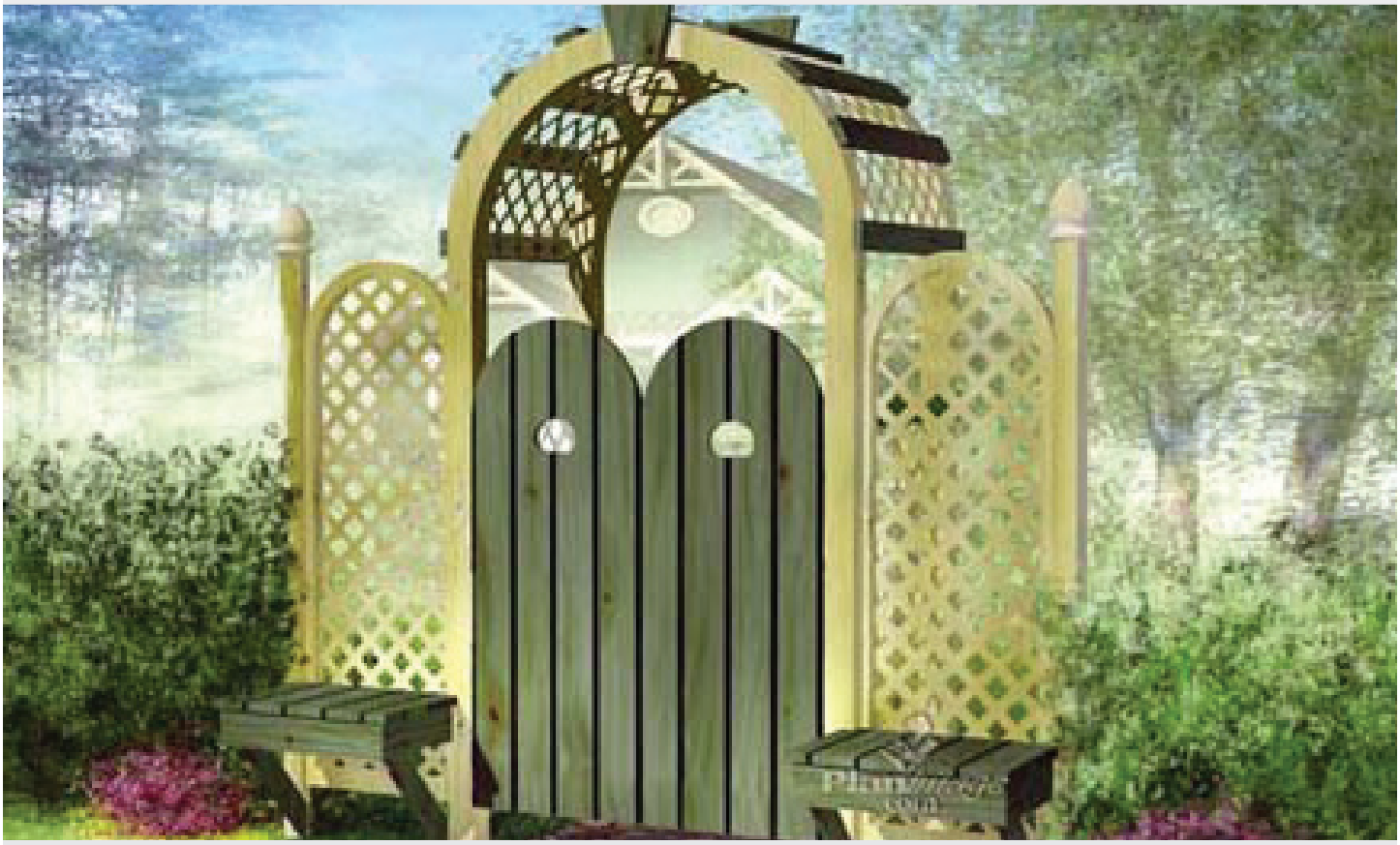
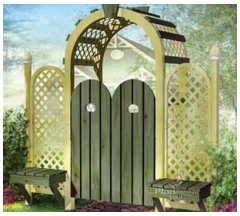
BUILDING AN ARBOR

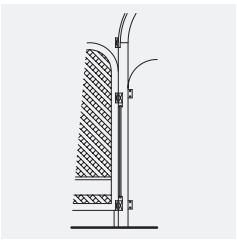
CONSTRUCTION PLAN

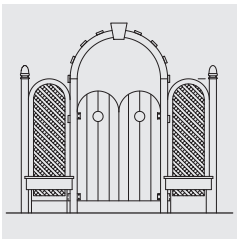


Difficulty level: EXPERT

Completion time: **Project Week-end**







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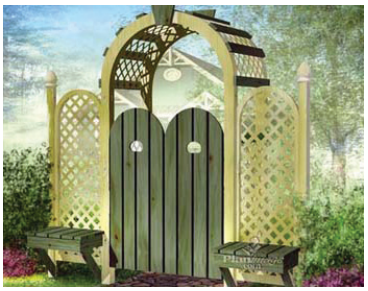


This elegant arbor is an aesthetic and useful addition to any landscape design.

The arched arbor measures 84 ½" tall, 96" wide and 24 ½" deep, complete with a hinged gate and two small bench seats. The pressure treated lumber assures your structure will withstand harsh conditions for years to come. The intermediate DIY-er should have no trouble completing this beautiful project in a weekend.

Implement this arbor over the walkway to your front door as a welcoming embrace for your guests. Or, perhaps it would be better placed in the backyard as a mini oasis for you to enjoy with a cup of coffee or good book. Where ever you decide to build your arbor, it will enhance your home's design while providing a climbing wall for plants and a small bench for you to rest. Personalize it to the style of your home with paint and plantings.

TOOLS AND MATERIALS NEEDED

TOOLS

- 3/8" bit
- ½" bit
- 3" hole saw
- Bevel square (optional)
- Circular saw
- Compass (optional)
- Drill
- Jigsaw
- Mitre saw (optional)
- Sandpaper
- Screwdriver
- Square
- Tape measure

MATERIALS

Concrete pads & posts

12 bags	Bags of crushed stone dust - Posts
6 pieces	4" x 4" x 10' Treated lumber - Posts

Arbor

2 pieces	2" x 12" x 144" Treated lumber - Arches
1 piece	2" x 4" x 120" Treated lumber - Structure
1 piece	1 1/4" x 4" x 96" Treated lumber - Finishing
3 pieces	1 1/4" x 4" x 120" Treated lumber - Finishing
3 pieces	8" 'U' shaped lattice moulding - Finishing
3 pieces	48" x 96" Treated lumber lattice - Finishing
2 pieces	4" x 8" x ½" Spruce plywood exterior type - Frames
2 pieces	Decorative post cap - Finishing

Door

11 pieces	1" x 6" x 5" Treated lumber - Finishing

Bench

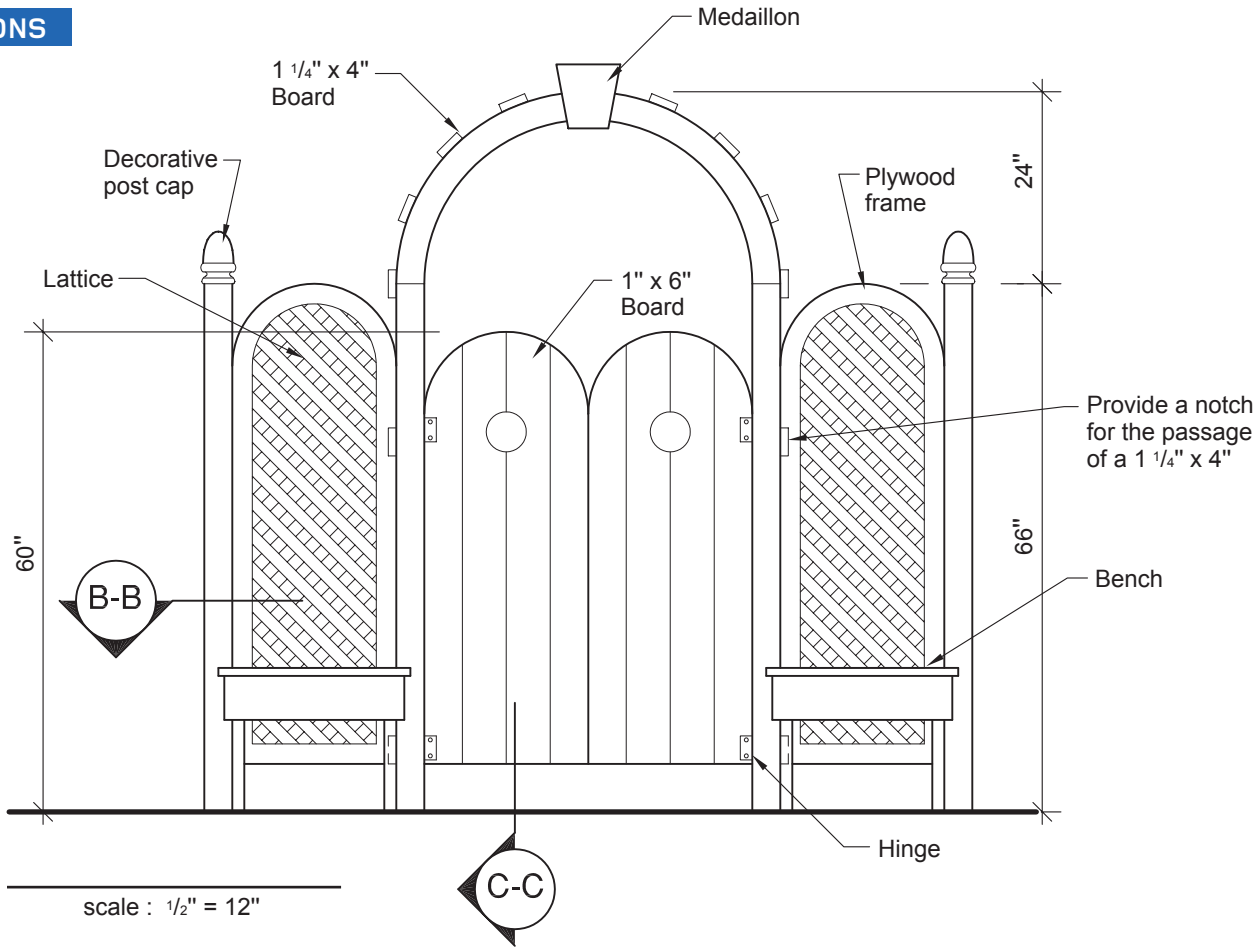
2 pieces	2" x 4" x 96" Treated lumber - Structure
2 pieces	2" x 6" x 144" Treated lumber- Seat

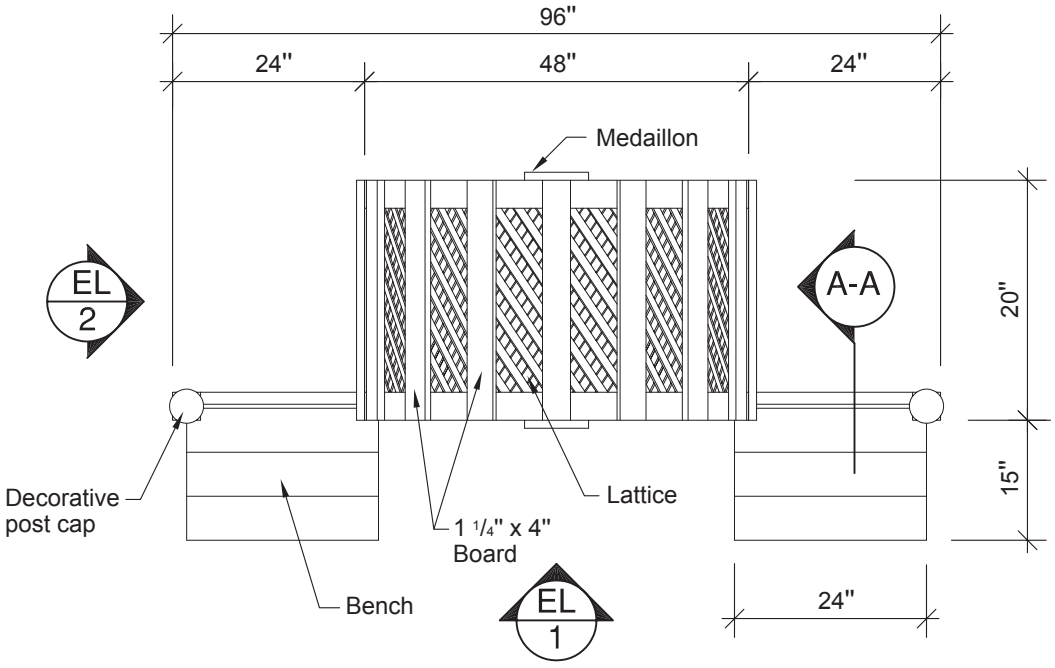
Hardware

100 pieces	3" Exterior type screws - Structure
300 pieces	2 ½" Exterior type screws - Structure
2 pairs	Fence hinges - Hardware
1 piece	Door latch / handle - Hardware

BUILDING AN ARBOR

ELEVATIONS





BUILDING AN ARBOR

NOTE ON TREATED WOOD

TREATED WOOD SHOULD BE HANDLED WITH PRECAUTIONS.

- Wear gloves and long sleeves when handling treated wood to avoid skin contact and to protect against splinters.
- Wear dust mask, eye protection, gloves and long sleeves when sawing, sanding or shaping treated wood to avoid skin contact with or inhalation of sawdust, to protect against splinters and to protect eyes from flying particles. When making cross cuts, use a cut sealer as the factory-treatment rarely goes to the heartwood.

DURING CONSTRUCTION

- Apply a wood preservative on the cut ends.
- Use nails, screws, bolts, connectors and other hardware resistant to corrosion: stainless steel, hot dipped galvanized, yellow zinc or other hardware specially coated for outdoor use. Ordinary fasteners will rust, causing unsightly stains and weakening the structure, ultimately causing it to fail.
- Make certain the wood is thoroughly dry before painting or staining, and follow the coating manufacturer's recommendations. Use only good quality oil or acrylic coatings on water repellent pressure treated wood.
- Do not dispose of treated wood remnants or sawdust in compost heaps, wood chips, or mulch.
- Do not use it as animal bedding or litter.

Never burn treated wood.

ASSEMBLY

1 INSTALL THE POSTS

1.1 Take four 4" × 4" × 120" posts and cut them to a minimum length of 102".

1.2 Drill or dig four 42" holes in the ground and fill them with 6" of gravel.

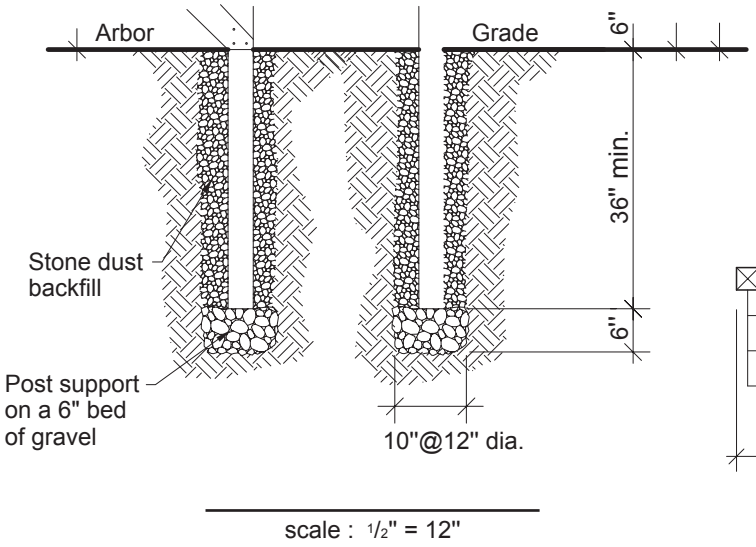
1.3 Position the posts in the holes and set them in place with crushed stone dust.

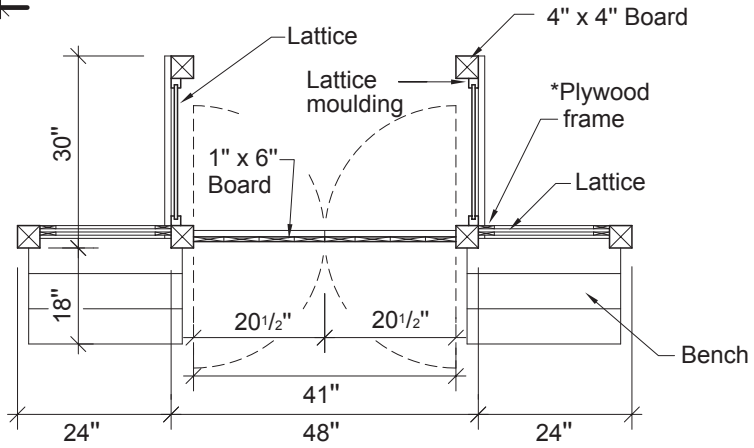
1.4 Using a screwdriver, fasten the first four 1 ¼" × 4" planks to the sides of the posts. Those planks are all 30" long.

BUILDING AN ARBOR

ASSEMBLY

1 INSTALL THE POSTS

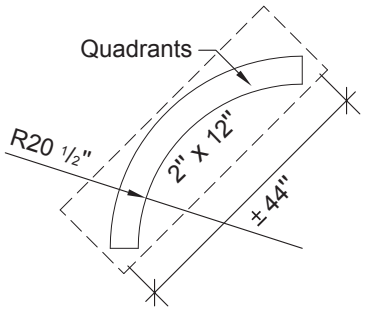




*From a 1/2" sheet of plywood, cut two frames 2 1/2" wide which will be nailed to each side of the lattice. (see front elevation)

2 MAKE THE ARCH STRUCTURE

The structure of the arch is made of two semicircles. Each semicircle is made of cut-out planks. In order to create the shape of an arch with those planks, you will first need to draw it on a kraft paper sheet. The inside of the arch has a radius of 20 ½" while the outside has a radius of 24".



2.1 Trace the shape with a long compass or a string.

2.2 Cut out the paper sheet in order to have a quarter of a circle in hand.

2.3 Cut 8 pieces of 2" × 12" to an approximate length of 35" inches.

2.4 Transfer the cut-out shape onto those pieces.

2.5 With a jigsaw or a bandsaw, cut the arch shape out of the planks.

2.6 Prepare two additional pieces, this time in a sheet of ½" plywood. This will be the centre of your semicircles. But this time, instead of making quarters of circles, trace and cut two semicircles of the same radius.

2.7 Glue the pieces of pine planks onto the plywood semicircles. You should then have two 3 ½" thick semicircles that will make the structure of the arch.

2.8 To obtain a nice finish, sand your pieces only once they are assembled together.

BUILDING AN ARBOR

ASSEMBLY

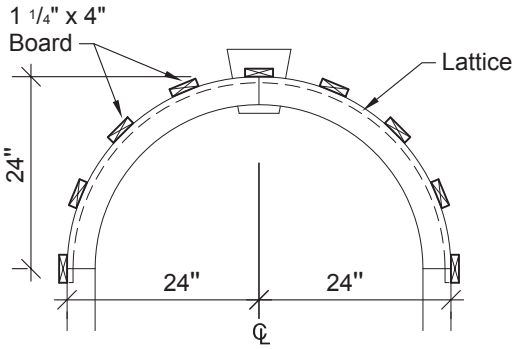
3 ASSEMBLE AND INSTALL THE UPPER PART OF THE ARBOUR

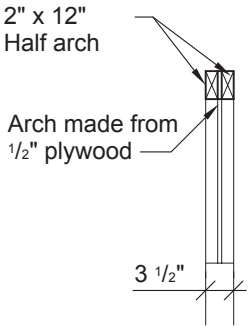
3.1 Using a screwdriver, fasten seven of the nine upper 1 ¼" × 4" planks that hold the two semicircles together. Those planks are all 30" long.

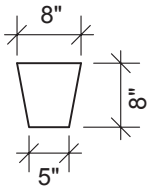
3.2 In a sheet of lattice, cut a piece of 72 ¼" x 23". Using the screwdriver and some 2" screws, fasten the lattice to the planks installed at the previous step.

3.3 Install next the arch on the posts and fasten it in place by screwing the two remaining 1 ¼" × 4" both to the arch and to the posts.

3.4 Finish screwing the lattice to the two planks installed at the previous step.







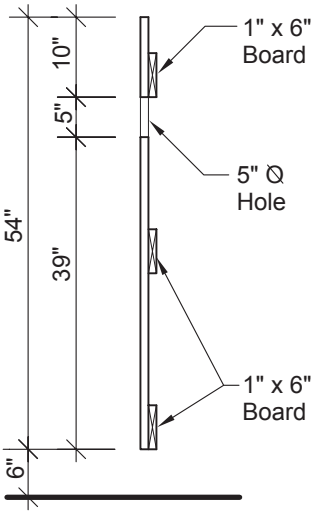
The arch is formed from 4 quadrants cut from a 2" x 12" to assemble the arch.

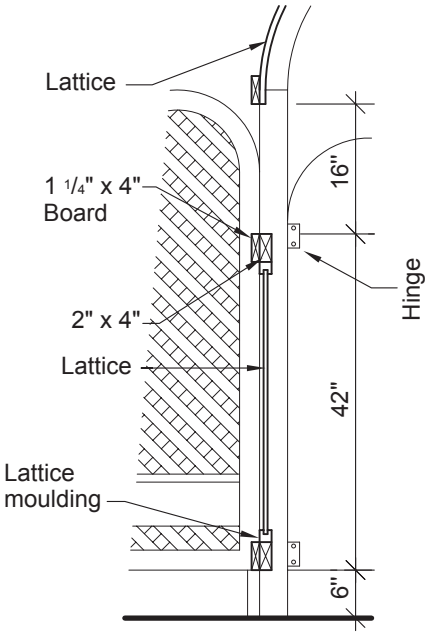
Place them around a semicircle of 1/2" plywood. Once they are be fiexed together, th earch will be 3 1/2" thick.

4 ASSEMBLE THE DOORS

4.1 Each door is made of four 1" × 6" planks all cut to a length of 54" (8 planks altogether). However, the planks located on the exterior sides of each door will have to be split to a width of 4 ¾" in order to obtain 20 ½" wide doors. Once put and fastened together with the 1" × 6" planks located on the back of the doors, they will have to be cut to create the round shape of the top.

4.2 In order to create the round shape, a compass or a 10" string will do. Also, the decorative holes in the doors have a 5" diameter.





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ASSEMBLY

5 ASSEMBLE THE FRAMES

5.1 Trace the shape of the side frames on a ½" thick sheet of plywood. To make sure they are both identical, first draw the shape on a sheet of paper and transfer it onto the plywood.

5.2 Prepare four frames in all.

5.3 Use the same sheet of paper to trace and cut out two shapes in a sheet of lattice.

5.4 Using a screwdriver, fasten the lattice sheets between the frames.

5.5 Place the frames against the posts, and mark out the area where notches will have to be made in order to leave enough space for the 1 ¼" × 4" planks located on the side of the posts. Please note that the frames will be installed at a height of 6" from the ground.

5.6 Make the notches.

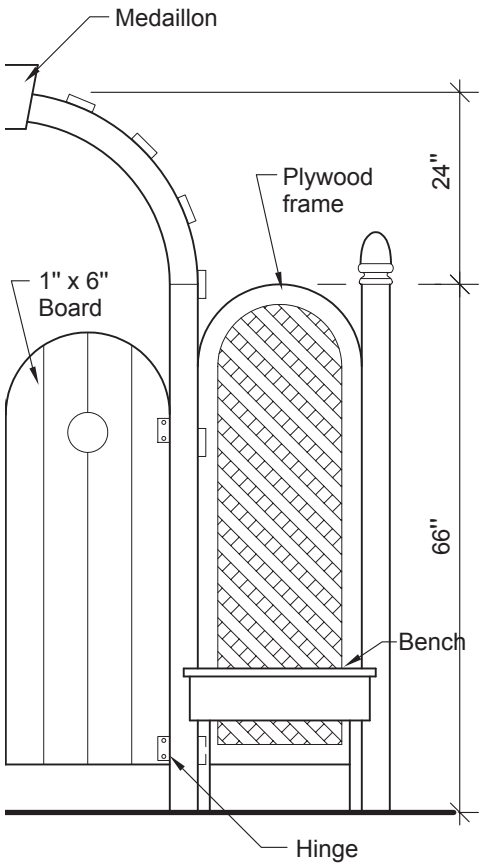
6 INSTALL THE FRAMES

6.1 Cut two 4" × 4" posts to a length of 66".

6.2 Install the decorative post caps of your choice.

6.3 Fasten the frames to those posts, making sure to leave a 6" space between the base of the posts and the base of the frames.

6.4 Then fasten the frames to the central part of the arbour.



7 ASSEMBLE THE BENCHES

7.1 Cut and install the horizontal planks that will make up the frame of the benches. By starting with those pieces, it will be much easier to determine the lengths and angles of the planks installed diagonally.

7.2 Install the 2" × 6" planks that will make up the seat of the benches.

7.3 Install the plank on the front of the benches.