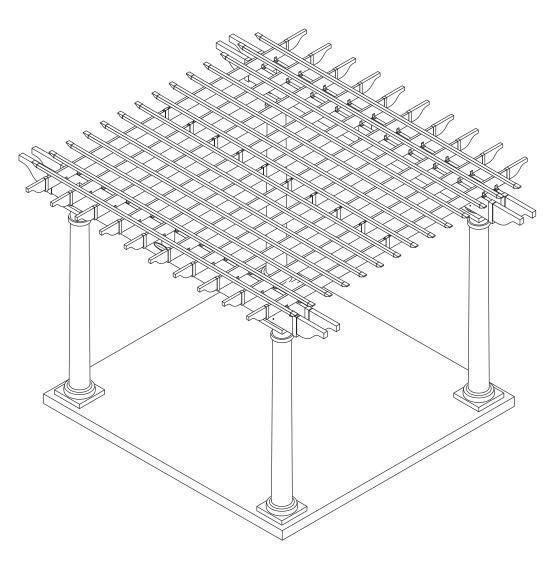


# Free Standing Pergola ASSEMBLY INSTRUCTIONS



Quality Control Number: Numéro de controle de qualitié: Número de control de calidad: Includes instructions for 8' x 8', 8' x 12', 10' x 14', 10' x 16', 12' x 16', 14' x 14', or 14' x 20' pergola

### Before You Begin...

• Consult your local authorities for any permits required to construct pergola.

Prior to the construction of your pergola, check with the local building code official to review any required permits or building limitations.

• COMPLETE SITE PREPARATION AND FOUNDATION CONSTRUCTION BEFORE UNPACKING ALL PARTS.

A level and sturdy foundation is required before pergola construction can begin.

Read instructions thoroughly prior to assembly.

This kit contains parts that can be damaged if assembled incorrectly or in the wrong sequence.

· Please follow instructions.

If you have questions or concerns with this product **DO NOT** return to store.

Assembly questions? Missing parts? Call 1-800-444-3310.

Assistance is required.

Due to the size of the parts, at least two people are required to handle, fit and secure pergola components.

• These instructions cover a 14' x 14' size pergola.

The assembly process is the same for each pergola size, but some steps will differ slightly, depending on the size you have purchased.

• Foundation mounting hardware varies with each application.

Read manual first and contact your local building supply retailer for recommendations for your application.

• If you live in a high-wind area, you my want to purchase the high-wind brackets (C), sold separately.

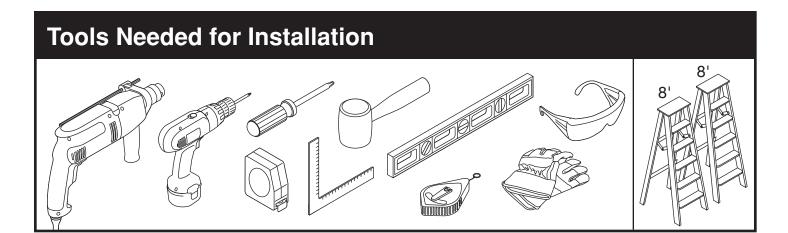
# A

### **CAUTION**

- Pergola not intended for use in extreme weather conditions.
- DO NOT stand, sit, or store items on top of pergola.
- Handle carefully in extreme temperatures.
- Repair or replace broken parts immediately. Call 1-800-444-3310 for replacement parts.
- Suncast is not responsible for damage caused by weather or misuse.
- At regular intervals inspect your pergola to make sure that assembly integrity has been maintained.
- Periodically check that the location you have chosen to set your pergola is still level.
- Avoid excess heat from any auxiliary source.
- Any additional holes drilled into parts could cause unsafe conditions.
- Follow manufacturer safety instructions when using ladder.
- DO NOT anchor to paver bricks. Foundation must be a solid surface.
- Exercise caution using a lawn mower, edge trimmer or other yard equipment near pergola.

### Pergola Safety and Care

- Wash pergola with garden hose or mild detergent solution and soft cloth. **DO NOT** use a stiff brush or abrasive cleaner as that could damage pergola.
- Hot items, such as recently used grills, blowtorches, etc., must not be used in or near the pergola.



### **Assembly Day Tips**

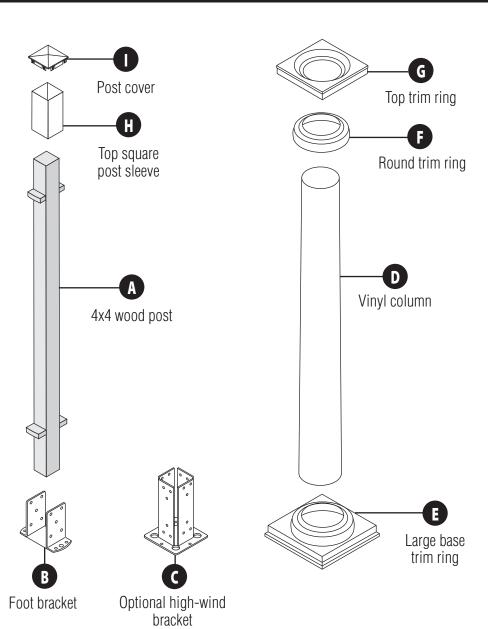
- Complete site preparation and foundation construction before unpacking parts and beginning assembly.
- Take care when removing vinyl parts. Other parts are packed inside them.
- DO NOT attempt to assemble on a day with strong winds.
- DO NOT attempt to assemble on days when temperature is below 32 degrees.
- Set aside appropriate amount of time to completely assemble pergola. See the chart below for approximate assembly times.

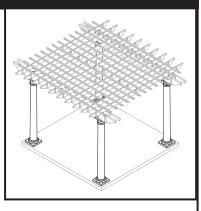
8x8	8x12	10x14	10x16	12x16	14x14	14x20
5 hours	6 hours	6 hours	7 hours	8 hours	8 hours	9 hours

- Make sure you have assistance nearby to lift and secure parts in place.
- Wear light duty work gloves while assembling pergola.
- If you have questions on assembly, please call 1-800-444-3310.

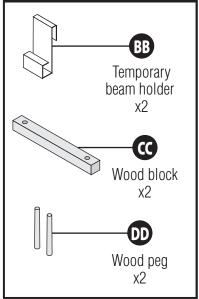
**Note:** This product contains parts that are used in different orientations to construct the pergola. Please take note of the orientation of the parts shown throughout this instruction manual. Failure to follow instructions could result in damage to parts. Suncast is not responsible for replacing parts lost or damaged due to incorrect assembly.

### **Parts**

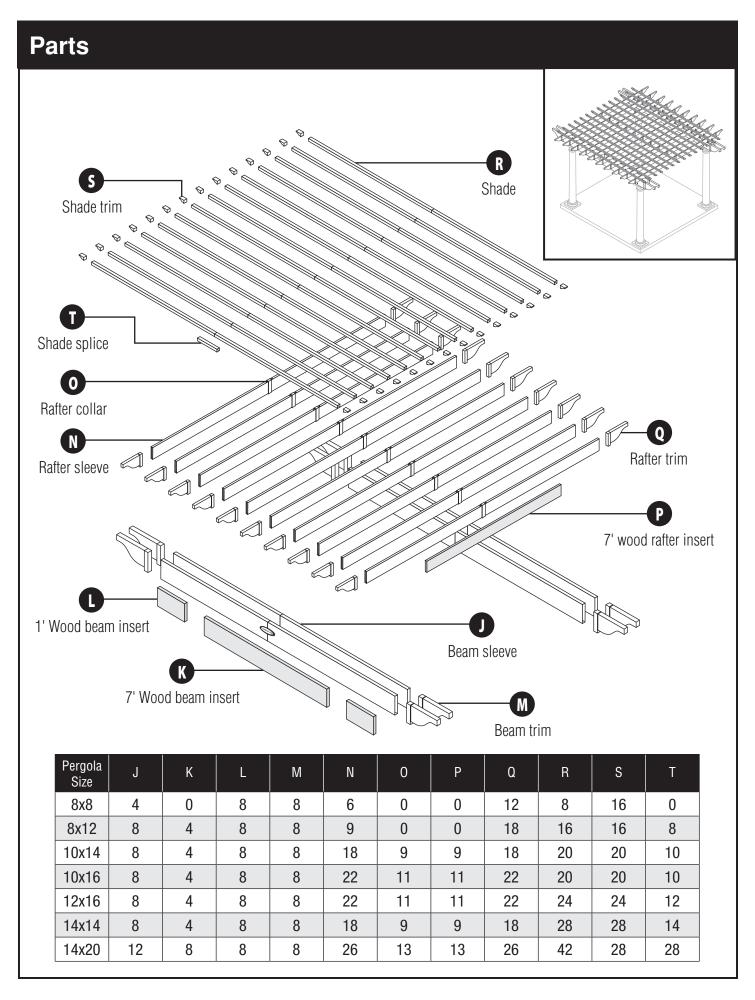




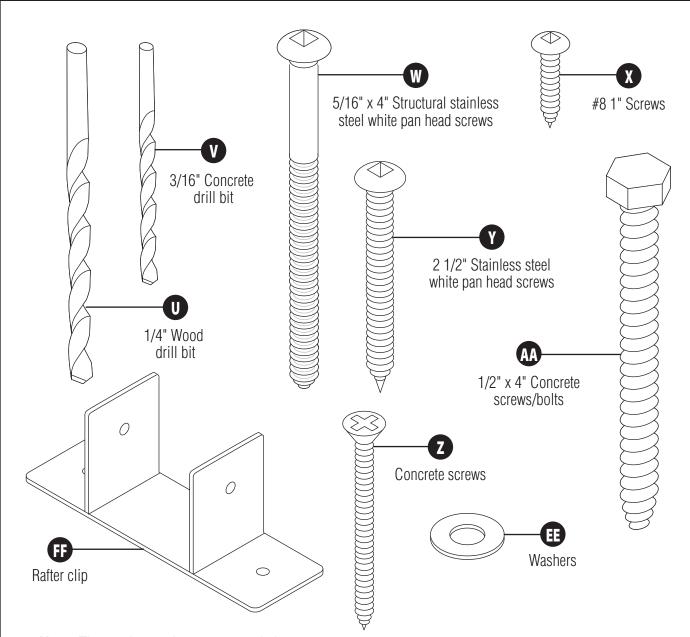
### Temporary Beam Holder



Pergola Size	A	В	С	D	Е	F	G	Н	I
8x8	4	4	4	4	4	4	4	4	4
8x12	4	4	4	4	4	4	4	4	4
10x14	4	4	4	4	4	4	4	4	4
10x16	6	6	6	6	6	6	6	6	6
12x16	6	6	6	6	6	6	6	6	6
14x14	4	4	4	4	4	4	4	4	4
14x20	6	6	6	6	6	6	6	6	6



# Hardware



Note: These pieces shown at actual size.

Pergola Size	U	V	W	Х	Υ	Z	AA	EE	FF
8x8	1	1	18	128	72	17	8	16	25
8x12	1	1	18	204	96	17	8	16	37
10x14	1	1	18	208	124	17	8	16	37
10x16	1	1	26	244	152	25	12	16	45
12x16	1	1	26	248	176	25	12	16	45
14x14	1	1	18	216	164	17	8	16	37
14x20	1	1	26	320	242	25	12	16	53

### Site preparation, unpacking, and platform construction

(Materials NOT supplied with Pergola Kit)

**Note:** Site preparation and platform construction and Support Post Installation steps may require professional assistance to be installed correctly.

Please read all manual steps thoroughly before starting this project.

**Note:** Site preparation and platform construction are required for this pergola. Placing the pergola on the ground without any type of foundation is not recommended. Suncast is not responsible for replacing parts damaged or property lost due to construction without a foundation or platform.

Complete the site preparation and platform construction before unpacking parts.

#### To prepare your pergola site, follow these steps:

- 1) Consult your local authorities and neighborhood association for building codes and covenants before beginning foundation or erecting pergola.
- 2) Consult your local building supply retailer to assist you in determining the best foundation or platform method for your application. The building supply retailer can also help you determine what anchoring hardware you will need once the foundation or platform method has been determined. Bring this manual with you to the retailer so they can see the scope of the project.
- 3) Before any digging, check with local utilities to determine location of buried cables, pipes, etc.
- 4) A four inch thick concrete slab or concrete piers are recommended as the foundation.
  - If a wood platform is chosen as the foundation, use exterior grade wood.

Note: DO NOT erect pergola on paver bricks. Foundation must be a solid surface.

If you plan to erect the pergola on an existing deck, consult local authorities for building codes and make sure that the structure is sound and can hold the additional weight of the pergola (see chart below). Consult local building supply retailer to determine the best method and hardware for your application.

8x8	8x12	10x14	10x16	12x16	14x14	14x20
335 lbs	405 lbs	565 lbs	745 lbs	865 lbs	683 lbs	985 lbs

#### 5) Preparing the building site:

- The ground should slope away from the foundation area to provide drainage.
- The foundation surface must be flat and level.
- Follow local building codes for a proper vapor barrier.

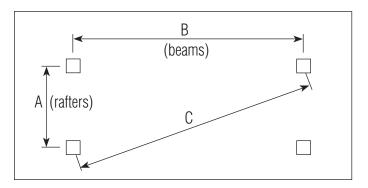
#### For installation on concrete pillars:

Using the chart provided on Page 8, mark the location of the center of each post. Prepare a hole that is 16 inches in diameter, adjusting the depth as needed for the area of the country that you are in. For example, because of frost issues, the northern part of the US requires a deeper hole than the southern part. Make sure that the finished height of the concrete is exactly the same for all of the post foundations.

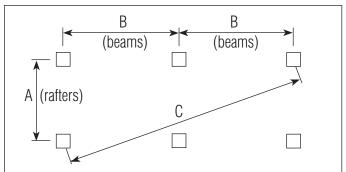
# Specs for post and beam layout

Proper site preparation requires that the layout is square. Use the measurements on the chart provided to determine the correct spacing of the posts (A & B). The diagonal measurement (C) will ensure that the pergola is square.

#### Four post layout



#### Six post layout

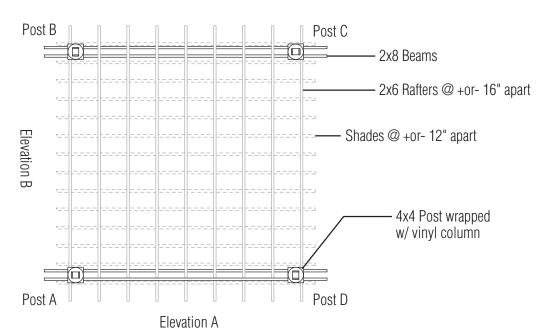


#### **Specs and Dimensions**

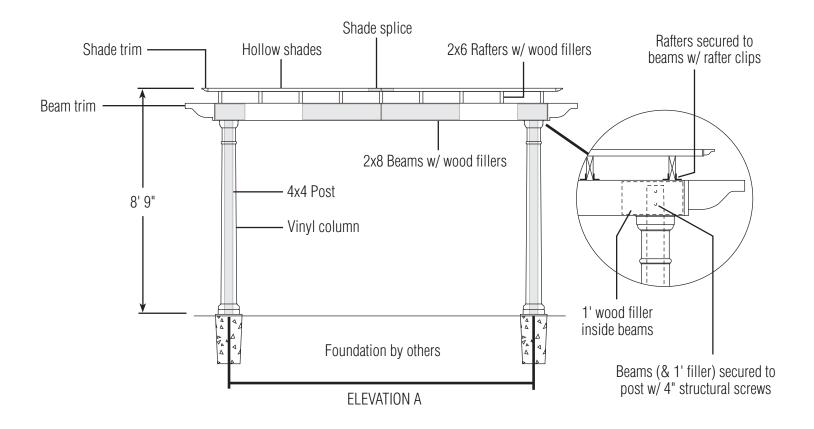
Top size in feet	Rafter length including ends in inches	Beam length including ends in inches	# of posts	# of double beams	Depth (A) in inches	Width (B) in inches	Diagonal (C) in inches
8x8	106	114	4	2	74	74	104.65
8x12	106	158	4	2	74	118	139.28
10x14	130	182	4	2	96	142	171.41
10x16	130	204	6	2	96	82	190.03
12x16	154	204	6	2	120	82	203.21
14x14	178	182	4	2	144	142	202.24
14x20	178	261	6	2	144	110.50	263.77

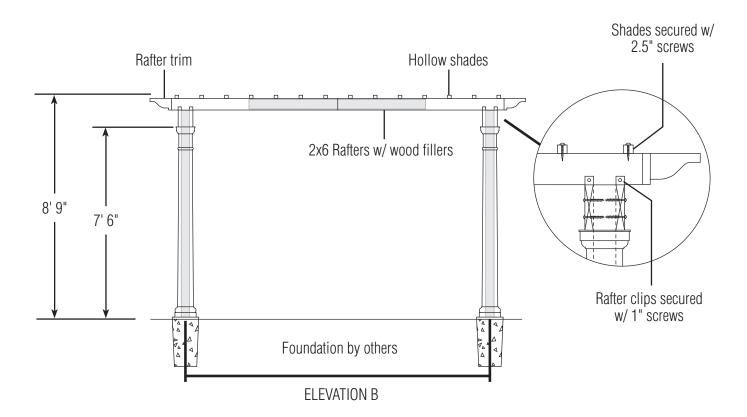
**Note:** The measurements on the chart are from center to center of the posts.



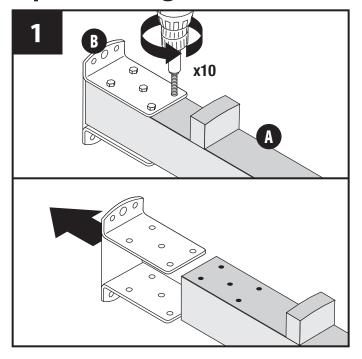


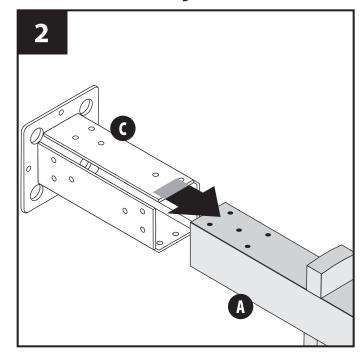
## **Elevations**





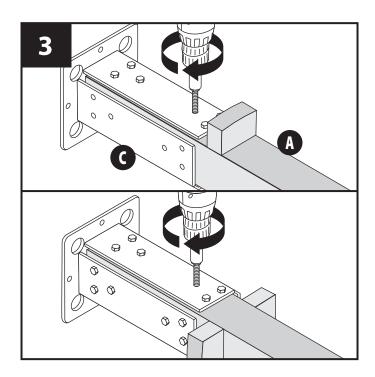
# **Optional High-Wind Bracket Pre-assembly**





If you have chosen to purchase the high-wind brackets (C), remove the screws in the existing brackets (B). Set brackets aside and save all screws for later.

Slide the high-wind bracket (C) onto the bottom of the post (A), making sure that it is snug against the bottom.

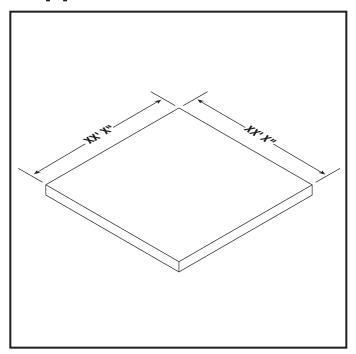


Attach the high-wind bracket (C) using the screws that were removed in Step 1. The high-wind bracket uses an additional 14 screws that are included.

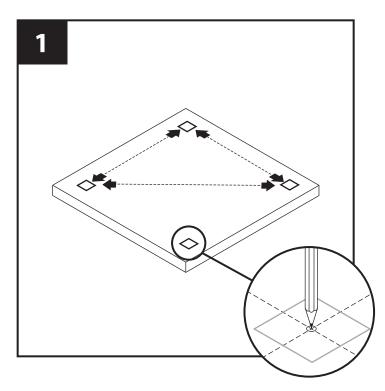


The post with the high-wind bracket should look as pictured.

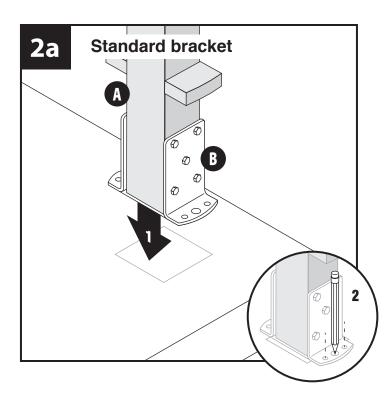
# **Support Post Installation**



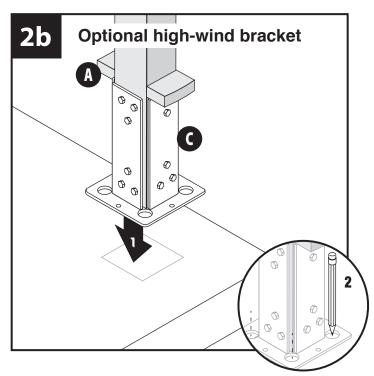
Using the chart on page 8, determine post layout.



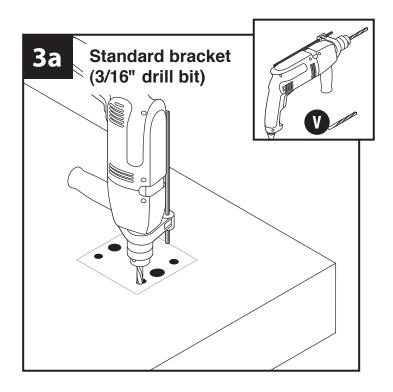
Mark each post location. Each mark will be the exact center of the posts.

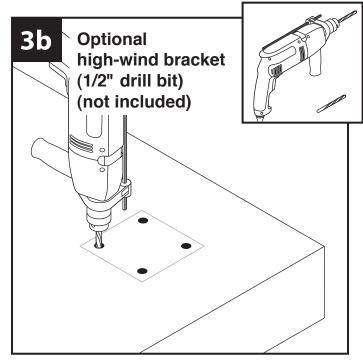


Position post (A) and foot bracket (B) over mark and trace holes in bracket.



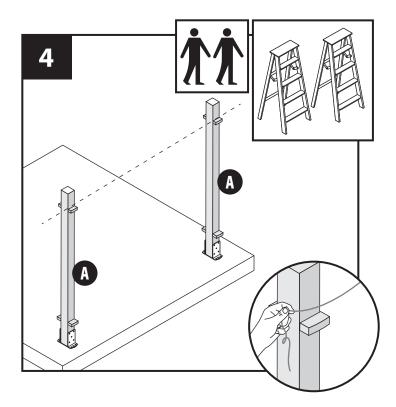
For high wind areas, position post (A) and high-wind bracket (C) over mark and trace holes in bracket.

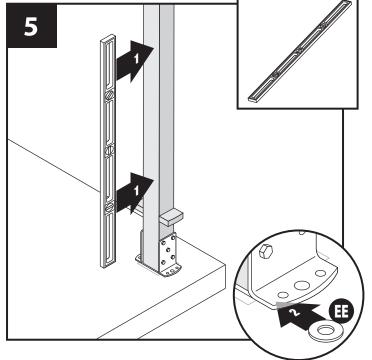




Drill holes using the 3/16" concrete drill bit (V) provided.

For high-wind areas, use a 1/2" concrete drill bit (not included) to drill holes a minimum of 5" deep.

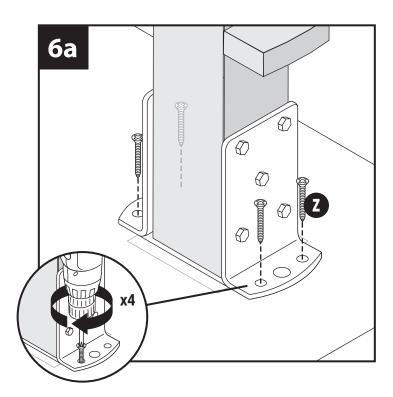




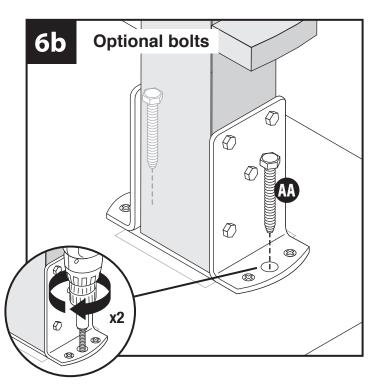
Position wood posts (A) so that they are parallel with each other. Using a string, align the tops of the posts. This will ensure that when the beams are attached, they will fit properly against the posts.

Note: The bottom of the posts may not be perfectly parallel. This is common and will not be visible once the vinyl columns are in place.

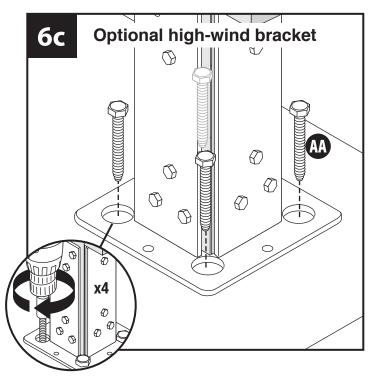
Position wood post over holes and plumb using a four foot level. If needed, use supplied washers to plumb posts. *Note:* The vinyl column covers bracket, this is your last opportunity to secure and plumb the posts.



Use four concrete screws (Z) to secure. Tighten securely. **DO NOT** proceed with post covers until all wood posts are plumb and mounted securely.



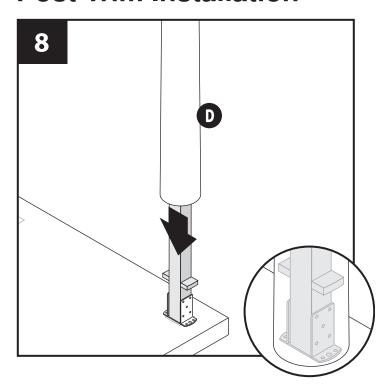
As an option, additional 1/2" x 4" concrete screws/bolts (AA)can be installed.



Use concrete screws/bolts (AA) to secure brackets. Tighten securely. **DO NOT** proceed with post covers until all wood posts are plumb and mounted securely.

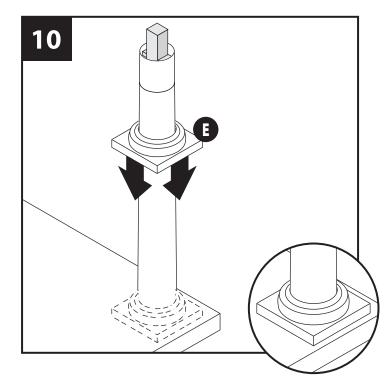
Repeat Steps 2-6 for remaining posts.

### **Post Trim Installation**

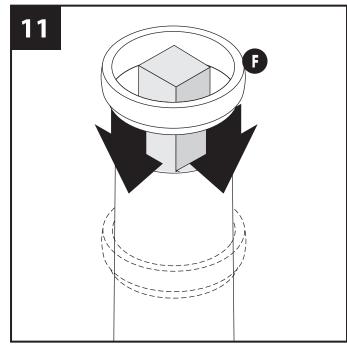


Slide vinyl column (D) over wood post. Fit lower portion of vinyl column over wood spacers, until cover rests securely on concrete surface.

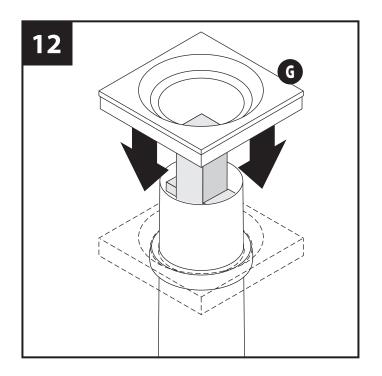
Unpack post trim boxes and position trim close to each post in the order shown.

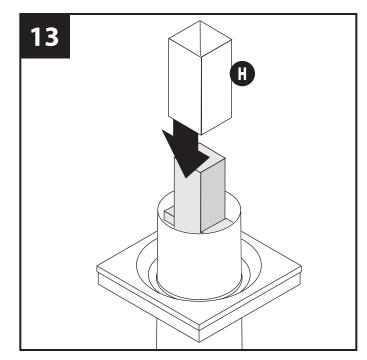


Slide the large base trim ring (E) over the top of the column until it rests on the concrete surface.



Slide round trim ring (F) down column until it rests on the raised ledge.





Slide top trim ring (G) over column, making sure the rounded part is facing down and the square part is facing up.

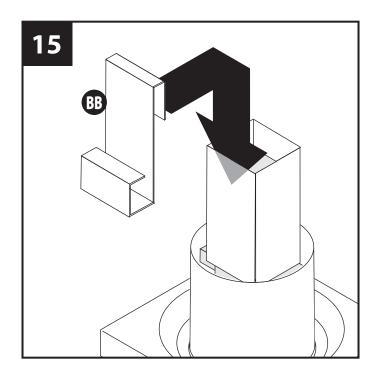
Slide top square post sleeve (H) over wood post.

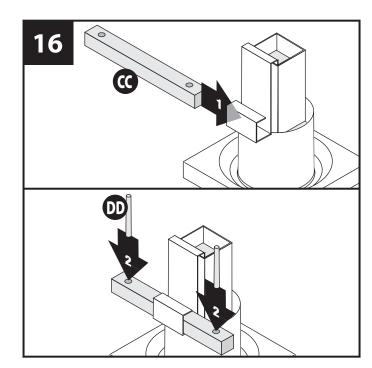


14

Repeat Steps 10-13 for remaining posts.

This is how the top post trim should look.



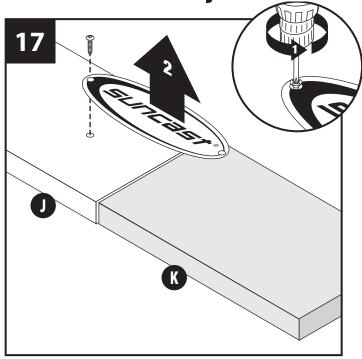


Hook temporary beam holder (BB) on top of the square post sleeve, facing direction of post, which will be supporting the opposite end of the beam. Repeat for opposite post.

Insert wood block (CC), making sure the two holes in the wood block are facing upward. Insert a wood peg (DD) in each hole. Repeat for opposite post.



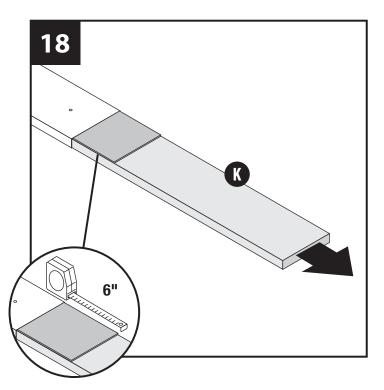
This is how the temporary beam holder should look when it is positioned to hold the beam during beam installation. **Beam Assembly** 



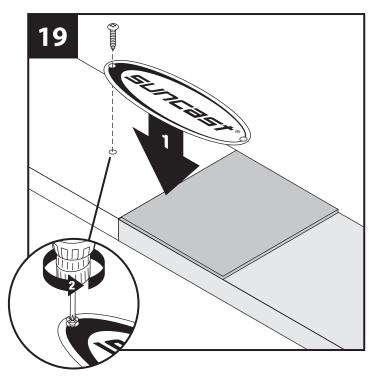
Unwrap beam sleeve (J) with the Suncast logo. Unscrew logo and remove. Set logo plate and gold screws aside to be reattached later.



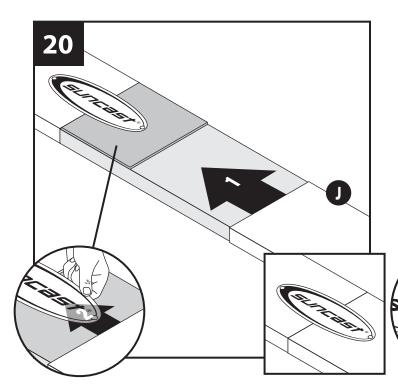
Keep logo plate with screws.

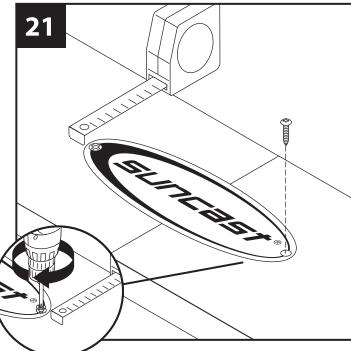


Slide 7' wood beam insert (K) out until 6" of the filler piece is exposed.



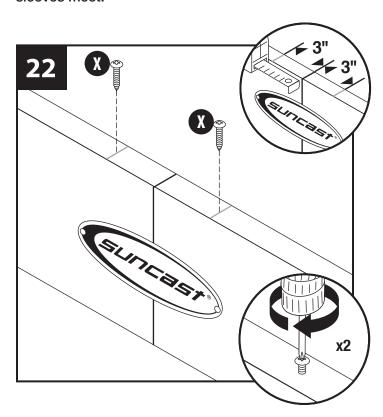
Re-attach one side of the logo plate.



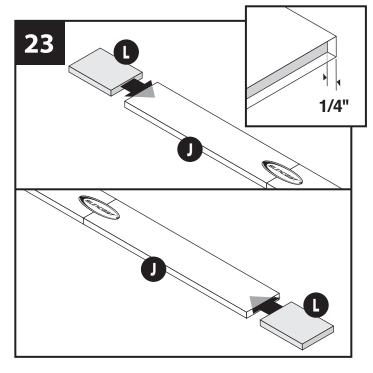


Slip opposite beam sleeve (J) over wood beam insert. Lift logo plate while sliding beam sleeve underneath. The seam should be snug where two sleeves meet.

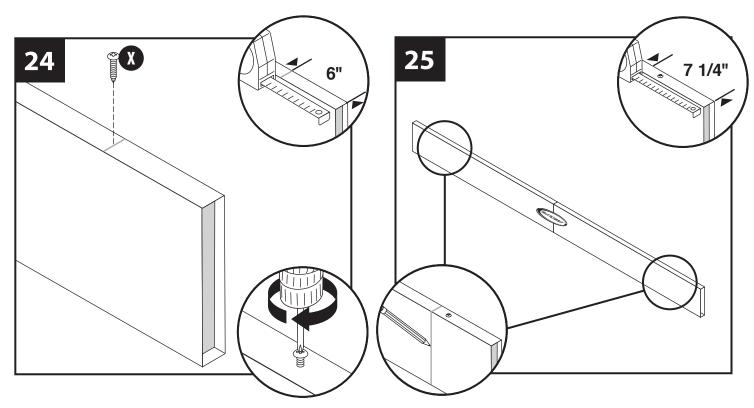
Measure the placement of the existing screw in the logo plate and transfer the measurement to the other end of the logo plate. Insert and tighten remaining screw.



Measure 3" from the splice on both sides. Fasten two 1" screws (X) on the top of both beams.



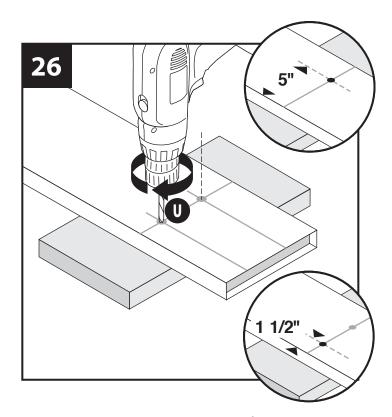
Unpack 1' wood beam inserts (L). Slide wood beam insert into hollow ends of beam sleeve (J). Wood beam insert should be flush with end or recessed 1/4".



Fasten a 1" screw (X) on the top edge of beam, 6" from the end of the beam.

**Note:** Top edge of beam is determined by the logo plate orientation.

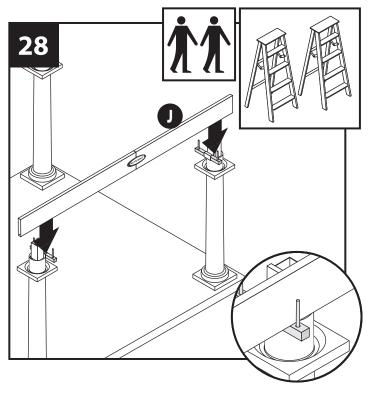
Measure and mark a line 7 1/4" in from the end of beam. Repeat on other end of beam. *Note:* Bottom edge of beam is determined by the logo plate orientation.



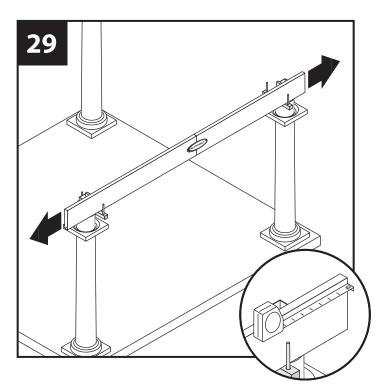
Measure and mark holes 5" and 1 1/2" from bottom of beam. Predrill holes making sure that the hole that is 1 1/2" from the edge is towards the bottom of the beam.

**27** 

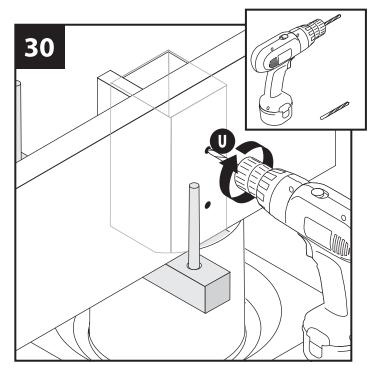
Repeat Steps 17-26 for remaining beams.



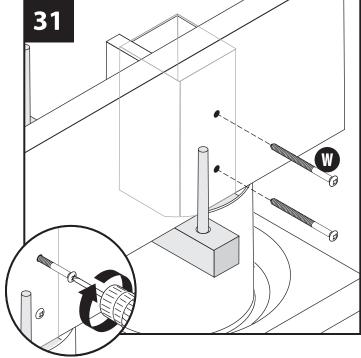
Position two 8' step ladders next to two posts. Double check the orientation of the temporary beam holders and make sure they are positioned to support the beams. Ensure the Suncast logo is facing outward and place the beam (J) onto the temporary beam holders.



Center the beam on the two posts, making sure that an equal amount of beam protrudes past each post.



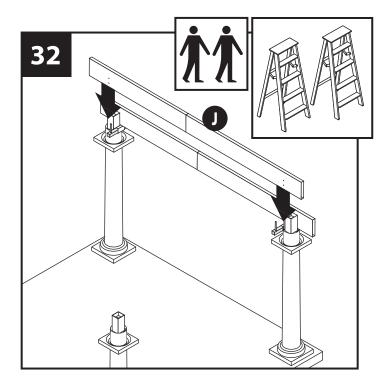
Using the pre-drilled holes that you drilled in Step 26, drill a 1/4" pilot hole into the post. The pilot hole should go through the post vinyl sleeve and into the wood 1/4".



Make sure that the beam is resting on top of the vinyl column and pressed securely against the 4" square posts. Secure with two 4" pan head screws (W) through the beam and into the post. Repeat on opposite end of beam.



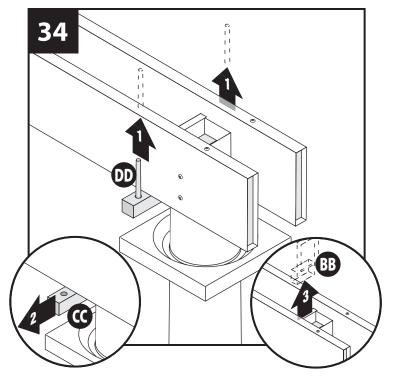




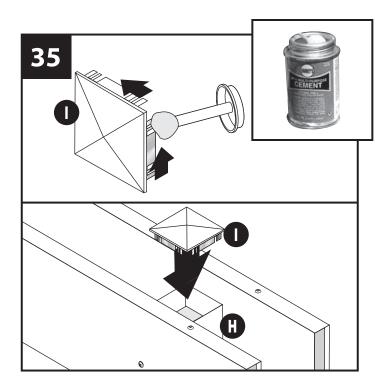
Position next assembled beam (J) on opposite side of post. Make sure the pre-drilled holes are facing outward and towards the bottom.

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Repeat steps 28-31 to install opposite beam.

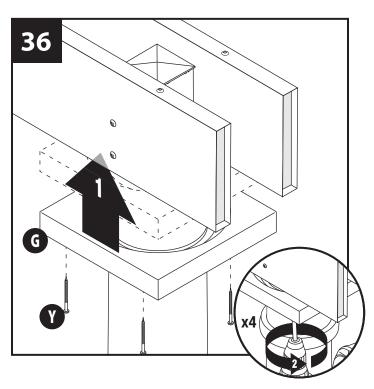


Remove wood pegs (DD) and slide out wood blocks (CC) to remove temporary beam holders (BB). Reinstall them, as needed, on remaining posts.



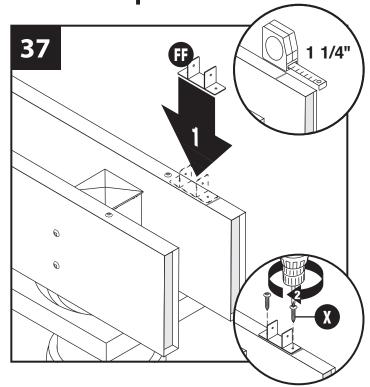
Apply cement to the flange of post cover (I). Promptly slip post cover over the top of the top square post sleeve (H). Repeat for remaining posts.

Note: It may be necessary to loosen the top of the beams to allow the cover to fit securely on post sleeve.

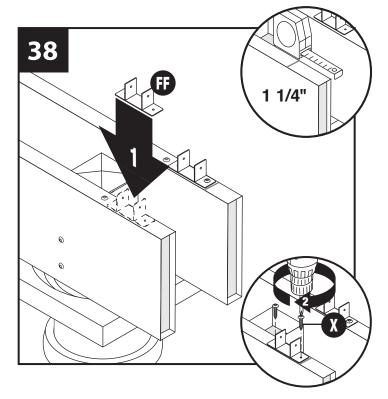


Hold the top trim ring (G) against the beams and flush around the edges. Using four 2 1/2" pan head screws (Y), secure trim to beams. Repeat for other post.

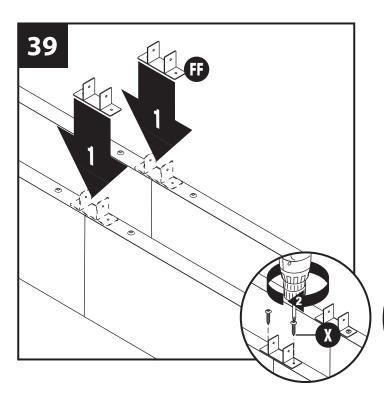
## **Rafter Clip Installation**



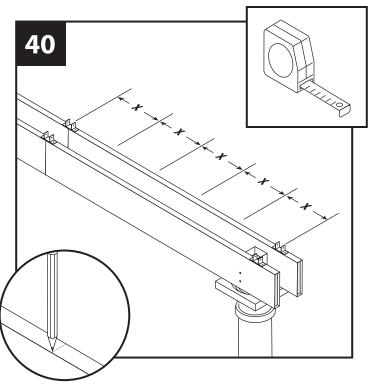
Attach a rafter clip (FF) exactly 1 1/4" from the end of beam with two 1" screws (X).



Attach a rafter clip (FF) on the adjacent beam exactly 1 1/4" from the end of beam with two 1" screws (X).

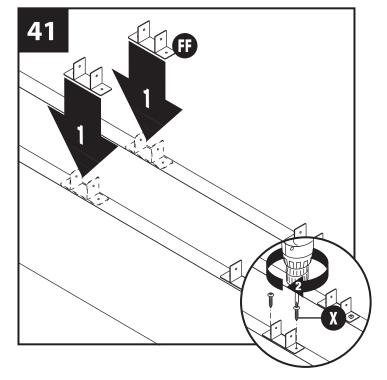


Attach a rafter clip (FF) directly over the top of the beam splice in the center of each beam with two 1" screws (X).



Refer to the chart to determine rafter clip spacing. Using a tape measure and pencil, mark the location of rafter clips.

Pergola Size	Rafter Spacing (on center)	Number of Rafters
8x8	16 3/4"	6
8x12	16"	9
10x14	19"	9
10x16	17 3/8"	11
12x16	17 3/8"	11
14x14	19"	9
14x20	19 1/4"	13

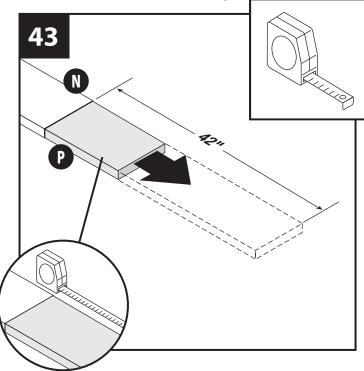


Install remaining rafter clips (FF) using two 1" screws (X) on each clip.

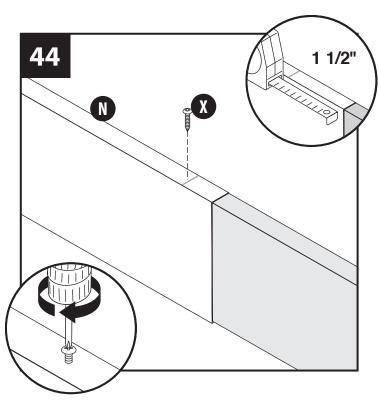
42

Repeat steps 37-41 to install remaining beams and rafter clips.

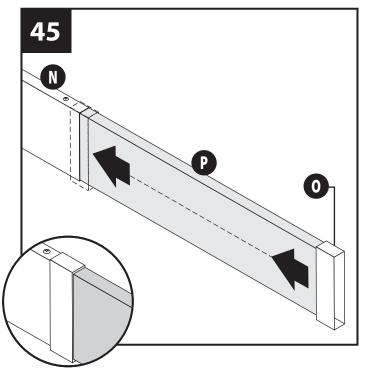
# Rafter Assembly



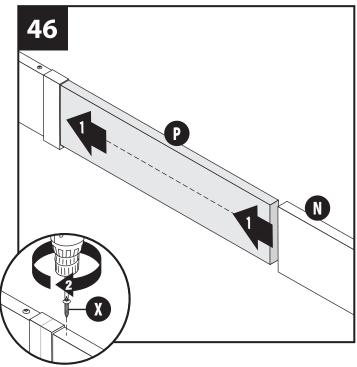
Slide the 7' wood rafter insert (P) out of the rafter sleeve (N) until it protrudes 42".



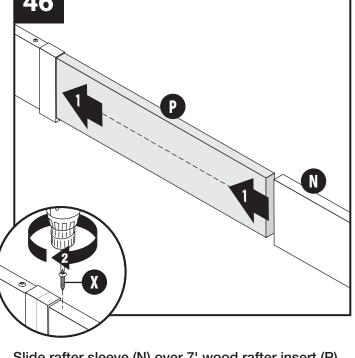
Insert a 1" screw (X) 1 1/2" from the end of the rafter sleeve (N).



Slide rafter collar (O) onto 7' wood rafter insert (P) so that half of it rests on the rafter sleeve (N).



Slide rafter sleeve (N) over 7' wood rafter insert (P) until the two vinyl sleeves are touching. Insert a 1" screw (X) next to the collar.

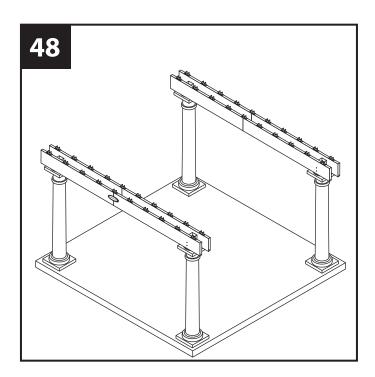


Installing the Rafters

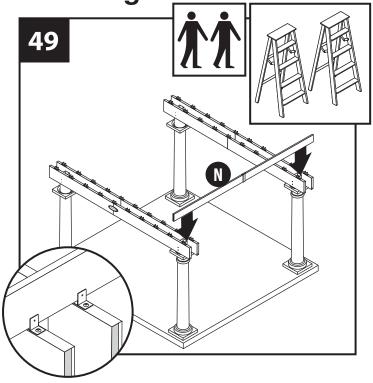
Repeat steps 43-46

to assemble remaining

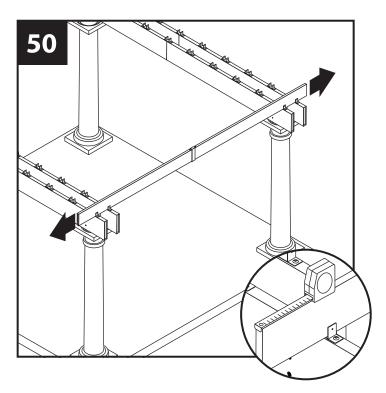
rafters.



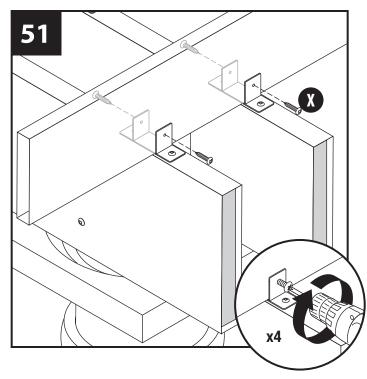
At this point in the assembly process, all of the posts, beams, and rafter clips should be permanently installed. All of the rafters should be assembled and ready to be installed.



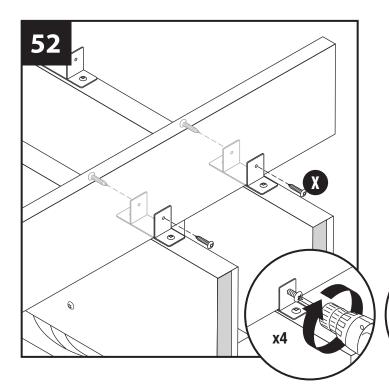
Position two step ladders next to two posts. Place each end of a rafter (N) into the outer most rafter clips on the beams.



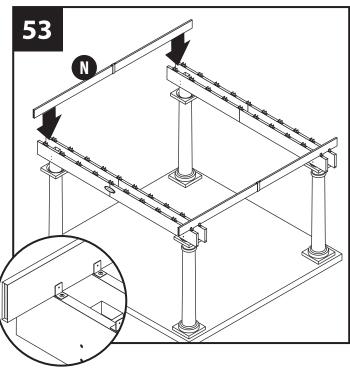
Center the rafter on the beams, by measuring from each end of the rafter to the outside edge of the beam. Both of the measurements on each side of the beam should be equal.



Using four 1" screws (X), secure rafter to the rafter clips.



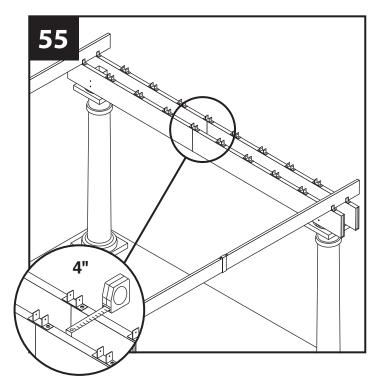
Using four 1" screws (X), secure rafter to the rafter clips on opposite end of beam.



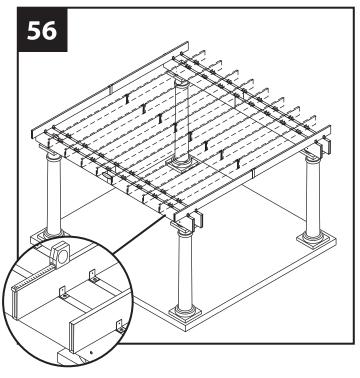
Place each end of a rafter (N) into the outer most clips on the beams.

**54** 

Repeat steps 49-52 to center rafter and secure rafter to rafter clips.



Before moving on, measure the beams at the seam to make sure the spacing between the beams is 4". If needed, temporarily insert a 4" spacer while attaching remaining rafters.

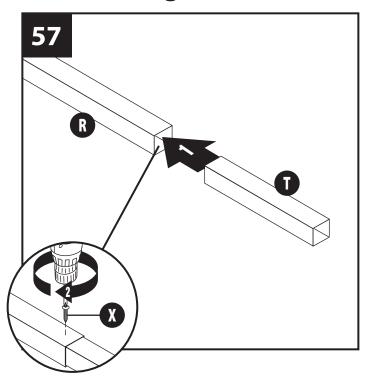


Position the remaining rafters, fitting them inside the rafter clips. **DO NOT** attach any, until all have been centered and positioned. Adjust the rafters as needed, make sure all rafters line up perfectly straight before securing to rafter clips.

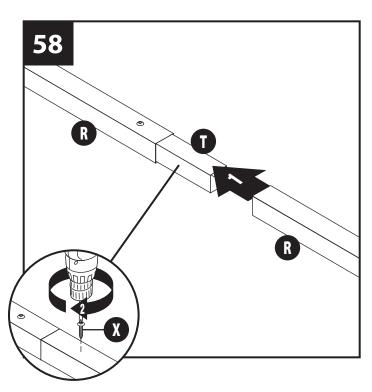


After rafters have been installed the pergola should look like this.

### **Assembling the Shades**

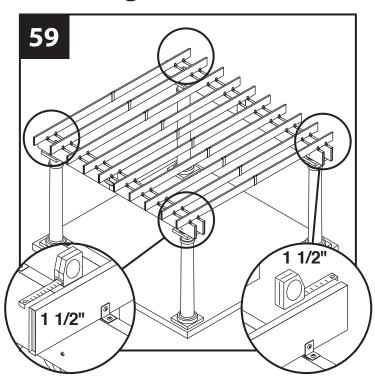


Slide the shade splice (T) halfway into shade (R). Insert a 1" screw (X) about 1" from end of the shade.

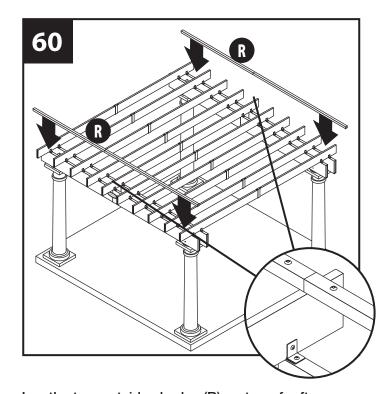


Slide another shade (R) over shade splice (T), until it butts against exisiting shade. Insert a 1" screw (X) about 1" from end of the shade.

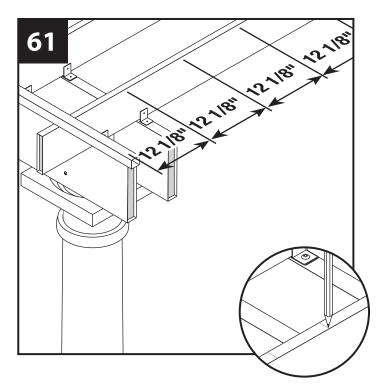
# **Installing the Shades**



Measure 1 1/2" from each end of the outermost rafters to establish the location of the two outside shades.



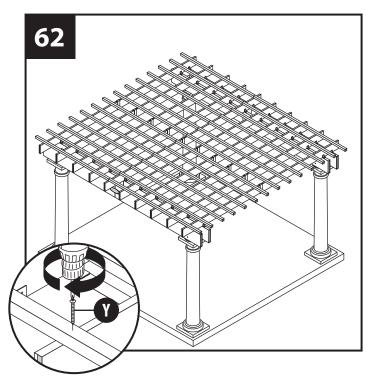
Lay the two outside shades (R) on top of rafters. Make sure that the splice (where the two shades come together) is directly centered over the middle rafter.



Measure and mark rafters 12 1/8" from the center of the first shade for remaining shades.



Prior to fastening the shades, sight the rafters and straighten shades as needed.



After positioning the shades, begin at the corner and fasten shades using 2 1/2" pan head screws (Y). Ensure screws go through the top of the shade and into the rafter.

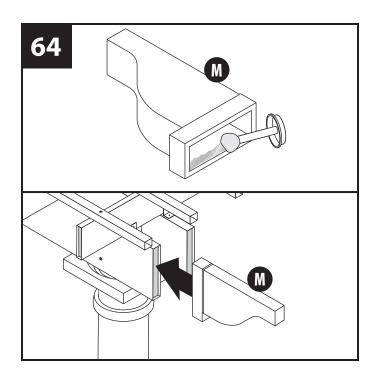
63

Secure remaining shades to rafters.

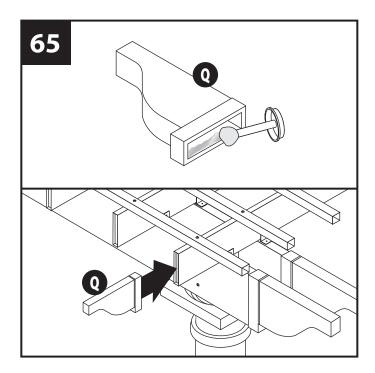
### **Installing Decorative Trim**



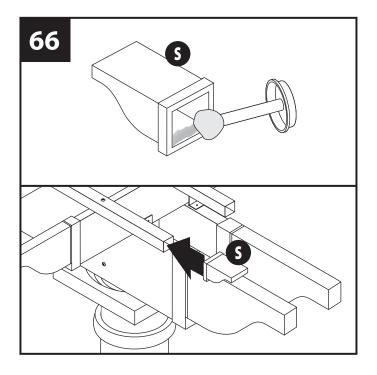
Multi-purpose cement is provided to install decorative trim.



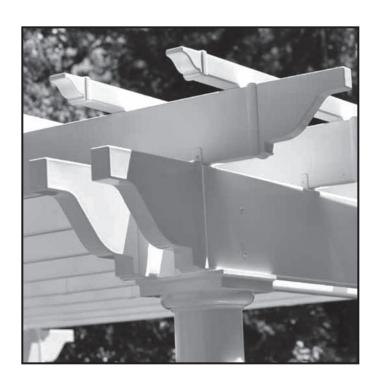
Apply cement to inside ring of beam trim (M). Promptly tap beam trim into place, so that trim is snug and level. Repeat for remaining beams.



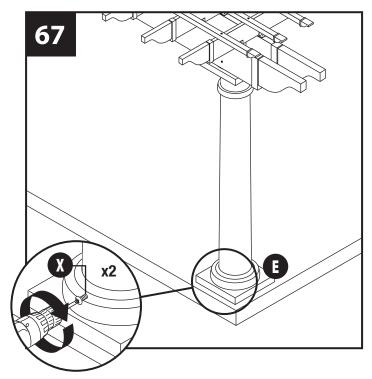
Apply cement to inside ring of rafter trim (Q). Promptly tap rafter trim into place, so that trim is snug and level. Repeat for remaining rafters.



Apply cement to inside ring of shade trim (S). Promptly tap shade trim into place, so that trim is snug and level. Repeat for remaining shades.



After beam, rafter, and shade trim have been installed, the pergola should look like this.



Make sure that the large base trim ring (E) is square and parallel to the beam. Secure trim with two 1" screws (X) on opposite sides of the posts. Repeat for remaining posts.



Congratulations! Your pergola is now ready to enjoy.

### Warranty

Suncast® Corporation, 701 North Kirk Road, Batavia, Illinois 60510 (Manufacturer) warrants to the original purchaser only that the enclosed product is free from material and workmanship defects under normal, household use at time of purchase. Defective product or part must be returned, freight prepaid, to the Manufacturer's address (Attention: Parts Department) along with proof of purchase. Upon receipt of the aforesaid, the defective product or part will be repaired or replaced at the option of the Manufacturer without charge to the original purchaser and returned to the customer freight collect.

This limited warranty does not apply to damage resulting from accident, neglect, misuse, commercial use, alteration, operation not in accordance with instruction or repairs made or attempted by unauthorized persons.

This limited warranty applies only to the product enclosed and does not apply to accessory parts.

THE MANUFACTURER'S LIABILITY HEREUNDER IS LIMITED SOLELY TO THE REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT OR PART AND THE MANUFACTURER SHALL IN NO EVENT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES WHICH MAY RESULT FROM ANY DEFECT IN MATERIAL OR WORKMANSHIP OR FROM THE BREACH OF ANY EXPRESS OR IMPLIED WARRANTY.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or a limitation of how long an implied warranty lasts, so the above limitations may not apply to you. This warranty gives you specific legal rights, and you may have other rights which may vary from state to state.

### **Factory Repairs**

Repair service and assembly assistance are available direct from the factory, not from the place of purchase. If this product requires repair, please call or write us. Warranty repair parts are sent out free of charge. If the product is out of warranty, we will inform you of the charges prior to sending out the parts. VISA and MasterCard are accepted on phone orders. To purchase Suncast replacement parts and learn more about other Suncast products, visit us online at www.suncast.com 24 hours a day, 7 days a week, 365 days a year, or call 1-800-844-3310 Mon-Fri 6am-8pm, Sat 8am-5pm, Sun Noon-5pm CST.