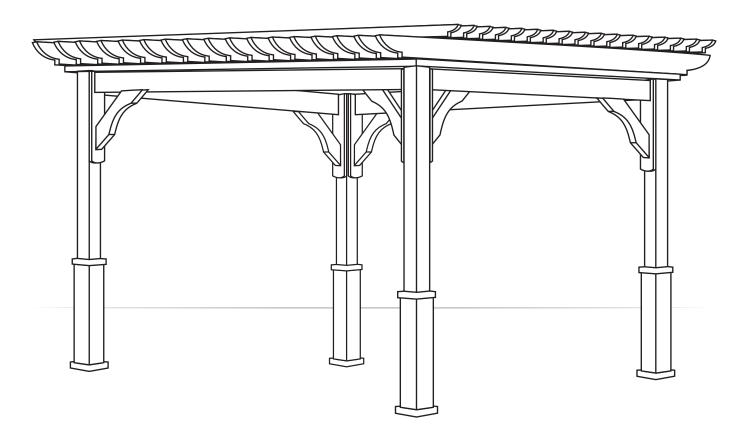
WOOD 4-BEAM PERGOLA



Thank you for the purchase of your new wood 4-beam pergola. Depending on the size of your structure, installation can usually be completed in one to two days. Additional options may have a bearing on installation.

Before You Begin

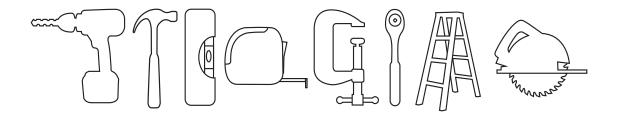
These instructions are meant to serve as a guide for people with a basic knowledge of general handyman skills. This assembly requires a minimum of two people to complete.

(Extra help with installing the roof sections is suggested.)

Please always check with your local building codes. These will vary from state to state.

Tools Needed for Assembly

Screw Gun/Drill, Hammer, Level, Tape Measure, C Clamps, Socket Set, Ladder, Circular Saw.



You will receive a parts list with your pergola. All hardware is included in each pergola kit. The specific hardware will vary depending on the pergola. Please see your parts list for details.

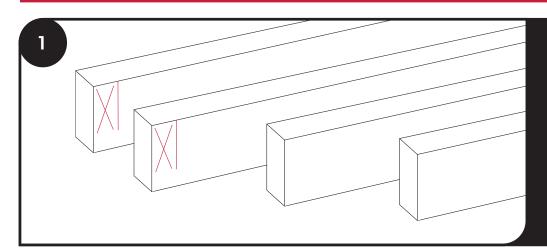
Site Preparation

Consider a few details before beginning assembly:

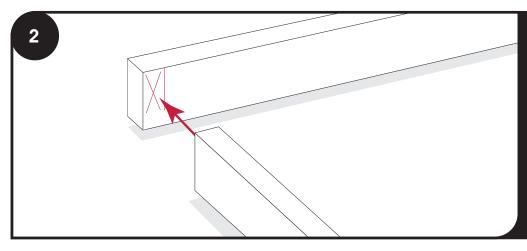
The base for the pergola must be solid and level. If installing on a concrete slab or on concrete footers, they should be level where the posts will rest. If they are not, it may be necessary to cut the bottom of the posts so that the tops are all level. No cutting is necessary unless noted. If you think 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, and can void our warranties.

Hardware Included (Hardware may vary) Wedge Anchors GRK Screws Post Brackets 2" Screws 2" Screws 2" Screws

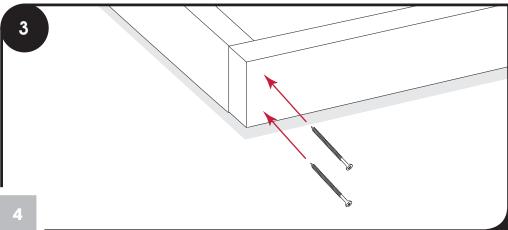
Template Assembly



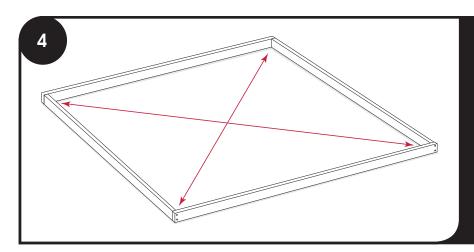
Your pergola kit includes a wooden template that you will use to mark your post locations. You will notice that two of the 2x4 boards have a marking near the ends. You will build a box that will reveal the outside corners of the posts when properly placed.



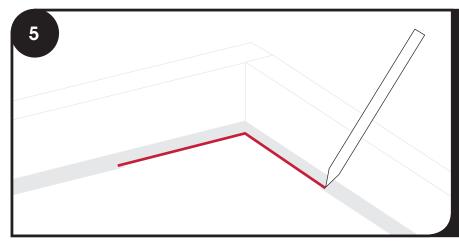
Arrange the template pieces so that they are positioned in the exact location of where your pergola will be placed. The boards with the marking on the end will be across from each other. The marks will show where the other boards will be attached to create th is box.



Connect the corners of the template pieces by driving two $2^{1}/2^{11}$ screws through the side of the template boards. On larger pergolas, your template will be spliced. Match the letters, then fasten them together with $2^{1}/2^{11}$ screws.

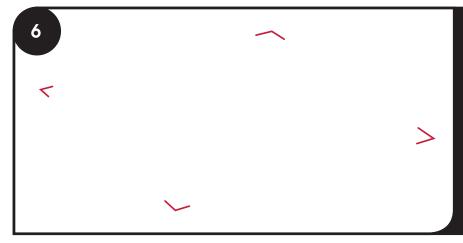


Once the template is in position, you will need to square the template. Do this by measuring diagonally from one corner to its opposite corner. Then measure diagonally between the other two corners. These two dimensions MUST be the same. Adjust the template until the diagonal measurements are identical.



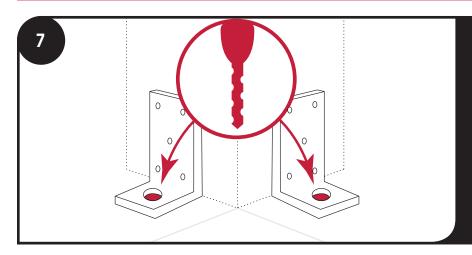
Once the template is "square," mark the post locations (using the INSIDE corners of the framed box) on the concrete slab with a pencil.

NOTE: If you have more than four posts please mark them according to the template.



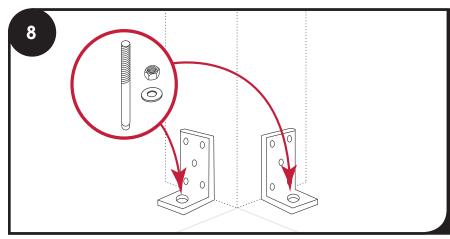
Remove and set the wooden template aside. You are now ready to assemble your pergola.

Assembly



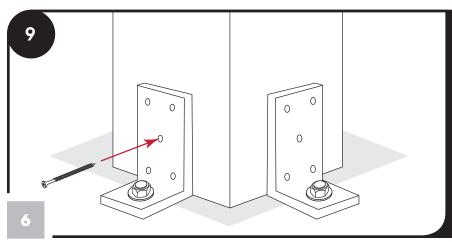
NOTE: If you ordered heavy-duty anchors, please skip this step.

Use a $\frac{1}{2}$ " mason bit and drill down about $\frac{1}{2}$ " farther than length of anchor bolt.



NOTE: If you ordered heavy-duty anchors, please skip this step. See page 12 for installation instructions

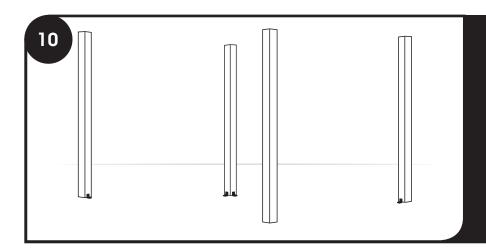
When holes are all drilled, put the anchor bolts in. Make sure the nut and washer are on. Use a hammer and an old 2x4 to protect the threads. Tap bolt into the hole. When you have it down against, tighten nut with a wrench. Do this with all brackets.



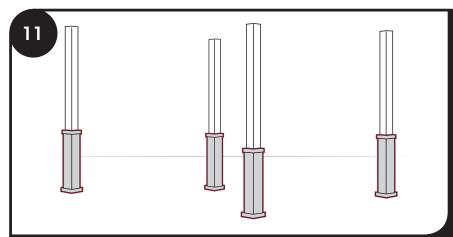
NOTE: Only secure one L bracket to each post at this time. The othe L bracket will be secured after the structure is set.

Fasten the black L brackets to bottom of each post with five $2\frac{1}{2}$ " screws.

NOTE: If you ordered heavy-duty anchors, please skip this step.

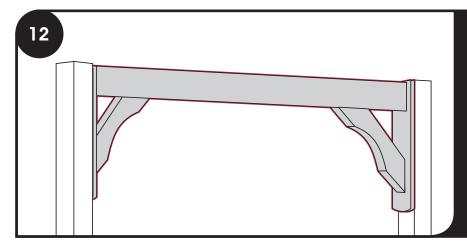


When you have one L bracket secured to each post you are ready to begin assembly.

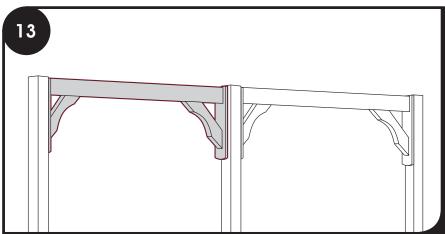


The next step is install the post bases. Get a ladder and slide the base over the top of the post. There are six screws per base, it does not matter which way they are turned, although we recommend keeping the screws turned in the same direction. Repeat this step for each post.

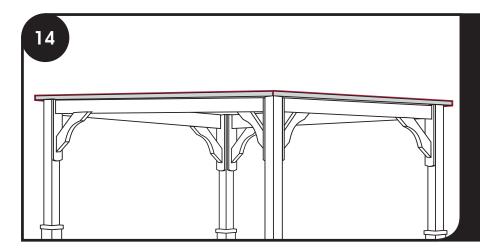
NOTE: Do not screw in the post bases to the main posts at this point



Install the headers. It does not matter which side you start on. Fasten to the posts using (5) 2½" screws. Keep the header even on the top and center of the posts. We recommend keeping the screws on the header angled toward the inside of the pergola.

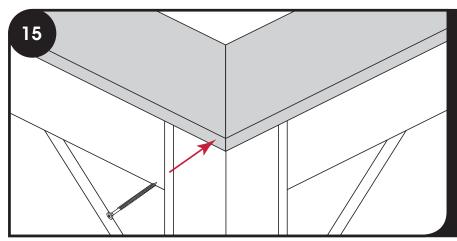


NOTE: if you ordered a pergola that is over 18' long, or that has a custom post layout, there will be will be a center post, making two sets of beams for each side of the pergola. Installing the beams is the same no matter how many beams there are.

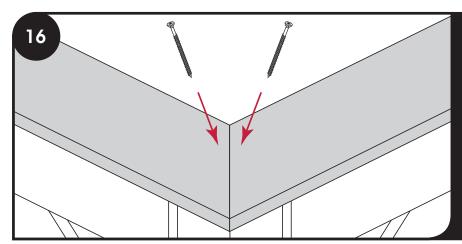


Install the 2x8" top plate. The top plate is pre-cut to fit on top of the beams. Rest all four pieces on top of the beams and arrange them so they fit tight at the corners.

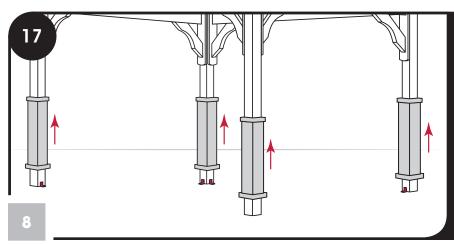
Note: On larger pergolas there may be more than four top plates as some sides will need more than one board. Two top plates will have markings for positioning the runners. These are usually set on the longest dimension.



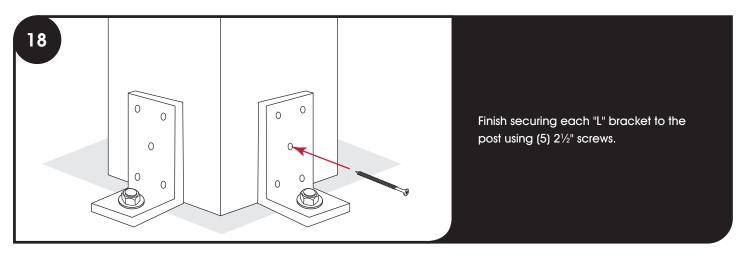
The top plate pieces must be joined together before attaching them to the top of the posts or the beam. Place $3\frac{1}{2}$ " screws on an angle at the corners. There are no pre-drilled holes. Since the screw is close to the end, pre-drill a $\frac{1}{8}$ " pilot hole to keep the wood from splitting.

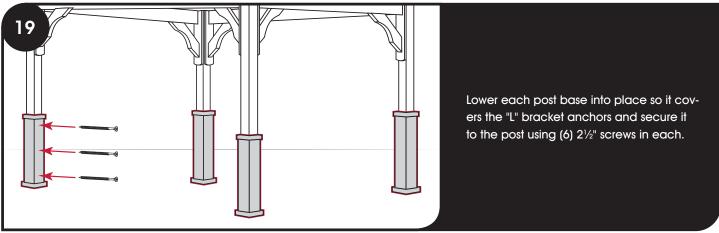


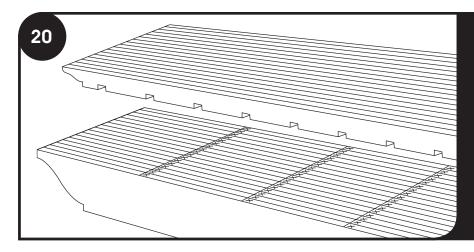
Position the assembled top plates so that the seam in the corners are centered across the corner post. The top plate will overhang the beams by about ½"-1" on the inside before attaching to the posts and to the top of the beam with 2½" screws. Make sure that the overhangs are the same along the entire perimeter. At the angled cuts, secure with two screws into the corner posts. Once you have fastened all corners, screw plate to header with (2) 2½" screws approximately every 24".



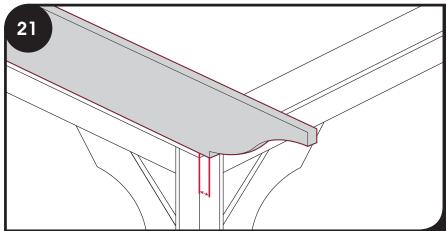
Now that your pergola is secure, go back to the post bases. Double check the square and level of each post. Lift the post base and finish securing each "L" bracket on each post.



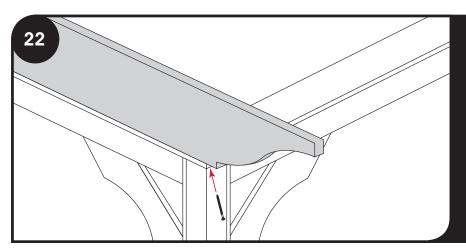




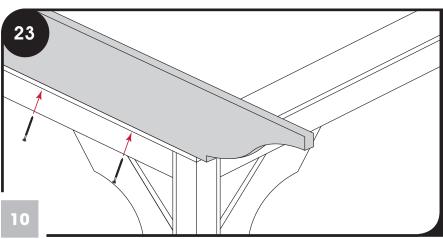
Note: Generally both the main and top runners are spaced at 16" on center unless you order other spacing. Since the first runner on each side will align with the edge of the top plate, any spacing adjustments are made during production and the marks are made accordingly. The top runners have notches that coincide with the calculations made. Never change the placement of the main runners or the top runners will not fit.



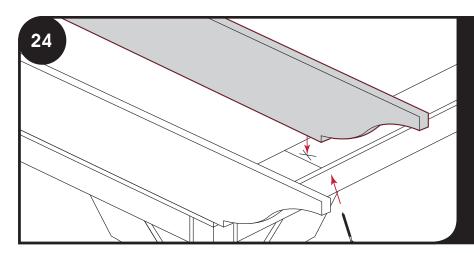
Place the first main runner. Set the runner against the outside edge of the pergola. Make sure you have an overhang between the ornamental notch corner and the pergola edge. Make sure you have an matching overhang measurement at this location on both ends. Take note of this measurement for the following runners.



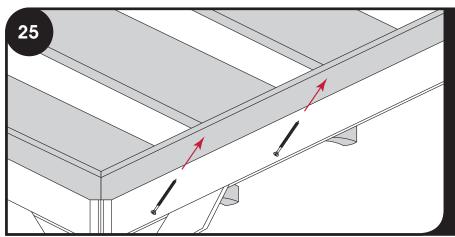
Secure the runner by running $2\frac{1}{2}$ " screws up from the underside of the top plate and into the runner on both ends.



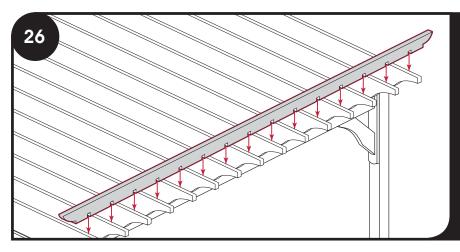
NOTE: For the outside two runners, also screw through the top plate every 24" for the entire length of the runner.



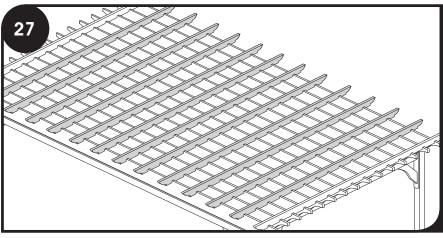
Place each consecutive runner. Make sure the overhangs are equal. Then secure them on either end with $2\frac{1}{2}$ " screws run up though the top plate. Be sure to place the runners on the side of the line with an "X" mark.



When all of the runners are in place run additional screws up though the bottom of the 1" top plate from the inside of the pergola and into each runner on each end.

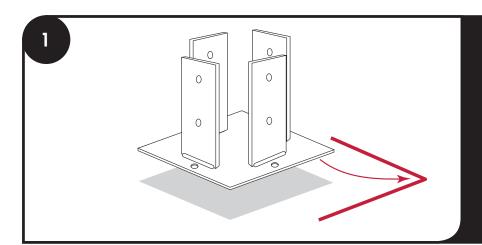


Double check the runner spacing by placing the outside top runners over the bottom runners and make sure the notches all fall in place fitting over the bottom runners. Do this on both ends of the pergola. If any notches do not line up, adjust the bottom runner by unscrewing it and positioning it correctly so the notch falls in place and re-secure the bottom runner.

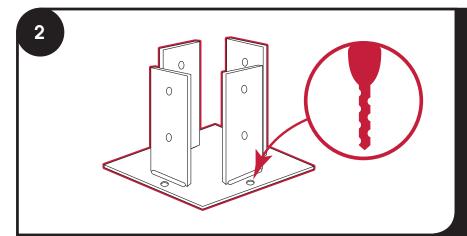


Attach the top 2x4 runners to the main runners using $3\frac{1}{2}$ " screws inserted into the predrilled holes. Align each of the top runners over the "X" marks on top of the main runners. It is best to work from one side to the other of the pergola to make sure that any bows in the runners are worked out.

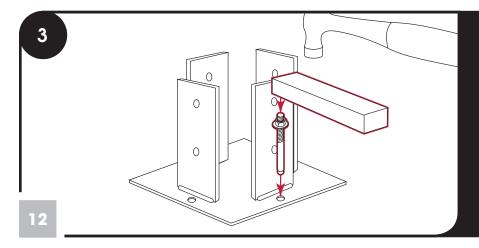
Heavy-Duty Anchors for High Wind



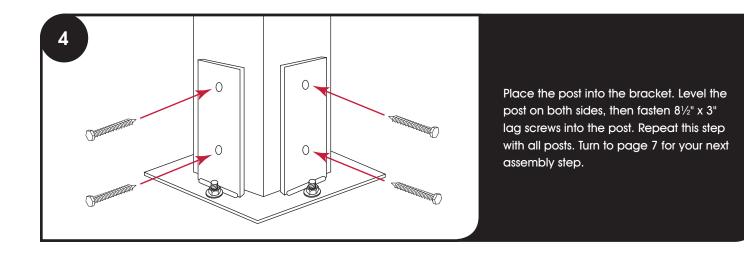
Set the outside edges of the brackets at the pencil marks you made from the template.



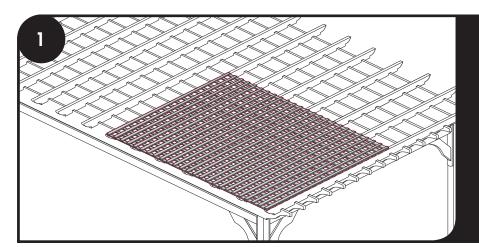
Be sure your bracket is sitting correctly against the pencil marks. Using the bracket base as a template, drill a hole using a $\frac{1}{2}$ " masonry bit about 1" longer than the masonry bolt in each of the four anchor bolt holes. Clear all concrete dust from the holes.



Install the washer and nut on the bolt so that only a few threads are showing above the nut. Using a piece of wood to protect the threads, tap the anchor bolt into the hole with a hammer until about ¾" of threads are showing. Tighten the nut and the base of the bolt will expand and anchor the entire assembly to the ground. Continue on with the rest of the anchor bolts.

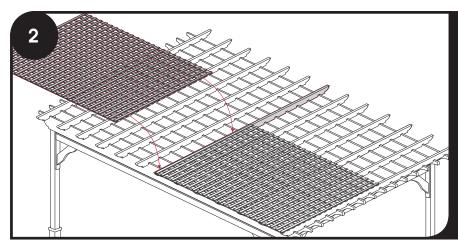


Wood Lattice Top



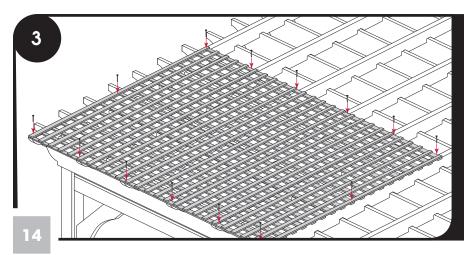
Install your lattice pieces on top of runners. Make sure that lattice pieces are running the opposite way of your top runners.

NOTE: It will be normal if the overall lattice top size is about 1/2" to 1" smaller than the top runner.



Your lattice piece should be cut to length so that in the center you should be able to but your lattice pieces together on the center top runner.

Install with one end on the center of the center top runner and the other end on the outside top runner.



Fasten with three $2\frac{1}{2}$ " screws on each end of your lattice and then 2 on every runner they cross.

Electrical Package

