

# CHADSWORTH COLUMNS



### FIBERGLASS PERGOLAS – INSTALLATION

#### **REQUIRED TOOLS:**

Hammer • Electric Hammer Drill • 5/8" Concrete Drill Bit • 13/16" Wrench • Portable Cordless Drill • #2 Square Drive Bit • 5/16" Socket Head Bit • Pair of Pliers • 3/8" Socket Head Bit • 3/16" Drill Bit • 1/8" Drill Bit • 15/16" Socket

#### STEP 1



Locate the center points of the Columns. Make sure the layout is Squared. Also make sure the slab is level.

#### STEP 2



Use the hammer drill and 5/8" concrete bit to drill a five (5) inch deep hole.

#### STEP 3



Remove the dust from the hole to insure a clean insertion of the stainless steel anchor.

#### STEP 4



Use the hammer to install the stainless steel anchor in the prepared hole.

#### STEP 5



Use the 15/16" socket wrench to tighten the nut on top of the anchor.

#### STEP 6



Install the connector nut on top of the stainless steel anchor and tighten.

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#### STEP 7



Position the column so that it is centered over the connector nut. If the column base is not installed, slide it over the top of the columns & down the column to the bottom.

#### NOTE:

The support
Columns must be
a minimum of 10"
diameter. The
maximum height of
the column should
be 10' tall unless
approved in writing.



#### STEP 8



Attach a connector nut to the threaded rods & then attach the short six-inch stainless steel threaded section to the top of the connector nut.

#### STEP 9



Lower the threaded rod into the column & engage the coupling nut on the bottom.

#### STEP 10



Screw the threaded rod snugly into the coupling nut at the bottom of the column & tighten with pliers.

#### STEP 11



Locate the column cap (shown in 11 & 12). Place on the column & feed the threaded rod through the hole in center of the plate with the welded angle.

#### STEP 12



#### **STEP 13**



Tilting the column to one side may make it easier to position the rod so it can be inserted through the hole in the cap. Make sure that the attached angle is oriented properly. Caulk around the center hole. Only finger tighten the stainless steel nut at this time.

#### STEP 14



Install headers without decorative rafter tails to outside of the aluminum angles on top of columns using the 2.5" hex head stainless steel screws. Set the clutch on drill so the screw is not stripped.

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Install the headers with the decorative rafter tails on the opposite side of the aluminum angle using the 2.5" hex head stainless steel self tapping screws. Set the clutch on the drill so the screw is not stripped.

#### **STEP 15**

Note: On the Double Rafter support system, the Rafter supports will mount on the outside of the double top plate bracket using (4) 2-1/2" hex head self-tapping screws per side (from the outside in toward center hole). The Header will mount to the angle bracket with 2-1/2" hex head screws. The small flat bracket will mount on top of the header & double rafter support with 3/4" screws or 3/16" pop rivets. (Pop rivet requires 3/16" drill bit). Note: All the holes in the top plate should be pre-drilled with a 1/8" steel drill bit from the outside from the bracket toward the center hole.

Note: On the single rafter support system, the (2) 2-1/2" hex head stainless self-tapping rafter support screws will be used on each support on Steps 14 & 15 in our installation instructions. They will attach the single rafter supports & headers to the aluminum 90 degree angled top plate shown in Step 13. Note: All the holes in the top plate should be pre-drilled with a 1/8" steel drill bit from the inside of the bracket.







#### **STEP 16**



Starting in the center of the arbor, begin installing the rafters with the decorative tails. The headers have fiberglass angles as shown which indicate the rafter location.

#### NOTE:





The ¾" hex head stainless rafter screws will be used on Step 16 to attach the angle clips to the rafters. (Requires 5/16" socket head bit)

\*Pre-drilling not required.

#### **STEP 17**



Continue working out from the center until all the rafters are installed.

NOTE: It is easier to paint on the ground before you begin installation.

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#### **STEP 18**



Following the layout pattern on the rafters, begin installing the Purlins across the top of the rafters using the steel deck screws.

#### NOTE:





The 2-1/2" stainless steel self-tapping purlin screws will be used on Step 18 to attach the purlins to each rafter.

(Requires #2 square drive bit).

#### STEP 19



Set the clutch on the drill to insure that the screw head does not dimple the top surface of the purlin.

Continue across the top of the rafters until all purlins have been installed.

#### STEP 20



Using a 15/16" deep well ratchet or opened end wrench, tighten the nut on top of each column until very tight.

#### **STEP 21**



Using a 1/8" drill bit, drill a hole in the bottom near the end of each header, rafter & purlin. This will insure that moisture will vent – should any collect.

#### Wood or Composite Deck Installation



Note: Deck plates must be bolted to the top of the wood or composite deck with four (4) ½" stainless steel lag bolts. 2" x 4" Blocking must also be used on the underside of the deck for extra support. (The ½" bolts are sold separately).



- \*Accessorize as you desire, and begin to experience many years of low maintenance enjoyment.
- \*Check your local building code for the building requirements in your area before installation.
- \*Any deviation from our standard installation shown in these instructions voids all warranties.