## $61 / 2 \times 6$ 1/2 Wood Grain Flat Top Pergola



## ASSEMBLY GUIDE

Models: Lakewood


OPTIONAL ACCESSORY

- Bolt Down Bracket Kit


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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 $15^{\prime} \times 15^{\prime}(4.6 \mathrm{~m} \times 4.6 \mathrm{~m})$ area for un-obstructed assembling. You should not need to use excessive force when assembling any components.

## 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 18002829346 (Mon to Fri 8:00 A.M to 5:00 P.M. EST).

## 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 ( 10.2 cm ) 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.

## 6.5 x 6.5 Wood Grain Flat Top Pergola Materials Overview



Front View


Top View


## Side View

## 6.5 x 6.5 Wood GrainFlat Top Pergola Materials Breakdown

(Accessories Not included)

## Check Boxes (Total of 4) for These Contents

In the event of missing or defective parts please call our customer service dept at $\mathbf{1 8 0 0} \mathbf{2 8 2} 9346$ (Mon. to Fri. 8:00 AM to 5:00 PM EST).

1. Rafters (7) $1.5^{\prime \prime} \times 5.5^{\prime \prime} \times 94^{\prime \prime}(3.8 \mathrm{~cm} \times 14 \mathrm{~cm} \times 238.8 \mathrm{~cm})-14001$
2. Shade Slats (7) $1.5^{\prime \prime} \times 1.5^{\prime \prime} \times 94^{\prime \prime}(3.8 \mathrm{~cm} \times 3.8 \mathrm{~cm} \times 238.8 \mathrm{~cm})-14002$
3. Rafter \& Beam Decorative End Caps (18) - 14003
4. Post Caps (4) - Top 14004 \& Bottom 14005
5. Rafter Brackets (10)-14006
6. Shade Slat Decorative End Caps (14) - 14007
7. Main Support Beams with pre-drilled holes (2) $1.5^{\prime \prime} \times 5.5^{\prime \prime} \times 94 .{ }^{\prime \prime}(3.8 \mathrm{~cm} \times 14 \mathrm{~cm} \times 238.8 \mathrm{~cm})-14008$
8. Posts (4) $5^{\prime \prime} \times 5^{\prime \prime} \times 94^{\prime \prime}(12.7 \mathrm{~cm} \times 12.7 \mathrm{~cm} \times 238.8 \mathrm{~cm})-14009$


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. VinylWeld Glue(2)-20029
B. 3/4"( 1.9 cm )Self-Auguring Screws(40)- 20025 (for Rafter Brackets)
C. 3/4" (1.9 cm) Self-Auguring Screws(8) - 20025 (to secure Posts to Wood Posts)
D. $\mathbf{4 "}^{\prime \prime} \mathbf{1 0 . 2} \mathbf{c m}$ )Self-AuguringScrewswithNylon Washer(49) - 20026 (for Shade Slats)
E.4" $\mathbf{( 1 0 . 2} \mathbf{2 d m}$ )Self-Auguring Screws with NylonWasher(32)-20026 (to secure Beams and Rafters to posts)
F. Snap Caps (129)-20027 (for screw heads)

## Extra Materials You will Need

(Purchase separately from Vita 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)
J. $4 \times 4 \times 4$ '( $\mathbf{1 0 . 2} \mathbf{~ c m} \times 10.2 \mathbf{c m} \times 122 \mathbf{c m}$ ) Pressure-TreatedWood Posts(4)(purchase at local building center)
K. 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:
L. $1 / 2^{\prime \prime} \times 31 / 2^{\prime \prime} \times 12^{\prime \prime}(1.3 \mathrm{~cm} \times 9 \mathrm{~cm} \times 30.5 \mathrm{~cm}$ ) Wood Shims (32) (see page 8)
M. 1/4" $\times 2$ 3/4" ( 0.64 cm x 7 cm) Cement Screws - Countersunk Head (12)
N. 3/16" $\mathbf{( 0 . 4 8 ~ c m}$ ) Concrete drill bit. Minimum 3" long (1)

If mounting pergola onto a wooden/composite deck with
AN ACCESSIBLE UNDERSIDE:
O. $1 / 2^{\prime \prime} \times 31 / 2^{\prime \prime} \times 12^{\prime \prime}$ ( $1.3 \mathrm{~cm} \times 9 \mathrm{~cm} \times \mathbf{3 0 . 5} \mathbf{c m}$ ) Wood Shims (32) (see page 8) P. $1 / 4^{\prime \prime} \times$ ? "' ( $0.64 \mathrm{~cm} \times \mathbf{~ c m}$ ) Bolts and Nuts - Countersunk Head (12) (Length depends on thickness of blocking material)
Q. 1/4" ( 0.64 cm ) Washers (12)
R. 1/4" ( 0.64 cm Wood drill bit. Minimum 3" long (1)

If Mounting Pergola in Ground
L. $4 \times 4 \times 8$ ' ( $\mathbf{1 0 . 2} \mathbf{~ c m ~ x ~} \mathbf{1 0 . 2 ~ c m ~ x ~} \mathbf{2 4 3 . 8} \mathbf{~ c m}$ ) Pressure-Treated Wood Posts (4) (purchase at local building center)
M. Concrete Ready Mix (4) (purchase at local building center)

## Tools You Will Need

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


## Tools You May Need

- Circular Saw with Fine Tooth Blade
- Framing Level
- Framing Square




## 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 " $\left(25.4 \mathrm{~cm}\right.$ ) diameter x $36^{\prime \prime}(91.5 \mathrm{~cm})$ deep post holes.

## 2

After holes are dug and cleaned, place the $4 \times 4$ wood post into a hole ensuring it's level and square to string lines. The final post height should be about $60^{\prime \prime}(152.4 \mathrm{~cm})$ out of the ground.

## 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. After the concrete has set, back fill \& compact the $3^{\prime \prime}(7.6 \mathrm{~cm})$ space with soil.

## 4

Repeat for all four posts.


## 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.

## 11

Measure and mark out the location of the bolt down brackets using string or chalk line. Measure from the edges of the base plates (not the vertical side walls). 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 location of the inside corner of the base plates.

## 2

Mark out the location of bolt down brackets as illustrated.

## 3

Using a $3 / 16^{\prime \prime}(0.48 \mathrm{~cm})$ masonry drill bit, drill $3^{\prime \prime}(7.6 \mathrm{~cm})$ deep holes to allow installation of $23 / 4^{\prime \prime}(7 \mathrm{~cm})$ concrete screws (Not included)

4

Proceed to install three $23 / 4^{\prime \prime}(7 \mathrm{~cm})$ 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 $4 \times 4 \times 4$ ' wood post in place. Secure using the same concrete screws included in the kit. Repeat for all 4 posts.

## 6

Posts should be approximately $48^{\prime \prime}(122 \mathrm{~cm})$ height.
$\square$
In order to create a snug fit between the wood posts and the inner cavity of the vinyl posts, it will be necessary to 'build out' the $4 \times 4$ posts near the bottom and the top using $1 / 2^{\prime \prime} \times 31 / 2^{\prime \prime} \times$ $12^{\prime \prime}(1.3 \mathrm{~cm} \times 9 \mathrm{~cm} \times 30.5 \mathrm{~cm})$ shims on all four sides (not supplied).

Note: Shims can be cut from $1 / 2^{\prime \prime}(1.3 \mathrm{~cm})$ plywood and secured to the wood posts using wood screws or nails (purchased separately).


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

110 11/16 in ( 281.5 cm ) From corner of bracket


6


## STEP THREE

## Vinyl Column Installation Over In-Ground Wood Posts

## 1

Using a step ladder, guide the vinyl column over the top of the wood post down into position. Ensure that holes at top of column are orientated correctly for future beam and rafter placement as per illustration.

## Please Note:

If you installed your wood posts directly into the ground, please proceed to position the vinyl column tight to the inside corner of the wood posts as illustrated below. NO SHIMS REQUIRED.


2
Finally, 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.

## 3

Securethevinyl columns to the wood posts using $1-3 / 4^{\prime \prime}(1.9 \mathrm{~cm})$ screw at $8^{\prime \prime}(20.3 \mathrm{~cm})$ up from the bottom and 1 more approximately $36^{\prime \prime}(91.4$ $\mathrm{cm})$ high. Cover the screw heads with provided snap caps.


At this stage, the columns should be properly installed as per the following illustration, with the columns 78 in ( 198.1 cm ) apart. Also, notice that the holes at the top of each post should be facing the same direction.


## STEP FOUR

## Main Support Beam Assembly

## 1

Lay out two 94 " $(238.8 \mathrm{~cm}$ ) beams (part 7) as shown. Align and fasten mounting brackets to the pre-drilled holes on top of the beams using the 3/4" ( 1.9 cm ) screws provided. Cover the screw heads with provided snap caps.

## STEP FIVE

## Main Support Beam \& Rafters Placement

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

2
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 opposite beam.
Please note:
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 for some measure of flex.

## 3

Stop when the end of the main support beam measures $3^{\prime \prime}(7.6 \mathrm{~cm})$ from the outside edge of the post. Fasten both ends of the beam to the posts as illustrated using four $4^{\prime \prime}(10.2 \mathrm{~cm})$ screws per post.

Cover the screw heads with provided snap caps.
Repeat step 2 for the remaining posts and main support beam.


2


Slide the two outer rafters through both holes of the vinyl column (overshooting) and then back through both holes of the opposite column. Stop when the end of the beam measures $3^{\prime \prime}(7.6 \mathrm{~cm})$ from the outside edge of the post.

5
Using 4" ( 10.2 cm ) self-auguring screws, lock the beams and rafters into position inside the posts by driving in 2 screws on each face of the posts. Cover the screw heads with provided snap caps.

## 6

Place the remainder five rafters in the front and rear rafter brackets.

## 7

Complete a final adjustment of all beams and rafters. All spacing should appear equal to the eye.

## 8

Using 3/4" 1.9 cm ) self-auguring screws, attach the pergola rafters to the rafter brackets. Cover the screw heads with
provided snap caps.


## 4




## STEP SIX

## Fastening Decorative Caps

## 1

Glue the post caps top and bottom using vinyl weld. Glue the postcaps onto the posts.

2

Install decorative pergola end caps using vinyl weld.


## STEP SEVEN

2

## Shade Slat Assembly

1
To assemble the shade slats, glue the $11 / 2^{\prime \prime}(3.8 \mathrm{~cm})$ square pergola end caps onto the end of the filters.

## Shade Slats Installation

Shade slats are designed to extend approximately 7 1/4" (18.4 cm) pastthe last rafter. Measurement includes the pergola end caps.

Your goal is to ensure that all the shade slats overhang equally to the eye.

## 2

Install first and last shade slats 2" ( 5.1 cm ) away from the posts.
3
Install the rest of the shade slats at $10.5^{\prime \prime}(26.7 \mathrm{~cm})$ spacing.
4
Install one $4^{\prime \prime}(10.2 \mathrm{~cm})$ screw at each intersection of rafter and shade slat. Cover the screw heads with provided snap caps.

6


