

Single-Beam Attached Pergola Installation Guide



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Before you begin installation:

- View the installation video [here](#)
- Consult your local authorities for any permits required to construct the pergola.
- Check with local building code officials to review any required permits or building limitations.
- Read instructions thoroughly prior to assembly.

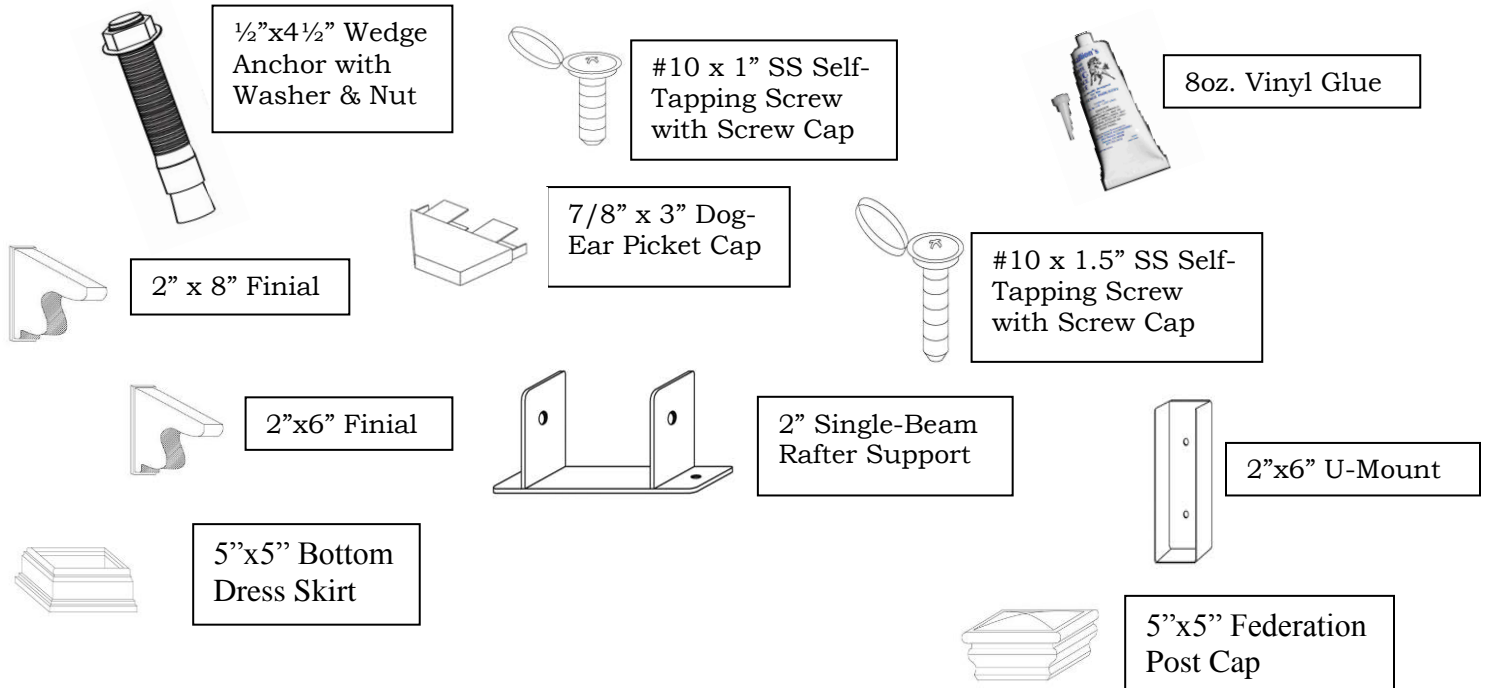
- If you have questions or concerns with this product **DO NOT** return to store. Assembly questions? Missing parts? Call 1-800-403-9259.
- Due to the size of the parts, at least two people are required to handle, fit and secure pergola components.
- Read manual first as mounting hardware varies with each application. Do not anchor to paver bricks. Foundation must be a solid surface.
- Do not stand, sit, or store items on top of pergola.
- Repair or replace broken parts immediately. Call 1-800-403-9259 for replacement parts.
- At regular intervals inspect the pergola to make sure that assembly integrity has been maintained.

Tools required for installation:

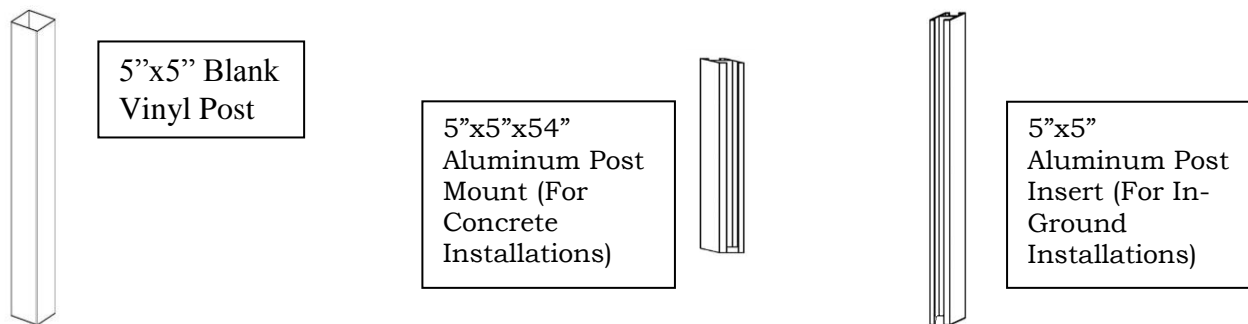
1. Extension Cord
2. Post-Hole digger (for ground installation only)
3. Hammer Drill (for concrete installation only)
4. Reciprocating Saw
5. Cordless Drill
6. Power Drill (optional)
7. Drill Bits – 1”, 5/16”, 3/16”
8. Phillips Screwdriver Bit
9. Masonry Bit – 3/8” (for concrete installation only)
10. Masonry Bit – 5/32”
11. Carpenter’s Square
12. Pencil
13. String Line
14. Level
15. Tape Measure (min of 25’)
16. 2 Ladders (for at least the height of the pergola)
17. Rubber Mallet
18. Ratchet
19. Deep Socket – ½”

INSTALLATION NOTE: You may start the installation by setting either the ledger board or the posts. If you install the posts first, the ledger board placement will be determined by the height of the headers and rafters. The headers sit on the posts and the rafters sit on the headers and attach to the ledger board. If you install the ledger board first, the pergola height will be determined by where you place the ledger board.

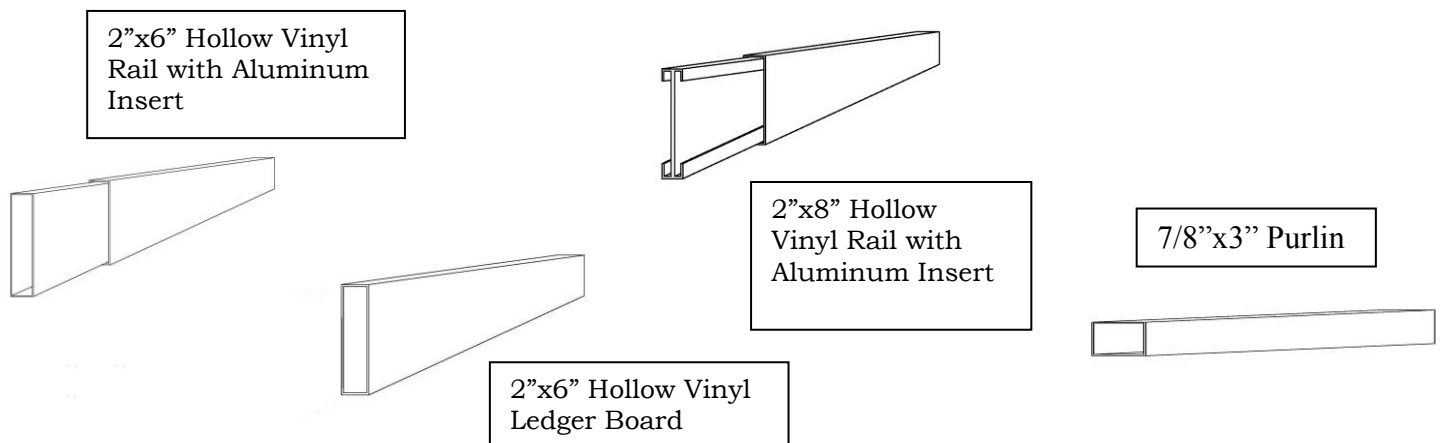
Hardware/Accessories



Post Components

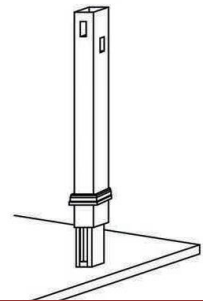
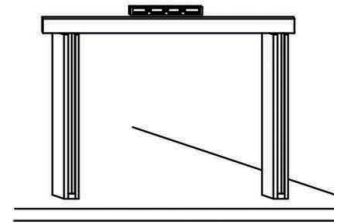
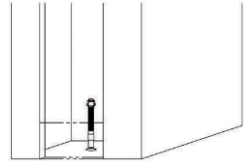
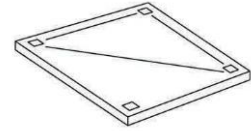


Canopy Components



D. On Concrete Installation

- 1) Square the posts based on the pergola size.
- 2) Place, square and trace each concrete mount.
- 3) Using a hammer drill at a 3½" depth, drill the traced anchor holes with a ½" masonry bit. **Do not** to rush this step, as it could compromise the integrity of the concrete surface.
- 4) Place the ½"x4½" wedge anchor into the each drilled hole and tap them into concrete using a hammer, making sure to leave 1" of the anchor above the concrete.
- 5) Place the concrete mount over the installed anchor mounts. Install the washer and nut to each anchor. Use a ½" deep socket to tighten the nuts. Do not over tighten.
- 6) Assure the post is level (vertically and horizontally) and that the concrete mounts are matching in height by using one of the rafters (see below).
 - Lay the rafter across the tops of two of the concrete mounts.
 - Place a level on top of the rafter to determine if the mounts are at the same height as each other. If the post heights are not the same, you will need to choose the lowest concrete mount to base the height of the other posts.
 - Based on the level, adjust the rafter (by holding it) so that the level shows level.
 - Place a mark on the taller concrete mount where the rafter is sitting at the level position.
 - Measure the distance from the mark to the top of the concrete mount. This is the amount you will need to trim off of the vinyl posts (from the bottom).
- 7) After leveling, cut the vinyl posts accordingly from the bottom, then place the post skirt over the vinyl post.
- 8) Place the vinyl posts over the concrete mounts and secure the post skirt to the vinyl post with a 1 ½" self-tapping screw and screw cap.



Section 2: The Headers & Rafters

NOTE: The joist hanger brackets can be connected directly to a structural area without a ledger board, however a ledger board is recommended.

NOTE: The provided Ultracon fasteners can connect to wood, brick, block concrete and masonry. These fasteners are specified by engineers. If mounting the ledger board to masonry wall (brick or stone), concrete fasteners will be necessary. If mounting to stucco, the ledger screws must make contact with wood supports.

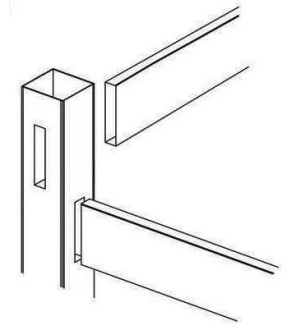
NOTE: The ledger board creates a structurally sound area to mount the pergola against. The trim for the joist hanger brackets are 7 ½". An 8" wide ledger board will give plenty of room to attach the brackets and trim. If you purchased a 2" x 8" hollow vinyl ledger from USA Vinyl, you will need to purchase pressure-treated wood locally and cut the wood 1" shorter than the ledger board on each side to allow the internal end caps to be slid inside the ledger.

A. Ledger Board Installation

- 1) Mark the position at the top where you want the ledger board to be mounted against the home.
- 2) Draw two vertical lines to represent the length of the ledger where you intend to mount it. Use a chalk line to create a straight line between the two vertical lines. If you have siding, remove the siding from the area where the ledger board is to be mounted.
- 3) Find the framing studs and mark them on the house. Place the ledger against the house and level the board. Transfer the marks that you found for the studs onto the ledger and predrill the holes for the lag screws through the ledger into the side of the house. We recommend using ½" x 4" to 6" lag screws with washers (not included). If you have siding, put the siding back around the ledger and caulk around the ledger to weather-proof.

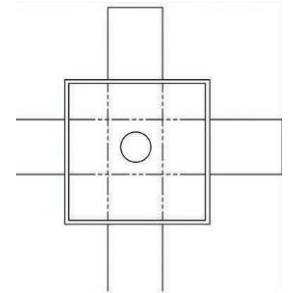
B. Header Installation

- 1) With the help of an additional person, position the 2"x8" headers into the routed slots in the vinyl posts. Make sure there is at least a 5 1/2" overhang from the end of the header to the post on each side.



C. Rafter Installation

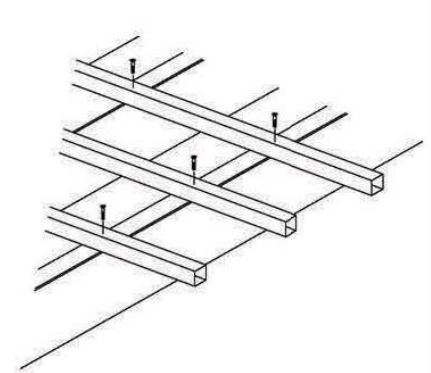
- 1) Position the end 2"x6" rafters into the routed slots on the vinyl posts. Then set them into the 2"x6" U-Mounts on the ledger board. Make sure there is at least 3 1/2" overhang from the end of the rafter to the post on each side, then secure the rafter to the U-Mount with self-tapping screws and screw caps.
- 2) Looking down into the installed vinyl post at the rafter, drill a 1" hole.
- 3) Place a self-tapping screw into the hole to secure the rafter to the header. Repeat at each post.
- 4) To get equal rafter spacing for the remaining rafters, preset the rafters in the rafter support brackets before making any cuts or securing any brackets. The rafters will extend at least 5" past the header on the outside. Adjust the spacing of the rafters as necessary.
- 5) Once the rafters are spaced evenly, use the #10x1" self-tapping screw and screw caps to secure the rafter to the U-mounts and the single-beam rafter supports onto header.



Section 3: Purlin Installation

NOTE: The purlin will lay perpendicular to the rafters.

- 1) Start from the back of the pergola and place the first purlin 5" from the 5" post. Space the remaining purlins evenly.
- 2) The purlin overhang should be the same distance from either side of the last rafter. It is helpful to have an additional person to assist with adjusting the purlin overhang.
- 3) Use the #10 x 1 1/2" self-tapping screws and screw caps to secure the purlin to the rafters. Do not over-tighten the screws as this will cause dents in the purlin.



Section 4: Finish Work

- 1) Place the post caps on the posts. Secure with small beads of vinyl glue.
- 2) Secure the finials onto the headers and rafters with vinyl glue.
- 3) Glue the end caps on the purlin. Use a dab of glue to secure the caps.

Enjoy your new pergola!

