

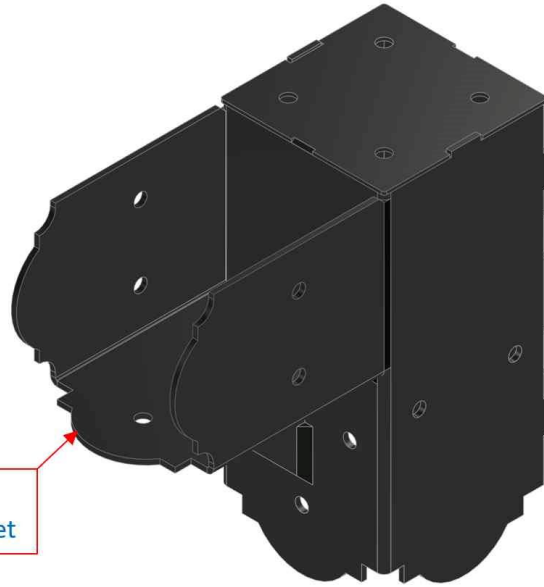


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#4C1L Installation Instructions

WARNING: If the information in these instructions is not followed exactly, weakening or failure of the erected structure may result causing property damage, personal injury, or loss of life.

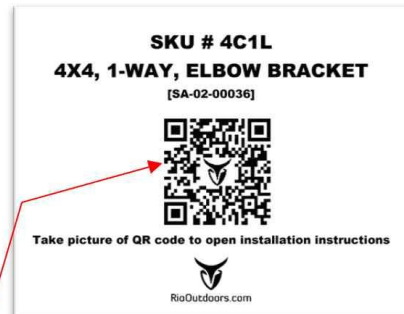
Contents of SKU #4C1L 4x4, 1-way, 90-degree elbow bracket



Qty 1
90-degree elbow bracket



Qty 8
1/4" x 1-1/4" Lag Screw



Box Label with QR Code Links to
Installation Instructions Video

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A properly sized pilot hole must be drilled before you attempt to drive lag screws into any pergola lumber member. See Table, below. Driving lag screws into lumber, without first drilling a pilot hole, can prevent the lag screw from driving fully into the wood or can lead to crack formation while driving the lag screw in, or later, as the wood dries naturally. This can result in a weakened pergola structure.

| Proper pilot hole diameter and depth for various lag screws and wood types | | |
|---|------------------|--|
| Lag Screw Type | Wood Type | Pilot hole drill diameter and depth |
| ¼" X 1-1/4" Lag Screw | Soft Wood | 3/32" drill bit diam., 1-1/4" depth |
| | Hard Wood | 3/16" drill bit diam., 1-1/4" depth |
| 3/8" X 3" Lag Screw | Soft Wood | 11/64" drill bit diam., 3" depth |
| | Hard Wood | ¼" drill bit diam., 3" depth |

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1 GENERAL INFORMATION

1.1 SAFETY AND WARNING INFORMATION









1.1.1 Cautions

CAUTION: Adhere to all safety requirements. Wear safety glasses/goggles when working. Wear safety gloves when handling brackets, hardware, and lumber. Wear hearing protection when using a circular saw, miter saw, table saw, or hammer drill.

INSTALLER: Leave this manual with the consumer. **CONSUMER:** Retain this manual for future reference.

1.2 TOOLS REQUIRED

Listed below, are common tools required for pergola projects. These tools are not included in this kit. Your pergola project may not require all tools. Select and acquire the tools for your project from the "Required for" column in this table.

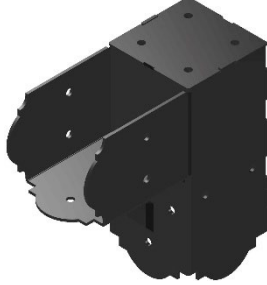

| Description | Tool Purpose | Required for | Reference Image |
|------------------------|--|------------------------|---|
| Tape Measure | Measure and verify lengths. | All pergola types |  |
| Framing Level | Verify Level/Plumb | All pergola types |  |
| Drill/Hammer Drill | Drill holes in concrete pads or concrete footing for securing floor anchor brackets. Drill pilot holes for lag screws. | All pergola types |  |
| Ratchet Socket Driver | Drive lag screws into Pergola lumber members. | All pergola types |  |
| 7/16" Hex Socket | Drive 1/4" X 1-1/4" Hex Hd. lag screws. | All pergola types |  |
| 3/32" Drill Bit | Drill pilot holes for 1/4" lag screws in soft wood. | All pergola types |  |
| Circular Saw/Miter Saw | Cut headers to length; cut rafters to length. | All pergola types |  |
| Crescent Wrench | Tighten down nut on concrete anchors. | Surface Mount Pergolas | Image not available. |
| Hammer | Various. | All pergola types. |  |

1.3 CONTENTS OF BRACKET # 4C1L

The contents of this Bracket are shown in the table, below. All hardware for each bracket is placed inside a plastic bag and taped to the individual bracket. This packaging method makes it easy for you to locate the hardware at the location you will be attaching the bracket. The exact quantity needed to attach the bracket is included.

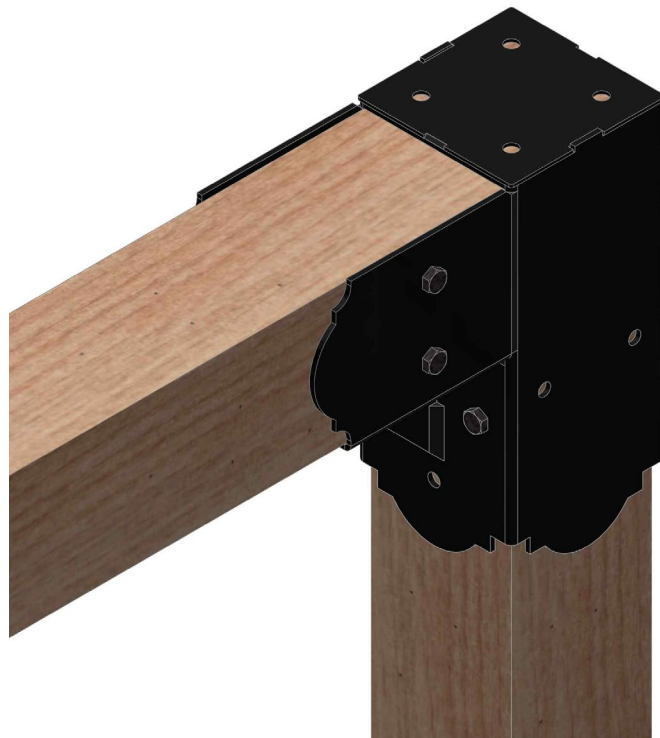
Before you begin your project, take an inventory of all items that you received from us. If any items are missing, contact us directly via email at info@RioOutdoors.com. Include your name and shipping address and your order number, if available. We will respond within 24 hours with a resolution to your problem.

Please note that the bracket parts you receive may appear slightly different than those depicted in these instructions. We perform continuous improvements in our designs and update our current products accordingly. The parts you receive will contain our most-recent improvements and will perform superior to those depicted in these instructions.

| Item SKU #, Description | Item Qty | Item Image |
|---|--|--|
| <p data-bbox="142 699 711 772">4x4 Post Top/Floor 1-way 90-degree Elbow Bracket SKU# 4C1L</p> <p data-bbox="110 800 716 856">(The hardware required to mount this bracket are taped to the bracket)</p> | <p data-bbox="834 768 850 789">1</p> |  |
| <p data-bbox="310 1003 540 1031">1/4 x 1-1/4" Lag Screw</p> <p data-bbox="120 1056 732 1083">(This Qty shows the total of this item included in this kit)</p> | <p data-bbox="834 1031 850 1052">8</p> |  |

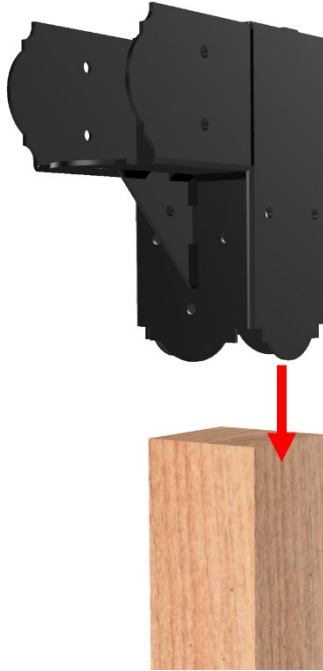
1.4 DESIGN INTENTS (INTENDED APPLICATIONS) FOR THE 1-WAY ELBOW BRACKET

The 1-Way Elbow Bracket is designed to create a strong and permanent 90-degree joint between two dimensional 4x4 (3.5" x 3.5") lumber members.

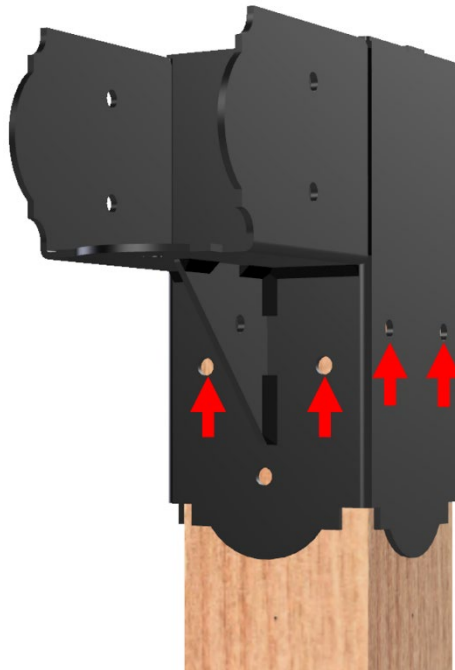


1.5 POST TOP #4C1L BRACKET INSTALLATION

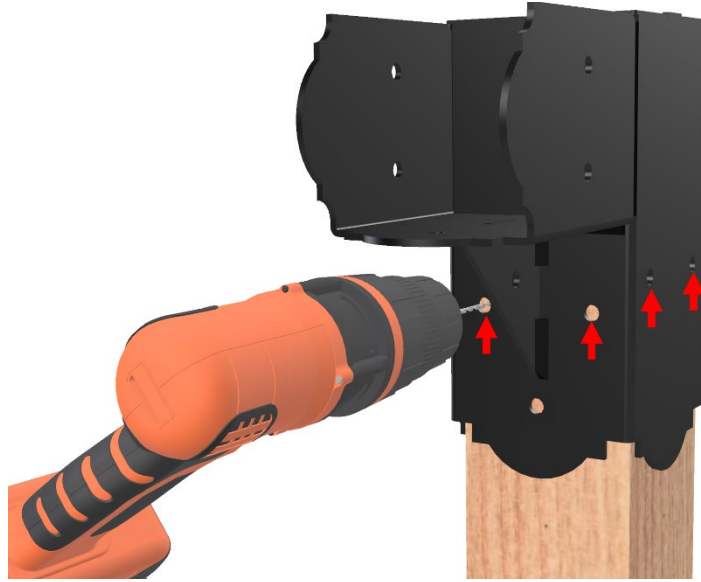
1. Slide a #6C1L bracket's tube over a 6x6 post end after aligning the header receiver U-channels in the proper direction. Let gravity work and pull the bracket all the way down on top of the post. If you feel resistance tap lightly on top of the elbow bracket until it slides all the way down.



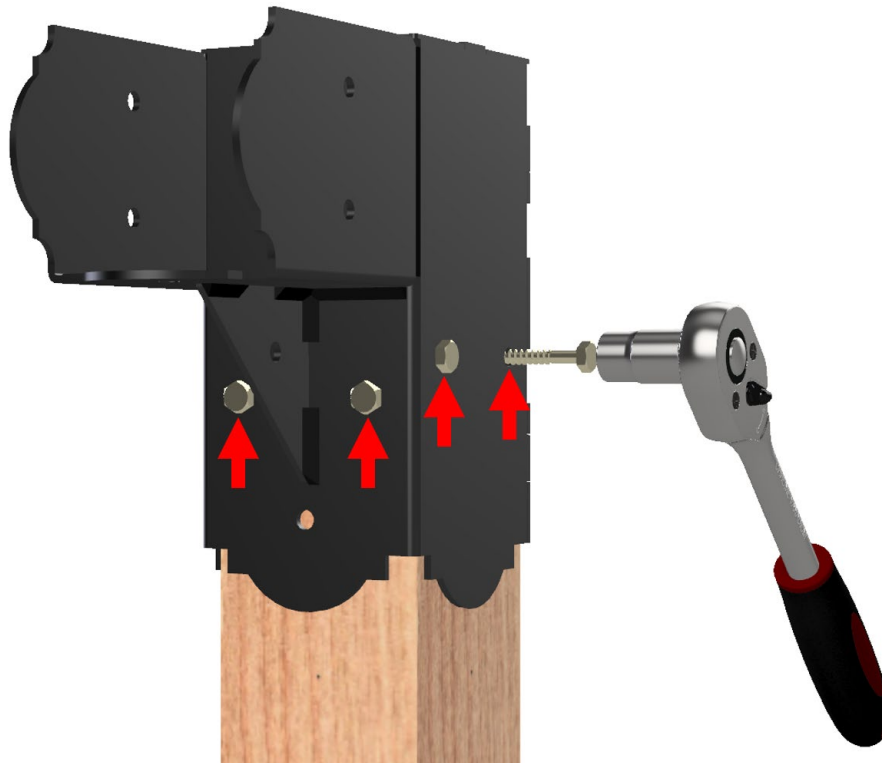
2. Identify the four 5/16" holes which are on two sides of square tube.



3. Drill $\frac{3}{32}$ " X $1\text{-}1/4$ " deep pilot holes at the center of four $5/16$ " Holes. Locate pilot holes at the center of each $5/16$ " hole.



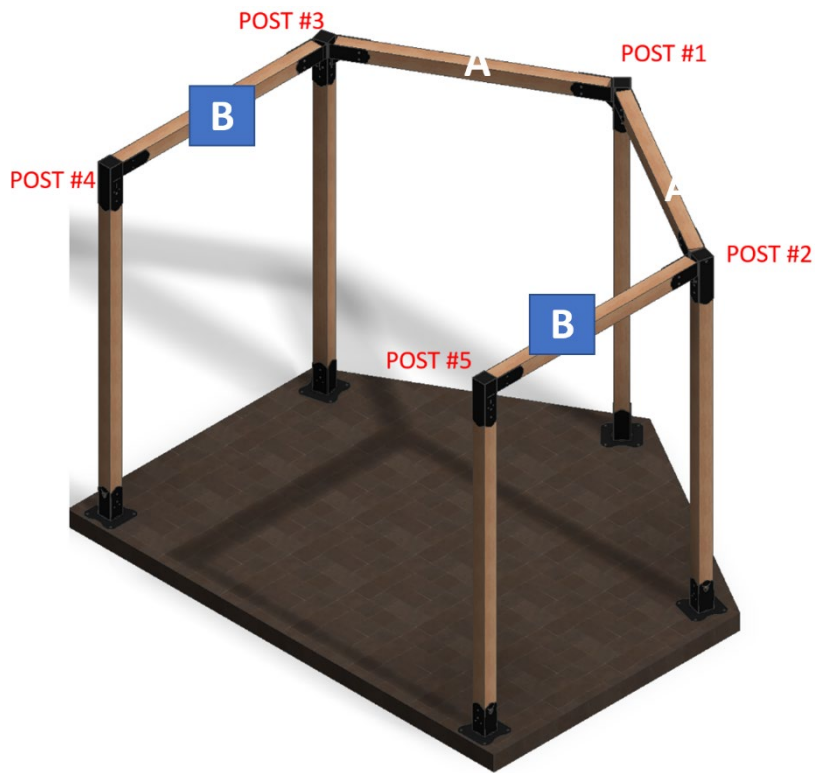
4. Drive one $1/4$ x $1\text{-}1/4$ " Lag Screw through each $5/16$ " hole into the pilot holes you drilled in step 4, using a $7/16$ " Socket and Ratchet driver. Tighten down each screw.



1.6 HEADER INSTALLATION

An example image is used to describe the installation steps.

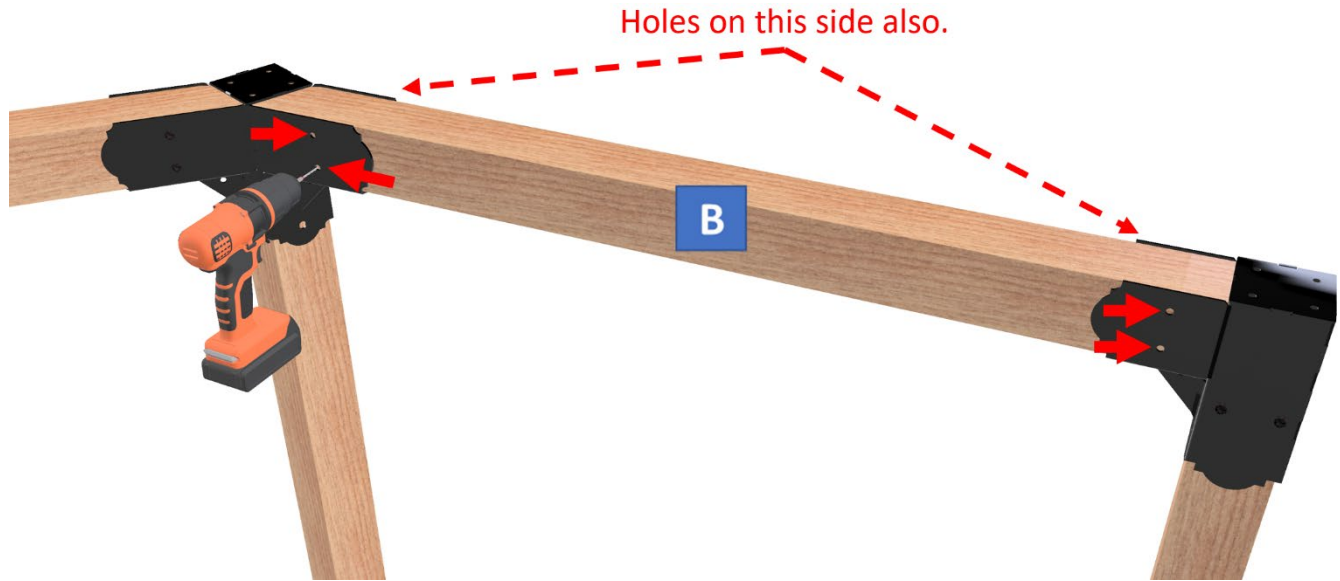
1. Lift and place one header "B" between post top #3 & #4 and one header "B" between post top #2 & #5. The miter cut ends of header "B" are to be positioned against post #3 and post #2.



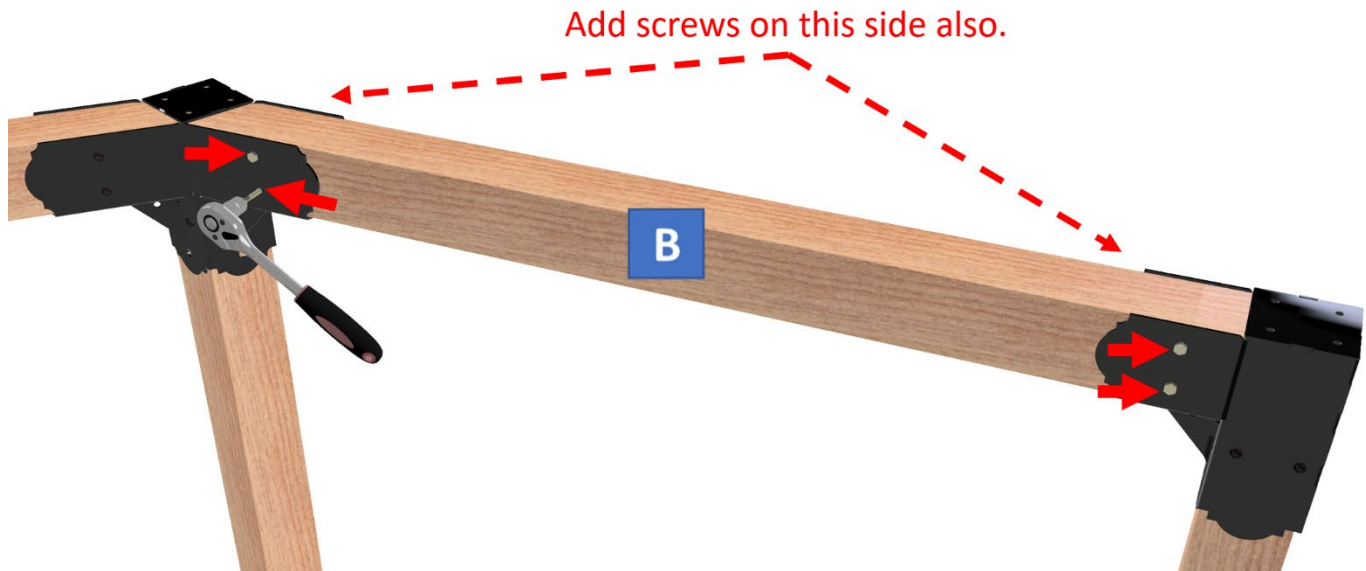
2. At both ends of header "B," identify the 5/16" holes which are on the sides of the U-channel in the elbow brackets. Holes exist on both inside and outside faces of the brackets.



3. Drill $\frac{3}{32}$ " X $1\text{-}1/4$ " deep pilot holes at the center of $5/16$ " holes at both ends of the header and on both sides. Locate pilot holes at the center of each $5/16$ " hole. Perform this step for both "B" headers.



4. Drive one $\frac{1}{4}$ " x $1\text{-}1/4$ " Lag Screw through each $5/16$ " hole into the pilot holes you drilled in step 3, using a $7/16$ " Socket and Ratchet driver. Tighten down each screw.



5. Repeat step 4 for the "B" header on the opposite side.