## 12 x 12 Flat Top Pergola



## ASSEMBLY GUIDE

## Model: Regency, Roosevelt, Monterey

- Bolt Down Bracket Kit (4 for Pergola)

- Canvas Weave

- Shade Kit

- Privacy Wall (Regency Only)

- Pergola Planter (Regency Only)



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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. When assembling components place on a non-abrasive surface (ie: shipping box) to avoid scratching. We recommend a $15^{\prime} \times 15^{\prime}$ area for unobstructed assembling. You should not need to use excessive force when assembling any components.

## Planning \& Preparing

The Regency 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 $4 \times 4$ 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, 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 calling1 8002829346
(Mon to Fri 8:00 A.M. to 5:00 P.M. EST).
(Regency Pergola Shown)

## Regency Pergola Materials Overview



1. Post Caps (4) 10699-1 White / 14030 Composite
2. Main Column Tops (4) 10826 White / 14025 Composite
3. Post Trims (8) 10698-1 White / 14029 Composite
4. Rafter \& Beam Decorative End Caps (16) 10829 White / 14048 Composite
5. Main Support Beams (4) 10817 White / 14033 Composite
6. Beam \& Rafter Joiners (8) 10820 White / 14026 Composite
7. Main Column Bottoms (4) 10816 White / 14024 Composite
8. Rafter Brackets (8) 10827 White / 14031 Composite
9. Rafters (12) 10818 White / 14034 Composite
10. Shade Slates (28) 10819 White / 14035 Composite
11. One Way 4"x4" Internal Wood Post Guide (4) 10696-1 White / 14027 Composite
12. Shade Slat Joiners (14) 10600-1 White / 14028 Composite
13. Shade Slat Decorative End Caps (28) 30030-1 White / 14032 Composite
14. Rafter Hanger (6) 10828 White / 14082 Composite


## Regency Pergola Materials Breakdown

## Check Boxes (Total of 6) for These Contents

In the event of missing or defective parts please call our customer service dept. at $\mathbf{1 8 0 0} \mathbf{2 8 2} \mathbf{9 3 4 6}$ (Mon. to Fri. 8:00 AM to 5:00 PM EST)

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13. Shade Slat Decorative End Caps (28) 30030-1 White / 14032 Composite
14. Rafter Hanger (6)* 10828 White / 14082 Composite
(*) May be disposed of when installing the Regency / Roosevelt Pergola.


Not to Scale

## Pergola Additional Materials List

## Hardware (in plastic bag)

All Screws Included with this Kit are Self-Auguring.
A. Vinyl Weld Glue (3) - 20000 White / 20022 Composite (only 1 tube necessary for Monterey)
B. $\mathbf{2 1 / 2 "}$ [64 mm] Self-Auguring Stainless Steel Screws (16) - 20009-1 White
/ 20032 Composite (to lock vinyl column and wood post together at bottom of each post)
C. 2 1/2" [64 mm] Self-Auguring Stainless Steel Screws (16) - 20009-1 White
/ 20032 Composite (to lock vinyl column and wood post together at top of each post just above trim cap)
D. 4" $1 \mathbf{1 0 2} \mathrm{~mm}$ ] Self-Auguring Stainless Steel Screws (64) - 20006 White / 20034 Composite (to lock the intersection of beams and first rafters with vinyl columns)
E. $1 \mathbf{1 / 2 "}$ [ $\mathbf{3 8} \mathbf{~ m m}$ ] Self-Auguring Stainless Steel Screws (48) - 20005 White / 20031

Composite (joiner screws)

F. 5/8" $\mathbf{1 6} \mathbf{~ m m}$ ] Self-Auguring Stainless Steel Screws (48) - 20016 White / 20030 Composite (for rafter brackets and/or rafter hanger)
G. $\mathbf{3}^{\prime \prime}$ [76 mm] Self-Auguring Stainless Steel Screws (84) - 20007 White / 20033 Composite (for shade slats)

## Extra Materials You will Need

(Purchase separately from www.wearevita.com or retailer of our products)
If Mounting Pergola on Concrete (not intended to be installed on concrete pavers, patio stones, or interlocking bricks) or Wood Deck
l. $4 \times 4 \times 7$ [10cmx10cmx200cm] Pressure-Treated Wood Posts (4) (purchase at local building center)
J. 4x4 Bolt Down Bracket Kit (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 $12^{\prime \prime}$ (1.3x9.x30.5cm) Wood Shims (32) - Can Be Cut from 1/2" (1.3cm) Sheet of Plywood

- 1/4"x 2 3/4" (6x70mm) Cement Screws - Countersunk Head (12)
$\cdot 3 / 16^{\prime \prime}(5 \mathrm{~mm})$ Concrete drill bit. Minimum 3"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 (32) - Can Be Cut from 1/2" 1.3 cm ) Sheet of Plywood
$\cdot 1 / 4^{\prime \prime} \mathrm{x}$ ?" (6x?mm) Bolts and Nuts - Countersunk Head (12) (Length depends on thickness of the blocking material)
- $1 / 4^{\prime \prime}(6 \mathrm{~mm})$ Washers (12)
- 1/4" $(6 \mathrm{~mm})$ Wood drill bit.Minimum $3^{\prime \prime}$ long (1)


## If Mounting Pergola in Ground

K. $4 \times 4 \times 10(10 \times 10 \times 300 \mathrm{~cm})$ Pressure-Treated Wood Posts (4) (purchase at local building center)
L. Concrete Ready Mix (4) (purchase at local building center)

## Rafter / Beam Support (Required)

M. 2x6x12 (5x15x365cm) Pressure-Treated Boards (8) (purchase at local building center)


L


Purchase Separately

## 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 $4 \times 4$ 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.

## STEP TWO

## Install Wood Supporting Posts Directly into the Ground

## 1

After you have determined where the posts will be located excavate 10 " $(25.4 \mathrm{~cm})$ diameter x 36 " $(91.4 \mathrm{~cm})$ deep post holes.

## 2

After holes are dug and cleaned, place the $4 \times 4$ ( $9 x 9 \mathrm{~cm}$ ) wood post into a hole ensuring it's level and square to string lines. The final post height should be $84^{\prime \prime}(213 \mathrm{~cm})$ 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 $3^{\prime \prime}(7.6 \mathrm{~cm})$ of the top of the hole.
Once concrete has set, backfill \& compact 3 " $(7.6 \mathrm{~cm})$ space with soil.

## 4

Repeat for all four posts.

## Please Note:

Some $4 \times 4$ pressure treated posts can be larger than $31 / 2 \times 31 / 2$ square due to twisting or cracking. We have allowed a tolerance for this in the internal one way and two way $4 \times 4$ wood post guides (see page 8). However in extreme cases you may need to shave down the top of the $4 \times 4$ 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.


## 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

Measuring from the edges of the bottom base plates, 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 bottom corner flange of the bolt down bracket.

2
Mark out the location of bolt down brackets accordingly using the base of the bracket accordingly.

## 3

Using a $3 / 16^{\prime \prime}(5 \mathrm{~mm})$ masonry drill bit drill $3^{\prime \prime}(76 \mathrm{~mm})$ deep holes to allow installation of $23 / 4^{\prime \prime}(70 \mathrm{~mm}$ ) concrete screws.(Not included)

Proceed to install three 2 3/4" ( 70 mm )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 $4 \times 4 \times 7^{\prime}(10 \mathrm{~cm} \times 10 \mathrm{~cm} \times 200 \mathrm{~cm})$ wood post into place.

Posts should be $84^{\prime \prime}(213 \mathrm{~cm})$ in height.
7
In order to create a snug fit between the wood posts and the inner cavity of the vinyl posts, it will be necesary to "build out" the $4 \times 4$ posts near the bottom and the top using $1 / 2^{\prime \prime} \times 31 / 2^{\prime \prime} \times 12^{\prime \prime}$
$(1.3 \times 9 . \times 30.5 \mathrm{~cm})$ shims. Follow instructions as illustrated.

## Please Note:

Some $4 \times 4$ pressure treated wood posts can be larger than $31 / 2 x$ $31 / 2$ 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 $4 \times 4$ wood post guides. However in extreme cases, you may need to shave down the end of your $4 \times 4$ wood post slightly to allow access.


* Orientate brackets accordingly to reduce offset motion of posts. (direction of arrows denote flange opening)

190 in ( 482.7 cm )
From corner of bracket $\quad 1343 / 8$ in (Bottom of flange) $\quad 341.3 \mathrm{~cm}$ to corner of bracket




At this stage, the columns should be properly installed as per the following illustration, with the columns 134" in. ( 340.4 cm ) apart. Also, notice that the holes at the top of each post should be facing the same direction.


## STEP FOUR

1

## Main Support Beam Assembly

1
Insert one $2 \times 6 \times 12$ ( $5 \times 15 \times 365 \mathrm{~cm}$ ) pressure treated wood into a beam followed by the joiner and another beam section.
Center the $2 \times 6 \times 12(5 \times 15 \times 365 \mathrm{~cm})$ within the main support beam.

## Critical Note:

Note the location of the pre-drilled holes on the top edge of the main support beams. As pictured aside, the further distanced holes need to mate together inside the beam joiner. This is critical to ensure equal spacing of your rafters.

## 2

Install the rafter brackets to the main beams using 1 1/2" ( 64 mm ) screws. Only attach four brackets to the beam as shown. Follow the pre-drilled holes to identify locations.

## 3

Screw the joiner to vinyl beams and wood insert using 1 1/2" ( 64 mm ) screws.


## STEP FIVE

## Rafter Assembly

Insert one $2 \times 6 \times 12(5 \times 15 \times 365 \mathrm{~cm})$ into a rafter section followed by the joiner and another rafter section.

2
Screw the joiner to vinyl rafters and wood insert using 1 1/2" (38mm) screws.

3
Repeat steps 1 and 2 for the remainder of the rafters.


## STEP SIX

## Main Support Beams \& Rafters Placement

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

1
Slide the main support beam with rafter brackets pre-installed through both holes of the vinyl column (overshooting), and then back through both holes of the opposite column.

Repeat for opposite main support beam.

## Please Note:

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

$$
2
$$

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

## 3

As necessary, adjust the main support beams and rafters ensuring the overhang past the columns is equal to the eye. Using $4^{\prime \prime}(102 \mathrm{~mm})$ screws lock the main support beams and raftersinto position inside the posts by driving in 8 screws from the outside and 8 screws from the inside of each column.

4
Place the remaining rafters in the front and rear rafter brackets.
5
Complete a final adjustment of all remaining rafters. All spacing and overhangs past columns should be equal to the eye.

4



## STEP SEVEN

## Fastening Rafters \& Caps

## 1

Using $5 / 8^{\prime \prime}(16 \mathrm{~mm})$ self-auguring stainless steel screws attach the pergola rafters to the rafter brackets.

2
Install decorative pergola end caps using vinyl weld.
3
Install the post caps using vinyl weld.
4
Final position your post trims.


To glue pergola end in place:

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


To position post trim in place:

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

## STEP EIGHT

## Shade Slat Assembly

## 1

Assemble shade slats by first gluing the decorative end caps as shown, and then inserting the two slats into one joiner. Push firmly until extrusion bottoms out inside joiner.

No screws are necessary.

## Shade Slats Installation

The 1 1/2 $\times 1$ 1/2 shade slats are designed to be installed with $811 / 16^{\prime \prime}(22.1 \mathrm{~cm})$ 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 end caps. Your goal is to ensure that all the shade slats overhang equally to the eye.

2
Install first shade slat adjacent to the top of the vinyl columns.
3
Install the rest of the shade slats at he $811 / 16^{\prime \prime}(22.1 \mathrm{~cm})$ spacing.


Install one $3^{\prime \prime}(76 \mathrm{~mm})$ screw at each intersection of rafter and shade slat.


## Suggestions for Additional Shade as Necessary

- White resin lattice in variety of shapes and sizes are available at your local lumberyard. Cut to size and fasten directly to the top of shade slats using stainless steel screws.
- In areas of extreme snow or wind load, do not use tight diamond privacy lattice.


