

Lenox Slide Lock Pergola



ASSEMBLY GUIDE

Models: **Lenox**

OPTIONAL ACCESSORIES

- Bolt Down Bracket Kit (4 for Pergola)



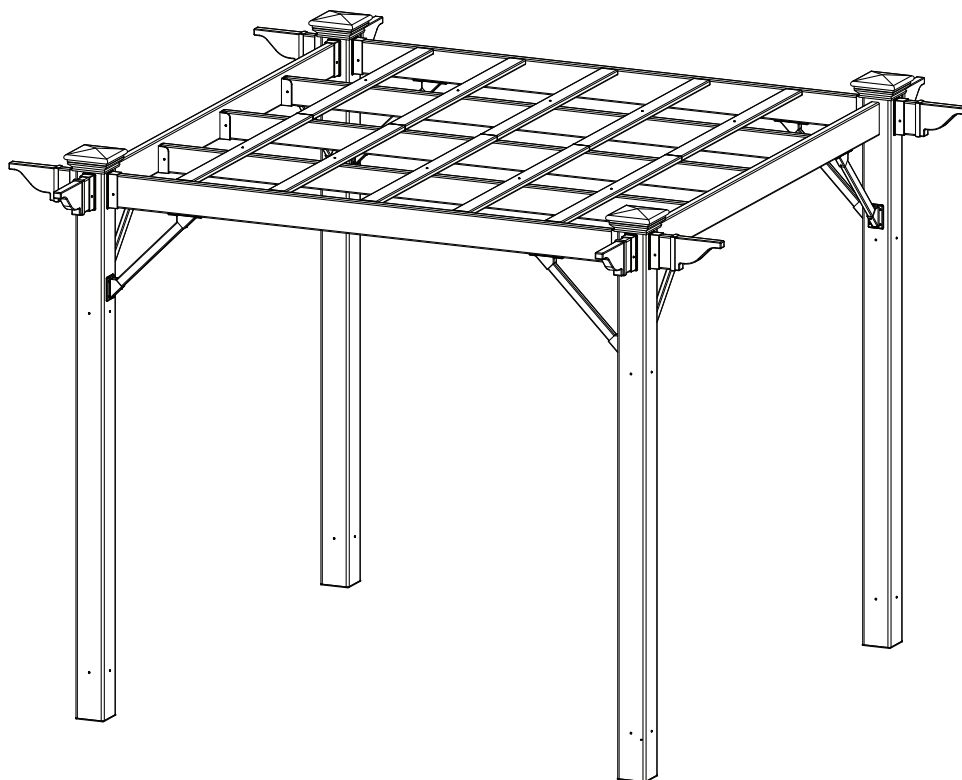
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Introduction & Overview



Getting Started

First off, allow us to say thank you for the investment you have made in one of our fine pergola kits. This kit is designed to be assembled and installed ideally by two people with basic carpentry knowledge and tools. Do not attempt alone, especially during the installation stage. Should you decide to moderately modify the dimensions of your pergola from the standard kit size, a circular saw with a sharp fine-tooth blade is all that is needed to cut, shorten or modify the vinyl components. The steel stiffeners for the main beams and rafters can be cut down using either a hacksaw or a motorized cutting device designed to cut steel. When assembling components place on a non-abrasive surface (ie: shipping box) to avoid scratching. We recommend a 15'x15' area for unobstructed assembling. You should not need to use excessive force when assembling any components.

Planning & Preparing

Because this project is made to stand independent of your home, you can either locate it near your house or let it stand alone in the garden. By keeping it unattached from your home you will not have to deal with moving existing gutters or matching eave heights. If you plan to build your pergola close to the house, please keep the outer extremities of the pergola a minimum of 4 inches back from your eaves.

What looks like the toughest part of this project is actually the easiest, the graceful, solid-looking columns. We've designed these columns to simply be slipped over treated 4x4 wood posts that are either embedded in concrete or directly mounted to a concrete or wood surface using our bolt down brackets. See pages 7, 8 and 9 for more details.

It is critical before you start, to consider the current slope of elevation where the pergola is planned - if there is any. Also utility or sprinkler line location is important to identify prior to excavating holes if necessary. You should also check to verify local building codes, ordinances, neighbourhood covenants, or height restrictions regarding this type of structure.

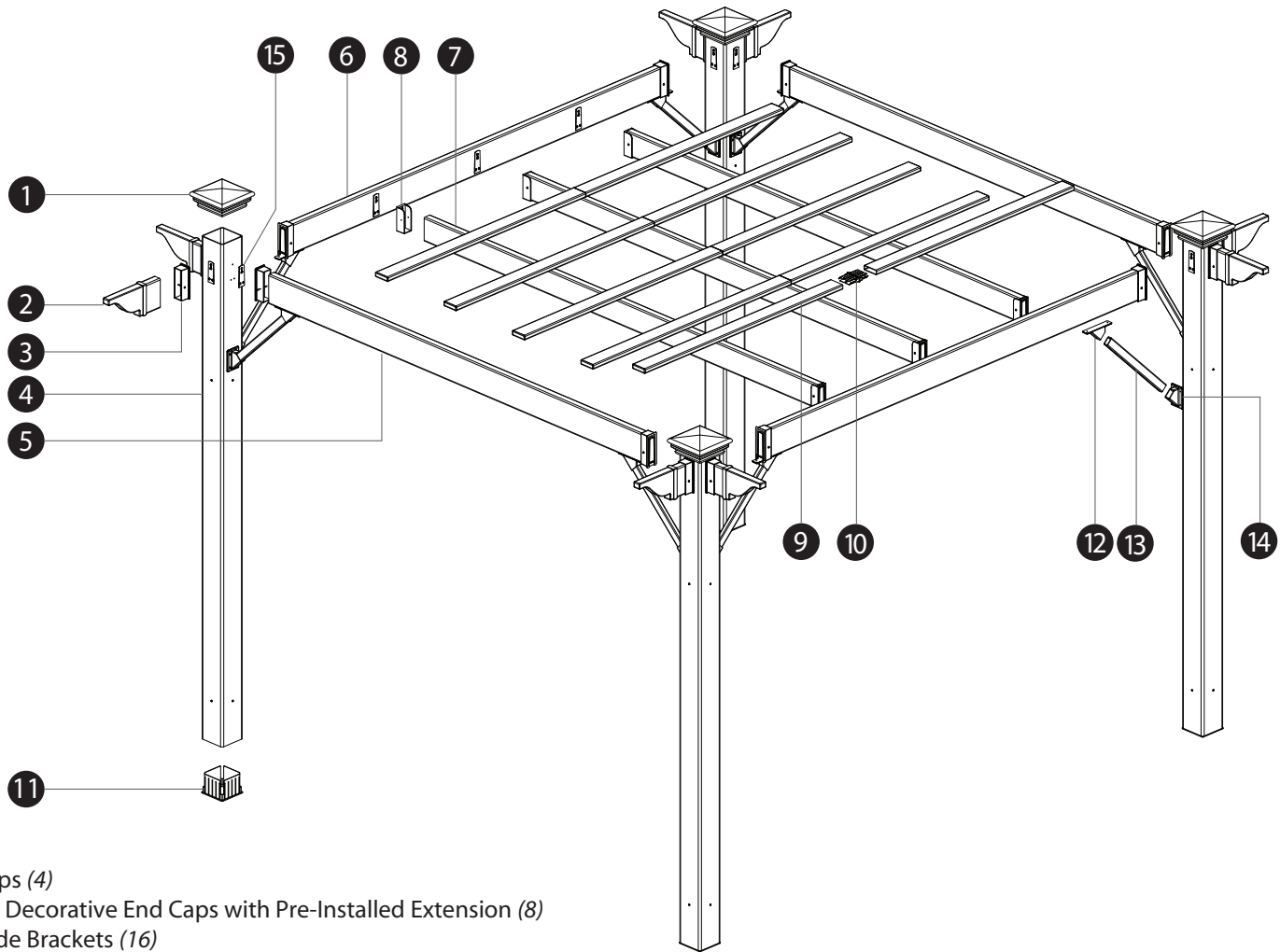
Restriction of Use

*This product **is not** designed to carry additional weight loads such as swings, people or other objects.*

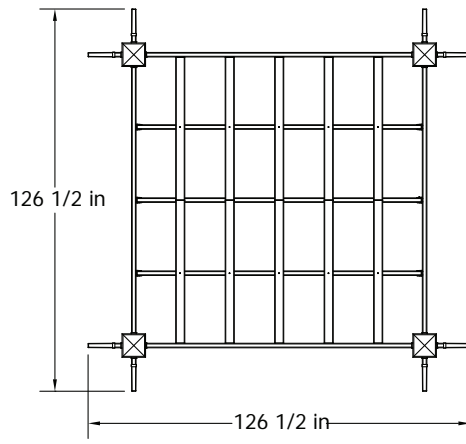
Please take the time to read this instruction guide thoroughly prior to the construction of your pergola. If you have any questions, feel free to contact our technical dept by calling 1 800 282 9346 (Mon to Fri 8:00 A.M to 4:00 P.M. EST).

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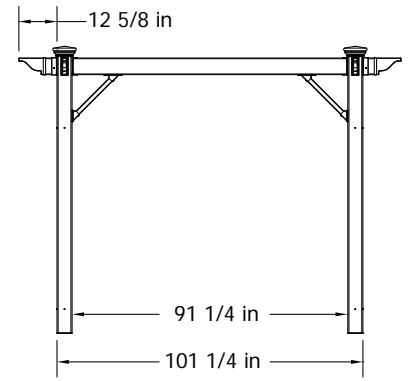
Lenox Pergola Materials Overview



- 1. Post Caps (4)
- 2. Pergola Decorative End Caps with Pre-Installed Extension (8)
- 3. Post Slide Brackets (16)
- 4. Main Column with Pre-Installed Slide Lock Brackets (4)
- 5. Beams (2)
- 6. Beam with Brackets (2)
- 7. Rafters (3)
- 8. Rafters Slide Brackets (6)
- 9. Shade Slats (10)
- 10. Shade Slat Joiners (5)
- 11. One Way 4"x4" Internal Wood Post Guide (4)
- 12. Beam Brace Bracket (8)
- 13. Pergola Brace (8)
- 14. Post Brace Bracket (8)
- 15. Slide Lock Bracket (8)



Top View



Side View

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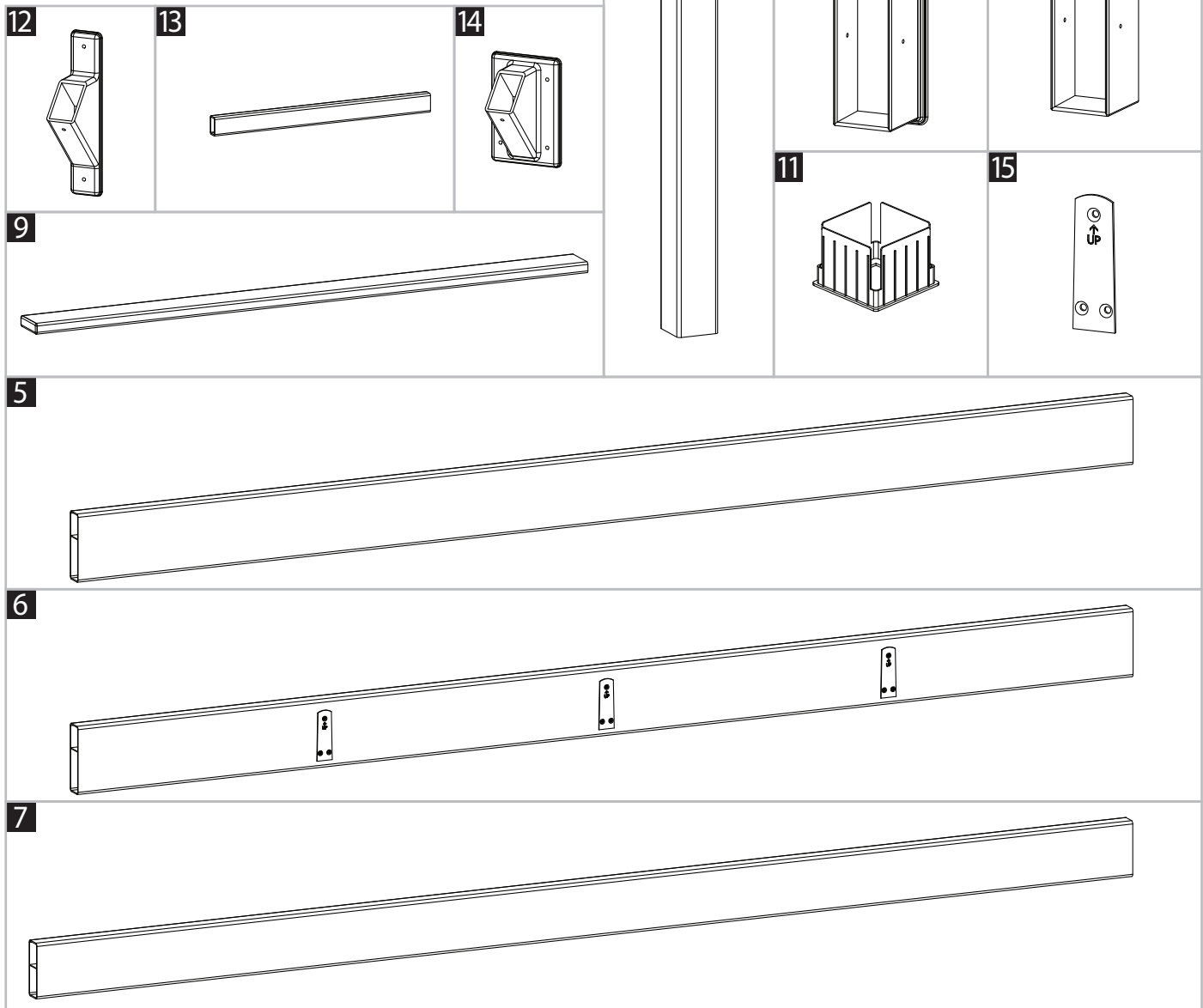
Lenox Pergola Materials Breakdown

Check Boxes (Total of 4) for These Contents

In the event of missing or defective parts please call our customer service department at **1 800 282 9346** (Mon. to Fri. 8:00 AM to 4:00 PM EST)

1. Post Caps (4)
2. Pergola Decorative End Caps with Pre-Installed Extension (8)
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10. Shade Slat Joiners (5)
11. One Way 4"x4" Internal Wood Post Guide (4)
12. Beam Brace Bracket (2)
13. Pergola Brace (2)
14. Post Brace Bracket (8)
15. Slide Lock Bracket (8)

Not to Scale



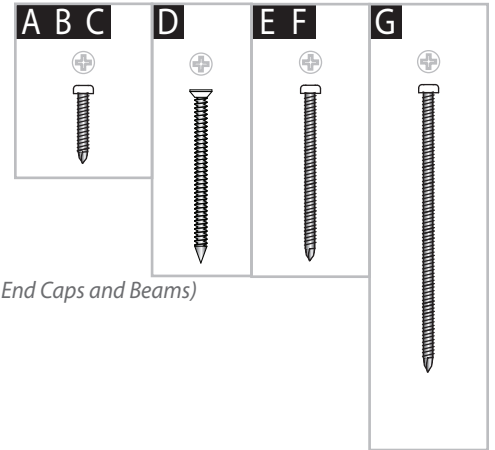
Pergola Additional Materials List

Hardware *(in plastic bag)*

NOTE: WE HAVE INCLUDED 10% EXTRA SCREWS BEYOND WHAT IS IDENTIFIED BELOW.

All Screws Included with this Kit are Self-Auguring.

- A. 5/8" Self-Auguring Stainless Steel Screws (32) (to lock Post Slide Brackets to Pergola Decorative End Caps and Beams)
- B. 5/8" Self-Auguring Stainless Steel Screws (12) (to lock Rafter Slide Brackets to Rafters)
- C. 5/8" Self-Auguring Stainless Steel Screws (16) (to lock Pergola Brace to Brace Brackets)
- D. 1 1/2" Flat-Head Stainless Steel Screws (24) (to lock the Slide Lock Brackets to Posts)
- E. 1 1/2" Self-Auguring Stainless Steel Screws (48) (to lock Brace Brackets to posts and beams)
- F. 1 1/2" Self-Auguring Stainless Steel Screws (10) (for Shade Slats)
- G. 2 1/2" Self-Auguring Stainless Steel Screws (32) (to lock main column to wooden post)



Extra Materials You will Need

(Purchase separately from www.newenglandarbors.com or retailer of our products)

If Mounting Pergola on Concrete or Wood Deck

- H. 4x4x7 Pressure-Treated Wood Posts (4) *(purchase at local building center)*
- I. 4x4 Bolt Down Bracket Kit *(purchase from www.newenglandarbors.com or a retailer of our products)*
 - 1/4" x 2 3/4" Concrete Screws or Wood Screws (12)
 - 3/16" Concrete Drill bit. Min 3" long (1)
 - Post Shims 1/2" x 3 1/2" x 12" (32)

If Mounting Pergola in Ground

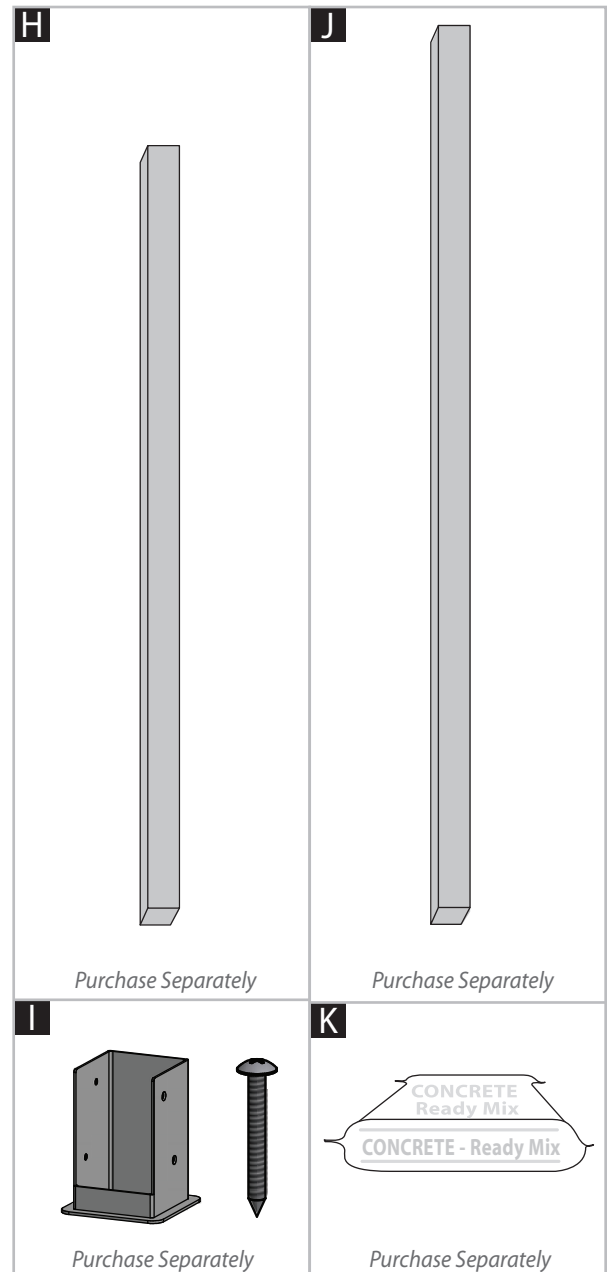
- J. 4x4x10 Pressure-Treated Wood Posts (4) *(purchase at local building center)*
- K. Concrete Ready Mix (4) *(purchase at local building center)*

Tools You Will Need

- Level
- Hammer
- Tape Measure
- String Line
- Wood Stakes (4) *(temporary support for string line)*
- Step Ladders (2)
- Cordless Drill
- Pencil

Tools You May Need

- Circular Saw with Fine Tooth Blade
- Framing Level
- Framing Square
- Hacksaw *(or a motorized cutting device designed to cut steel)*



Purchase Separately

Purchase Separately

Purchase Separately

Purchase Separately

Not to Scale

Wood Post Layout & Installation for In-Ground Application

This pergola can also be installed on a pre-existing wood or concrete surface using our bolt down bracket system with a 4x4 wood post (sold separately). See page eight for more details.

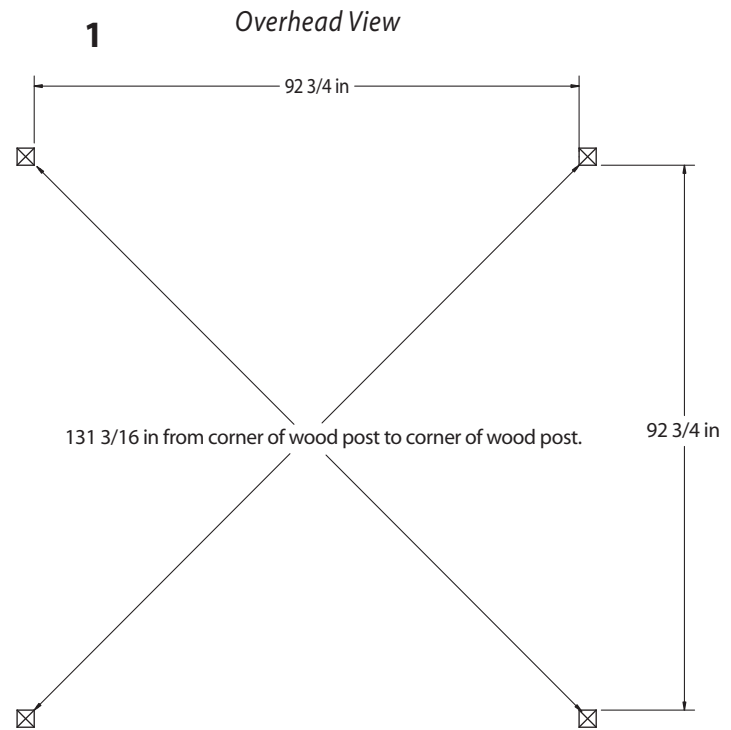
Post location and placement is the most critical step in the overall installation process. Please double check for the possibility of any underground utilities such as sprinkler, gas or telephone lines.

STEP ONE

Measure and mark out the location of the pergola posts using string line and temporary wood stakes. Diagonal distances must be the same to ensure a square installation. Adjust string lines accordingly. The inside corner of the string lines will be the post location.

Please Note:

Should you decide to moderately modify the dimensions of your pergola from the standard kit size, a circular saw with a sharp fine-tooth blade is all that you need to cut, shorten or modify the vinyl components.



STEP TWO

Install Wood Supporting Posts Directly into the Ground

1

After you have determined where the posts will be located, excavate 10" diameter x 36" deep post holes.

2

After holes are dug and cleaned, place the 4x4 wood post into a hole ensuring it's level and square to string lines. The final post height should be no more than 84" out of the ground. If a post is higher because of obstructed excavation of footings, please cut down in height accordingly.

3

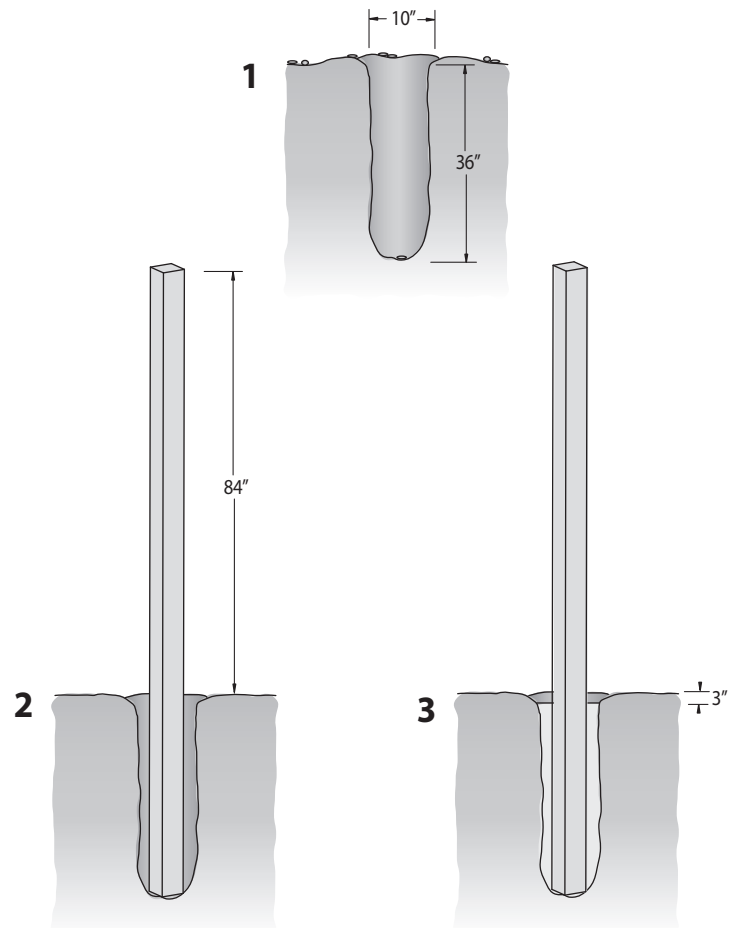
Fill the vacant hole with pre-mixed concrete all the way to within 3" of the top of the hole. After the concrete has set, back fill the 3" space with soil/sod.

4

Repeat for all four posts.

Please Note:

Some 4x4 pressure treated posts can be larger than 3 1/2 x 3 1/2 square due to twisting or cracking. We have allowed a tolerance for this in the internal one way and two way 4x4 wood post guides (see page 8). However in extreme cases you may need to shave down the top of the 4x4 wood post slightly to get the vinyl post started over the wood post. Before installing your wood posts in the ground, please check to confirm this and correct at this stage if necessary.



OPTIONAL STEP

Wood Post Layout & Installation Using Bolt Down Brackets for Concrete or Wood Surface

1

Measure and mark out the location of the bolt down brackets using string or chalk line. Diagonal distances must be the same to ensure a square installation. Adjust string lines accordingly. The inside corner of the string lines will be the corner of the bottom flange.

2

Mark out the location of bolt down brackets accordingly using the base of the bracket accordingly.

3

Using a 3/16" masonry drill bit, drill 3" deep holes to allow installation of 2 3/4" concrete screws (Not included)

4

Proceed to install three 2 3/4" concrete screws into the bottom base of the bolt down bracket. (Not included)

Please Note:

Concrete patios generally have sloped surface for water run-off. If this is the case, when you secure the bolt down bracket to the concrete, the bracket may be at an angle. This can be corrected for level using galvanized steel washers (not provided), acting as shims underneath the base to level - **VERY IMPORTANT OR PERGOLA BEAMS AND RAFTERS WILL NOT BE LEVEL.**

5

With the four post brackets installed plumb, proceed to set the 4x4 x7' wood post in place. Use wood screws to secure the posts to the bracket. Repeat for all 4 posts.

6

Posts should be approximately 84" in height.

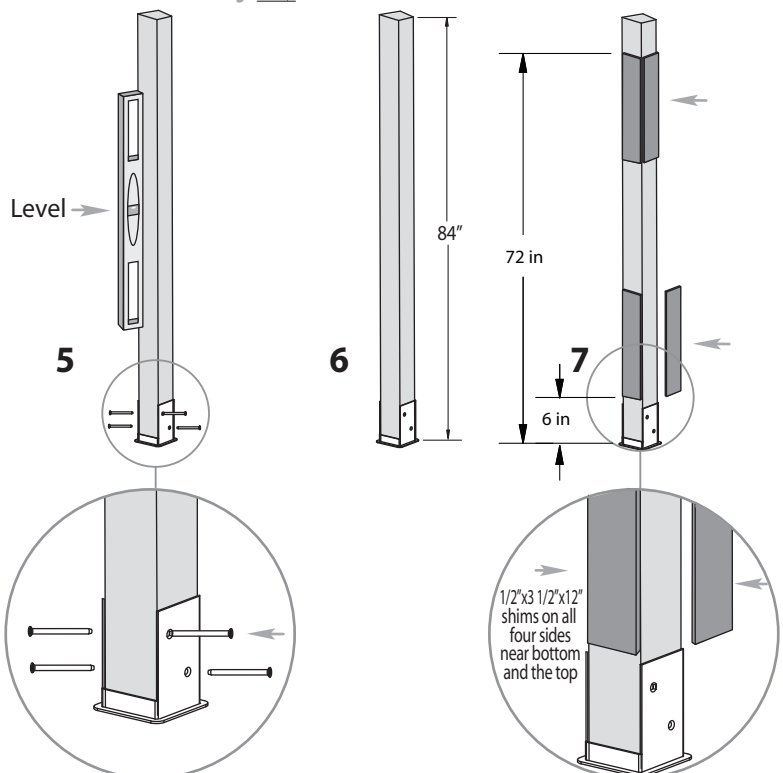
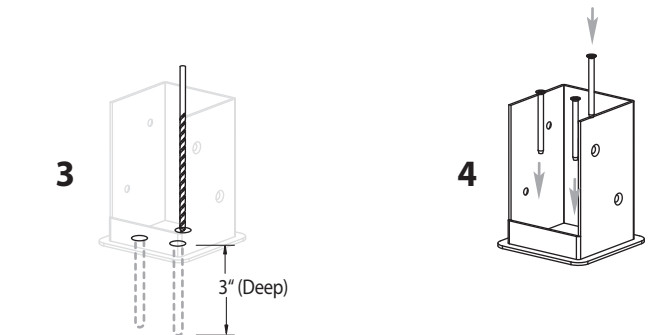
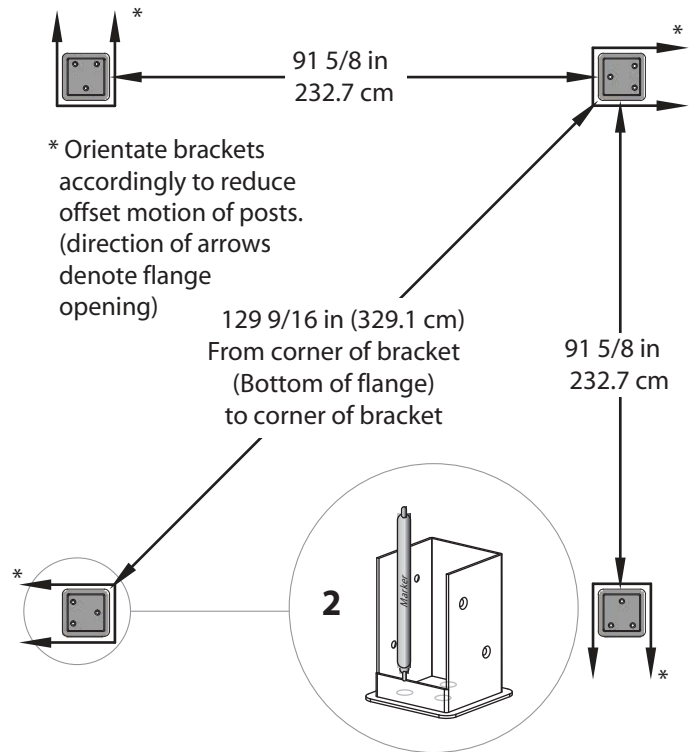
7

Attach 8 post shims to each of the wooden post, placing shims (6") on all four sides, near the bottom & top (72")

Please Note:

Some 4x4 pressure treated wood posts can be larger than 3 1/2 x 3 1/2 square due to twisting or cracking. We have allowed a tolerance for this in the post brackets and the internal one way and two way 4x4 wood post guides. However in extreme cases, you may need to shave down the end of your 4x4 wood post slightly to allow access.

1



STEP THREE

Vinyl Column Assembly & Installation Over Wood Posts

Note: For efficient packaging purposes, two of the four slide lock brackets have been intentionally excluded from the posts.

1

Locate the pre-drilled holes and fasten two more slide lock brackets to the post using three, 1 1/2" flat-head screws per bracket. Repeat for the three remaining posts.

2

Insert and pressure-fit the One Way 4"x4" Internal Wood Post Guide in the one end of the main column posts.

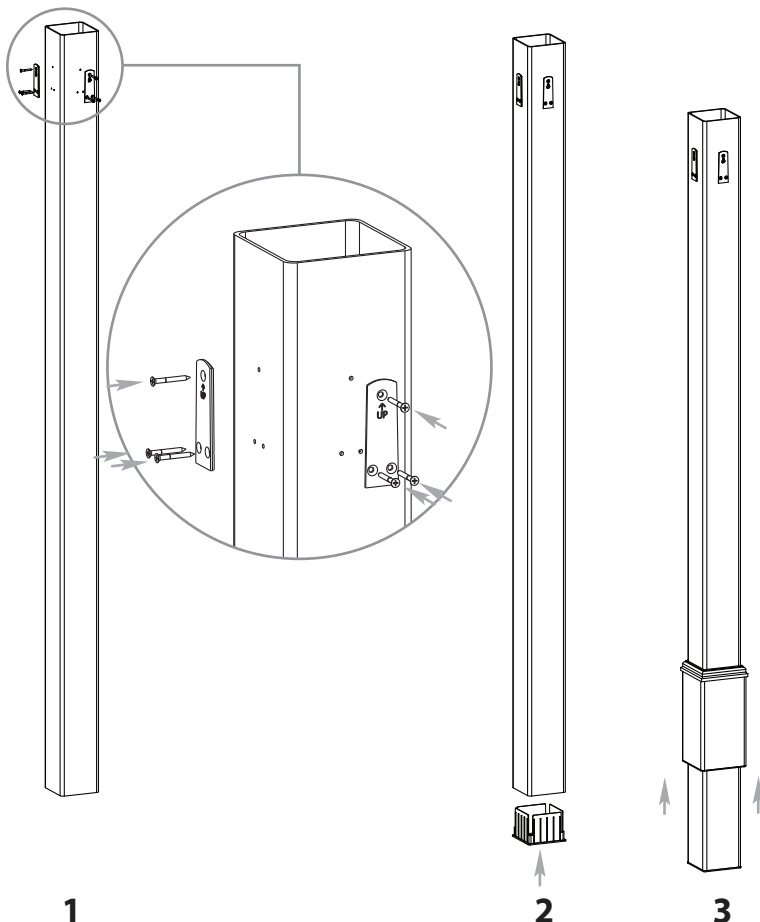
This step is only applicable if your wood 4x4 post are embedded into the ground. If your pergola is going to be installed on wood or concrete surface, please dispose of these four pieces.

3

If you purchased the base molds, slide them up the post as shown.

4

Using a step ladder guide the top vinyl columns over the wood 4x4 posts.

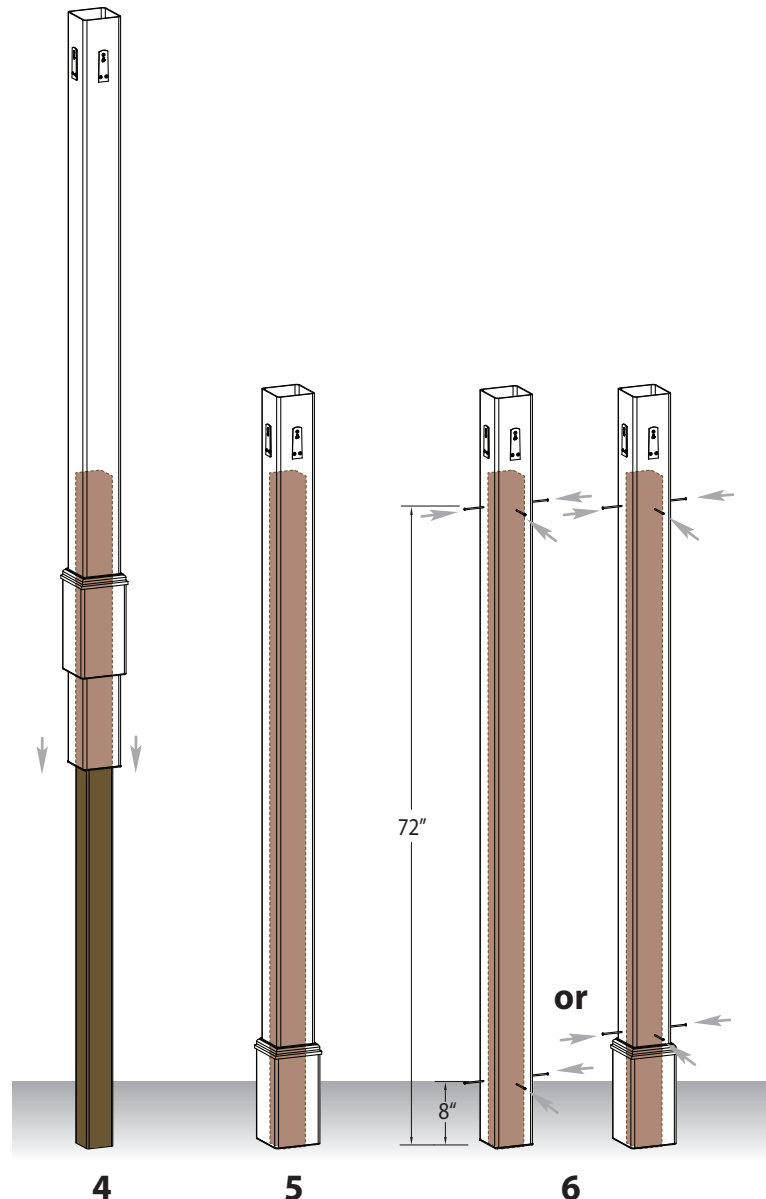


5

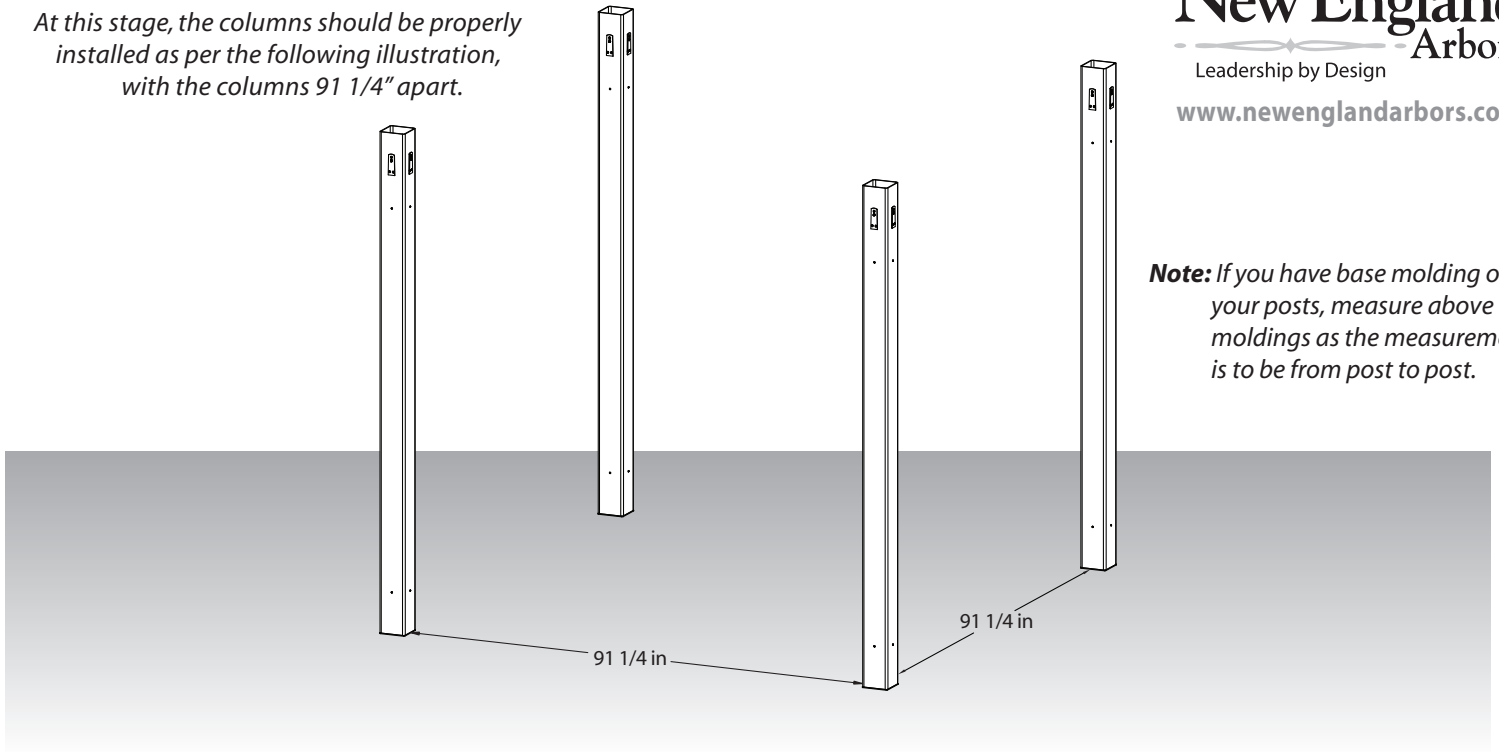
If necessary, adjust post heights accordingly to ensure future level installation of beams and rafters as necessary. If slope is severe causing a height difference between the posts, you may need to trim down the bottom of two or more of your vinyl columns as necessary.

6

Secure the vinyl columns to the wood posts using 4 - 2 1/2" self-auguring stainless steel screws at 8" up from the base of the posts, and 4 - 2 1/2" self-auguring stainless steel screws 72" up from the base of the posts. This will prevent possible uplift during high winds, etc. If base moldings are installed, position screws above the base moldings.



At this stage, the columns should be properly installed as per the following illustration, with the columns 91 1/4" apart.



Note: If you have base molding on your posts, measure above moldings as the measurement is to be from post to post.

STEP FOUR

Beam Assembly

1

Attach a post slide bracket to each end of the beam as illustrated.

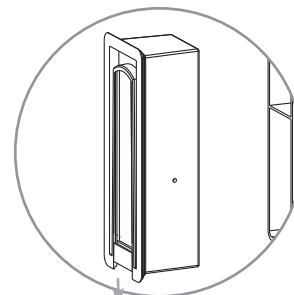
Note: Make sure the opening of the brackets are facing the same direction.

2

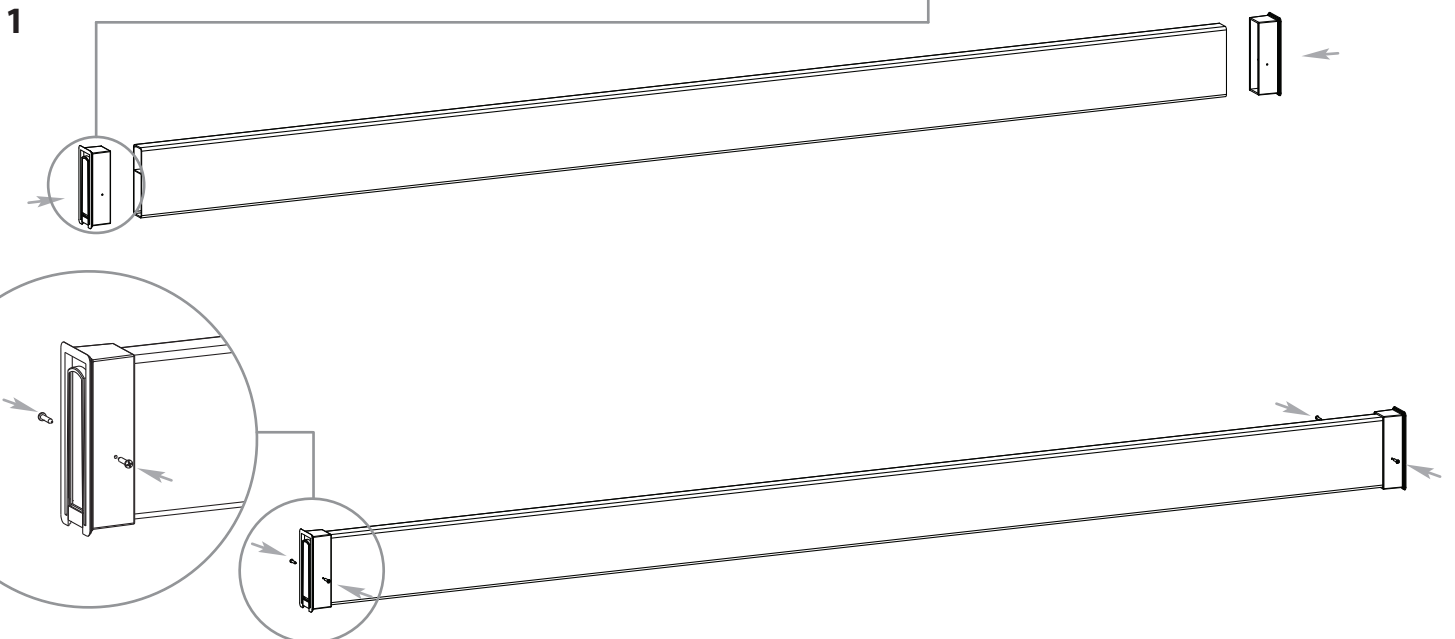
Fasten each bracket with two 5/8 in screws as shown.

3

Repeat for second beam assembly.



Opening Facing Down



STEP FIVE

Beam with Brackets Assembly

1

Attach a post slide bracket to each end of the beam as illustrated.

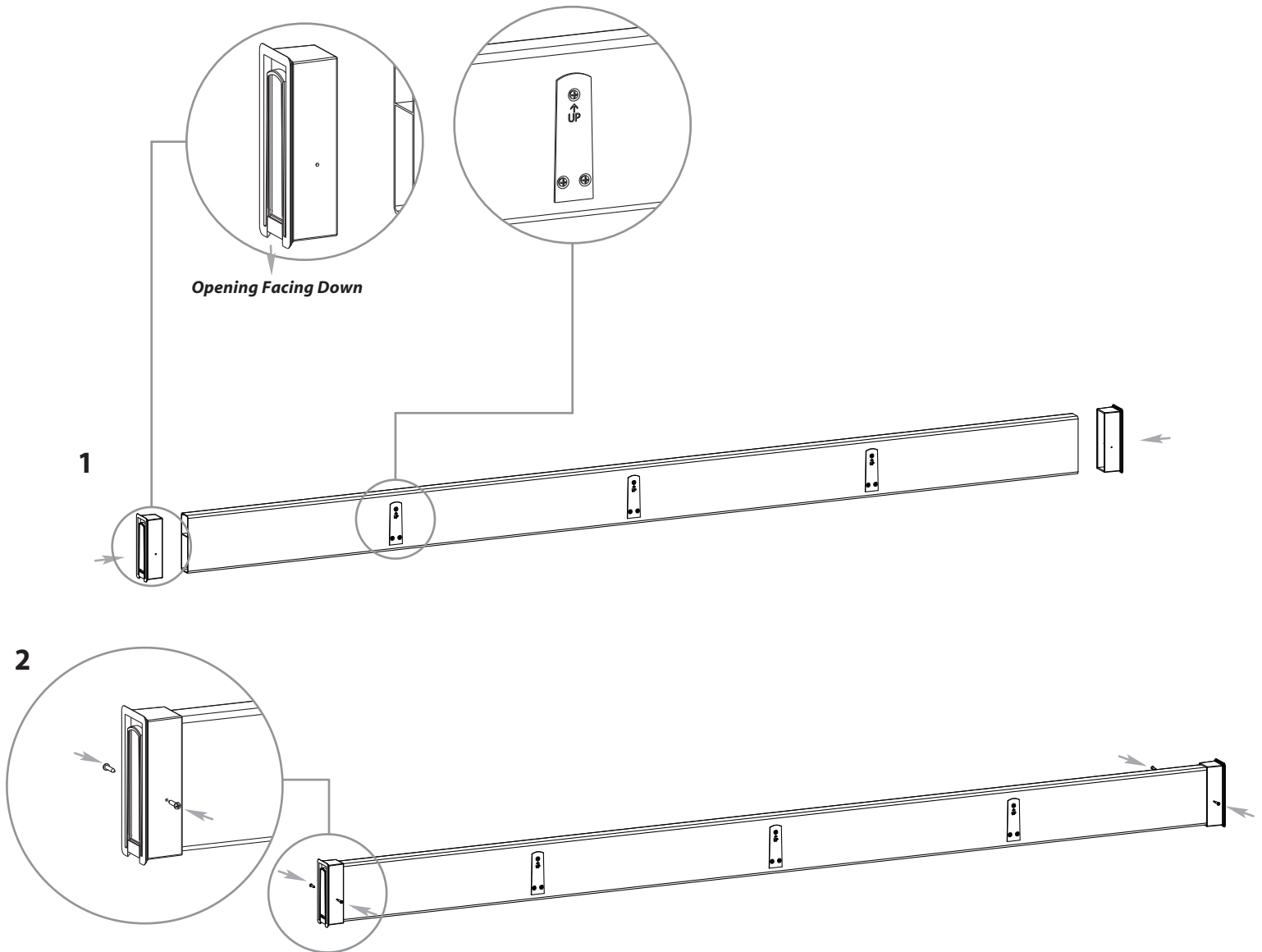
Note: Make sure the post slide brackets are facing the same direction as shown, and that the attached brackets on the beam are oriented properly (see illustration)

2

Fasten each bracket with two 5/8 in screws through the pre-drilled holes.

3

Repeat for second beam with brackets assembly.



STEP SIX

Rafters Assembly

1

Attach a rafter slide bracket to each end of the rafter as illustrated.

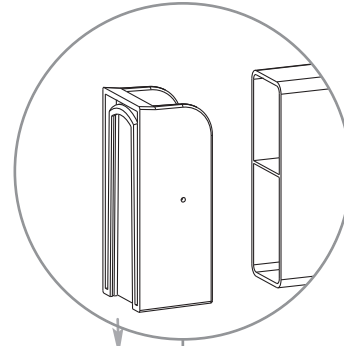
Note: Make sure the rafter slide brackets are facing the same direction as shown.

2

Fasten each bracket with two 5/8 in screws through the pre-drilled holes.

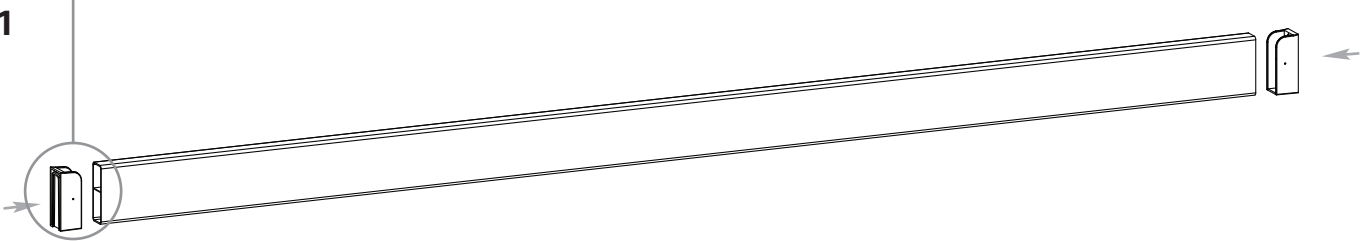
3

Repeat for remaining two rafter assemblies.

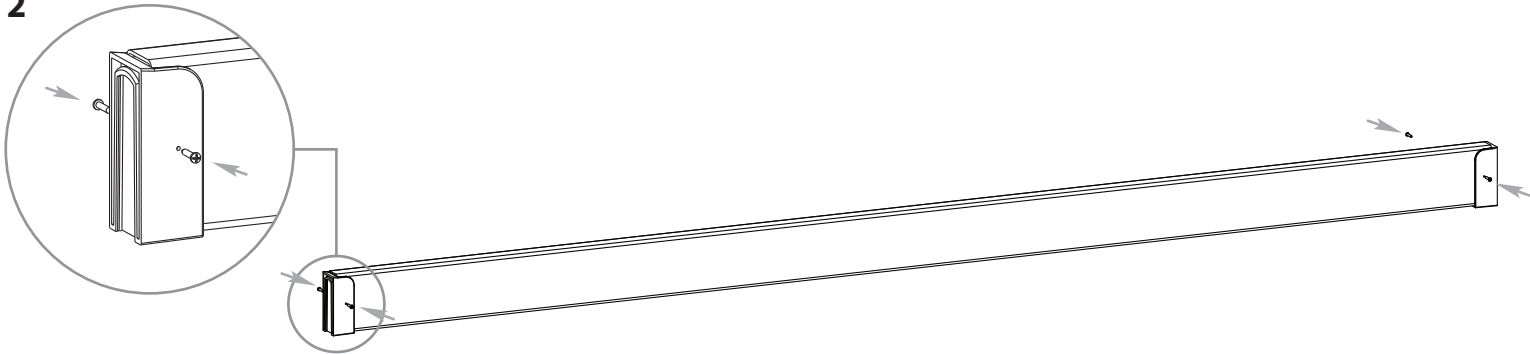


Opening Facing Down

1



2



STEP SEVEN

Pergola Decorative End Cap Assembly

1

Insert a pergola decorative end cap with pre-installed extension into a post slide bracket as shown aside.

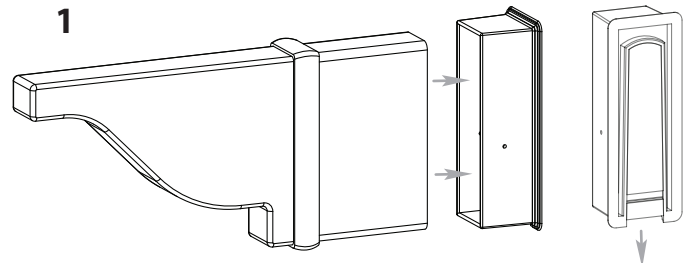
Please note the orientation of the decorative end and the direction of the bracket opening.

2

Fasten bracket with two 5/8" screws through the pre-drilled holes.

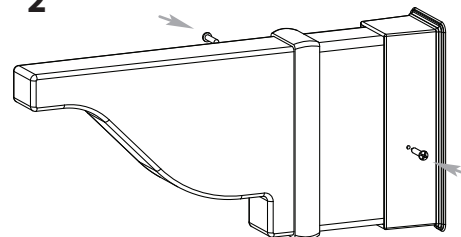
3

Repeat for remaining seven pergola decorative end cap assemblies.



Opening Facing Down

2



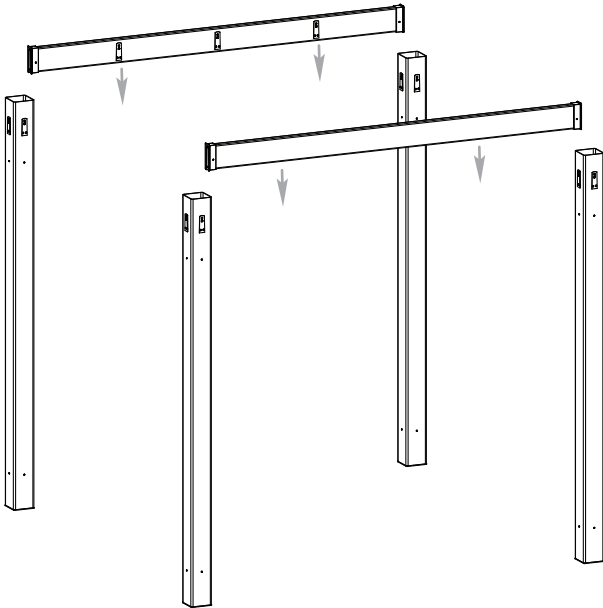
STEP EIGHT

Beams, Rafters, & Decorative End Cap Placement

Using a helper and two ladders proceed to complete the following steps:

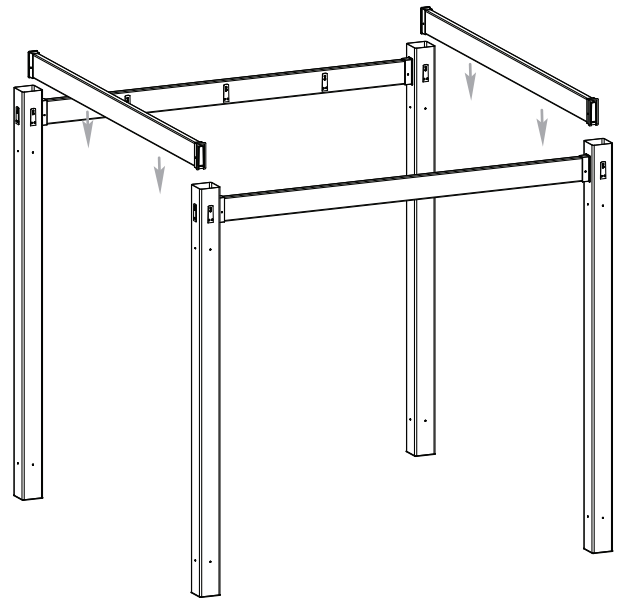
1

Slide the two beam with bracket assemblies between two opposite posts as shown.



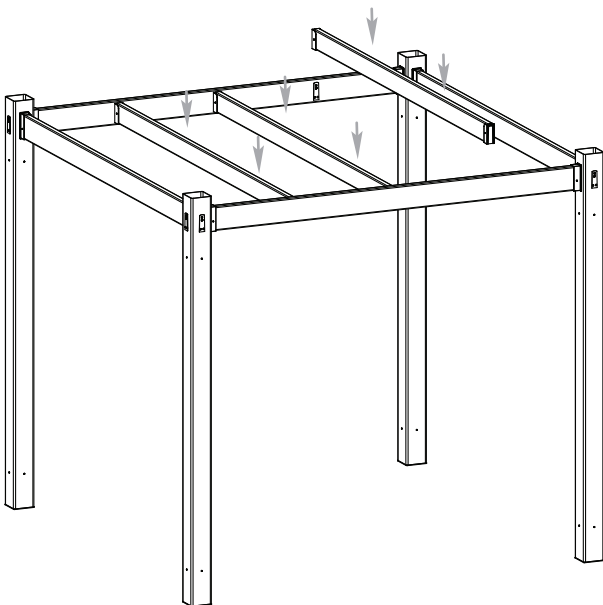
2

Slide the two other two beam assemblies between two opposite posts as shown.



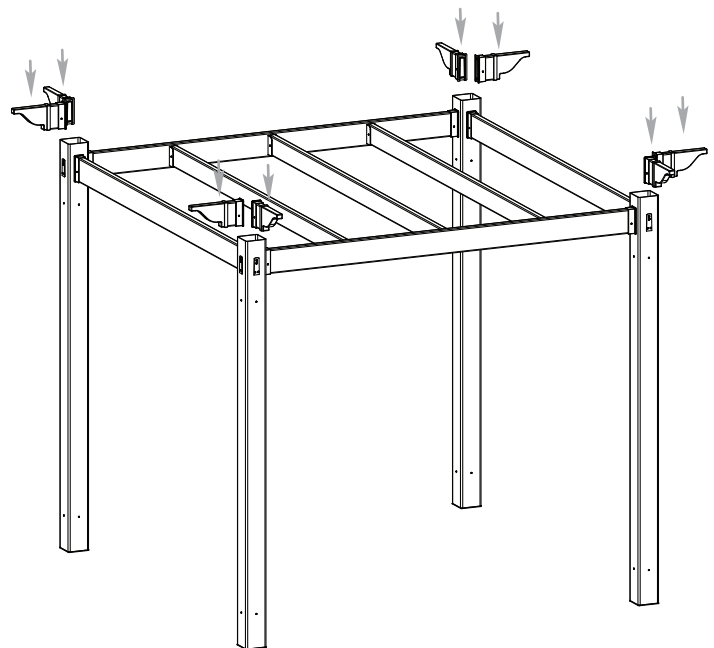
3

Slide the three rafter assemblies between two beams with brackets as shown.



4

Slide the eight decorative end cap assemblies at the end of the posts as shown.



STEP NINE

Shade Slat Assembly

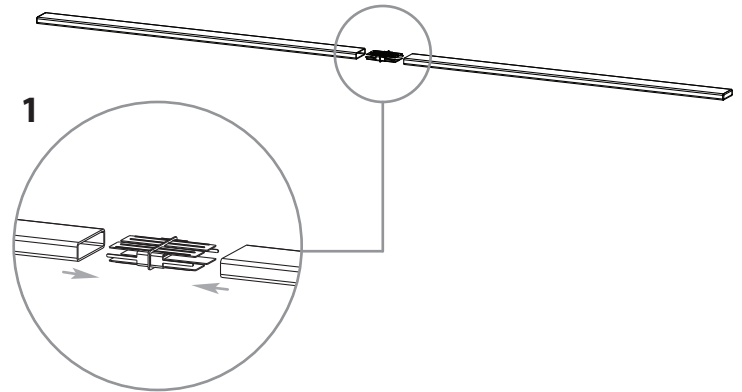
1

Assemble shade slats by joining two slats with a joiner. Push firmly until extrusion bottoms out over the joiner.

No screws are necessary.

2

Repeat for remaining four shade slat assemblies.



STEP TEN

Shade Slats Installation

The 7/8" x 3" shade slats are designed to be installed with 13 1/4" spacing between each slat.

1

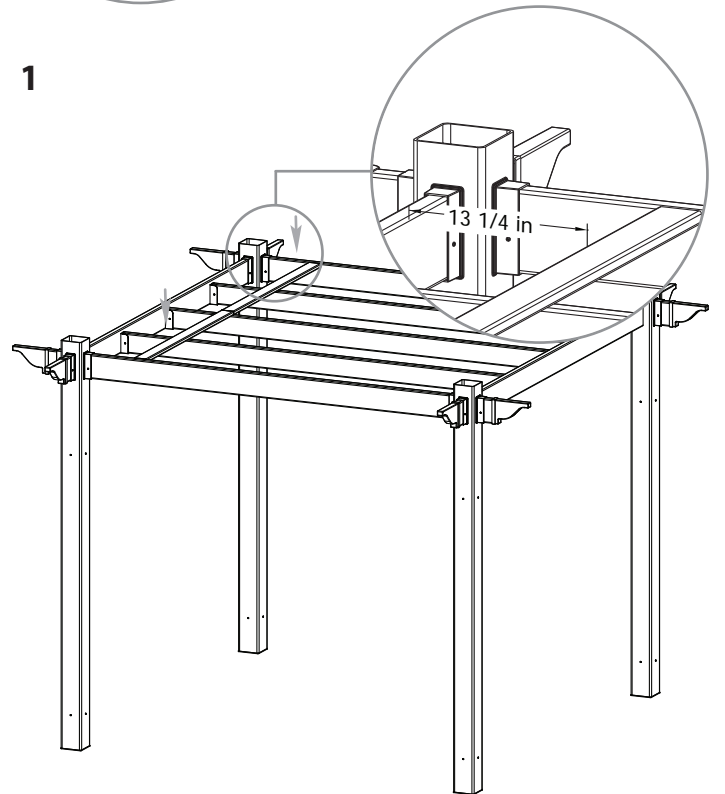
Install first shade slat assembly 13 1/4" away from the outer beam.

2

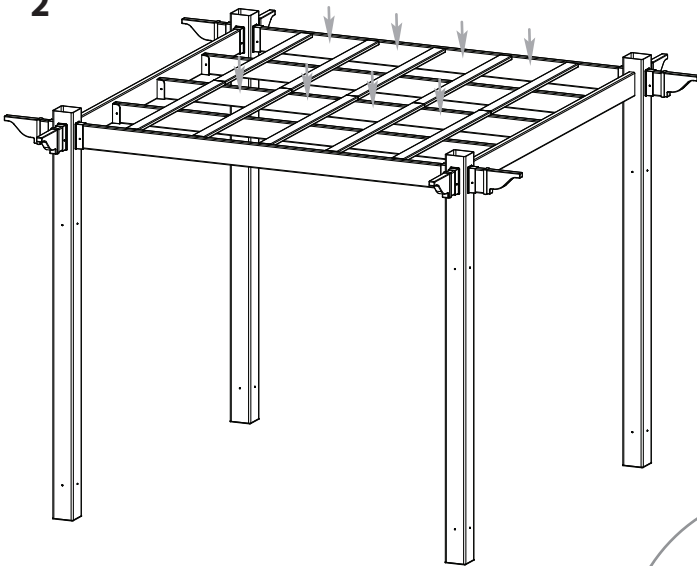
Install the rest of the shade slat at the 13 1/4" spacing.

3

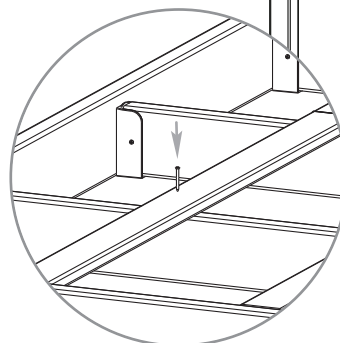
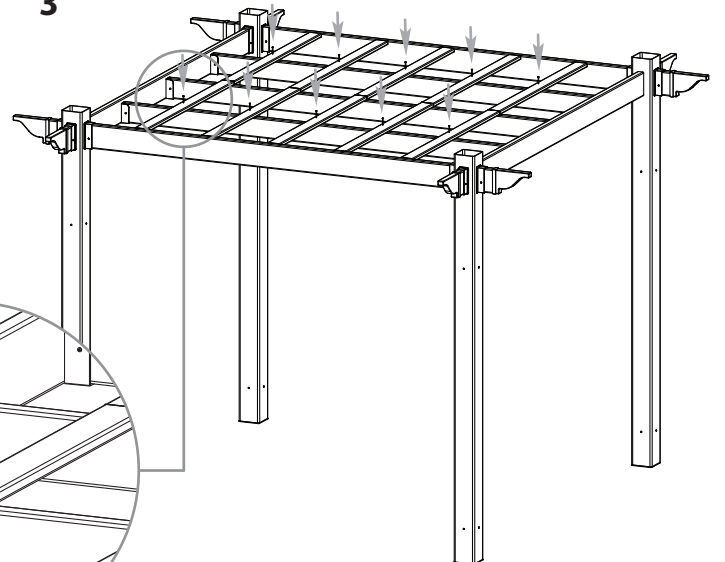
Install one 1 1/2" screw at each intersection of rafter and shade slat as shown.



2



3



STEP ELEVEN

Pergola Brace Assembly

1

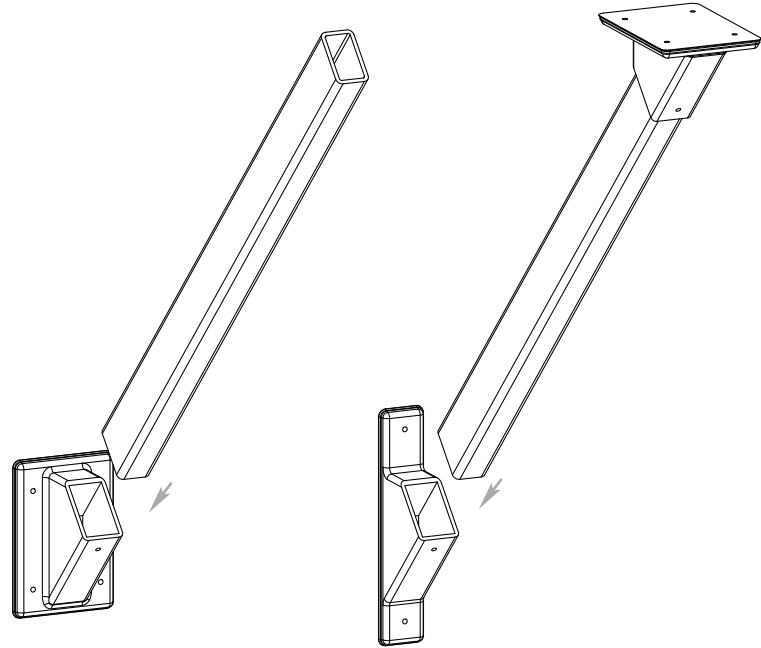
Temporarily fit a post brace bracket and beam brace bracket onto each end of a brace, ensuring that the brace is bottomed out in both brackets.

2

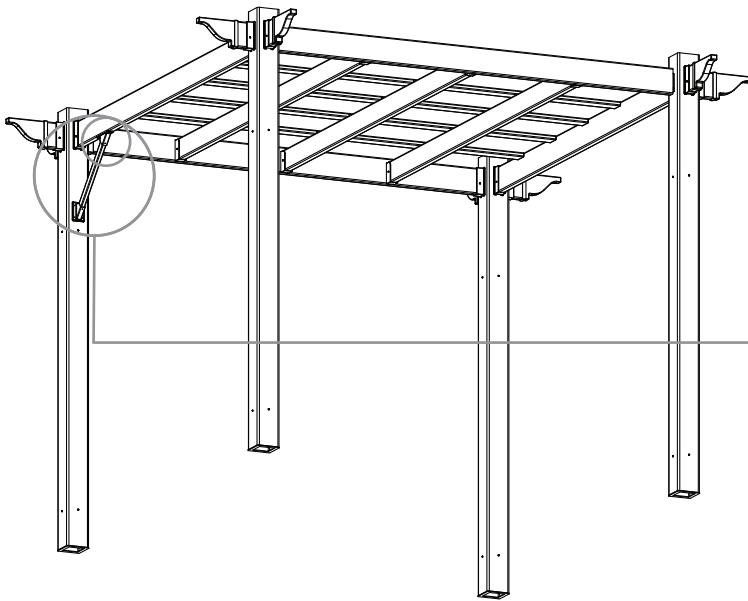
Position the temporary assembly against the post and the underside of the beam, ensuring the brackets are centered on the post and beam.

3

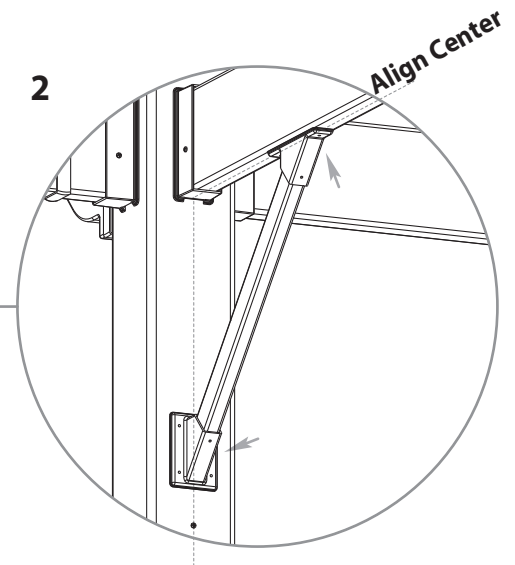
With a pencil, mark the position of the beam brace bracket on the beam (a light pencil mark will do, on the front and back of the beam).



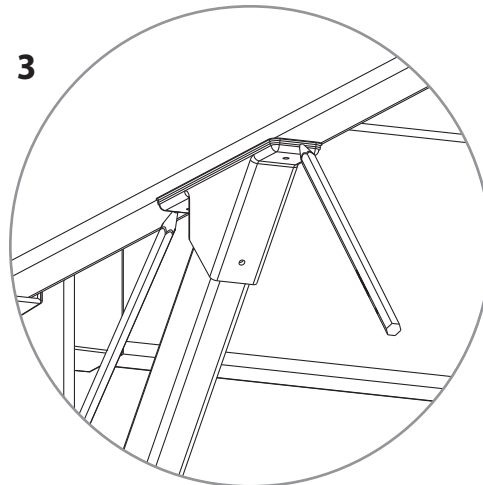
1



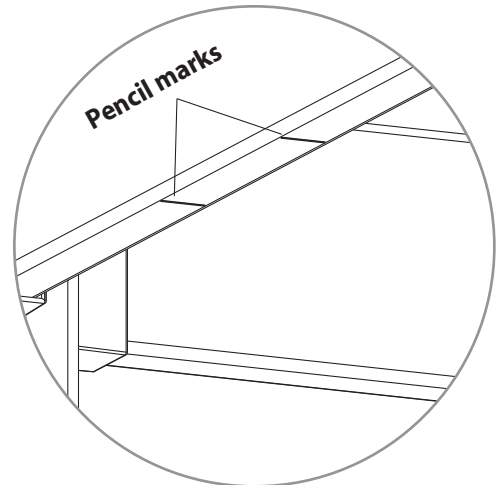
2



3



Pencil marks



STEP TWELVE

Pergola Brace Installation

4

Remove the beam brace bracket from the brace, and position it on the beam in between the pencil marks and screw it onto the beam using two 1 1/2" screws.

5

From an angled approach, slide the brace (with the post bracket still attached) into the beam brace bracket, ensuring that it bottoms out.

6

With the brace bottomed out inside the post brace bracket, center it on the post and secure with four 1 1/2" screws.

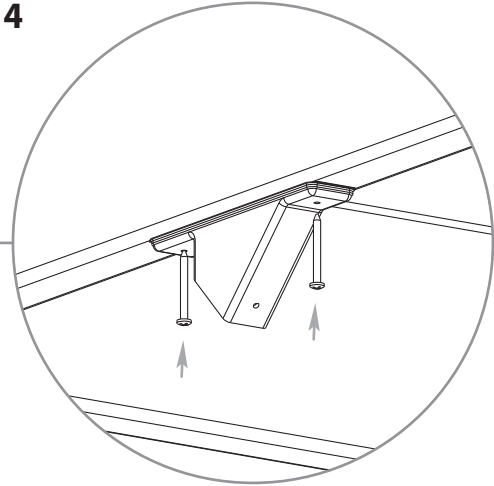
7

Lock the braces into the brackets using two 5/8" screws as illustrated.

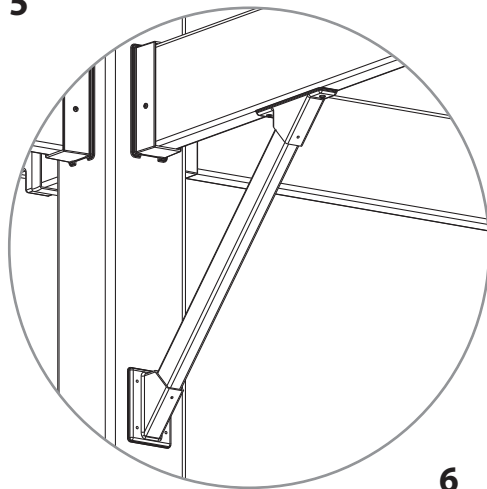
8

Repeat for the remaining 7 pergola brace assemblies.

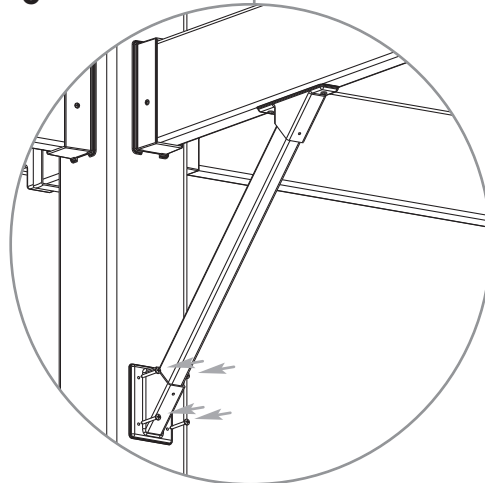
4



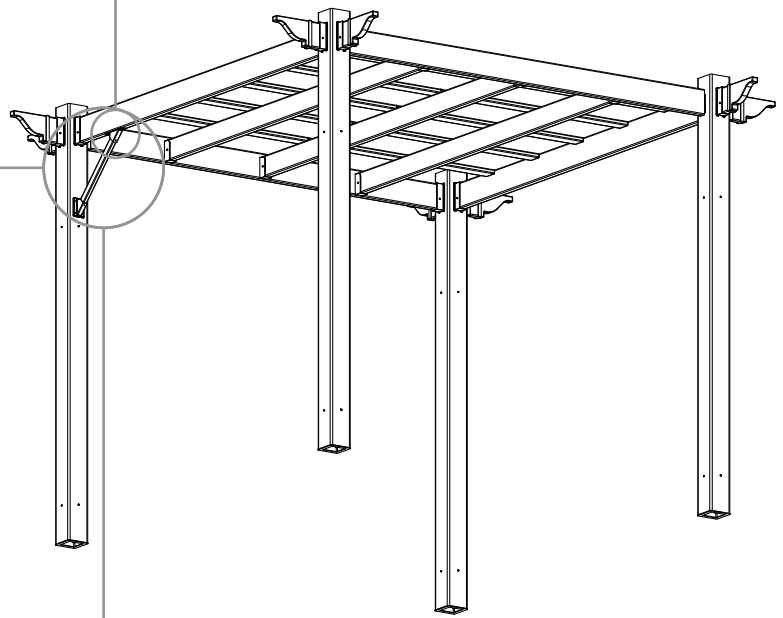
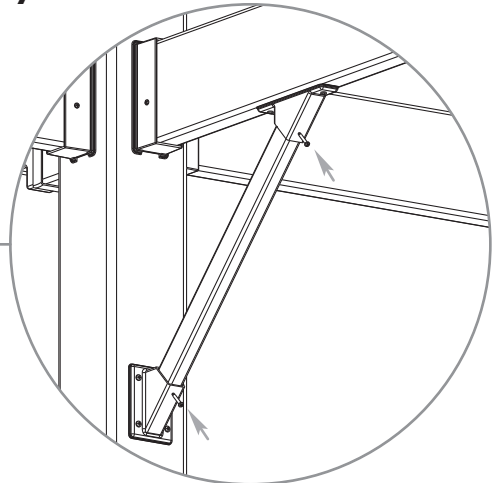
5



6



7



STEP THIRTEEN

Post Caps Installation

1

Place the post caps onto the posts as shown.

