10x10 Trellis Pergola



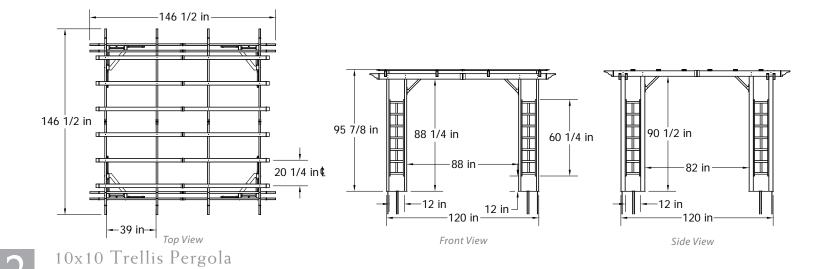


211 Campbell St. Sarnia, Ontario, Canada N7T 2G6

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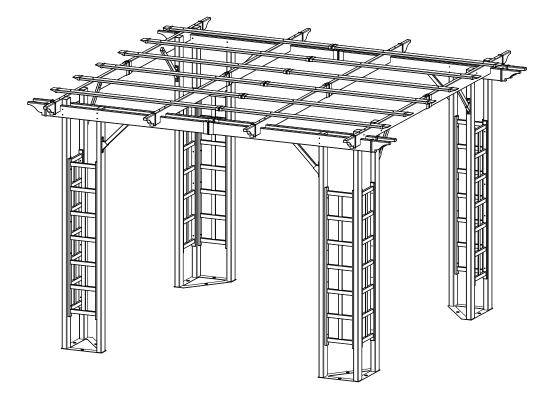
10x10 Trellis Pergola

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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. 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.

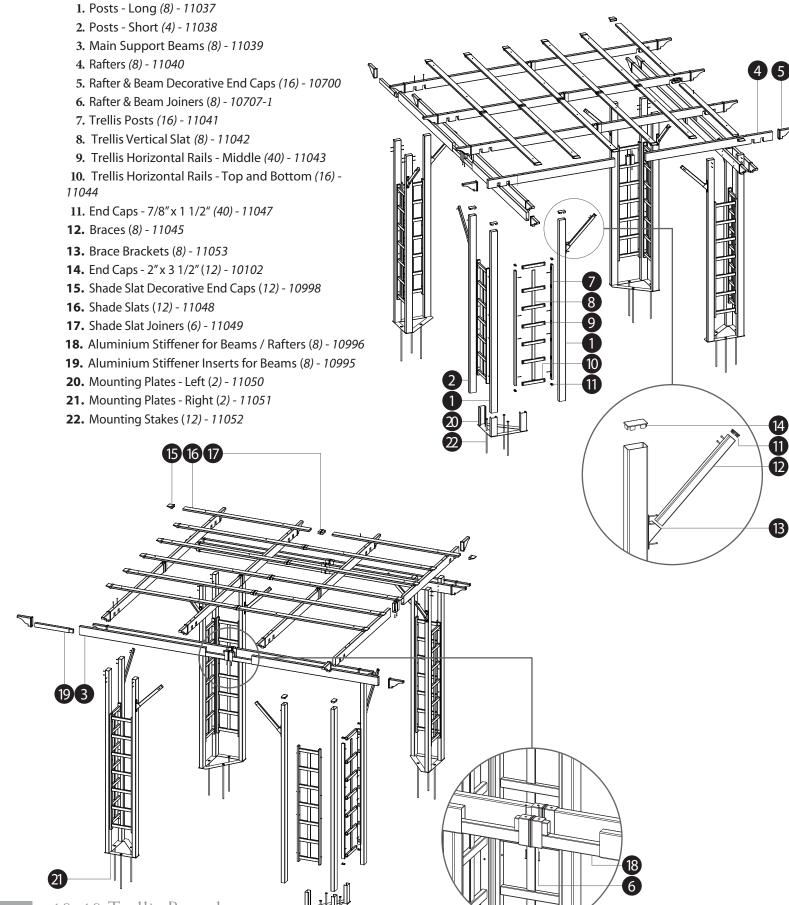
It is critical before you start that you consider the current slope of elevation where the pergola is planned - if there is any. Also utility or sprinkler line location is important to identify prior to excavating holes if necessary. You should also check to verify local building codes, ordinances, neighbourhood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

Restriction of Use

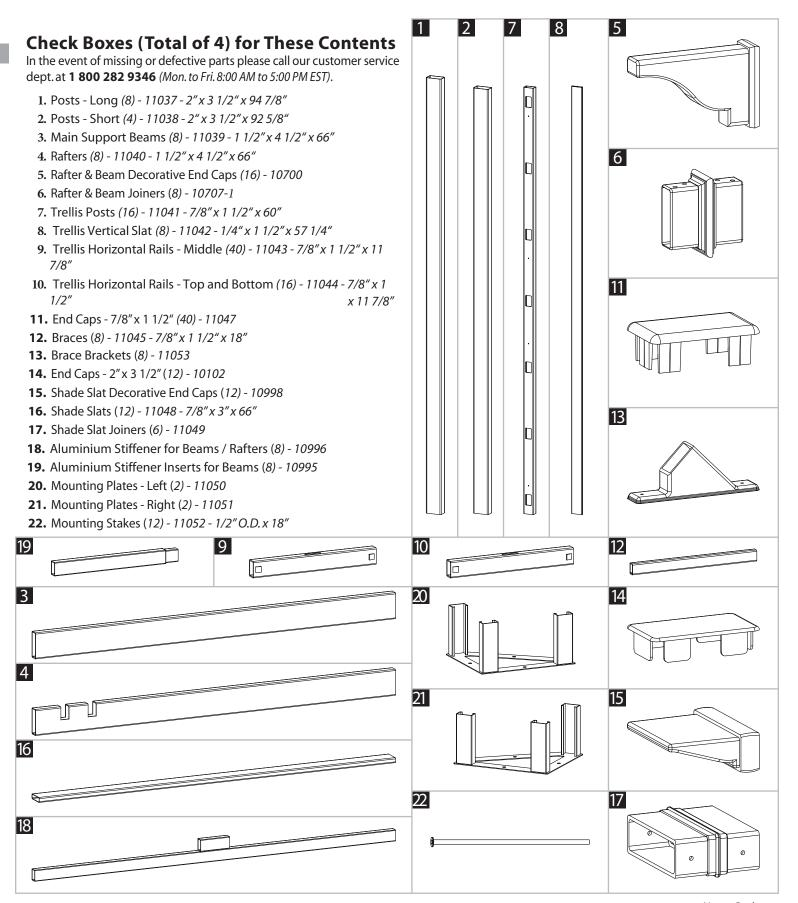
This product **is not** designed to carry additional weight loads such as swings, people or other objects.

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 calling 1 800 282 9346 (Mon to Fri 8:00 A.M to 5:00 P.M. EST).

10x10 Trellis Pergola Materials Overview



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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. Vinyl Weld Glue (2) 20000
- **B.** 1 1/2" Self-Auguring Stainless Steel Screws (64) 20005 (To fasten trellis assembly to pergola posts)
- **C.** 1 1/2" Self-Auguring Stainless Steel Screws (24) 20005 (For brace brackets)
- **D.** 1 1/2" Self-Auguring Stainless Steel Screws (24) 20005 (To fasten shade slats to rafters)
- **E.** 1 1/2" Self-Auguring Stainless Steel Screws (32) 20005 (For beam and rafter joiners)
- F. 1 1/2" Self-Auguring Stainless Steel Screws (16) 20005 (To fasten braces to beams / rafters)
- **G.** 1" Self-Auguring Stainless Steel Hex Head Tek Screws (24) 20023 (To fasten posts to mounting plates)
- **H.** 2 1/2" Self-Auguring Stainless Steel Screws (48) 2009-1 (To fasten beams / rafters to posts)
- I. 3" Self-Auguring Stainless Steel Screws (16) 20007 (To fasten rafters to beams)

Extra Materials You will Need

We have provided mounting plates with stakes to mount your pergola into the ground. You may, however, follow one of the options below to better suit your need:

If Mounting Pergola onto Deck (with access to under the Deck)

J. 1/2" Bolts with Washers and Locking Nut (12) (purchase at local building center). Length of bolts will depend on thickness of decking material.

If Mounting Pergola onto Deck (with no access to under the Deck)

K. 1/2" - 5/8" Lag Bolts (12) (purchase at local building center) Length of Lag bolts will depend on thickness of decking material.

If Mounting Pergola on existing Concrete Pad

L. 1/2" x 4" Sleeve Anchors (12) (purchase at local building center)

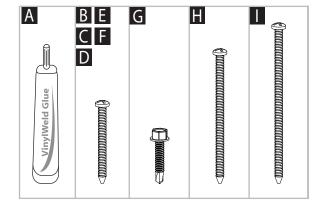
Tools You Will Need

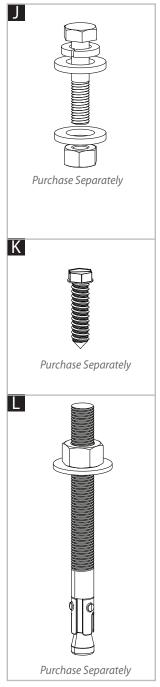
- Level
- Hammer
- Tape Measure
- Step Ladders (2)
- Cordless Drill
- Hex Nut Driver (5/16" or 8mm)
- 1/8" x 2" Drill Bit (to pre-drill holes on top and bottom of joiner to penetrate aluminium inserts as necessary)

Tools You May Need

- Circular Saw with Fine Tooth Blade
- Framing Level

- Framing Square
- Hacksaw (or a motorized cutting device designed to cut steel)





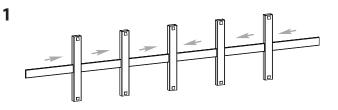
10x10 Trellis Pergola

Pergola Assembly

2

Side Panel Trellis Assembly

STEP ONE



One by one, insert five Middle Trellis Horizontal Rails over the Trellis vertical Slat as shown. Excess force should not be used.

Slide the End Trellis Horizontal Rails over the assembly as shown. Note that there are only one side with a routed hole.

2

Starting with one end, carefully 'walk' the assembly into the Trellis Post while making adjustments.

3

Note that the horizontal rails are tabbed; once inserted, the horizontal rails will lock into place.

4

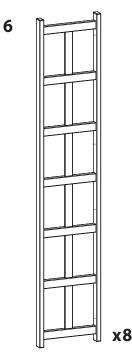
Starting with one end, carefully 'walk' a Trellis Post over the assembly as shown.

5

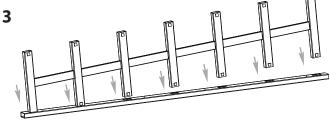
Pressure fit four end caps as shown.

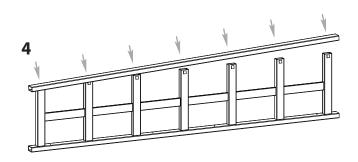
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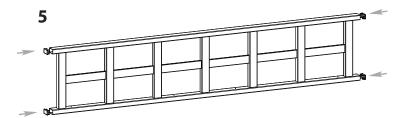
Repeat for other 7 side panel trellisses.

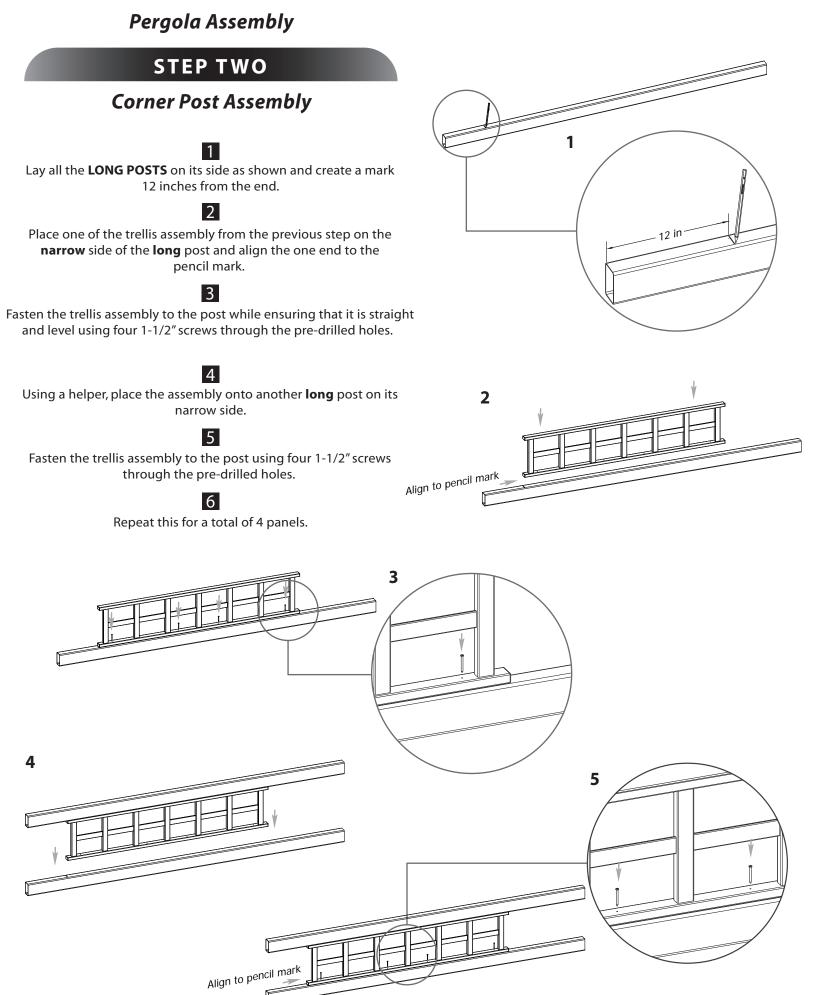












10x10 Trellis Pergola

STEP THREE

Left and Right Corner Post Assembly

There are Left and Right corner assemblies (2 each) as shown aside: The assembly process is very similar, the only diference between the two is which post the second trellis assembly is attached to. (The left or right side of the assembly)

Place the panel with trellis onto the steel mounting plate followed by the short post as shown.

2

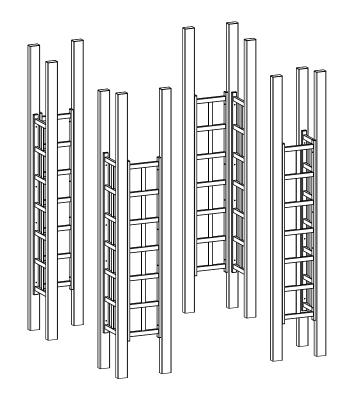
Place a trellis assembly between the posts as shown. The trellis assemblies should be at the same height. A level should be used to ensure the two trellis assemblies are level.

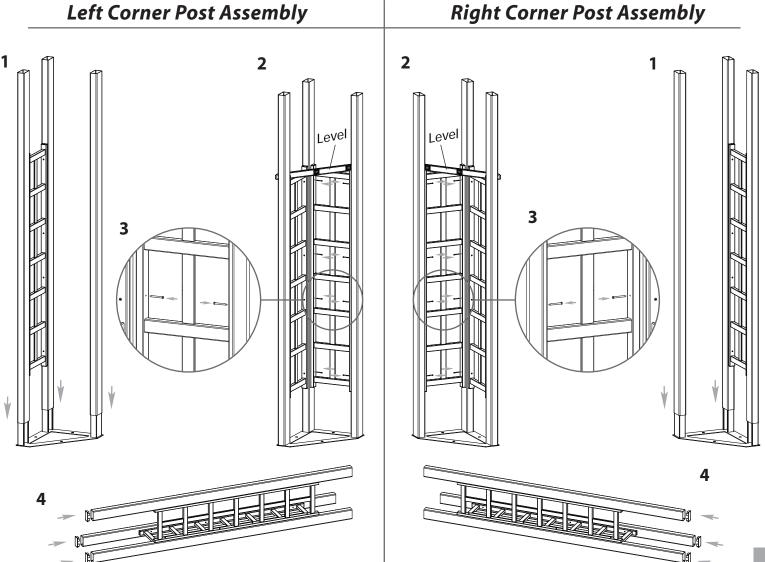
3

Fasten the trellis assembly onto the posts with eight, 1-1/2" screws though the pre-drilled holes onto posts (four per side). Make sure the trellis assembly is straight and level along the post.

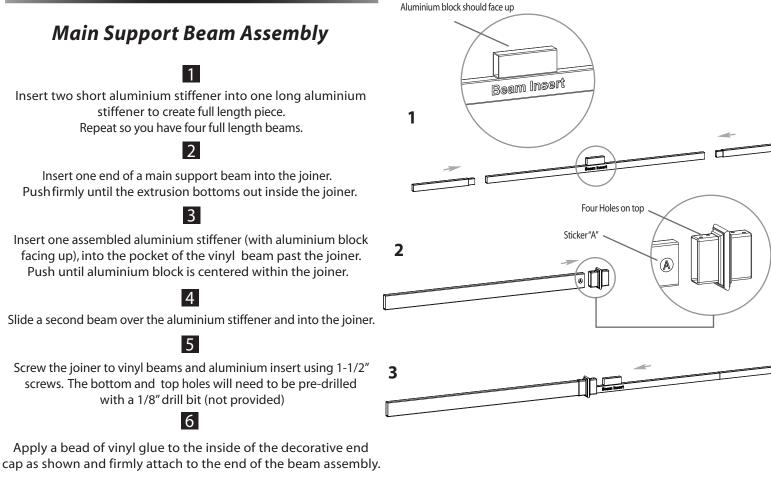
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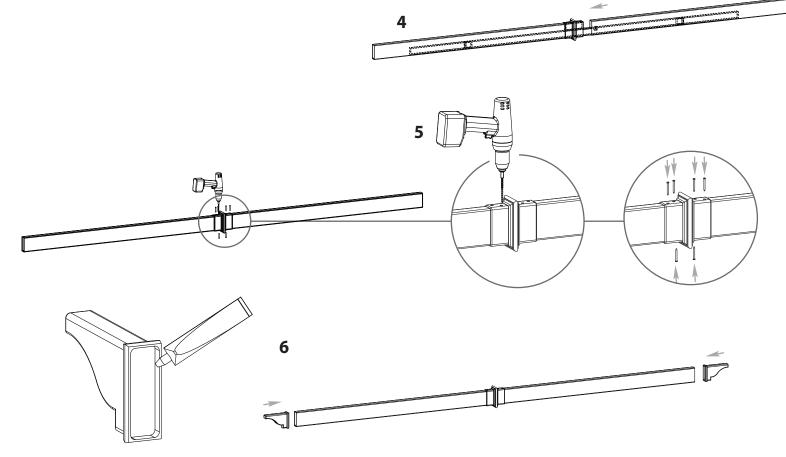
Pressure fit three post caps per corner assembly as shown.





STEP FOUR







STEP FIVE

Rafter Assembly

1

Insert one end of the rafter into the joiner. Push firmly until the extrusion bottoms out inside the joiner.

Insert one aluminium stiffener (with aluminium block facing up), into the pocket of the vinyl rafter past the joiner. Push until aluminium block is centered within the joiner.

2

3

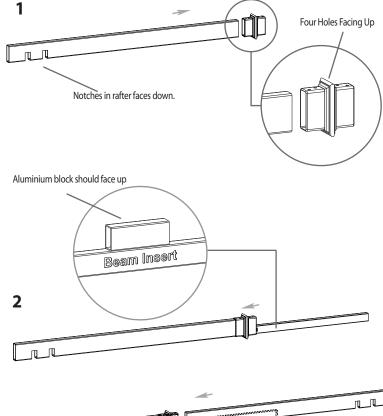
Slide a second rafter over the aluminium stiffener and into the joiner.

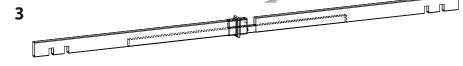
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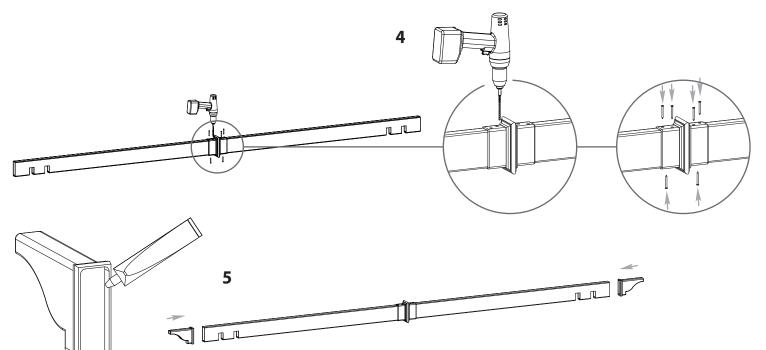
Screw the joiner to vinyl rafters and aluminium insert using 1-1/2" screws. The bottom and top holes will need to be pre-drilled (use drill bit provided).

5

Apply a bead of vinyl glue to the inside of the decorative end cap as shown and firmly attach to the end of the rafter assembly.







STEP SIX

Main Support Beams Installation

1

Space the post assemblies out using dimensions shown. Measurements are taken between posts. Note the placement of the short posts.

2

With a helper, raise one of the beam assemblies and butt it up against the outside of the posts as shown. Center the main support beams between the two posts. Note that the top of the main support beam should be level with

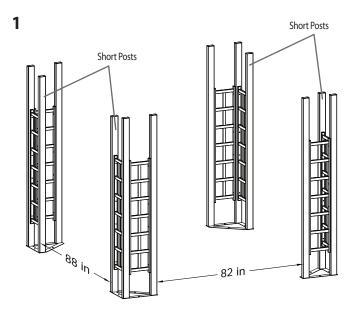
the **short** posts.

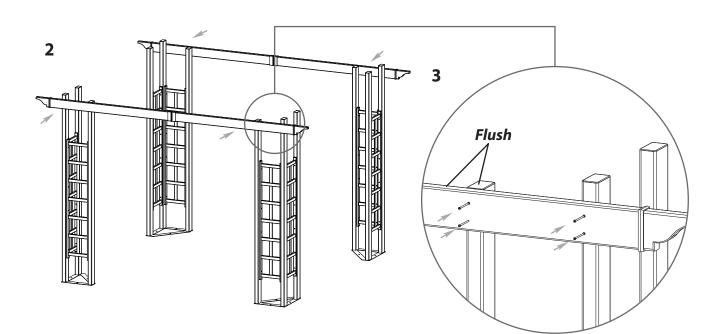
3

Fasten main support beam assembly to the posts using eight, 2 1/2" Screws.

4

Repeat steps for second outer beam.





STEP SIX (Continued)

Main Support Beams Installation

Insert the brace into the bracket as shown.

2

Pressure fit the end cap onto the brace.

3

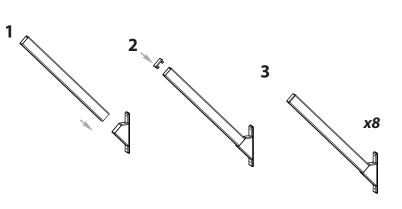
Repeat for all 8 braces.

4

Place brace assembly up against the post as shown. Brace assembly should be against the outer edge of the post (away from the pergola), and the top of the brace should be flush to the top of the beam.

5

Mark the location of the bracket and temporarily remove the brace. Fasten the bracket onto the post as shown using two 1-1/2" screws.



6

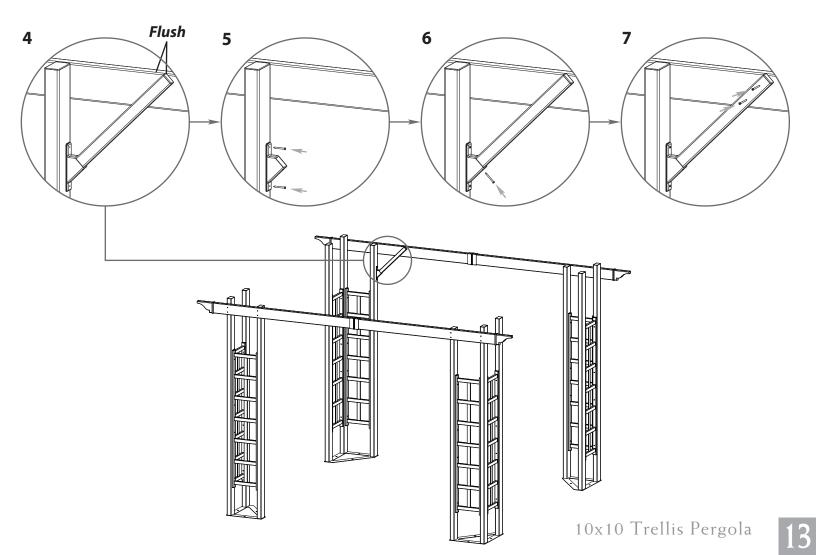
Re-install the brace and fasten into place using one 1-1/2'' screw.



From the inside face of the beam, fasten the brace to the beam using two 1-1/2" screws through the braces. Pre-drilling may be required if you screw hits the steel insert in the beam.

8

Repeat for all four corners.



STEP SIX (Continued)

Main Support Beams Installation

1

With a helper, raise one of the beam assemblies and butt it up against the inside of the posts as shown. Center the main support beams between the two posts.

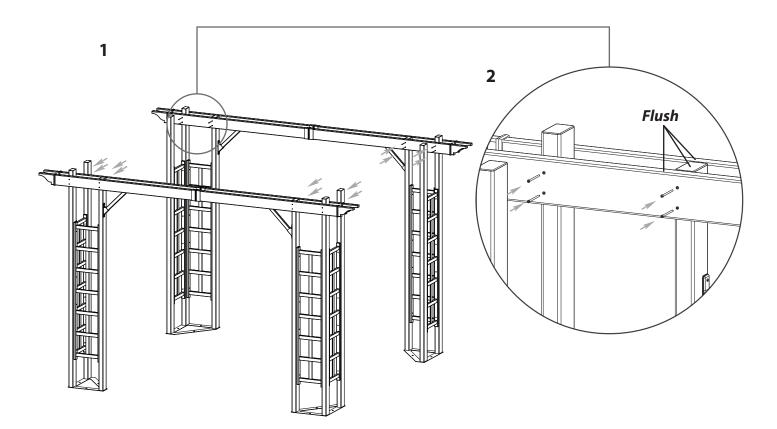
Note that the top of the main support beams should be level.

2

Fasten main support beam assembly to the posts using eight, 2 1/2" Screws.

3

Repeat steps for second inner beam.



STEP SEVEN

Rafters Installation

1

With a helper, place the rafter assemblies onto the beam assemblies. Excessive force should not be used.

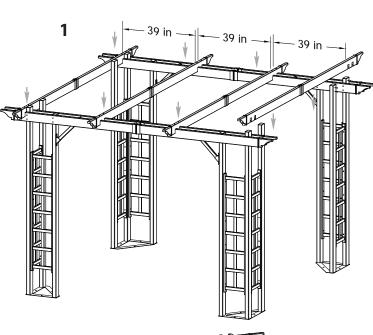
End rafters should butt up against the outside of the posts. Middle rafters should be spaced out 39" apart.

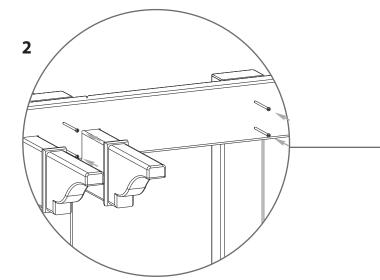
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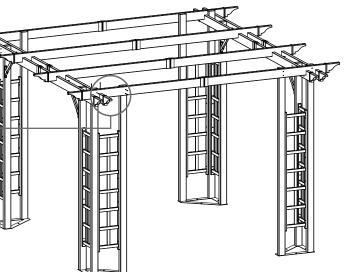
Fasten the end rafters to the posts using 2-1/2" screws as shown (8 per end rafter)

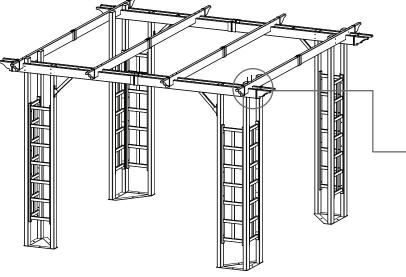
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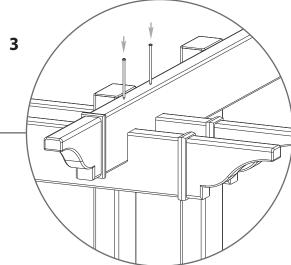
Fasten all rafters to the beams using 3" screws as shown (4 per rafter)











STEP SEVEN (Continued)

Rafters Installation

Place brace assembly onto the post as shown. Brace assembly should be against the outer edge of the post (away from the pergola), and the top of the brace should be flush to the top of the rafter.

2

Mark the location of the bracket and temporarily remove the brace. Fasten the bracket onto the post as shown using two 1-1/2" screws.

3

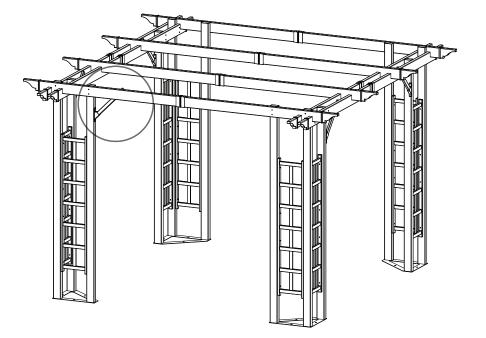
Re-install the brace and fasten into place using one 1-1/2'' screw.

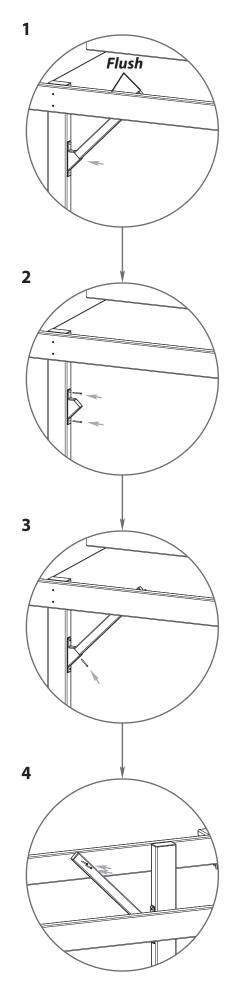
4

From the inside face of the rafter, fasten the brace to the rafter using two 1-1/2" screws through the braces. Pre-drilling may be required if you screw hits the steel insert in the beam.

5

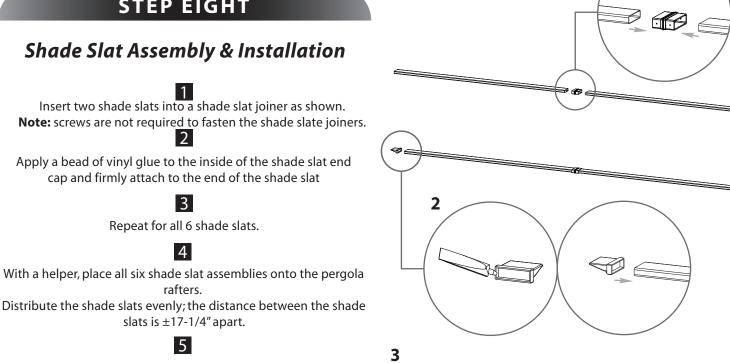
Repeat for all four corners.



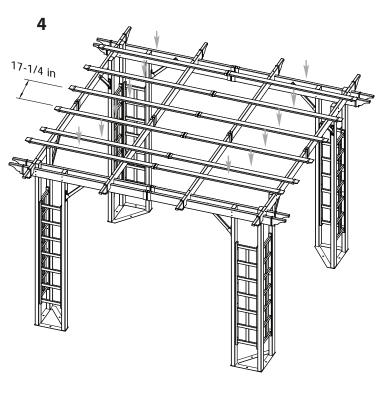


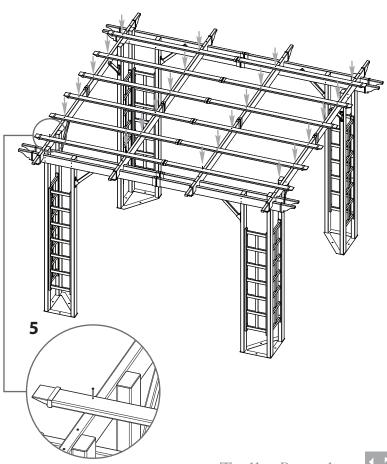
16

STEP EIGHT



Fasten the shade slats onto the rafter using 1-1/2" screws (One at every junction of where the shade slat crosses over the rafter - 4 screws per shade slat).





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STEP NINE

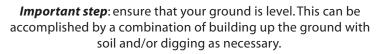
Pergola Mounting

This pergola has been designed to be easy to install and anchor to the ground.

Place the pergola at the desired location and pound the supplied

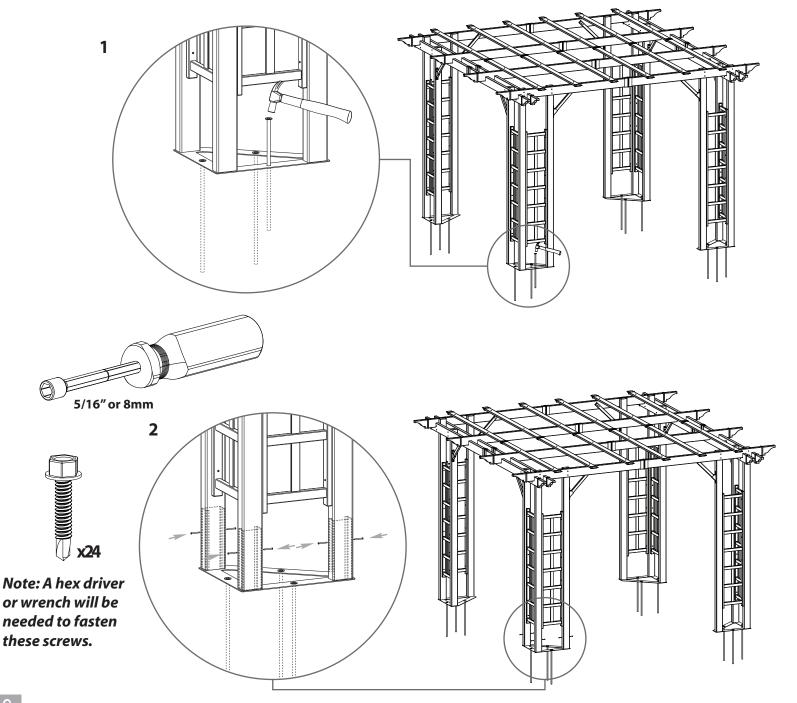
mounting stakes with a hammer into the ground.

If mounting onto concrete or decking material, please consult mounting options at the end of this instruction.



2

Fasten the pergola with 1" hex head tek screws provided at the locations shown. Before setting the screws, you will need to predrill pilot holes through the posts and mounting plates using the 1/8" drill bit (not provided).



8

Pergola Installation on deck (with access to under the deck)

Pergola installation with this menthod can and should be done AFTER the pergola is fully assembled.

STEP ONE

Place the fully assembled pergola (including the mounting plates) to the desired location and make sure pergola posts are standing square relative to each other.

1

To distribute the weight of the pergola, we recommend using 2×6 supports directly below the mounting plates as shown.

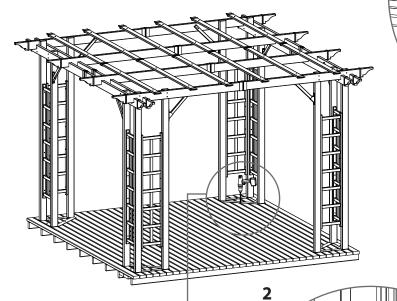
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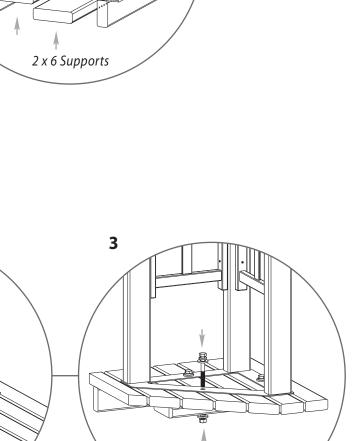
Drill 1/2" holes (3 per mounting plate) through the deck and 2 x 6 supports as shown.

1

3

Insert a 1/2" bolt assembly into each of the hole and fasten nut into place.





Pergola Installation on deck (with no access to under the deck)

Pergola installation with this menthod can and should be done AFTER the pergola is fully assembled.

STEP ONE

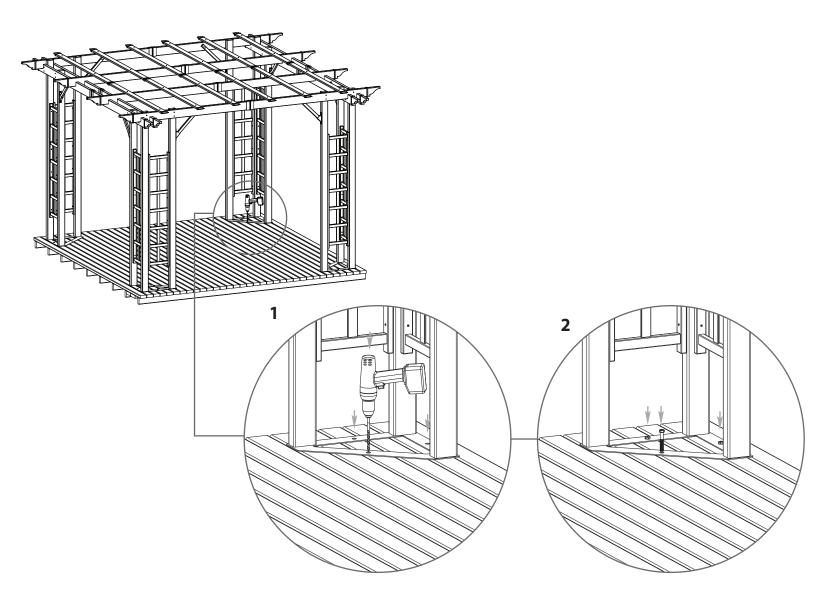
Place the fully assembled pergola (including the mounting plates) to the desired location and make sure pergola posts are standing square relative to each other.

1

Drill 3/8" holes (or lag bolt manufacturer's suggestion) - 3 per mounting plate through the deck and 2 x 6 supports as shown.

2

Fasten 1/2" lag bolt into each of the hole.



Pergola Installation on Existing Concrete Pad

Pergola installation with this menthod can and should be done AFTER the pergola is fully assembled.

STEP ONE

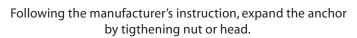
Place the fully assembled pergola (including the mounting plates) to the desired location and make sure pergola posts are standing square relative to each other.

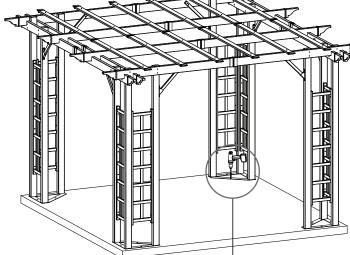
1

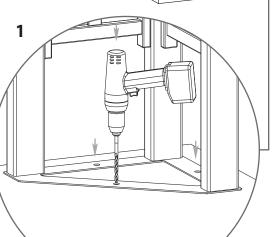
Using a masonary bit and a hammer drill, drill 5/8" holes (or as per sleeve anchor manufacturer's suggestion) - 3 per mounting plate as shown.

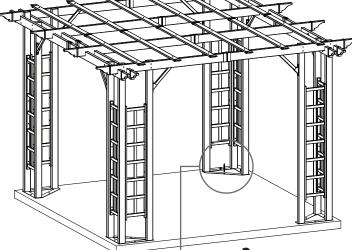
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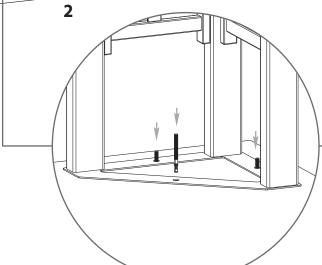
Clean the holes and insert the sleeve anchors.

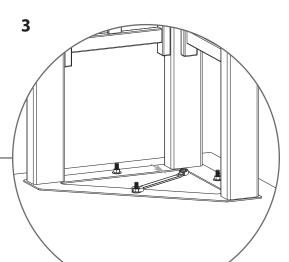












Additional Installation Note

If there is too much sway in the pergola, you may also purchase "ready-mix" cement and pour it down the posts - DRY - and then add water down the posts (consult cement packaging for cementwater ratio).

This will help lock the posts and footings together.

One bag of ready-mix cement should be used for each corner (3 posts) for a total of 4 bags.

CONCRETE - Ready Mix

Purchase Separately

