WOOD 4 BEAM DELUXE PERGOLA INSTRUCTIONS

Thank you for purchasing our 4 Beam Deluxe Wood Pergola. Depending on the size of your pergola, installation can usually be completed in a day.

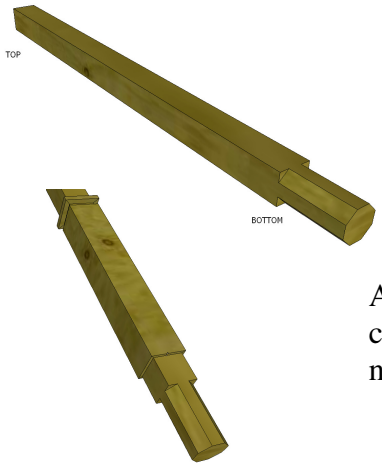
Consider a few details before starting assembly:

1. The base for the pergola must be solid and level. If installing on a concrete slab or on concrete footers, they should be level where the posts will rest. If they are not, it may be necessary to cut the top of the posts so that the tops are all level. Other than this, no cutting is necessary. If you feel that you will need to make any additional cuts, please contact us before doing so. ***Making cuts without calling first may make installation difficult or impossible or void our warranties.***
2. These instructions show connection to asphalt, using a wedge bolt. The same method can be used with concrete. If connecting to an existing deck, a lag bolt and deck screws (not included) will replace the wedge bolt.
3. The 4 beam pergola does not give you the ability to alter the location of the posts. It is important that they are laid out correctly and that you double check for accuracy before permanently attaching it to your base.
4. There are alternate sections that explain how the runners and top runners attach. Be sure that you use the correct section.

SECTION ONE. – POSTS

1. **Set the Template**: Your pergola is shipped with a wooden template so that you can properly figure the location of the posts. Arrange them so that they are positioned in the approximate location of where your pergola will be. Connect the corners of the template by drilling screws through the side of the planks.
2. **Square the Template**: Once it is in position, you will need to square the template. Do this by measuring the distance from one corner to the opposing corner, as shown. Remember this dimension (varies by pergola size) and then measure the other two corners. These dimensions must be the same. Adjust the template, measuring the corners until they are the same. Once the template is square, mark the inside of the hole for each of the posts with a pencil.

3. **Set the Brackets**: Our brackets are stainless steel. You will need to drill a hole into your concrete footer or slab. Using a ½" masonry bit, drill a 4" hole through the center of the large hole in the middle of the post base. Make sure all of the concrete dust is cleared from the hole, and use a vacuum if needed. Then, attach only with the large bolt at this time. If you're installing your pergola on concrete, you can use a wedge bolt. If you're attaching your pergola to a wood deck, you should use a 4" lag bolt (not included) instead of a wedge bolt.
4. **Square the Brackets**: It is a good idea to recheck the square of the brackets by measuring opposing corners, similar to what you did when squaring the template. Also be sure that the brackets are parallel with the other brackets. The brackets can be rotated until they are aligned properly. (Keeping the template in place will insure that the brackets do not spin) Once you are satisfied with their location, install one tapcon screw (not included) in one of the remaining holes in the base of the bracket to keep it from spinning. You can use one of the 2 ½" screws instead of a tapcon on wood decks. You can now remove the template.

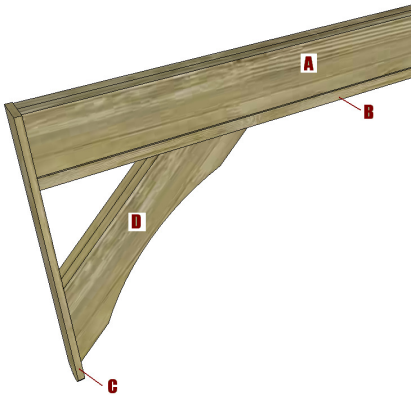


5. **Post Bases:** You will notice that there is a top an bottom of each post. The bottom is square. The bottom of the posts have 45 degree cuts creating a octagon when looking at them from the bottom. There is a top trim for the post base that is made of four 2x2's that will go onto the posts first, then the 36" tall post bases. You do not want to attach the base trim to the posts. Actually you want to secure the post base above the angled cuts so that you can attach the posts to the bracket in the next step. One screw will hold the base up

6. **Install the Posts**: Slide the posts into the brackets so that the bracket prongs are at the corners of the posts and setting flat on the bracket. Attach it using 3 ½" screws (12 screws per post, 3 on each corner). Do this on all posts before proceeding to the next step.

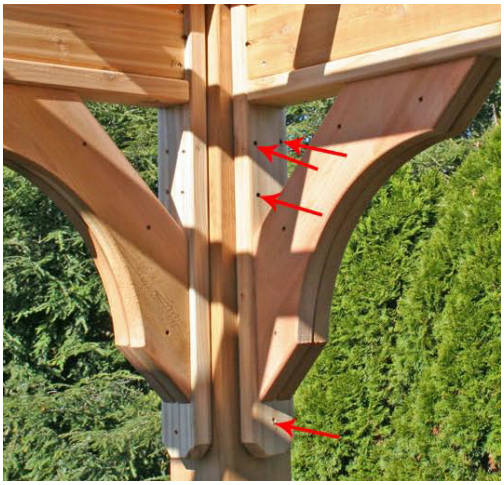
NOTE: A hole has been drilled on the bottom of each post. The nut and the top of the wedge bolt should fit inside the hole so that the bottom of the posts rests on the bracket plate, and not on the wedge bolt. If the wedge bolt prevents the post from setting on the plate, you can fix this by either cutting the top of the wedge bolt threads (above the nut) or by drilling the hole deeper.

SECTION 2 – BEAMS

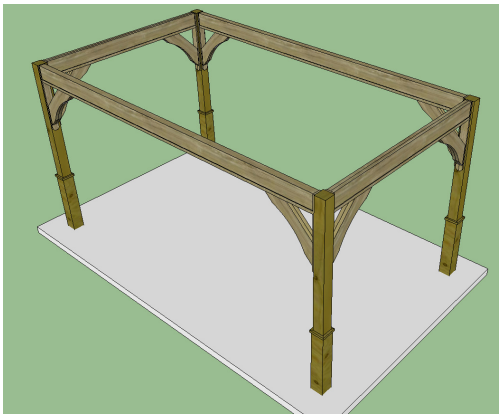


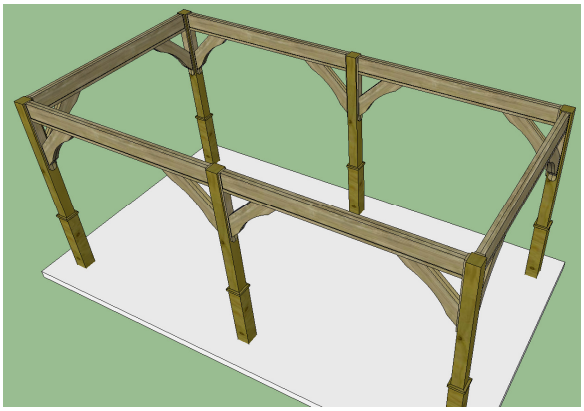
Note: The beams are pre built and include 45 degree braces. You will need help when installing beams. Ideally you should have a minimum of 3 people – one to hold each end of the beam in place and one to screw to the posts. Some of the beams can be up to 16' long and weigh over a hundred pounds. Each beam will be comprised of a double beam - two 2x6's laminated together(A); a 2x4 bottom plate that will hide the seam of the two 2x6 beams(B); two "legs" (one on each end) which are 1x4's that will hold the beams to the posts(C); and two 45 degree braces(D). Some pergolas may have larger members due to customized or increased strength required, but the basic beam assembly is the same.

1. **Install the Beams**: Though there is no set order, i t usually works best to install the shorter beams first. This way you can get a feel for how they are done using lighter beams. Lift the beam into place until the top of the beam is flush with the top of the posts, and centered. Secure each beam with 5 screws on each side into the predrilled holes in the beam, 2 on either side of the brace and one centered in the bottom.

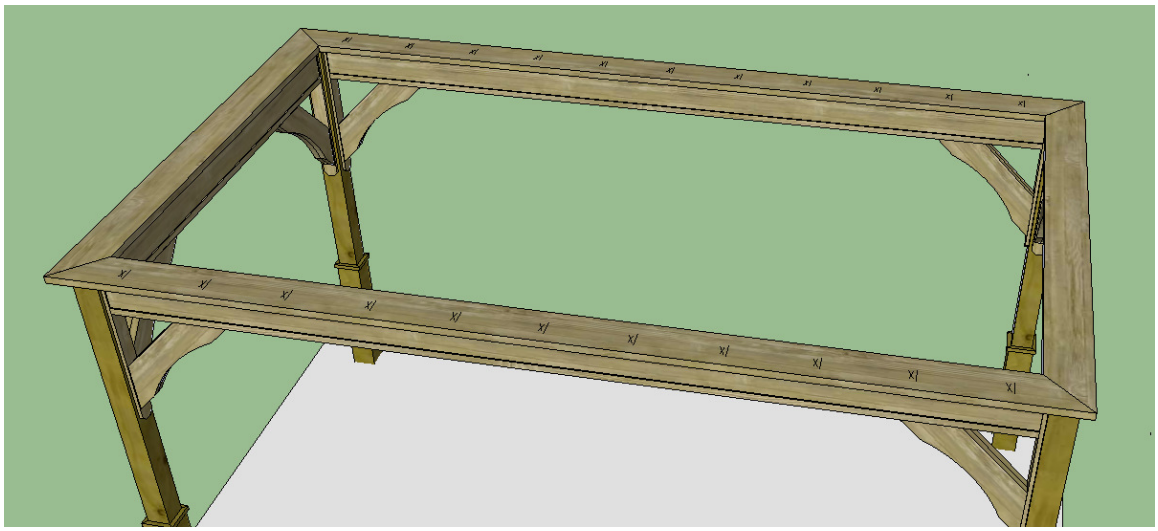


2. **Do the same for the longer beams**. Note that if your pergola is over 16' long there will be a center post. There would then be 2 sets of beams for each of the side of the pergola. Installing the beams is the same no matter how long or how many beams there are.





3. Install The Top Plate: The top plate is a piece of 2" x 8" wood that is precut to fit on top of the beams. Rest all 4 pieces on top of the beams, and then arrange them so that they fit tight at the corners. (NOTE: On larger or longer pergolas, there may be more than 4 top plates as some of the sides will need more than one board. Two of the top plates have marks for positioning the top runners – these usually are set on the longest dimension since runners span the short dimension, On square pergolas, the parts are interchangeable, but the top plates with the markings need to be on opposing sides. Be sure that the markings are facing up.



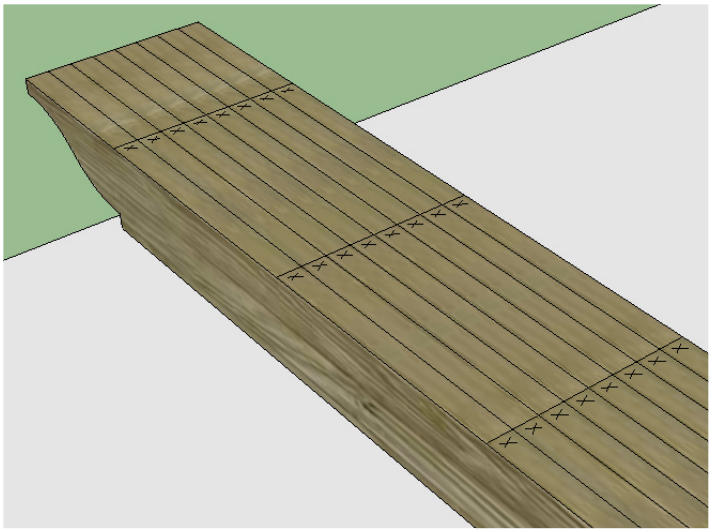
4. You will be joining all the top plate pieces together *before* attaching them to the top of the posts or to the beam by placing screws on an angle at the corners as shown (through the pre drilled holes).
5. Position the assembled top plates seams are centered across the corner posts. The top plate will overhang the beams by about 1½" on the inside. Before attaching to the posts and to the top of the beam with 2 ½" screws, make sure that the overhangs are the same along the entire perimeter. Attach with 2 screws at the angled cut into the top of the wood posts, and then along the beam approx. every 24."

You are now ready for the runners!

SECTION 3 – MAIN RUNNERS
The main runners are 2x6's that have decorative cuts on both ends (unless special order). They have markings on the top for the top runners.

NOTE concerning spacing. Generally both the main and top runners are spaced 16" on center unless you order other spacing. Since the first runner on each side will align with the edge of the top plate as explained below, the spacing may need adjusted. We have done this during production and made the marks accordingly. Most importantly the top runners have notches that coincide with the calculations made. You should never change the placements of the runners or the top runners will *not* fit.

Since the top runners have notches, you cannot adjust the overhangs later. These runners notches are "symmetrical" but the markings will be backwards if not arranged correctly it is a good idea to set all the runners down next to each other to make sure the lines and Xs are aligned.



1. **Set the First Main Runner**: As discussed in the previous section, two sides of the top plate is lined with marks to guide your runner placement. Set the first 2x6 runner on the corresponding top plate marks. There are no markings for the two end runners since they will be attached to the ends of top plates. Set the first runner and align with the outer edge of the top plate. Then, adjust the runner placement back and forth until each overhang has an equal measurement. (Hint: You can "split the distance" to center the pergolas. For example if you have a measurement of 2" on one side and 1 ½" on the other the difference is ½" Moving the runner just ¼" will center it. Once the overhang measurement is the same, remember or write this measurement down.

Attach First Main Runner: When the runner has an equal overhang on each side, attach it to the frame by inserting a screw from the underside of the top

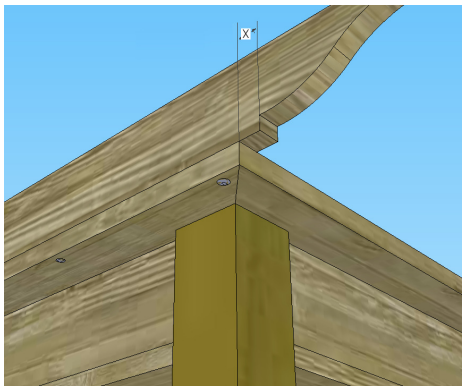
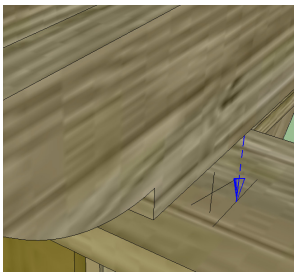


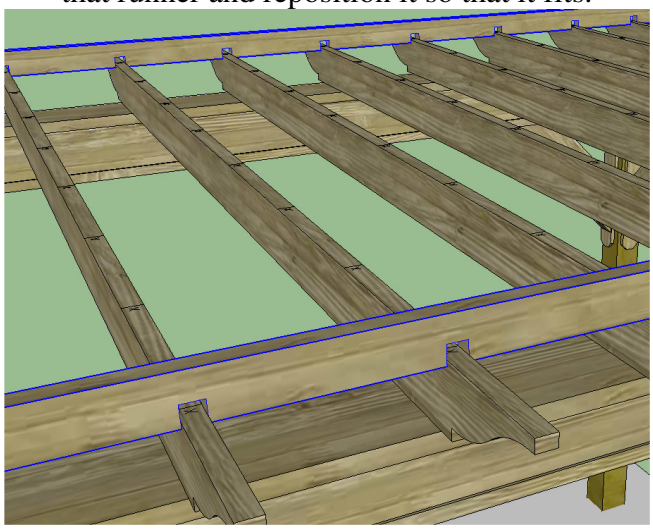
plate up into the runner on both sides. Only on the two outside runners, will you use screws through the top plate into the runner the full length or the runner – approx. every 24".

NOTE Concerning the markings. Each mark consists of a line and an X the line represents the side of the 2x6 runner, and the x means that the board will be placed to that side of the line.



2. **Set and Attach the Remaining Main Runners**: Set the next runner over the markings, ensure the overhangs are equal to each other and the preceding runner's overhang, and attach with screws on the outside, up throught the bottom of the top plate and into the bottom of the runners. Do this for the rest of the main runners.

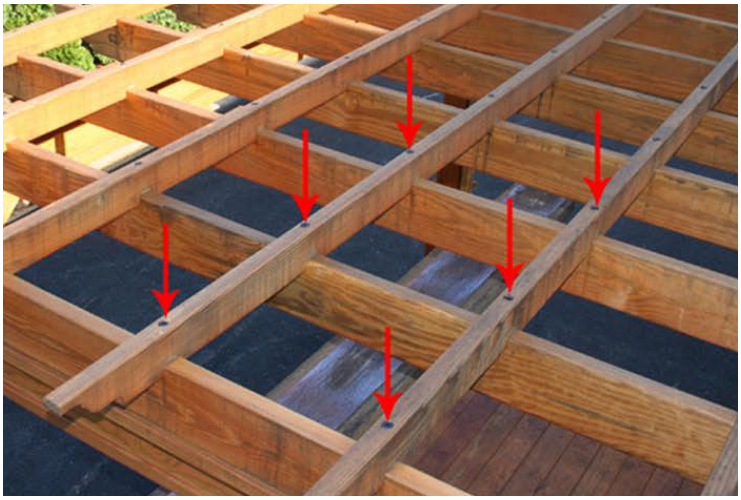
3. You will want to double check the spacing by using two of the top runners and setting it on the main runners and making sure that the notches in the top runners will slide down over the main runners. Do this on bot sides (above the beams) If one or more of the notches do not line up, unscrew that runner and reposition it so that it fits.



4. Once all of the runners are in place and attached with screws, run an additional screw from the inside of pergola, up through the 1½" exposed top plate, and into each runner. You can angle this screw slightly facing toward the outside of the beam.

SECTION 4 – TOP RUNNERS

1. Align each of the top runners over the marking on the main runners. It is best to work from one side of the pergola to the next in order to make sure that any bows in the runners are worked out. Attach the top 2x4 runners onto the main runners using 3 ½" from the top through the pre drilled holes. Do this so until all the top runners are in place.



SECTION 5 – FINISHING TOUCHES

1. Note that if you have pavers or a brick patio, you may want to fill in the patio components around the post and then slide the post base trim down over the brick to hide cuts. If you are doing that, you can hold off to fully screw down the base trim. Using 4 screws per side will suffice.