

## WALL MOUNT VINYL PERGOLAS INSTRUCTIONS



Shown above: 8x16 Pergola

### **Components:**

**Posts** – Minimum of 2 – may be more for larger pergolas

**Post Brackets** – stainless steel, includes wedge bolts

**Post base trim** – assembled - 1 per post

**Beams** – The beams sandwich the top of the posts. There are two 2x8' on each side of the posts. The beams may come in 2 pieces and need to be spliced over the middle post(s) with longer pergolas.

**Runners** – Number varies by size. All are spaced approximately 16" on center.

**Top Runners** – 1x1's – number varies by size, standard spacing is 16", closer spacing is optional.

**Corner Braces** – Usually 1 per post, (although with additional posts, there will be additional braces as well.

**Hardware** – See parts list that comes with the pergola for quantities on each component. Kit includes a #2 square head bit for use with screws provided.

**Additional options** – (lattice, walls, etc.) are not in this booklet, but will have additional pages added.

**Tools needed:** Ladder, level, tape measure, square, drill or screw gun. If attaching to concrete, an impact drill may be needed for drilling into slab, ½" masonry bit.



1. Ideally the pergola should be set on level concrete or wood base. This can be a full slab, or footers that are poured specifically for the pergola. If installing on a deck be sure that there are supports (joists) directly under the posts of the pergola.

2. If the slab is an existing one, be sure that the post will be on a solid spot. If the thickness of the slab is 6 or more inches, no additional work should need to be done. Be sure to position the posts so they are a minimum of 4 inches from the edge of the slab to the middle of the posts, to prevent cracking.

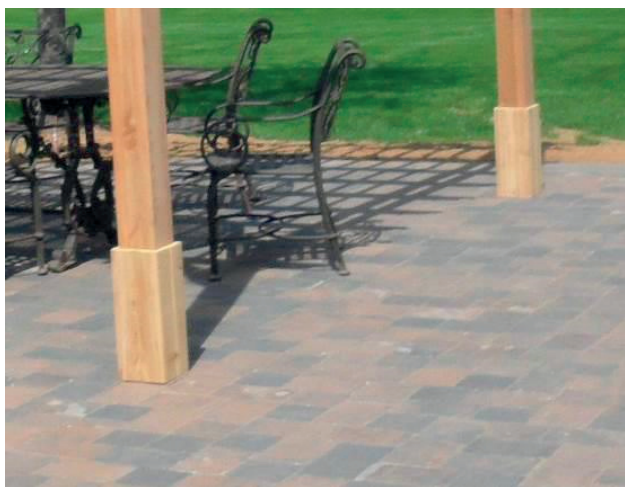


3. If pouring a new slab, it is best that the slab is at least 12" wider and longer than the stated size of the pergola. Pergola sizes are to the outside corners of the posts. For instance, a 12' x 16' pergola ideally should be on a slab that is at minimum 13' x 17'. When pouring the slab be sure that the slab is thicker under the location of the posts (minimum is 12" or to local codes if applicable).



4. When pouring individual footers, Sono-Tubes can be used (as shown) at left. It is important that the tops of all footers (4 or 6, depending on the size of the pergola) be level, and at least larger than double the size of the post. For example, if the posts for your pergola are 5x5, your footer should be 10" to 12" in diameter. This allows for sufficient strength and also for a “margin of error”. The posts do not have to sit perfectly on the center of the footers. The depth of the footer should be a minimum of 12" deep, or to the local building code.

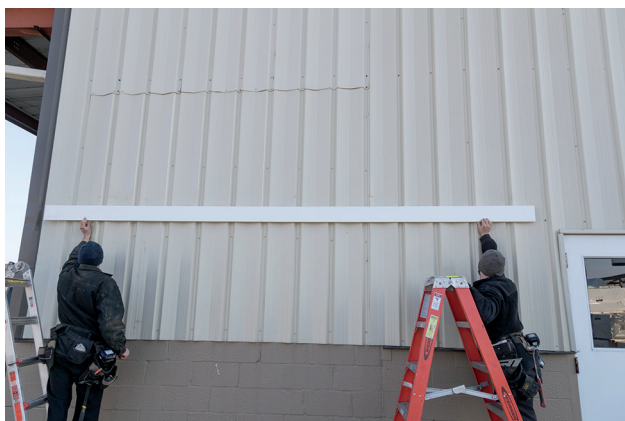




5. If a patio is made of something other than concrete, it may be necessary to remove the bricks or patio stones and set the pergola on a concrete footer. Patio stones can be reset after the pergola is installed, butting them to the post and setting the post base on top to give a finished look. (at left) On stamped concrete, follow the same instructions as with plain concrete.



6. If setting the pergola on a wooden deck, be sure that the base is anchored to the deck understructure or joists, and not simply to the decking boards. If there are no joists or band boards where the posts should set, add blocking between the joists. With proper planning, the posts of the pergola can be used for attaching railings for your deck, as shown.



7. To start the install first set the 1x6 mounting board into place on the wall. This board will be about 18" shorter than the main 2x8 beams.

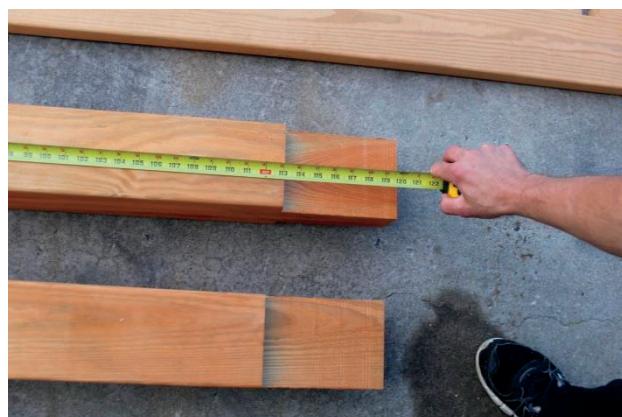
8. Once this board is in position where it is to sit permanently, take a level and place it on top to make it level.



9. Next, secure the mounting board to the wall with the appropriate hardware. This is not supplied with the kit, because of the different materials the wall could be made of.



10. Now, take the 2x8 ledger board with the decorative ends and place this over the mounting board make sure that the bottom of the board is flush with the other. Connect the ledger board to the mounting board with 3½" screws. Drive three into every joist hanger hole. (as shown)



11. After the ledger board is connected to the mounting board, take a measurement from the underside of the ledger board to the ground/ mounting surface. This measurement is the height needed to cut the post. Take the measurement and measure from the notch shown in the picture (to the left) to the end measurement. Make a line to cut the bottom of the post.

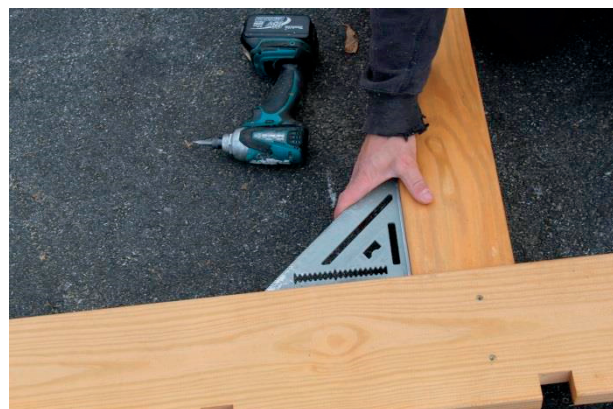


12. After all the posts have been cut to size the next step is to attach the main beams to the top of the posts. The beams will be marked with a line showing where the posts should rest against them. (as shown)





13. Next, lay the posts on the ground (as shown) and set the first beam on it with the marked line against the outside of the post. Then, take one 4" white screw and screw it from the beam into the post, do this for all posts.



14. Then, take a square and rest it where the beam and post assembly meet and make sure that everything is square. Do this with all posts. Once everything is square, take one more 4" white screw and screw it from the beam into the post. There should now be 2 screws in each post.



15. Once the beam is fully secured to one side of the post, take the post trim and slide it over the post. This is done now because once the posts up right it is hard to then put the post trim on.



16. After all the post trim is on, stand the assembly up. (as shown) Then lift up the other beam and attach it to the posts as was done with the first beam.

(This picture is shows an all wood pergola but the instructions are the same for vinyl)



17. Now that the posts are standing up take 2 of your main runners that run from the building outward. Place them in the hangers and clips that are setup for the beams. Once they are resting in place, take a tape measure and measure from one corner to the opposite (as shown). Then take the same measurement from the other 2 corners, these measurements should be the same, if they are not move the structure a little until they are.



18. A helper may be needed to hold the posts in place to position the first runner. Make sure that the overhang is the same on both ends of the runners. Do this by measuring from the beam to the end of the runner on both sides. Slide the runner to have the same overhang on both ends.



19. Once these measurements match screw the two runners to the front beams. Attach them with 1½" white screws through the holes in the clips (one screw per side).



20. Then attach them in the back with 1½" white head screws as well, driving 2 screws per side of each joist hanger into the runners.

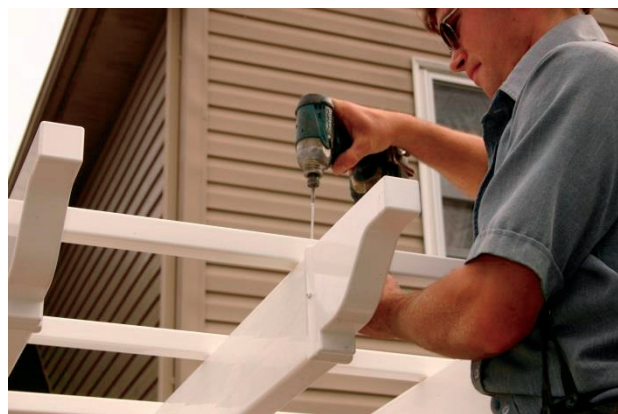




21. Now, set all of the other main runners into their slots and connect them the same way that the first two were connected.



22. Next, connect all of the top runners. Notice that there are marks on top of the main runners where the top runners are to be attached. These markings are about 16" on center (or another dimension if your pergola was ordered with additional top runners). There are also markings on each of the 1x1 runners.



23. Set the top markings on the centers of the runners and attach them with 2½" white screws. Check that the overhangs are the same on both sides of the top runners.

**Note:** There are only corner braces on the front of the pergola that rest against the post and go up into the space between the beams.



24. Once the corner braces are centered on the post and the tops of them are in place, secure them to the post with two 6" ledger lock screws. Follow this process on all posts until the bottoms of the corner braces are all secured.



25. Next, secure them at the top by driving two 4" white screws from the outside of the beams into the braces. Do this from both beams. There will be a total of 4 screws going into each brace at the top (2 from each side).



26. After all of the corner braces are in place, secure the posts to the ground. Be sure that the posts are level, by using a level up against the side of the post.



27. If not level simply take a hammer and tap on the bottom of the post in the direction that it needs to be moved. Once the post is level, secure it with the supplied brackets and anchor bolts.



28. To attach the stainless steel brackets first set them in place. There will be two brackets per post. Using a 1/2" masonry bit and a hammer drill, drill a hole in the concrete slab until a depth approximately 1/2" longer than the length of the wedge anchors that were supplied with the kit is reached.





29. Before tightening the wedge bolt take ten of the supplied stainless steel screws (they will most likely be 2½", but on larger Pergolas they are 3½") and screw the bracket to the post. (one screw per hole)



30. Before inserting the bolt make sure to have the nut and washer on, otherwise it may hit the bolt too deep into the hole. Now insert the wedge anchor bolts into the holes, leaving approximately ⅛" of bolt exposed above the nut. There may be a need to use a hammer to tap the wedge anchor bolts into the holes, which is normal.



31. After all the wedge bolts are set, tighten down the nut. When tightening the nut the wedge anchor will expand the bottom of the bolt in the concrete, securely anchoring the bolt into the concrete.



32. After all nuts have been tightened down and the posts are securely mounted to the concrete slab, slide the post trim down into place. To secure the post trim use a single 3½" screw and attach from the trim into the post. The pergola is now finished!







