



Backyard Pergola

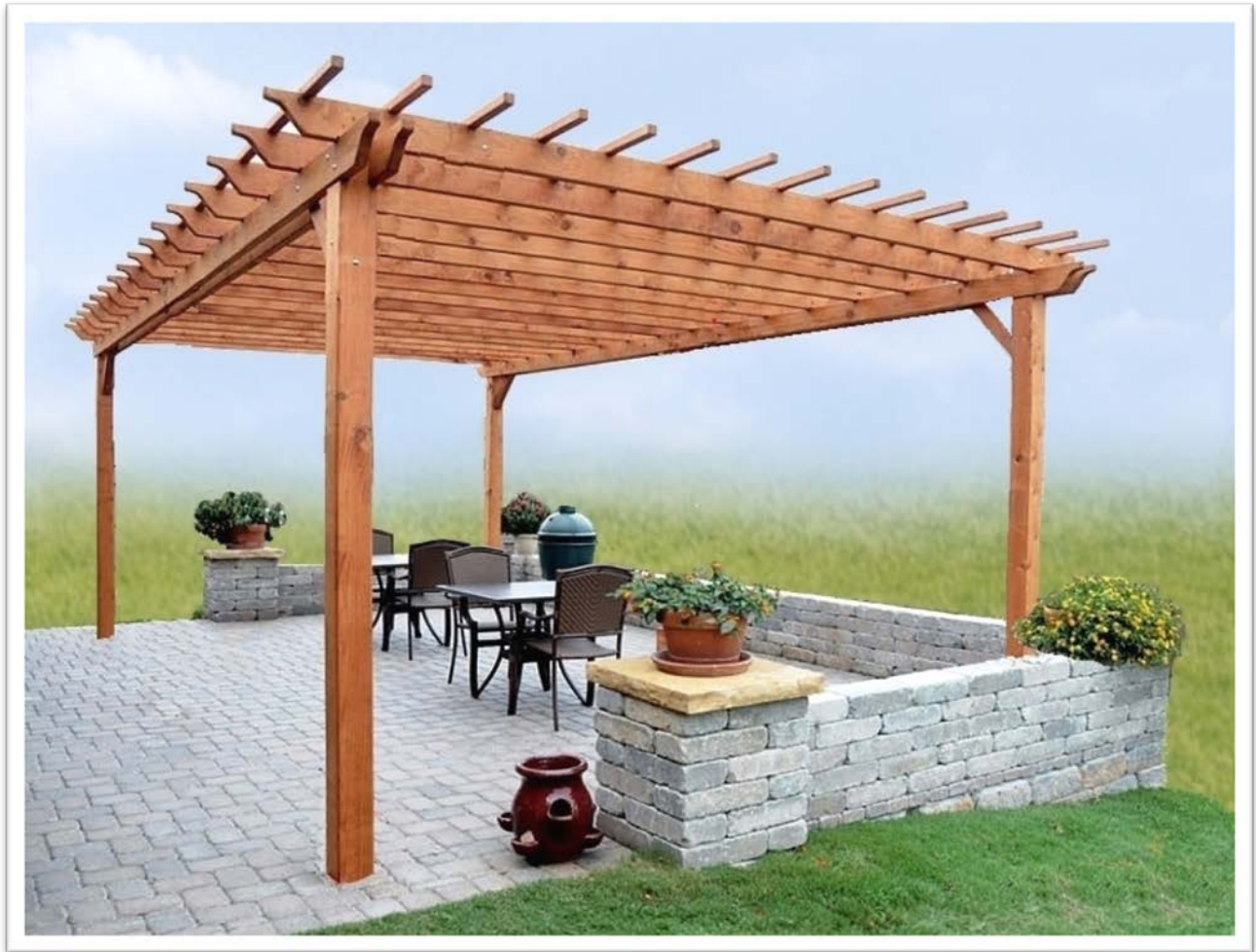
10'x10' (828-00-99)

12'x12' (828-03-99)

10'x12' (828-01-99)

12'x16' (828-04-99)

10'x16' (828-02-99)



Package includes...

- *Concrete mix*
- *Lumber*
- *Hardware*

Materials List

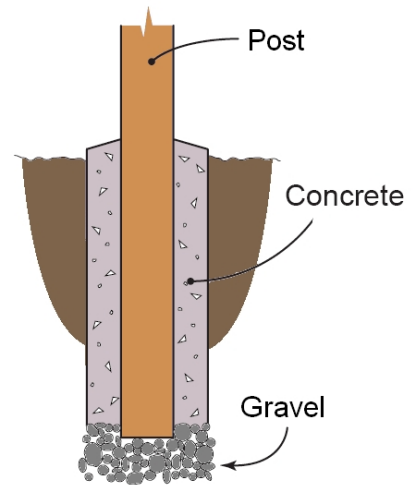
Product	SAMPLE POS	U.O.M.	Quantity				
			10'x10'	10'x12'	10'x16'	12'x12'	12'x16'
Foundation							
Gravel mix	34101	60 lb.	8	8	8	8	8
Framing							
6x6x12 Treated posts	60612TT		4	4	4	4	4
6x6x8 treated post bracing	60608TT		1	1	1	1	1
2x10x10 Treated beams	21010TT		4	---	---	---	---
2x10x12 Treated beams	21012TT		---	4	---	4	---
2x10x16 Treated beams	21016TT		---	---	4	---	4
2x8x10 treated rafters	20810TT		7	---	---	---	---
2x8x12 treated rafters	20812TT		---	9	12	9	12
2x2x8 treated louvers	20208TT		10	10	16	12	18
Optional louvers (Rip 2x4 stock lengthwise with circular saw)							
2x4x10 louvers (ripped)	20410TT		4				
2x4x12 louvers (ripped)	20412TT			4		5	
2x4x16 louvers (ripped)	20416TT				4		5
Hardware							
½"x10" galv. carriage bolt	835223		16	16	16	16	16
½" galv. washers	833185		16	16	16	16	16
½" galv. nuts	833186		16	16	16	16	16
16d galv. framing nail	92099	5 lb.	1	1	1	1	1
8d spiral galv. nails	94501	5 lb.	1	1	1	1	1

Step 1 – Installing the posts

Dig the post holes:

We recommend installing the posts in concrete. With a post hole digger or auger, dig the holes for the posts. These should be 10"-12" in diameter, and a minimum of 24" deep, which will vary by local soil conditions.

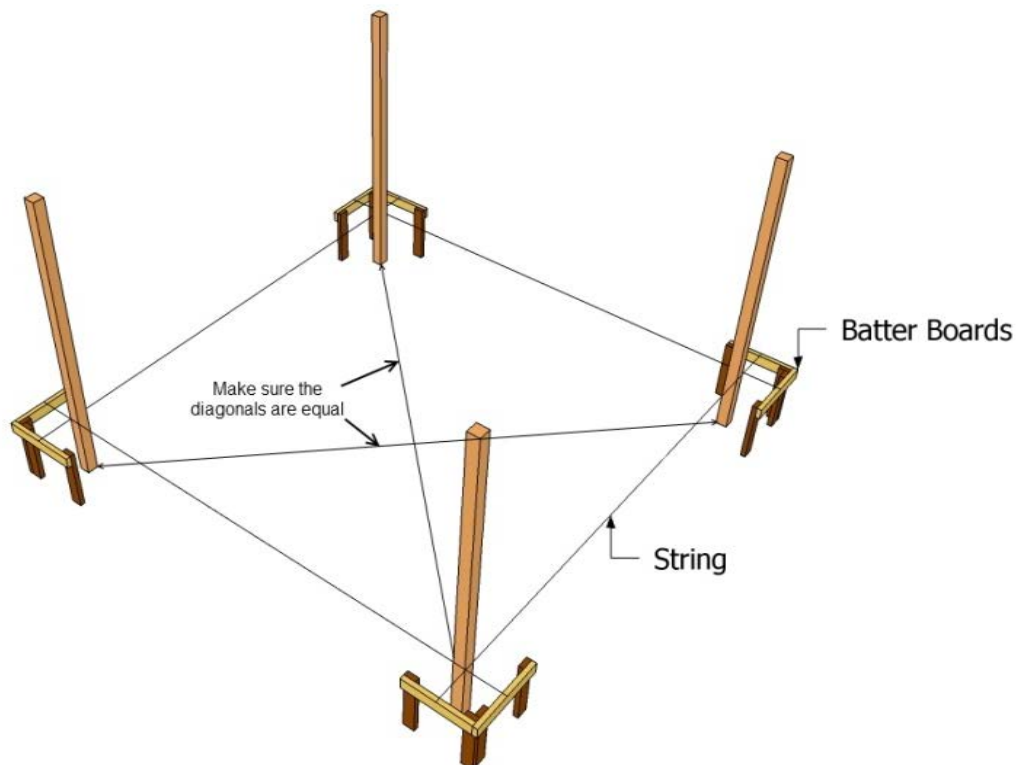
Clear all loose dirt and debris from the bottom of the hole, and keep the area around the hole clean so dirt will not fall back in. Tamp 2"-3" of gravel (not provided by 84) into the bottom of the hole to provide drainage for moisture which could collect at the bottom of the post.



Setting the posts:

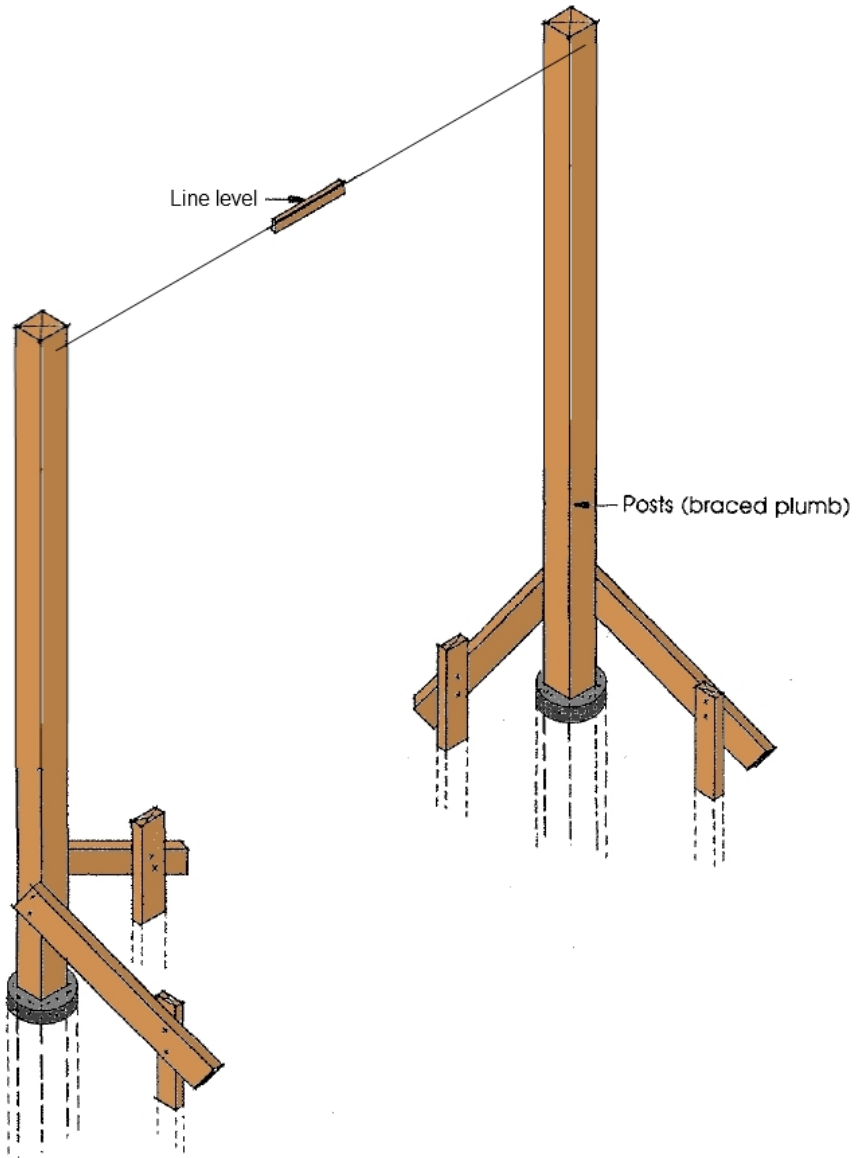
Next, lay the pergola using scrap lumber for batter boards and string (not included). Drive two stakes into the ground a foot or two from the edge of each hole. These will be used to hold the posts plumb and should be located so the posts can be leveled from two different directions. Measure the diagonals and adjust the position of the posts, until they are equal.

Plumb the posts with a level and lock them into place with temporary braces. Keep your posts slightly long before setting into concrete. They will be trimmed from the top after the concrete has dried.



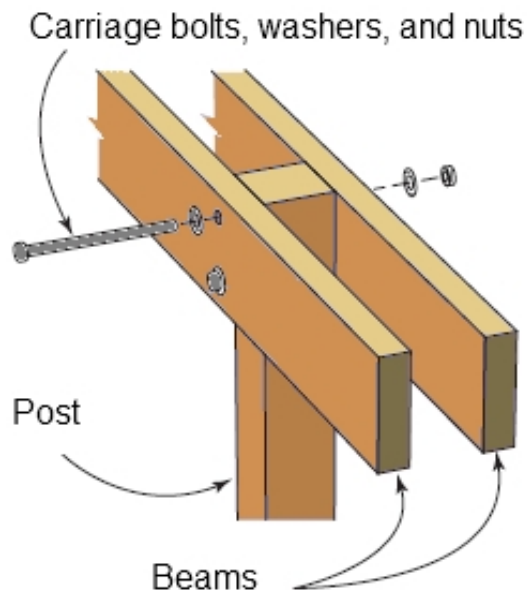
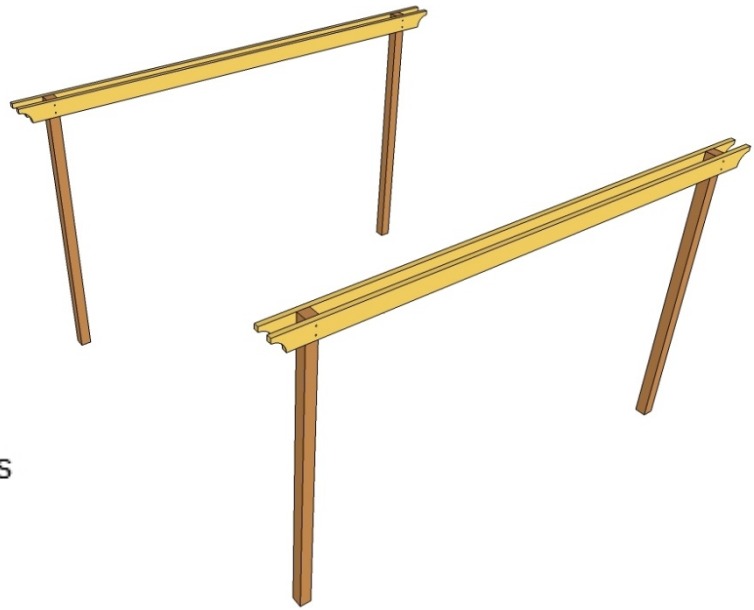
Trimming the posts:

Now cut the posts to the right length. Select a post to work from and mark a line 8' from the finished grade. Using the string line and line level transfer the desired top of post mark to the other posts. Double check by attaching the string line to a different post. When you are certain the posts are marked correctly, cut them off. Be sure the cuts are square.



Step 2 – Beam framing

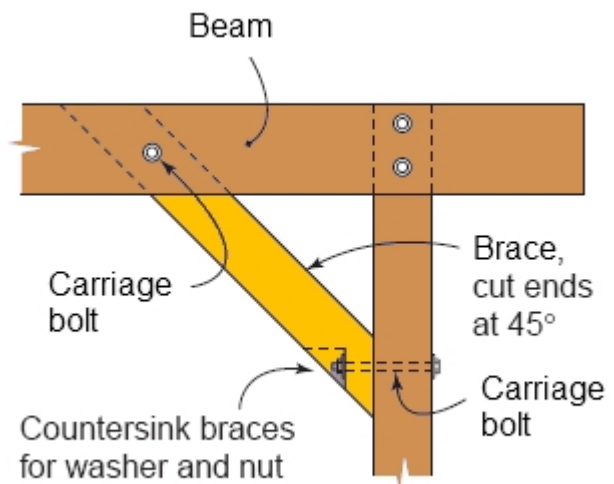
After you have installed the four posts into place, attach the support beams. Level the beams, lock them into position with clamps, drill pilot holes, and insert the carriage bolts. Continue the project by installing the other beams on the opposite side of the pergola. Make sure the crossbeams are perfectly level and aligned.



Install bracing:

Cut 6"x6" bracing into four pieces, 24" long, making the ends of the braces at 45°. Drill holes in the wooden braces and lock them into place with carriage bolts.

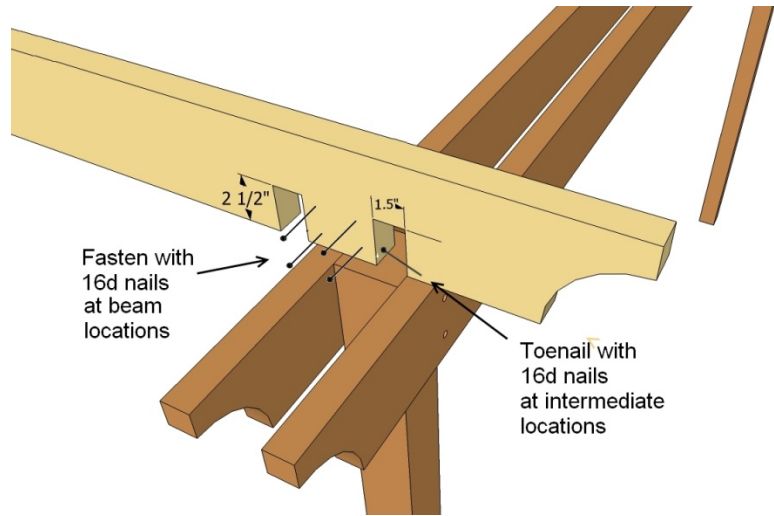
Fasten the bottom of each brace with a carriage bolt and countersink the washer and nut. The top of the brace is sandwiched between the beams and secured with a carriage bolt.



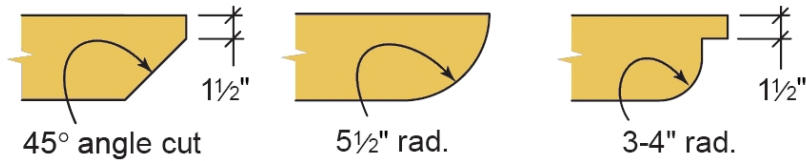
Step 3 – Rafter installation

Cutting rafters:

Set your circular saw to a depth of 2 1/2" and cut several kerfs to a width of 1 1/2" in the rafters as shown. Knock out the cuts with a hammer and clean up with a chisel.

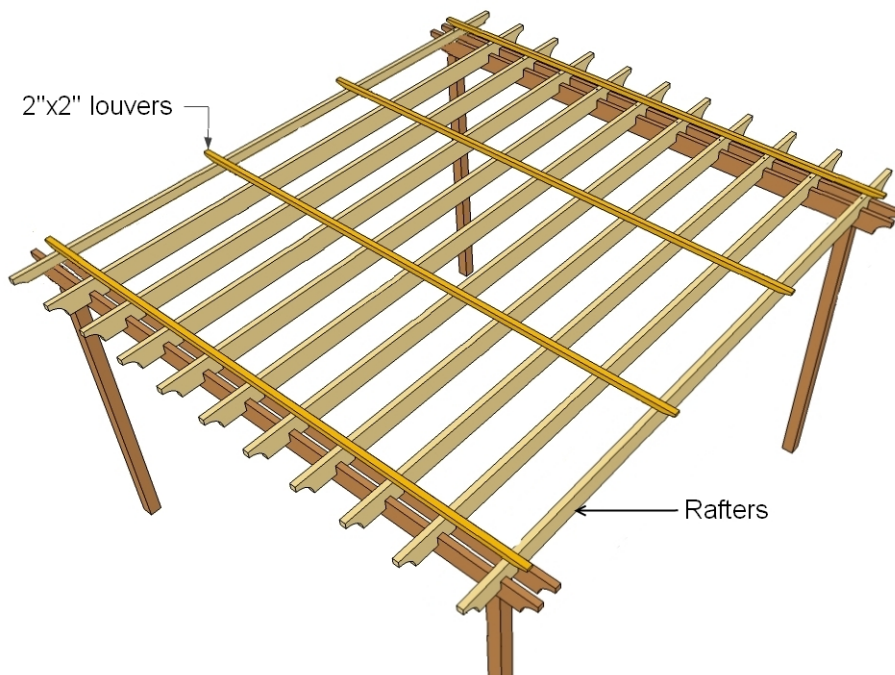


Cut the tails of the rafters as shown or modify to your own design. Here are some other ideas for end rafter cuts.



Fastening the rafters:

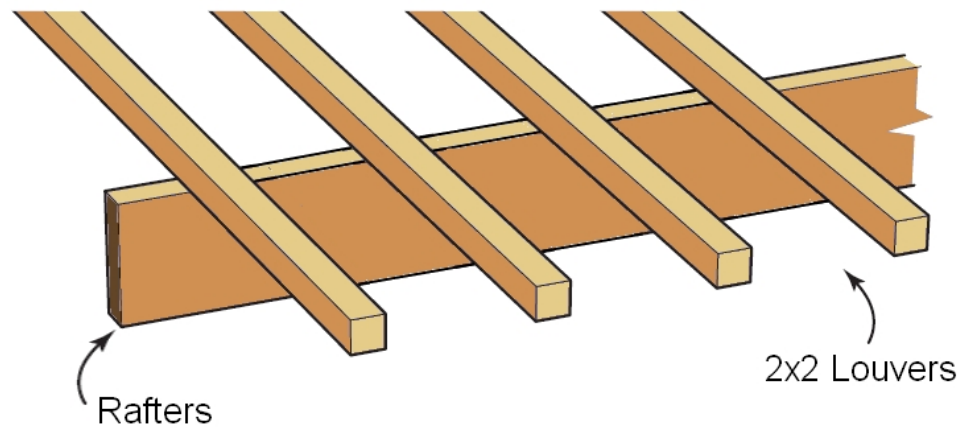
Layout the rafters according to the plans for your size structure. Fasten with nails as shown. Follow the spacing guidelines shown to ensure a symmetrical installation.



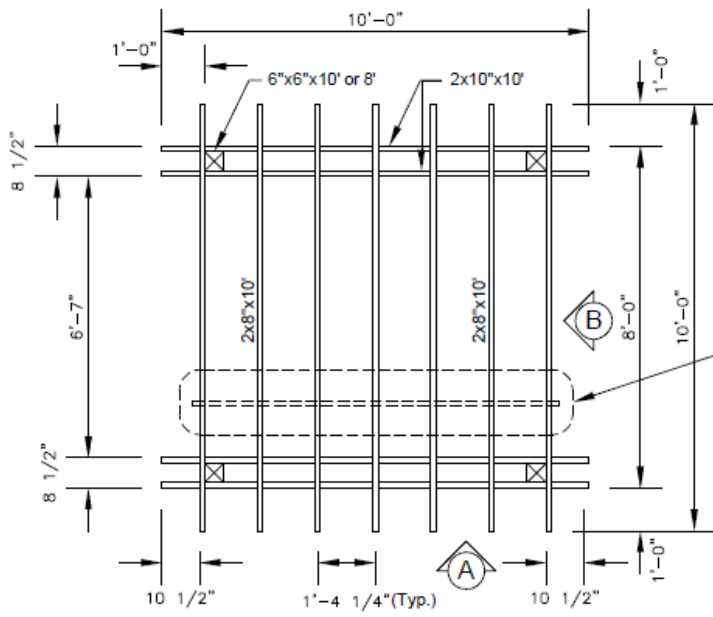
Step 4 – Louver installation

Attach the 2"x2" louvers with 8d nails by nailing from the top directly into each rafters. You may need to pre-drill the holes on the end to avoid splitting. Make sure all the cuts for the louvers occur over a rafter.

Layout the rafters according the plans for your size structure. Follow the spacing guidelines shown to ensure a symmetrical installation.

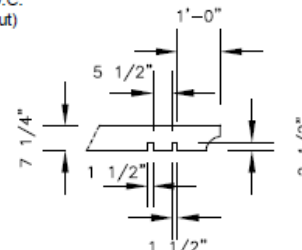


10'x10' Pergola

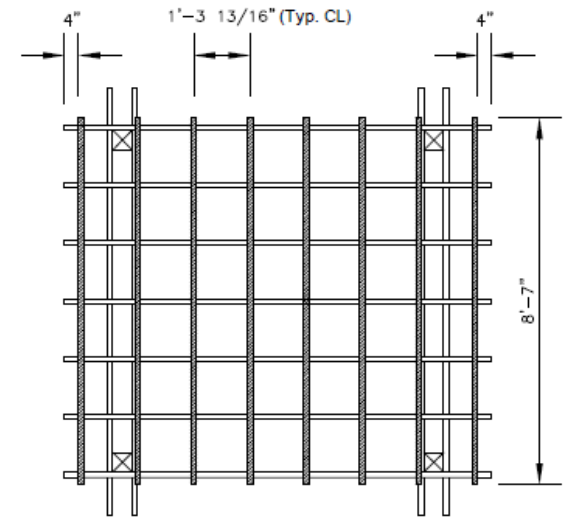


10'x10' PERGOLA - PLAN

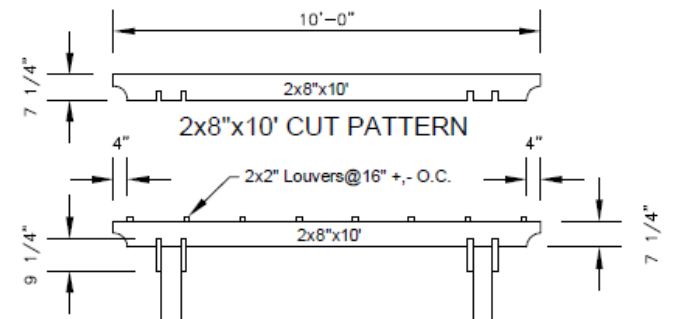
2x2" Louvers@16" +/- O.C.
(See Louver Plan Layout)



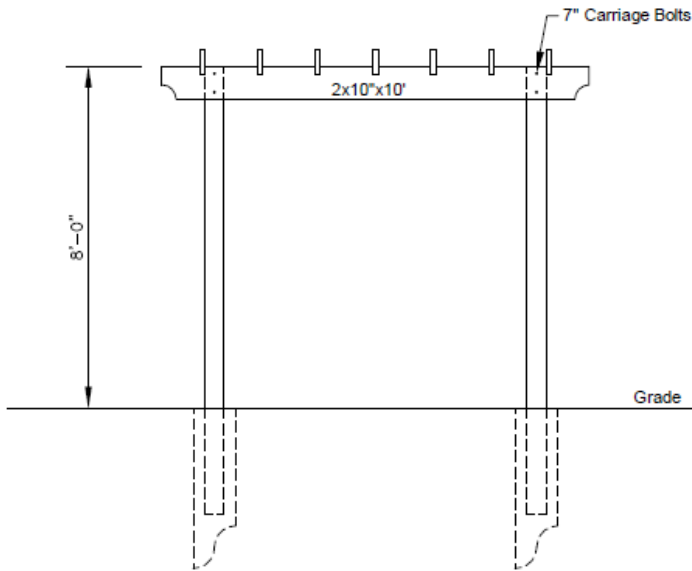
2x8"x10' END DETAIL



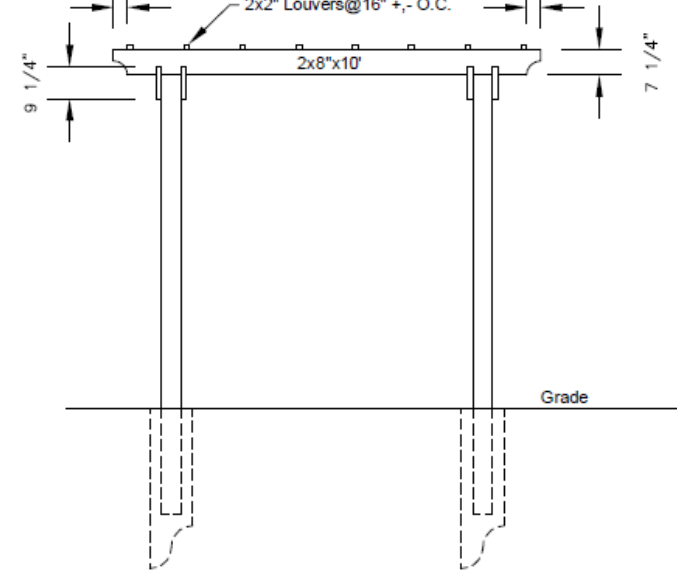
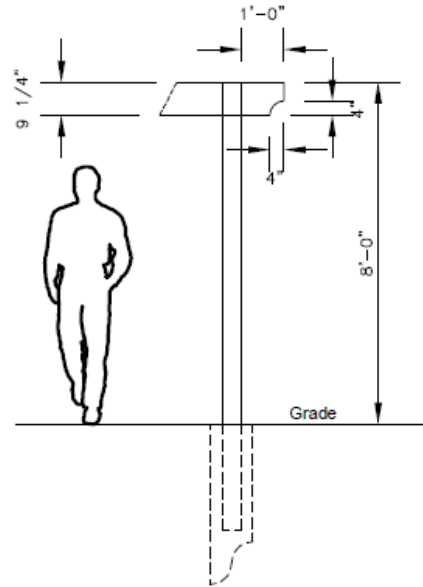
2x2" Louvers Layout Plan



2x8"x10' CUT PATTERN

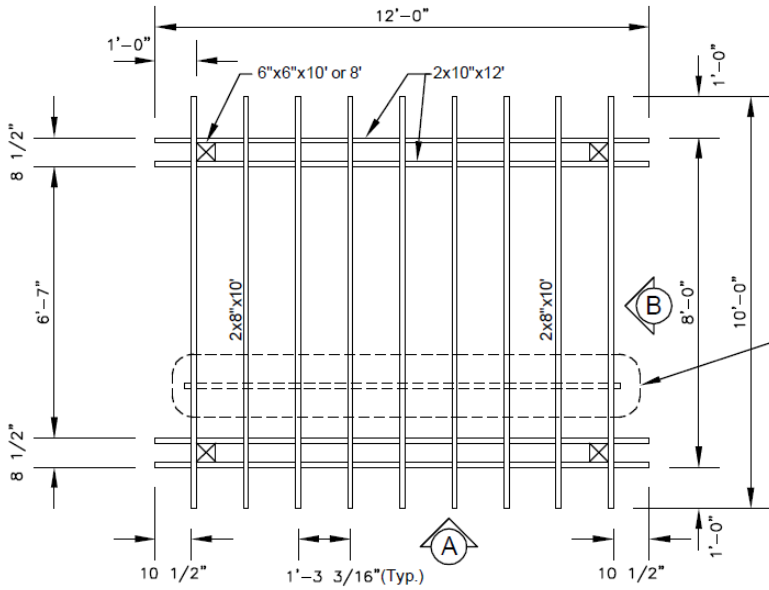


10'x10' PERGOLA - ELEVATION (A)



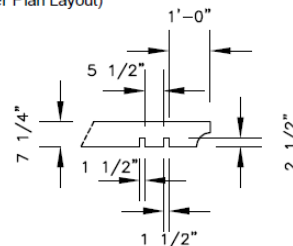
10'x10' PERGOLA - ELEVATION (B)

10'x12' Pergola

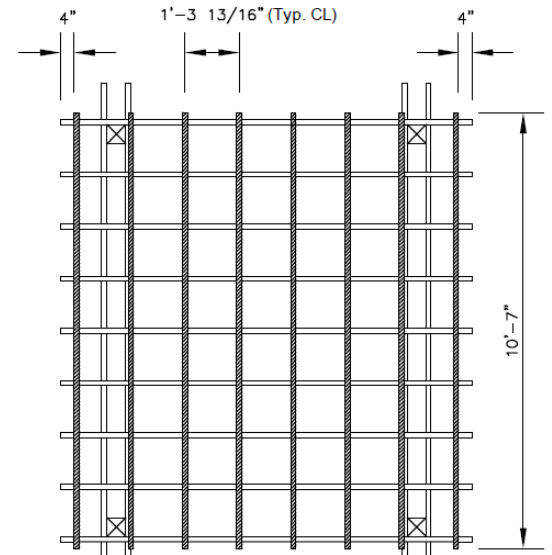


10'x12' PERGOLA - PLAN

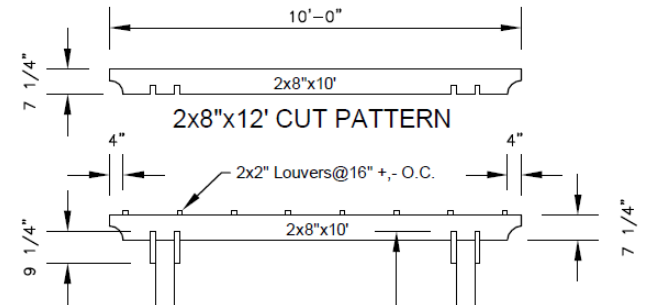
2x2" Louvers@16" +/- O.C.
(See Louver Plan Layout)



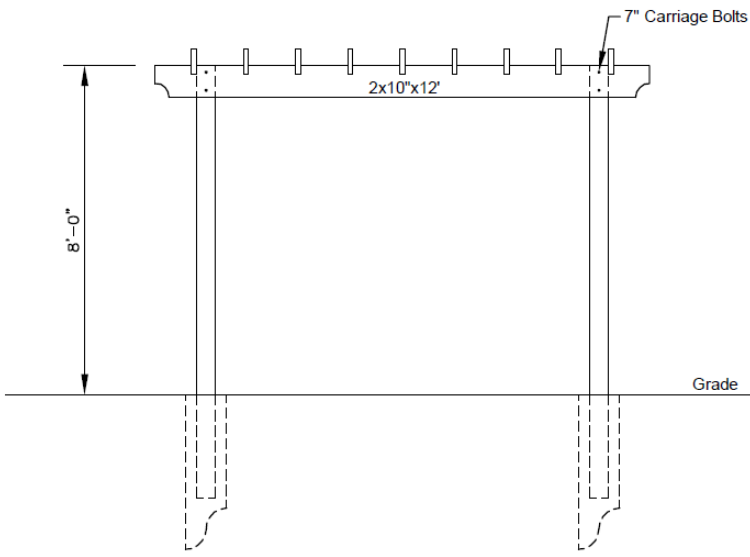
2x8"X10" END DETAIL



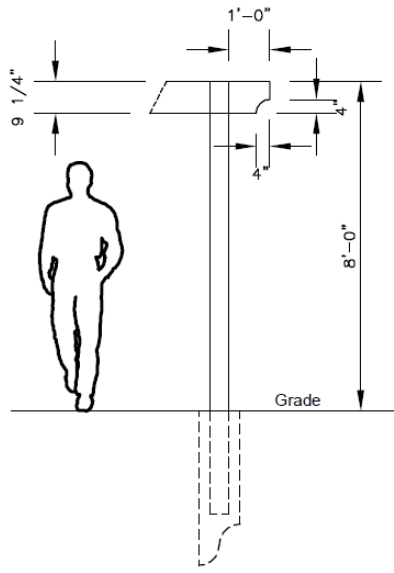
2x2" Louvers Layout Plan



2x8"X12" CUT PATTERN

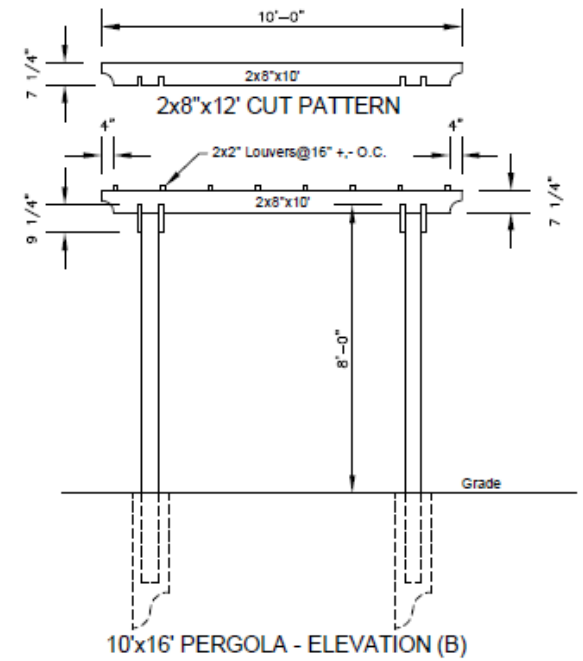
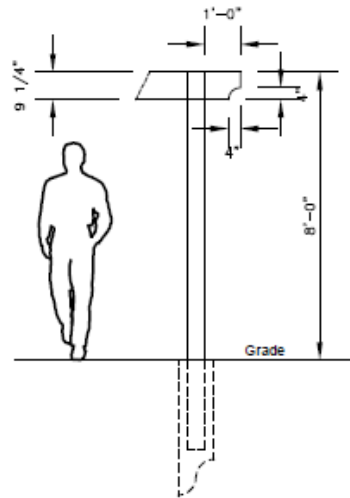
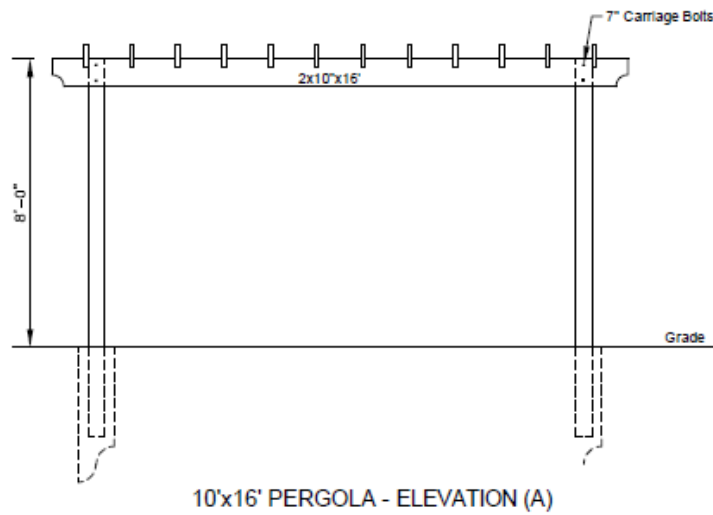
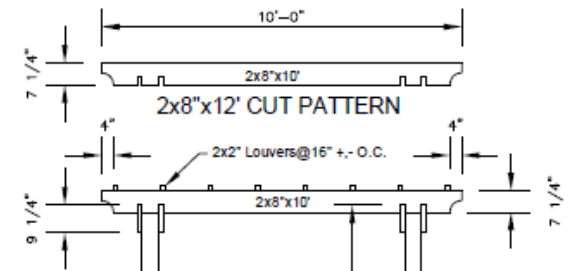
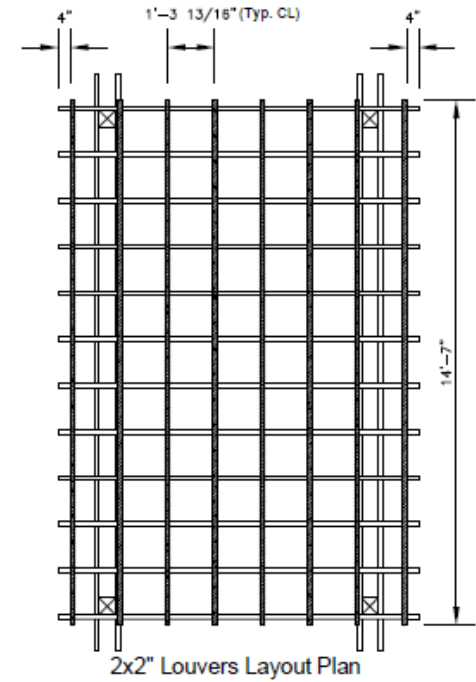
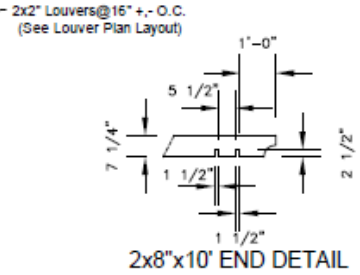
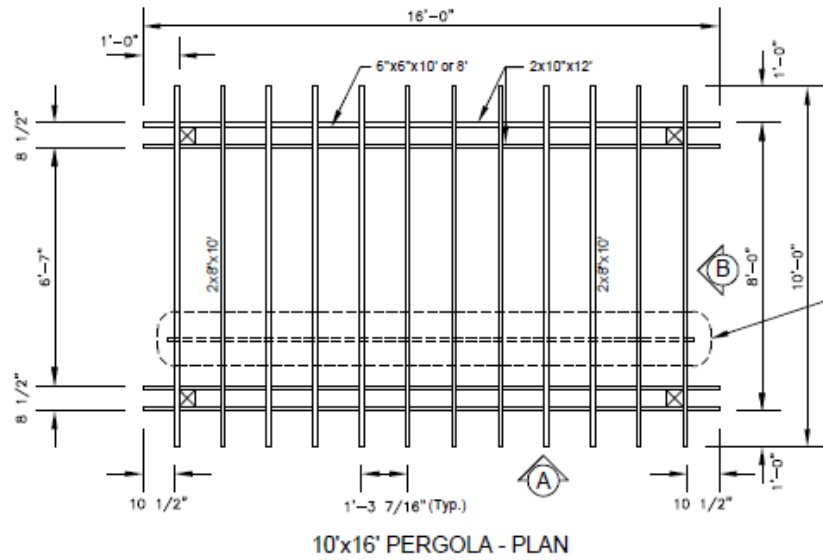


10'x12' PERGOLA - ELEVATION (A)



10'x12' PERGOLA - ELEVATION (B)

10'x16' Pergola



12'x16' Pergola

