

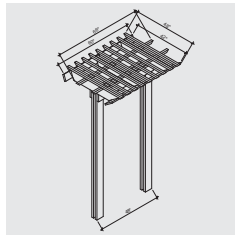
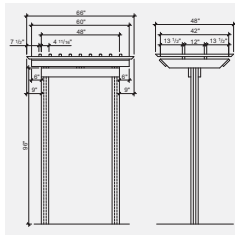
# CEDAR PERGOLA ARCH

## CONSTRUCTION PLAN



Difficulty level: **T | EASY**

Completion time: **4 hours**



# CEDAR PERGOLA ARCH

An archway is not only a decorative feature; it is also a visual threshold and an invitation to enter another part of the garden.

This arch, which stands around 105" high, is anchored with metal ground stakes, but concrete form tubes could be used instead. If the latter method is used, holes must be dug at least 24" deep and the posts must therefore be that much longer.



## Cedar wood

Cedar is a naturally weather-resistant wood and so does not need to be specially treated or painted. But there's nothing to prevent you from staining it to go with the decor – this will not detract from its beauty.

## TOOLS AND MATERIALS NEEDED

### TOOLS

- > Mitre saw or circular saw with mitre table
- > Driver drill
- > Countersink bit
- > Sledgehammer
- > Pencil
- > Measuring tape

### MATERIALS

- > 8 cedar boards, 2" x 6" x 96"
- > 2 cedar boards, 2" x 4" x 96"
- > 2 cedar boards, 1 1/4" x 6" x 96"
- > 7 cedar pieces, 2" x 2" x 96"
- > 2 1/2" treated-wood screws
- > 2 metal stakes

## BEFORE ASSEMBLY

### CUTTING LIST

Sand the edges smooth as needed.

#### Cedar boards, 2" x 6" x 96"

PIECES	QUANTITY	LENGTH (")
A OUTER UPRIGHT	4	96
C LINTEL	2	48
D SUPPORT BEAM	6	42

#### Cedar boards, 2" x 4" x 96"

PIECES	QUANTITY	LENGTH (")
B INNER UPRIGHT	2	96

#### Cedar boards, 1 1/4" x 6" x 96"

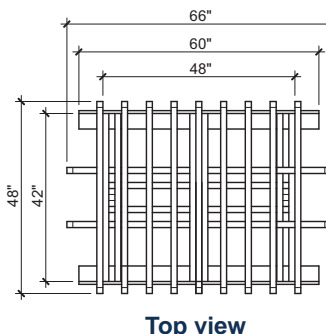
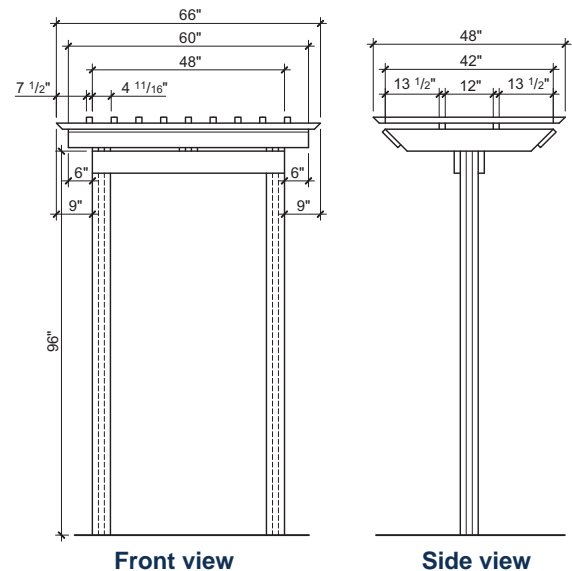
PIECES	QUANTITY	LENGTH (")
E ROOF EDGE	2	60

#### Cedar pieces, 2" x 2" x 96"

PIECES	QUANTITY	LENGTH (")
F LONG RAFTER	2	66
G SHORT RAFTER	9	48

The ends of parts D, F and G are cut at 45°.

## ELEVATIONS

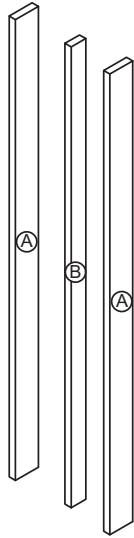


# CEDAR PERGOLA ARCH

## ASSEMBLING THE POSTS

Each post is made by layering three uprights. The one in the centre (B) is narrower than the other two, which gives the structure a three-dimensional aspect.

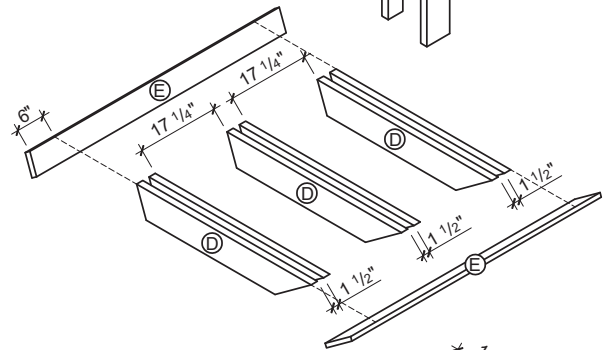
- Centre an inner upright B between two outer uprights A. Fasten the parts together by first screwing B to the back of A, then the other part A to the back of B. That way, the screw heads will only show at the back. Alternatively, for even less visible screws, fasten the inner upright to the outer uprights at an angle. Built the second post in the same way.



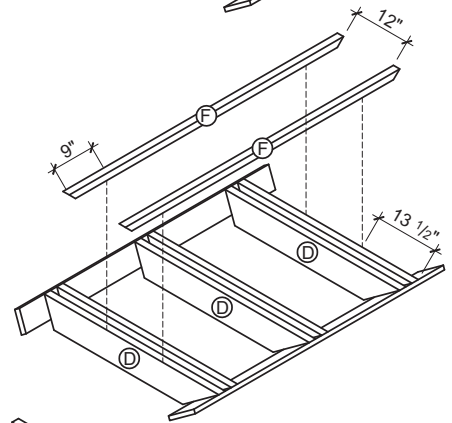
## ASSEMBLING THE ROOF

- Mark the locations of support beams D on each roof edge E:
  - Draw a line 6" from one end of E, followed by three other lines spaced 1 1/2" apart.
  - Repeat at the other end of E.
  - Draw a line 27 3/4" from one end of E, followed by three other lines spaced 1 1/2" apart.

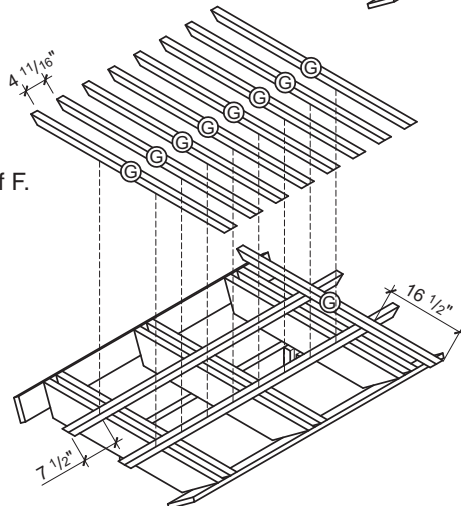
The spaces between the first and second sets of lines drawn in the previous steps represent the positions of the beams.



- Align beams D with the marks so that the top edges of E are level with the top edges of D. Screw into place.
- Mark the location of long rafters F on beams D, 13 1/2" from the ends of D.
- Position long rafters F on the marks so that the tips of the angled ends of F are 9" from the first beam D. The rafters should be spaced 12" apart. Pre-drill holes in parts F with a countersink bit to prevent them from splitting.



- Screw a short rafter G to long rafters F, 7 1/2" from the ends of F. The tips of the angled ends of G should be 16 1/2" from F. Install the remaining rafters G, spacing them 4 11/16" apart. Pre-drill holes in parts G with a countersink bit.

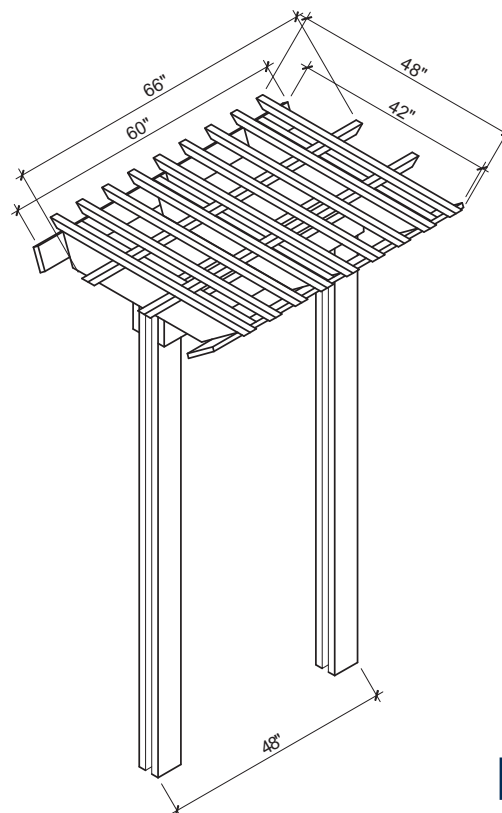
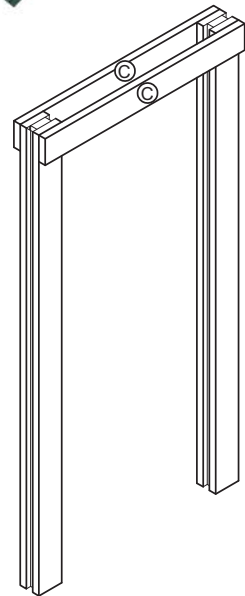


# CEDAR PERGOLA ARCH

## INSTALLATION

You will find it much simpler to mount the posts first and then attach the roof structure than to assemble the entire arch on the ground.

- 7 Decide where to position the metal stakes for the posts. Space the stakes 42 1/2" apart, centre to centre.
- 8 At each location, dig a hole approximately 7" wide x 5" deep to conceal the metal brackets on the end of the stakes.
- 9 Extend the metal brackets to their maximum length by unscrewing them but without removing them from the stake.
- 10 Sink the stakes into the holes until the base of the metal bracket (flat surface holding the post) is at ground level. To drive the stakes in, insert a 10" scrap piece of 4" x 4" post into the bracket and hit it with a sledgehammer.
- 11 Insert the posts into the stake bases and adjust with shims if necessary to ensure the posts are sturdy. Screw in place.
- 12 Turn the posts so as to screw the brackets down into the earth, until they are concealed below ground level.
- 13 Screw a lintel C to each side of the top of the posts. The ends and top edges of the lintels should be aligned with the sides and top of the posts. Make sure that this structure is square and level before mounting the roof.
- 14 Place the roof on top of the lintels, centre it and screw it in to the lintels at an angle. You will need to ask someone to help you lift and position the roof.
- 15 Fill in the holes around the ground stakes and tamp the earth down to hide the metal brackets.



This pergola arch will look stunning near a patio or garden entrance. Place a flower box on either side, for even greater effect.