

Cedar Pergola 14'x16'

a simple guide to a better pergola

Tool Check List

☐ Marking Pencil
☐ Hammer
□ Square

☐ Screw Gun

□ Tape Measure
☐ Post Hole Digge
□ Power Saw
□ Plumb Bob

String	Line
1 1	

□ Level

☐ Gloves☐ Line Level

1. Where to Start

The height of your Pergola is generally determined by your preference or building constraints, such as roof height. The bottom of the ledger will be the same height as the underside of the Pergola. The support beam that supports the rafters will sit $5\frac{1}{2}$ " lower.

Cut the 2"x6"x14' ledger to $13'10\frac{1}{2}"$ long. With a level, mount the ledger the house at the correct height with two 3" screws every two feet.

(Figure 1)

Do not install the ledger more then 8' in height or longer posts will be required.

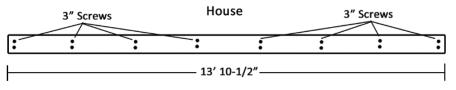


Figure 1

Figure 2

edger 2"x6:x13' 10-1/2"

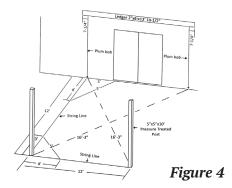
2. Spacing & Squaring the Posts

Measure in $7\frac{1}{4}$ " on both ends of the ledger, hang a plumb bob and mark the house near the ground. Pull a string line from the house 12'. Square the string line with the house by measuring a 3'x4'x5' triangle. **(Figure 2)**

Pull a second string line parallel to the house, from the first string line, squaring it with a 3'x4'x5' triangle. (Figure 3)

Square the posts with the house by measuring diagonally from corner to corner. The measurement should be the same in both directions. **(Figure 4)**

Take time to measure and position the posts accurately. The appearance and structure of the Pergola depend on the position of the posts. (Figure 5)



House

2"x6"x10-1/2" 2"x6"x13' 10-1/2"
Block Ledger

2"x6"x13' 10-1/2"
Interior Rafters

2"x6"x14'
End Rafters

11'-4"

2"x6"x16'
Support Beam

2"x6"x16'
Support Beam

Plum bob

Plum bob

Plum bob

String Line

String Line

Figure 3

Figure 5

3. Setting the Posts

Posts should be set with approximately 2' of post buried in the ground and set to the desired height of your Pergola. If setting posts on a concrete patio, post brackets will be required and some trimming. Please see your sales associate

Use a 6" or 8" post hole digger. Dig the holes 8" in diameter and straight to the proper depth and in the correct location.

"Dry" set the posts by packing the posts with concrete, taking care to keep concrete along the sides but not under the posts. Using a level, plumb the post in both directions. A helpful hint is to gently pack the concrete mix around the posts.

Double check your measurements from the house and between posts. Water down each post several times with a garden hose until water stops disappearing into the concrete. Once posts are watered down, they should not be worked on for 2 to 3 days.

4. Install Post Trim

Cut the 5/8"x6"x8' post trim pieces to length and width. (Figure 6) The cedar trim should also be flush with top of post. Install \%"x\begin{align*} \%"x\begin{a screws. (Figure 7)

5. Installing the Support Beams

Secure each of the 2"x 6"x 16' double scroll support beams, one at a time, to the posts using four 3" screws in each end. Line up support beams flush with top of posts. (Figure 8)

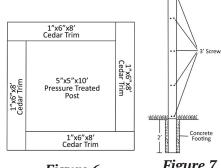


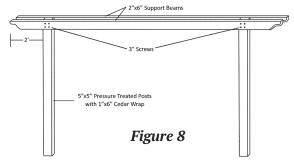
Figure 7 Figure 6

6. Installing the 2x6 Rafters

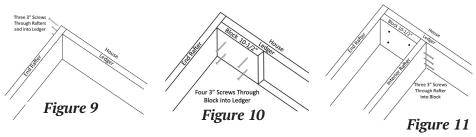
Trim the first and last 2"x6"x14' rafter as needed. Rafters are attached to the side of the ledger with three 3" screws. Screw through the rafter into the end of the ledger. (Figure 9)

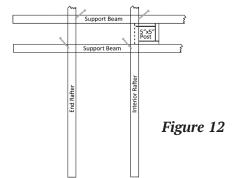
Cut one 2"x6"x14' into blocks 10-1/2" long to fit between the rafters. Cut thirteen 2"x6"x14' rafters to 13' 10-1/2" long.

After the first end rafter is installed, install a 2"x6" block with four 3" screws. (Figure 10) Next install the interior rafter with two 3" screws through the rafter into the end of the block. (Figure 11) Continue this process until all the rafters are in place.



Using two 3" screws, toe-screw the rafter into each of the support beams. (Figure 12)





7. Installing the 2x2 Tops

The 2"x 2"s run parallel to the house and are spaced 6" on center. (Figure 13) Using a 3" screw, from the top screw down through the 2"x 2" and into each 2"x 6" joist. The first 2"x2" is installed 1114" from the house.

