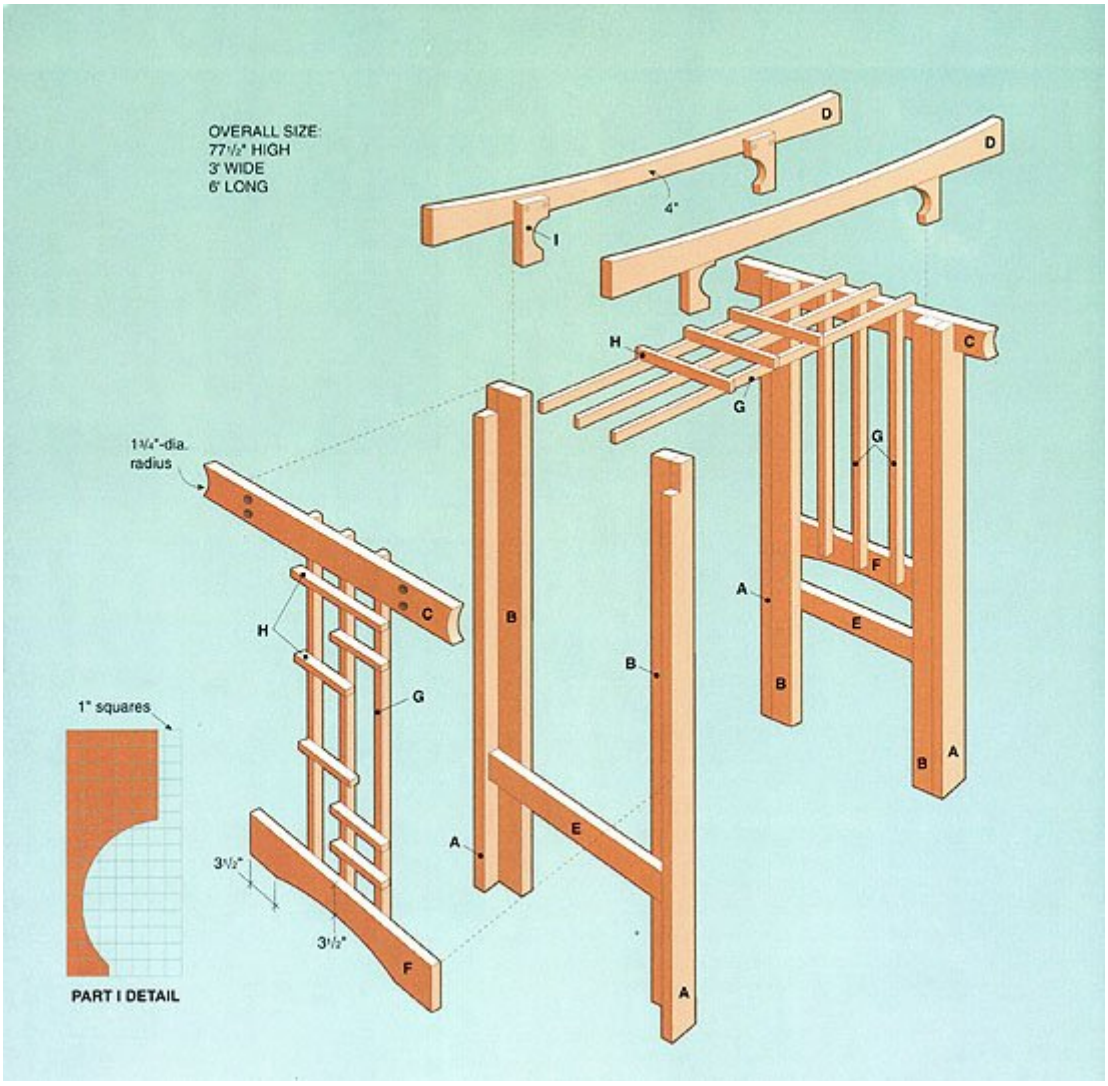
Freestanding Arbor

This freestanding arbor combines the beauty and durability of natural cedar with an Oriental-inspired design. Set it up on your patio or deck, or in a quiet corner of your backyard—it adds just the right finishing touch to turn your outdoor living space into a showplace geared for relaxation and quiet contemplation. The arbor has a long history as a focal point in gardens and other outdoor areas throughout the world. And if privacy and shade are concerns, you can enhance the sheltering quality by adding climbing vines that weave their way in and out of the trellis. Or simply set a few potted plants around the base to help the arbor blend in with the outdoor environment. Another way to integrate plant life into your arbor is to hang decorative potted plants from the top beams.

This arbor is freestanding, so it easily can be moved to a new site whenever you desire. Or, you can anchor it permanently to a deck or to the ground and equip it with a built-in seat.

Sturdy posts made from 2 × 4 cedar serve as the base of the arbor, forming a framework for a 1 × 2 trellis system that scales the sides and top. The curved cutouts that give the arbor its Oriental appeal are made with a jig saw, then smoothed out with a drill and drum sander for a more finished appearance.

CONSTRUCTION MATERIALS **Quantity Lumber** 2 1 × 2" × 8' cedar 5 2 × 2" × 8' cedar 9 2 × 4" × 8' cedar 3 2 × 6" × 8' cedar



Cutting List				
Key	**Part**	**Dimension**	**Pcs.**	**Material**
A	Leg front	1 1/2 × 3 1/2 × 72"	4	Cedar

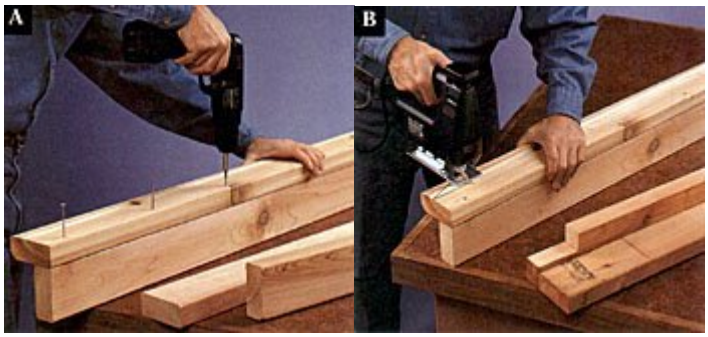
B	Leg side	1 1/2 × 3 1/2 × 72"	4	Cedar
C	Cross beam	1 1/2 × 3 1/2 × 36"	2	Cedar
D	Top beam	1 1/2 × 5 1/2 × 72"	2	Cedar
E	Side rail	1 1/2 × 3 1/2 × 21"	2	Cedar
F	Side spreader	1 1/2 × 5 1/2 × 21"	2	Cedar
G	Trellis strip	7/8 × 1 1/2 × 48"	9	Cedar
H	Cross strip	7/8 × 1 1/2 × *	15	Cedar
I	Brace	1 1/2 × 5 1/2 × 15"	4	Cedar
Tools: Circular saw, drill, jig saw, belt sander **Materials:** Wood glue, wood sealer or stain, #10 × 2 1/2" wood screws, 3/8"-dia. × 2 1/2" lag screws (8), 6" lag screws (4), 2 1/2" and 3" deck screws, finishing materials. **Note:** Measurements reflect the actual size of dimension lumber. *Cut to fit				

MAKE THE LEGS.

Each of the four arbor legs is made from two 6'-long pieces of 2 × 4 cedar, fastened at right angles with 3" deck screws.

1. Cut the leg fronts (A) and leg sides (B) to length. Position the leg sides at right angles to the leg fronts, with top and bottom edges flush. Apply moisture-resistant glue to the joint. Attach the leg fronts to the leg sides by driving evenly spaced screws through the faces of the fronts and into the edges of the sides **(photo A)**.

2. Use a jig saw to cut a 3 1/2"-long × 2"-wide notch at the top outside comer of each leg front **(photo B)**. These notches cradle the cross beams when the arbor is assembled.



Create four legs by fastening leg sides to leg fronts at right angles.

Cut a notch in the top of each of the four legs to hold the cross beams.

Tip
Climbing vines help any man-made structure blend into a natural environment. Common climbing vines include ivy, clematis, morning glory, and wild rose. Check with the professionals at your local gardening center for planting suggestions and other information.

MAKE THE CROSS BEAMS, RAILS & SPREADERS.

1. Cut cross beams (C) to length. Cut a small arc at both ends of each cross beam. Start by using a compass to draw a 3 1/2"-diameter semicircle at the edge of a strip of cardboard. Cut out the semicircle, and use the strip as a template for marking the arcs. Cut out the arcs with a jig saw. Sand the cuts smooth with a drill and drum sander.

2. Cut two spreaders (F) to length. The spreaders fit just above the rails on each side. Mark a curved cutting line on the bottom of each spreader. To mark the cutting lines, draw starting points 3 1/2" in from each end of a spreader. Make a reference line 2" up from the bottom of the spreader board. Tack a casing nail on the reference line, centered between the ends of the spreader. With the spreader clamped to the work surface, also tack nails into the work-surface next to the starting lines on the spreader. Slip a thin strip of metal or plastic between the casing nails so the strip bows out to create a smooth arc **(photo C)**. Trace the arc onto the spreader, then cut along the line with a jig saw. Smooth with a drum sander. Use the first spreader as a template for marking and cutting the second spreader.

A piece of cardboard acts as a template when you trace the outline for the arc on the cross beams.

3. Cut the rails (E) to length. They are fitted between pairs of legs on each side of the arbor, near the bottom, to keep the arbor square.

ASSEMBLE THE SIDE FRAMES.

Each side frame consists of a front and back leg, joined together by a rail, spreader and cross beam.

1. Lay two leg assemblies parallel on a work surface, with the notched board in each leg facing up. Space the legs so the inside faces of the notched boards are 21" apart. Set a cross beam into the notches, overhanging each leg by 6". Also set a spreader and a rail between the legs for spacing.

2. Drill 3/8" pilot holes in the cross beam. Counterbore the holes to a 1/4" depth, using a counterbore bit. Attach the cross beam to each leg with glue. Drive two 3/8"-dia. × 2 1/2" lag screws through the cross beam and into the legs **(photo D)**.

Lag-screw the cross beams to the legs, and fasten the spreaders and rails with deck screws to assemble the side frames.

3. Position the spreader between the legs so the top is 29 1/2" up from the bottoms of the legs. Position the rail 18" up from the leg bottoms. Drill 1/8" pilot holes in the spreader and rail. Counterbore the holes. Keeping the legs parallel, attach the pieces with glue and drive 3" deck screws through the outside faces of the legs and into the rail and spreader.

ATTACH THE SIDE TRELLIS PIECES.

Each side trellis is made from vertical strips of cedar 2 × 2 that are fastened to the side frames. Horizontal cross strips will be added later to create a decorative cross-hatching effect.

1. Cut three vertical trellis strips (G) to length for each side frame. Space them so they are 2 3/8" apart, with the ends flush with the top of the cross beam **(photo E)**.

Attach trellis strips to the cross brace and spreader with deck screws.

2. Drill pilot holes to attach the trellis strips to the cross beam and spreader. Counterbore the holes and drive 2 1/2" deck screws. Repeat the procedure for the other side frame.

Tip
Drill counterbores for lag screws in two stages: first, drill a pilot hole for the shank of the screw; then, use the pilot hole as a center to drill a counterbore for the washer and screw head.

CUT AND SHAPE TOP BEAMS.

1. Cut two top beams (D) to length. Draw 1 1/2"-deep arcs at the top edges of the top beams, starting at the ends of each of the boards.

2. Cut the arcs into the top beams with a jig saw. Sand smooth with a drum sander.

ASSEMBLE TOP AND SIDES.

1. Because the side frames are fairly heavy and bulky, you will need to brace them in an upright position to fasten the top beams between them. A simple way to do this is to use a pair of 1 × 4 braces to connect the tops and bottoms of the side frames **(photo F)**. Clamp the ends of the braces to the side frames so the side frames are 4' apart, and use a level to make sure the side frames are plumb.

2. Mark a centerpoint for a lag bolt 12 3/4" from each end of each top beam. Drill a 1/4" pilot hole through the top edge at the centerpoint. Set the top beams on top of the cross braces of the side frames. Mark the pilot hole locations onto the cross beams. Remove the top beams and drill pilot holes into the cross beams. Secure the top beams to the cross beams with 6" lag screws.

Use long pieces of 1 × 4 to brace the side frames in an upright, level position while you attach the top beams.

Lock the legs in a square position after assembling the arbor by tacking strips of wood between the front legs and between the back legs.

3. Cut four braces (I) to length, and transfer the brace cutout pattern to each board. Cut the patterns with a jig saw. Attach the braces at the joints where the leg fronts meet the top beams, using 2 1/2" deck screws. To make sure the arbor assembly stays in position while you complete the project, attach 1 × 2 scraps between the front legs and between the back legs **(photo G)**.

4. Cut and attach three trellis strips (G) between the top beams.

Tip

There are no firm rules about arbor placement. It can be positioned to provide a focal point for a porch, patio or deck. Placed against a wall or at the end of a plain surface, arbors improve the general look of the area. With some thick, climbing vines and vegetation added to the arbor, you can also disguise a utility area, such as a trash collection space.

ADD TRELLIS CROSS STRIPS.

1. Cut the cross strips (H) to 7" and 10" lengths. Use wood screws to attach them at 3" intervals in a staggered pattern on the side trellis pieces **(photo H)**.You can adjust the sizes and placement of the cross strips but, for best appearance, retain some symmetry of placement.

Attach the trellis cross strips to spice up the design and assist climbing plants.

2. Fasten cross strips to the top trellis in the same manner. Make sure the cross strips that fit across the top trellis are arranged in similar fashion to the side strips.

APPLY FINISHING TOUCHES.

1. To protect the arbor, coat the cedar wood with clear wood sealer. After the finish dries, the arbor is ready to be placed onto your deck or patio or in a quiet corner of your yard.

2. Because of its sturdy construction, the arbor can simply be set onto a hard, flat surface. If you plan to install a permanent seat in the arbor, you should anchor it to the ground. For decks, try to position the arbor so you can screw the legs to the rim of the deck or toenail the legs into the deck boards. You can buy fabricated metal post stakes, available at most building centers, to use when anchoring the arbor to the ground.