

ASSEMBLY GUIDE

# 12 x 24 Flat Top Pergola 12 x 24 Additional Shade Slat Kit

#### OPTIONAL ACCESSORIES:

- A) Bolt Down Bracket Kit (6 for Pergola)
- B) Privacy Wall each kit fits a 12' (3.6m) Section
- C) Pergola Planter each kit fits a 12' (3.6m) Section
- D) 12 x 24 Additional Shade Slat Kit
- E) 12 x 12 Canvas Weave x 2
- F) Tall Base Molding
- G) Short Base Molding



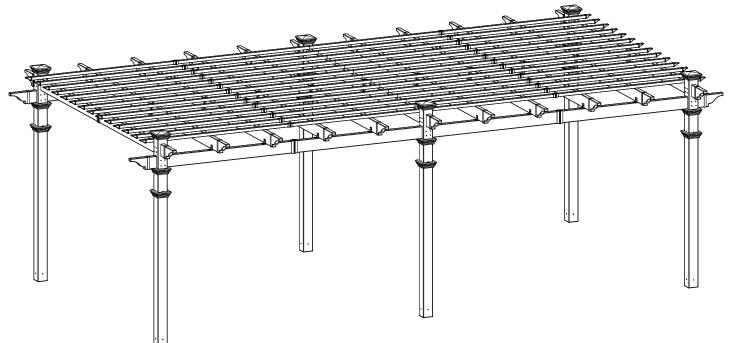
## 211 Campbell St Sarnia, Ontario, Canada, N7T 2G6

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171 1/2 in [435.6 cm]	Hereits and the second
94 in [238.8 cm] 134 in [340.4 cm] 139 in [353.1 cm] 144 in [365.8 cm] Side View	134 in 105 3/4 in   134 in 134 in   139 in [353.1 cm] 139 in [353.1 cm]   283 in [23'-7"] [718.8 cm] 105 3/4 in   Front View

)

## **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. When assembling components place on a non-abrasive surface (ie: shipping box) to avoid scratching. We recommend a 15' x 15' (4.5x4.5m) area for unobstructed assembling. You should not need to use excessive force when assembling any components.

#### **Planning & Preparing**

This Pergola is made to stand independent of your home and 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 (10x10cm) 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.

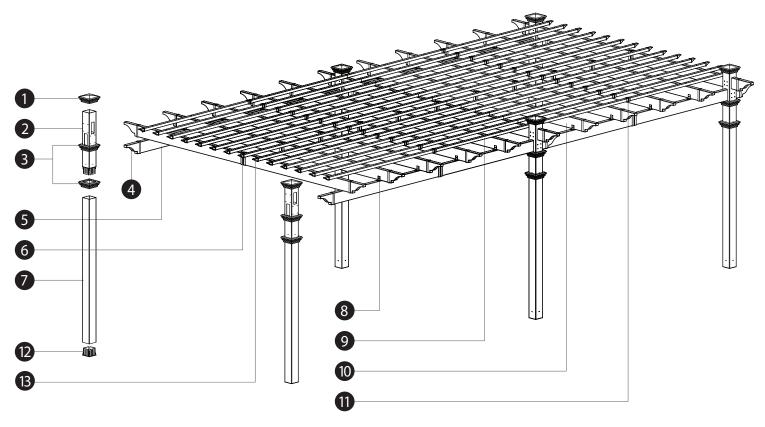
It is critical before you start that you consider the current slope of elevation where the pergola is planned - if there is any. Also utility or sprinkler line location is important to identify prior to excavating holes if necessary. You should also check to verify local building codes, ordinances, neighborhood 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 5:00 P.M. EST).

### 12 x 24 Pergola Materials Overview



- 1. Post Caps (6) 10699-1
- 2. Main Column Tops (6) 10826
- 3. Post Trims (12) 10698-1
- 4. Rafter & Main Support Beam Decorative End Caps (26) 10829
- 5. Main Support Beams (Pre-Drilled Holes one One Side) (8)\* 10817
- 6. Main Support Beam & Rafter Joiners (15) 10820
- 7. Main Column Bottoms (6) 10816
- 8. Rafter Brackets (16) 10827
- 9. Shade Slats 10819 (28)\*\* & 10718-1 (28) \*\*
- 10. Rafters (22) 10818
- 11. Shade Slat Joiners (28)\*\* 10600-1
- 12. One Way 4"x4" Internal Wood Post Guide (6) 10696-1
- 13. Shade Slat Decorative End Caps (28)\*\* 30030-1

#### Note:

Your 12 x 24 Pergola Kit is comprised of two, 12 x 12 Pergola Kits (1 Freestanding and 1 Attached). The quantities above is a reflection of the parts that will be used to assemble this kit. The next page will list the total number of parts and pieces received in the two kits.

A few parts will need to be modified (denoted with an "\*" above), while others will be discarded.

\*\*If you purchased a 12 x 24 Additional Shade Slat Kit along with your pergola, the quantities of these parts are doubled. Please follow Step 8 and Step 9B for installation.

## 12 x 24 Pergola Materials Breakdown

### **Check Boxes (Total of 11) for These Contents**

In the event of missing or defective parts please call our customer service dept. at **1 800 282 9346** (*Mon. to Fri. 8:00 AM to 5:00 PM EST*).

- 1. Main Column Bottoms (6) 10816
- 2. Main Column Tops (6) 10826
- 3. Main Support Beam & Rafter Joiners (16)\*\*\* 10820 (1 extra)
- 4. One Way 4"x4" (10x10cm) Internal Wood Post Guide (6) 10696-1
- 5. Shade Slat Joiners (28)\*\* 10600-1
- 6. Post Caps (6) 10699-1
- 7. Post Trims (12) 10698-1
- 8. Rafter & Main Support Beam Decorative End Caps (26)\*\*\* 10829 (2 extra)
- 9. Rafter Brackets (16) 10827
- 10. Shade Slat Decorative End Caps (28)\*\* 30030-1
- 11. Main Support Beams (With Pre-Drilled Holes on One Side) (8) 10817
- 12. Rafters (24)\*\*\* 10818 (2 extra)
- 13. Shade Slats Long Outer (28)\*\* Length 75 7/8" (192cm) 10819
- 14. Shade Slats Short Inner (28)\*\* Length 69 7/8" (177.5cm) 10718-1
- 15. Rafter Hanger (12)\* 10828

(\*) May be disposed of when installing the 12 x 24 Freestanding Pergola.

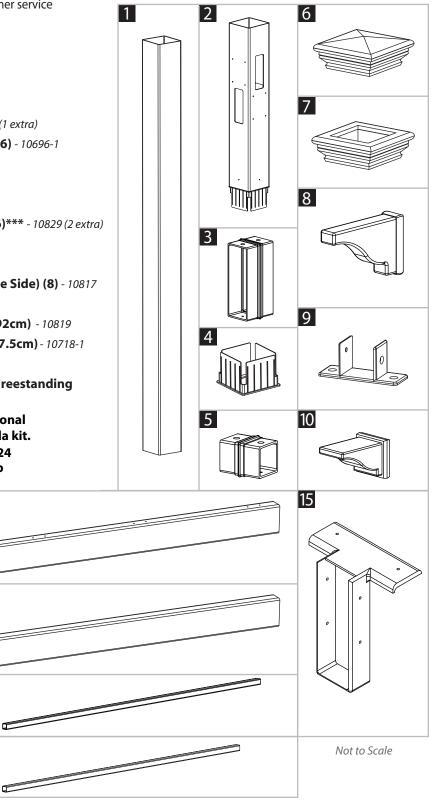
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12

13

14

(\*\*) These quantities are doubled if a 12 x 24 Additional Shade Slat Kit was purchased along with the pergola kit. (\*\*\*) These parts have extra quantities, as the 12 x 24 Flat Top Pergola kit consists of two 12 x 12 Flat Top pergolas assembled together.



# Pergola Additional Materials List

#### Hardware (in plastic bags)

All Screws Included with this Kit are Self-Auguring.

- A. Vinyl Weld Glue (6) 20000
- B. 2 1/2" (64mm) Self-Auguring Stainless Steel Screws (24) 20009-1 (to lock vinyl column and wood post together at bottom of each post)
- C. 2 1/2" (64mm) Self-Auguring Stainless Steel Screws (24) 20009-1 (to lock vinyl column and wood post together at top of each post just above trim cap)
- **D. 4" (102mm) Self-Auguring Stainless Steel Screws (96)** 20006 (to lock the intersection of beams and first rafters with vinyl columns)
- E. 1 1/2" (38mm) Self-Auguring Stainless Steel Screws (92) 20005 (joiner & rafter bracket screws)
- F. 5/8" (16mm) Self-Auguring Stainless Steel Screws (32) 20016 (for rafter brackets and/or rafter hanger)
- G. 3" (76mm) Self-Auguring Stainless Steel Screws (140) 20007 (for shade slats)

### **Extra Materials You will Need**

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

If Mounting Pergola on Concrete or Wood Deck (not intended to be installed on

concrete pavers, patio stones, or interlocking bricks)

H. 4x4x7' (10x10x213cm) Pressure-Treated Wood Posts (6) (purchase at local building center)

I. 4x4 Bolt Down Bracket Kits (VA80205 & VA80206) (purchase from www.wearevita.com or a

*retailer of our products*) Refer to bolt down bracket instructions for hardware requirements, as they pertain to your application:

#### If mounting pergola onto an existing concrete surface:

• 1/2" x 3 1/2" x 12" (1.3x9.x30.5cm) Wood Shims (48) - Can Be Cut From 1/2" (1.3cm) Sheet of Plywood

- 1/4" x 2 3/4" (6x70mm) Cement Screws Countersunk Head (18)
- 3/16" (5mm) Concrete drill bit. Minimum 3" (76mm) long (1)

#### If mounting pergola onto a wooden/composite deck with AN ACCESSIBLE UNDERSIDE:

• 1/2" x 3 1/2" x 12" (1.3x9.x30.5cm) Wood Shims (48) - Can Be Cut From 1/2" (1.3cm) Sheet of Plywood

• 1/4" x ?" (6x?mm) Bolts and Nuts - Countersunk Head (18) (Length depends on blocking material)

- 1/4" (6mm) Washers (18)
- 1/4" (6mm) Wood drill bit. Minimum 3" long (1)

#### If Mounting Pergola in Ground

J. 4x4x10' (10x10x305cm) Pressure-Treated Wood Posts (6) (purchase at local building center) K. Concrete Ready Mix (6) (purchase at local building center)

#### Rafter/ Beam Support (Required)

L. 2x6x12 (50x150x365cm) Pressure-Treated Boards (15) (purchase at local building center)

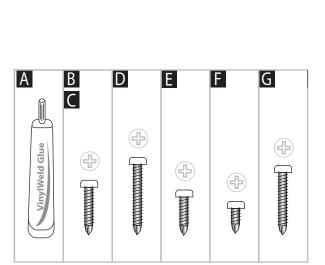
#### **Tools You Will Need**

- Level
- Hammer
- Tape Measure
- String Line
- Wood Stakes (6) (temporary support for string line)
- Step Ladders (2)
- Cordless Drill

Circular Saw with Fine Tooth Blade

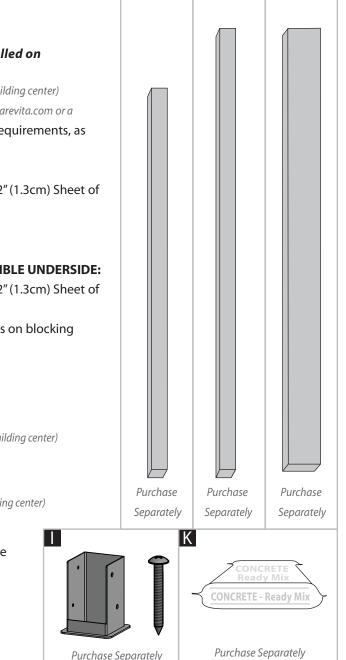
**Tools You May Need** 

- Framing Level
- Framing Square



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# 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 separate). See page eight for more details.

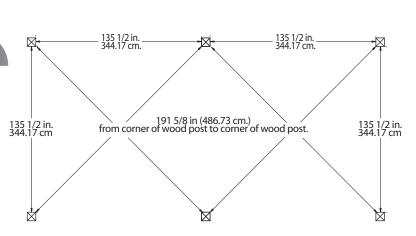
Post location and placement is the most critical step in the overall installation process. Please double check for the possibility of any underground utilities such as sprinkler, gas or telephone lines.

# 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.



**Overhead View** 

1

## **STEP TWO**

#### Install Wood Supporting Posts Directly into the Ground

#### 1

After you have determined where the posts will be located, excavate 10" (25.4 cm) diameter x 36" (91.4 cm) deep post holes.

### 2

After holes are dug and cleaned, place the 4x4 (9x9cm) wood post into a hole ensuring it's level and square to string lines. The final post height should be 84" (213 cm) out of the ground.

### 3

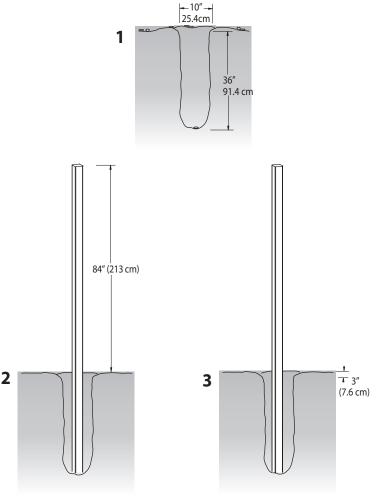
Fill the vacant hole with pre-mixed concrete all the way to within 3"(7.6 cm) of the top of the hole. Once concrete has set, backfill & compact the 3"(7.6 cm) space with soil.

### 4

Repeat for all six posts.

#### Please Note:

Some 4x4pressure treated posts can be larger than 3  $1/2 \times 3 1/2$  (8.9x8.9cm) 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



# **OPTIONAL STEP**

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

**Note:** for additional information on the bolt down bracket installation, refer to the bolt down bracket instructions.

# 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" (5mm) masonry drill bit drill 3" (76mm) deep holes to allow installation of 2 3/4" (70mm) concrete screws (Not included).

#### 4

Proceed to install three 2 3/4" (70mm) 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 six post brackets installed plumb, proceed to set the 4x4 x7' (10x10x213cm) wood post in place. Repeat for all 6 posts.

#### 6

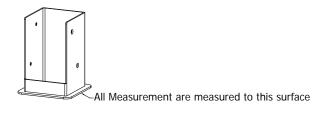
Posts should be 84" (213cm) in height.

#### Please Note:

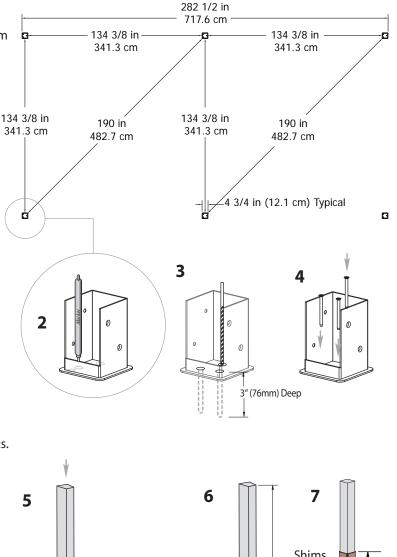
Some 4x4 pressure treated wood posts can be larger than 3 1/2 x 3 1/2 (8.9x8.9cm) square due to twisting or cracking. We have allowed a tolerance for this in the post brackets and the internal one way and two way 4x4 wood post guides. However in extreme cases, you may need to shave down the end of your 4x4 wood post slightly to allow access.

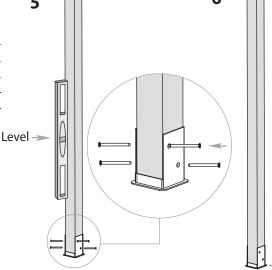
## 7

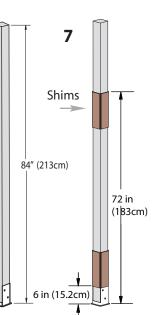
Attach 8 post shims to each post, placing 4 shims starting at 6" (15.2cm) on all sides, and 4 shims ending at 72"(183cm) on all 4 sides.

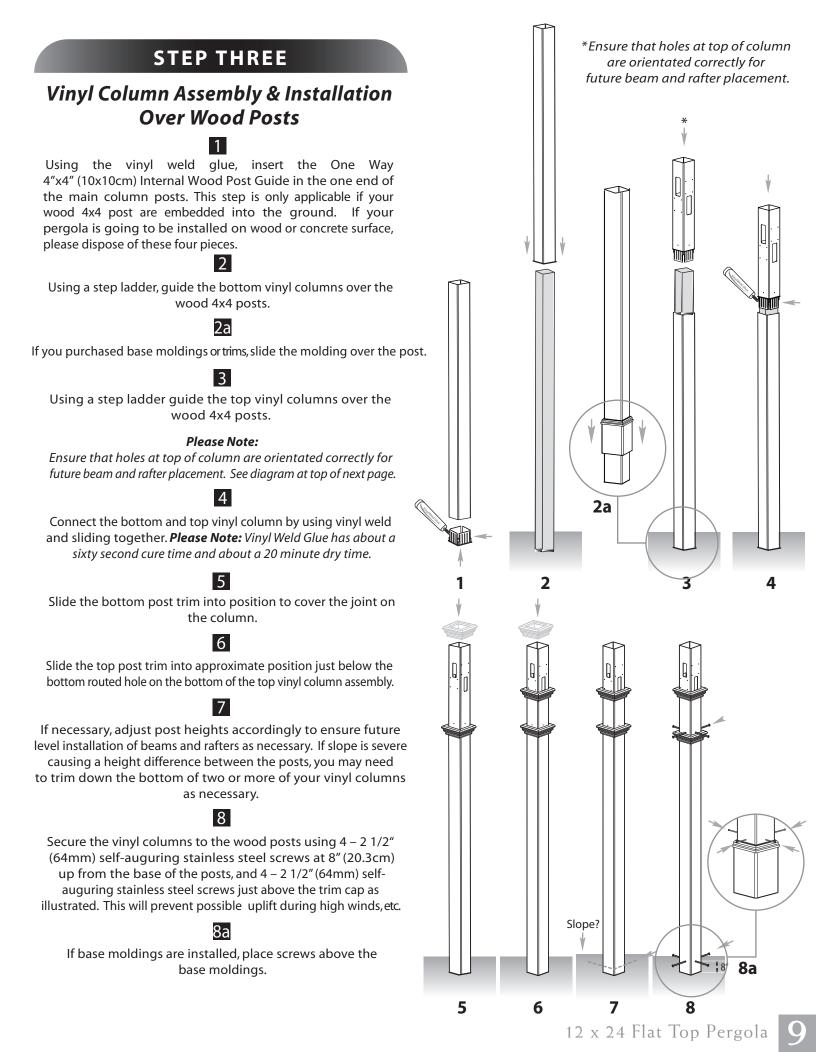


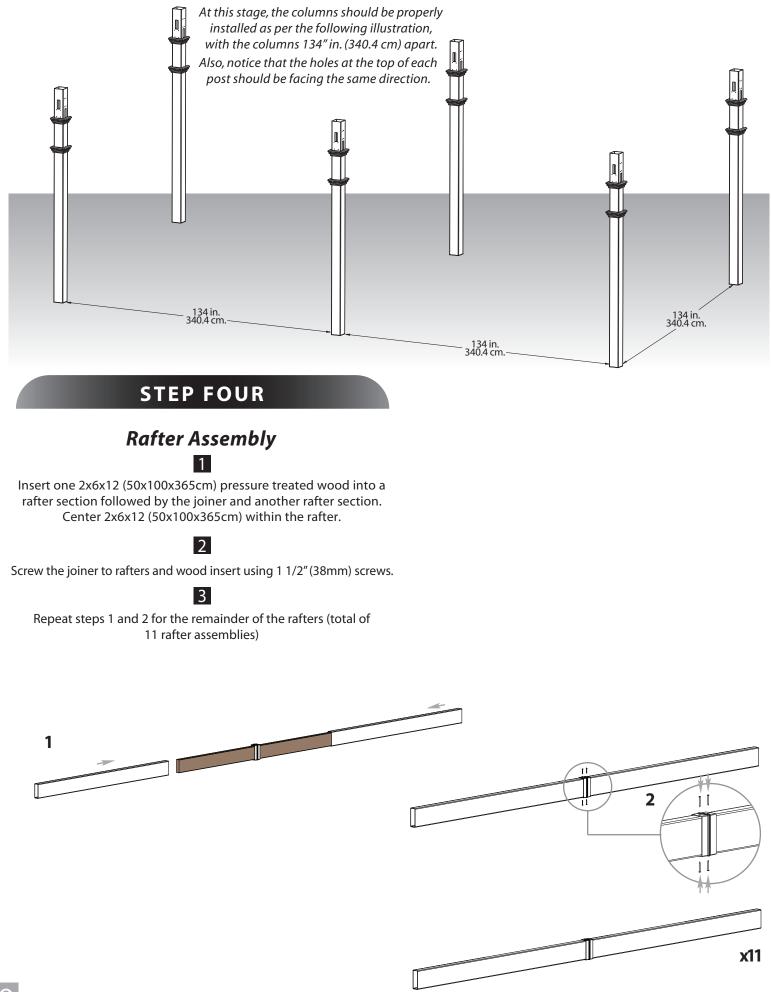
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12 x 24 Flat Top Pergola

# **STEP FIVE**

# Main Support Beam Modification

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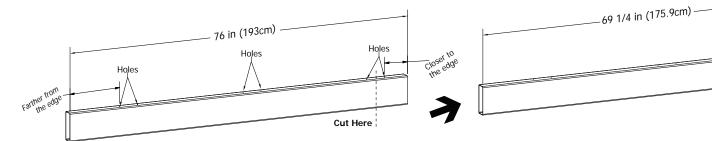
Using a fine-toothed saw blade, cut 6 3/4" (17.1cm) off the one end of the main support beam as shown.

Note: Cut the end which the two holes are closer to the edge.

Repeat for a total of four main support beams.

x4

2



# Main Support Beam Assembly

### 1

Insert one 2x6x12 (50x100x365cm) pressure treated wood into a *FULL* beam section as illustrated.

#### Critical Note:

Note the location of the pre-drilled holes on the beam. As pictured aside; the further distanced holes need to be closest to the beam. This is critical to ensure equal spacing of your rafters.

## 2

Insert one **MODIFIED** beam section as shown. Position the 2x6x12 (50x100x365cm) wood "flush" with the open end of the **MODIFIED** beam section.

#### Critical Note:

Note the location of the pre-drilled holes on the modified beam. As pictured aside, the further distanced holes need to be closets to the joiner. This is critical to ensure equal spacing of your rafters.

### 3

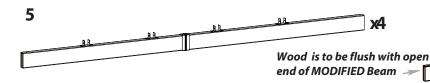
Screw the joiner to vinyl beams and wood insert using 1 1/2" (38mm) screws. **Note:** Wood should be flush with open end of the **MODIFIED** beam.

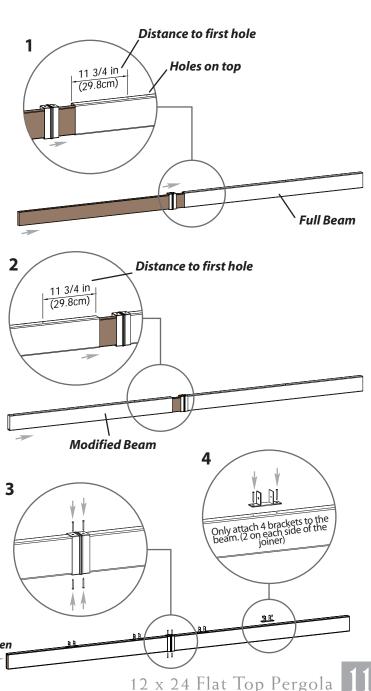
### 4

Install the rafter brackets to the main beams using 1 1/2"(38mm) screws. Only attach four brackets to the beam as shown. Follow the pre-drilled holes to identify locations.

#### 5

Repeat steps 1 to 4 for a total of 4 main support beam assemblies.





# **STEP SIX**

## Main Support Beams & Rafter Placement

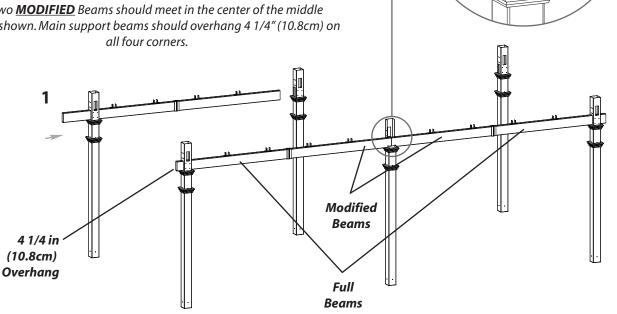
Using a helper and two ladders proceed to complete the following steps:

1

Slide the main support beam with rafter clips pre-installed through both holes of the vinyl column (overshooting), and then back through both holes of the opposite column. Repeat for all beams.

#### Please Note:

The two **MODIFIED** Beams should meet in the center of the middle posts as shown. Main support beams should overhang 4 1/4" (10.8cm) on all four corners.



2

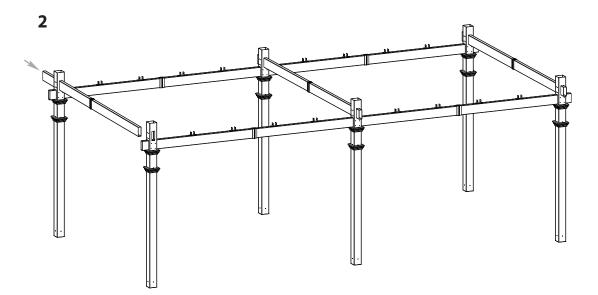


Beam ends meet

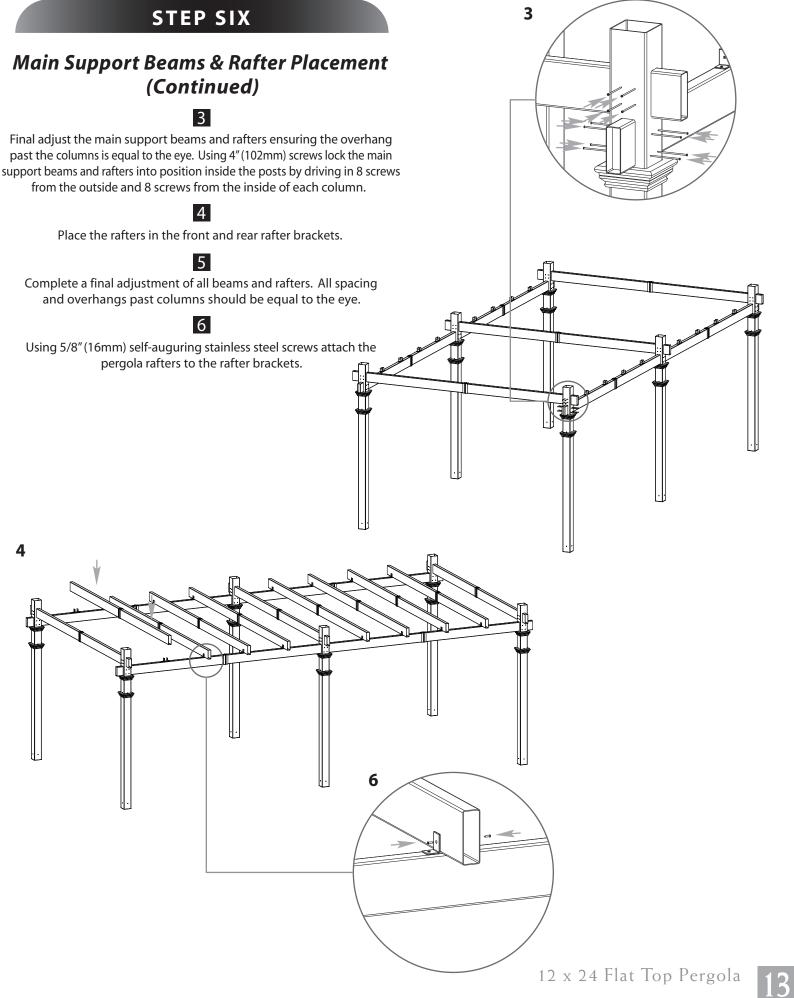
the middle post.

in the center of

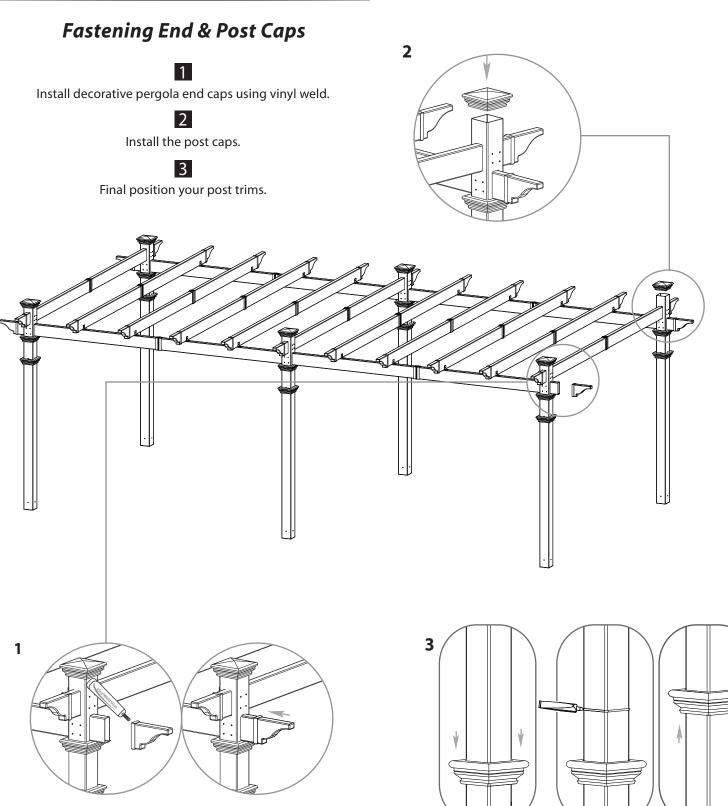
The top of the vinyl columns may need to be tensioned in opposite directions to each other to allow the beams and rafters to be installed on a slight angle. The vinyl columns naturally allow some measure of flex.



Slide the two outer and middle rafters through both holes of the vinyl column and through both holes of the opposite column.



# **STEP SEVEN**



To glue pergola end in place:

 Apply a generous amount of vinyl glue to the pergola end as shown.
Slide the pergola end into the beam/rafter and allow a few minutes for glue to cure.

 Slide the post trim down.
Apply a generous amount of vinyl glue around the post
Slide the post trim back up to the desired location and allow a few minutes for glue to cure.

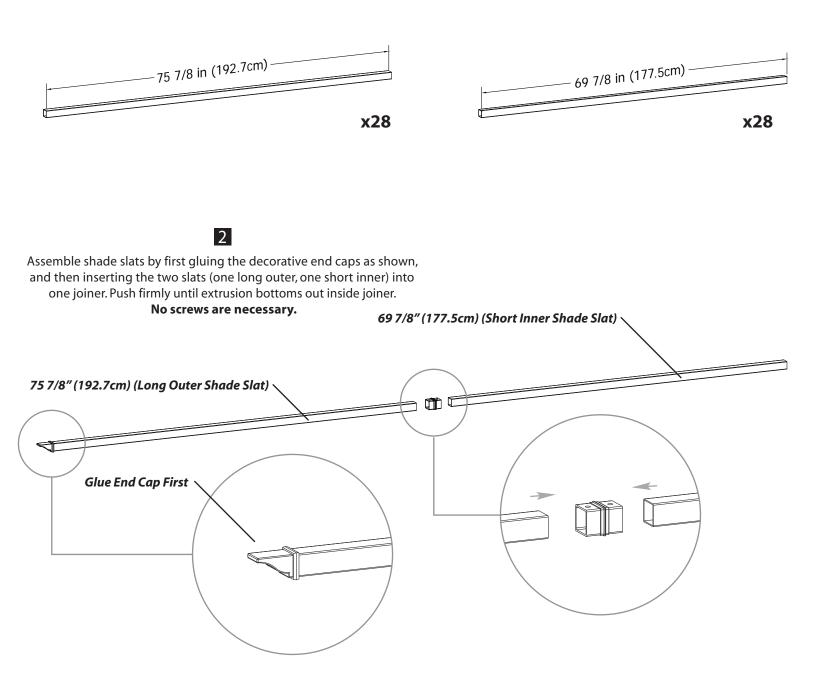
*To position post trim in place:* 





1

Please note the two different lengths of shade slats included in your kit - 75 7/8 in (192.7cm) (Long Outer Shade Slat) and 69 7/8 in (177.5cm) (Short Inner Shade Slat)



# **STEP NINE - A**

# 14 Shade Slats Installation

The 14 shade slats are designed to be installed with 8 11/16" (22.1cm) spacing between each slat.

Shade slats are designed to extend approximately 8 1/4" (21cm) past the last rafter. Measurement includes the pre-installed pergola ends. Your goal is to ensure that all the shade slats overhang equally to the eye.

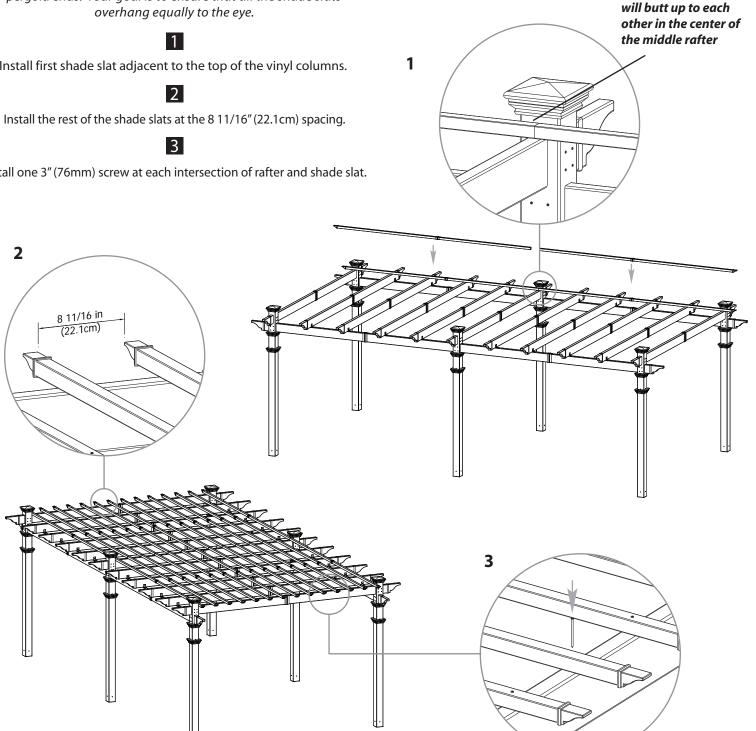
Install first shade slat adjacent to the top of the vinyl columns.

Install one 3" (76mm) screw at each intersection of rafter and shade slat.

#### Important!

If installing additional shade slat kit (purchase separately), please follow the steps for installing 28 shade slats on the next page.

Short Inner Shade Slats



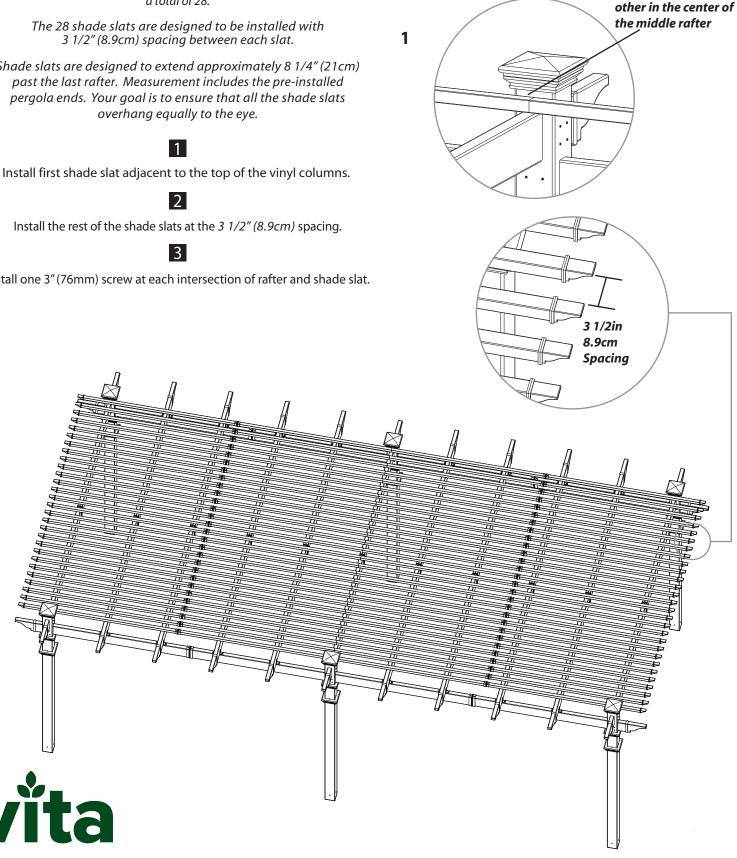
### **STEP NINE - B**

### 28 Shade Slats Installation

**Note:** The 12x24 Flat Top Pergola comes with enough parts to assemble & install 14 shade slats. The 12x24 Additional Shade Slat Kit provides enough parts to assemble & install another 14 shade slats, for a total of 28.

Shade slats are designed to extend approximately 8 1/4" (21cm) past the last rafter. Measurement includes the pre-installed pergola ends. Your goal is to ensure that all the shade slats overhang equally to the eye.

Install one 3" (76mm) screw at each intersection of rafter and shade slat.



Short Inner Shade Slats

will butt up to each