

## **IMPORTANT -- SPECIAL INSTALLATION INSTRUCTIONS**

**\*\* READ ALL INSTALLATION INSTRUCTIONS BEFORE STARTING!\*\***

**If at any point, you have questions, call 1-800-851-0865...(The manufacturer will not be responsible for delays or lost installation time, due to failure to follow all instructions.)**

### **ATTENTION INSTALLERS:**

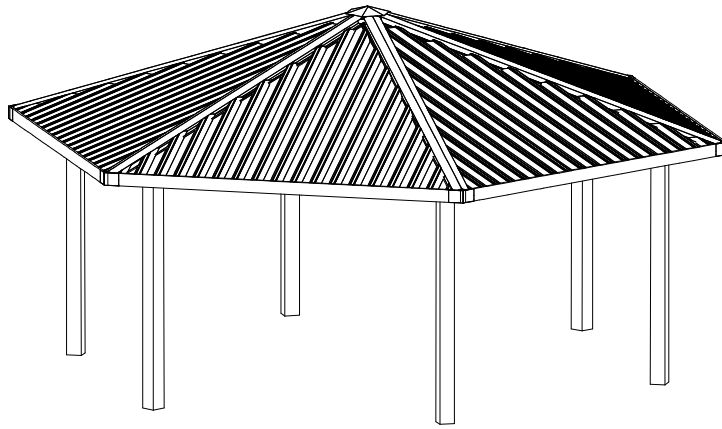
We recommend that the protective covering be left on shelter components until assembly has been completed. Remove covering just enough to install bolts and fasten shelter together.

Metal shavings left on roof or other surfaces will quickly rust and stain the surface finish. Cutting, drilling and installing roof panels, fasteners and other components will cause metal shavings. These shavings **MUST** be carefully removed at the end of each day by either sweeping or brushing the installed roof and other surfaces.

1. It is **EXTREMELY IMPORTANT** that, before setting any anchor bolts, the current footing layout is obtained from the manufacturer and the bolts are accurately set.
  - 1A **Anchor Bolts** are **not** included and must be furnished at time of installation. Consult local building codes and drawings if ordered and furnished.
  - 1B We recommend using **High Quality Stainless Steel Anchor Bolts** in areas with a corrosive climate. Check local building codes.
2. If the shelter is set on a concrete slab (or footings), the slab must be exactly level so that all the posts will be at the exact same elevation when mounted on the slab and anchored down.
3. If the shelter is set on an unlevel surface, it will bolt together if assembled with all bolts loose. When the bolts are tightened, some of the steel joints will have gaps and the unit may not be exactly plumb; however, the strength of the structure will not be affected.
4. In areas with frequent rain, the slab or footing elevation should be at least 1" above the elevation of the surrounding landscaping to prevent water from ponding around the base plate and anchor bolts.
5. In most cases, the anchor bolt nuts should not be tightened completely, until the frame is assembled and squared, and the roof panels have been installed.
6. In all cases, the center to center of roof panel lock spacing, the 24" c/c for the 3-V roof panels, the 10" c/c for the single V panels, and the 18" OR 8" c/c for the flat panels must be maintained as the panels are installed. This spacing must be maintained across both the top and bottom of the panels. **IF THIS IS NOT DONE**, the problems may not show-up until towards the end of the panel

installation, when they will not fit properly and appear to be too long or cut wrong. If this happens, go back and check the spacing and re-set if necessary.

7. As is common in the erection of all types of metal structures, due to job site conditions - unlevel slabs, footings, etc., slight modifications such as reaming of some holes or even drilling a new hole or two, may become necessary and must be done on the job site.
8. Installing Tek screws at a high rpm may cause the Tek screws to become damaged or break during installation. If damage or breakage occurs, lower the speed of the drill.
9. Predrilling holes and removing metal shavings and debris from between components before fastening together will help prevent any rusting or staining of surrounding surfaces.
10. After assembly of the gutter is complete, be sure to drill holes in the gutter at the desired locations and install scuppers or downspouts.
11. Touch up paint has been supplied with your shelter to cover minor scratches or bolt and screw heads to give your shelter that finished look. Use a template for touch up painting to achieve a good finish and minimize over spray.

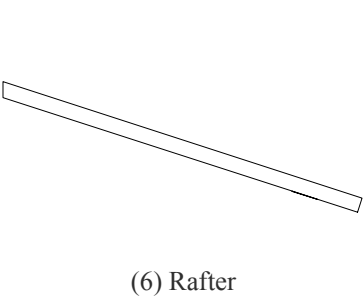
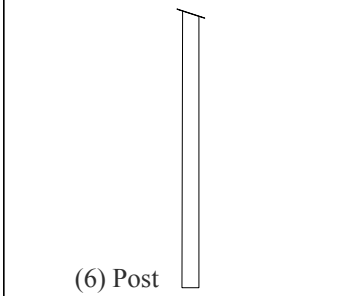
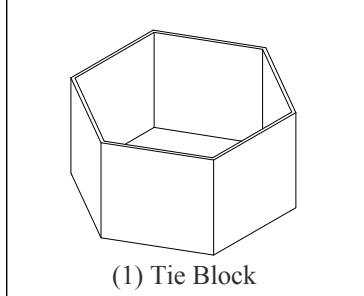
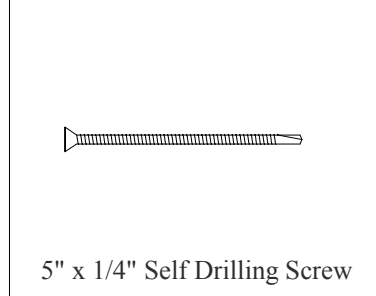
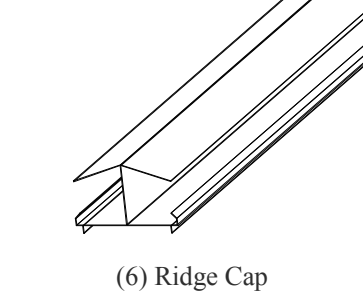
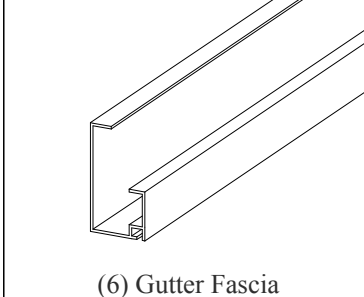
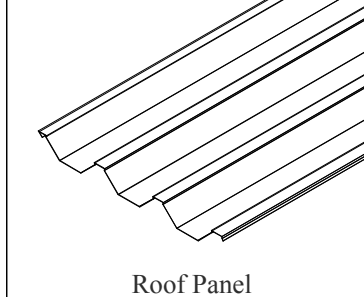
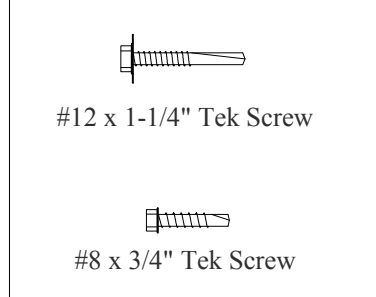
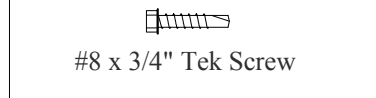
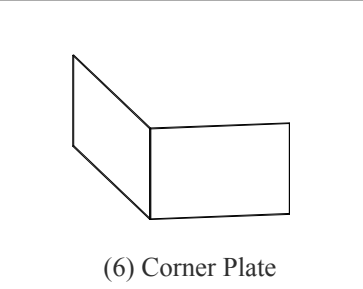
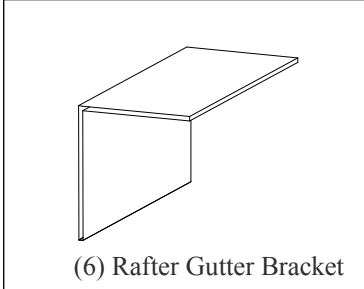
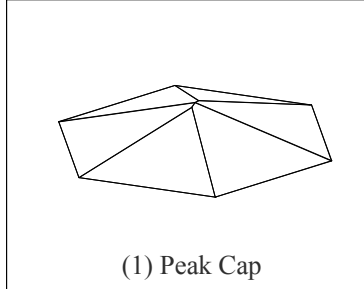
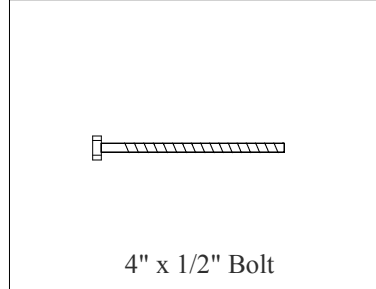


# Standard Apache Shelter Assembly & Installation Instructions

**Recommended Tools:** Safety Glasses, Tape Measure, Carpenters Level, Framing Square, Hex Head Nut Drivers, Elec. Drill w/ Bits, Open or Box End Wrenches, Mallet

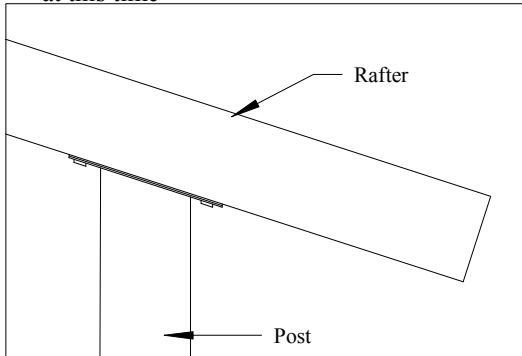
- Before You Begin:**
- 1.) Please read all instructions and the General Notes Page carefully. Check the Bill of Materials for any missing parts, and gather necessary tools. To prevent scratching of painted materials, place on a tarp, paper, or protective material.
  - 2.) You may be required to obtain a building permit for this structure from your local building authority. This product should only be installed in 10, 20, or 30 psf (pounds per square foot) snow load and 90 mph or less wind speed zone (Custom models can be designed for heavier loads). Contact your local building department for details and your area's snow & wind loads.
  - 3.) Note that this Roof Deck is not designed to carry additional loads such as hanging heavy plants, swings, people, or other objects.
  - 4.) Operating Tek screws at the highest speed of the drill may cause screws to become damaged or break during installation.

## APACHE SHELTER PARTS LIST

 <p>(6) Rafter</p>	 <p>(6) Post</p>	 <p>(1) Tie Block</p>	 <p>5" x 1/4" Self Drilling Screw</p>
 <p>(6) Ridge Cap</p>	 <p>(6) Gutter Fascia</p>	 <p>Roof Panel</p>	 <p>#12 x 1-1/4" Tek Screw</p>  <p>#8 x 3/4" Tek Screw</p>
 <p>(6) Corner Plate</p>	 <p>(6) Rafter Gutter Bracket</p>	 <p>(1) Peak Cap</p>	 <p>4" x 1/2" Bolt</p>

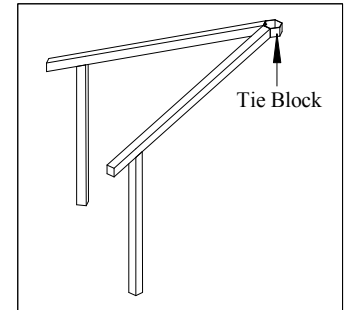
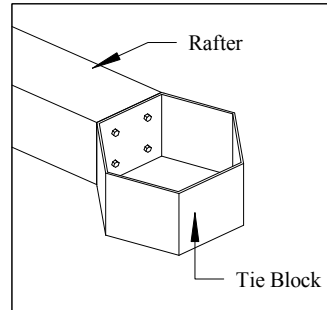
## STEP 1

- Layout the 6 Legs and Rafters
- Bolt together using 1/2" Bolts and nuts but do NOT TIGHTEN COMPLETELY at this time



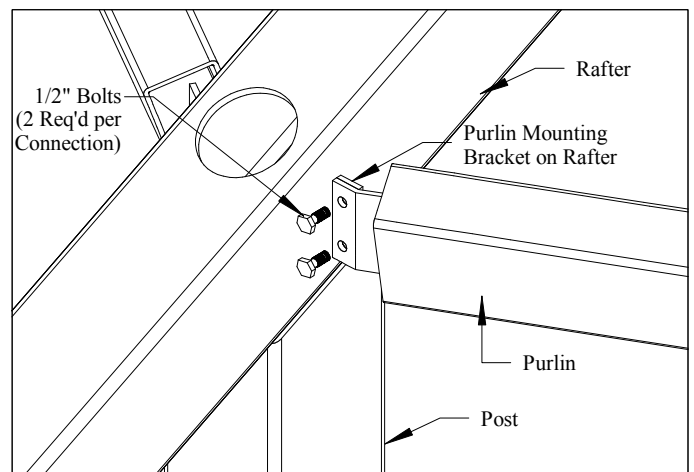
## STEP 2

- Bolt the Six-Sided Tie Block to one of the Leg/Rafter assemblies and stand it up
  - Stand up another assembly to the left or right of the 1st one and bolt together
- Follow this procedure around the tie block until all are in place  
**DO NOT COMPLETELY TIGHTEN BOLTS AT THIS TIME**



## STEP 3

- Attach purlins to rafters using 1/2" bolts and nuts.
- NOTE: Install purlins with the top angled down and out, following the slope of the rafters. This is necessary so the roof panels will lay flat on top of these purlins for installation.  
Do Not Tighten Bolts Completely At This Time.

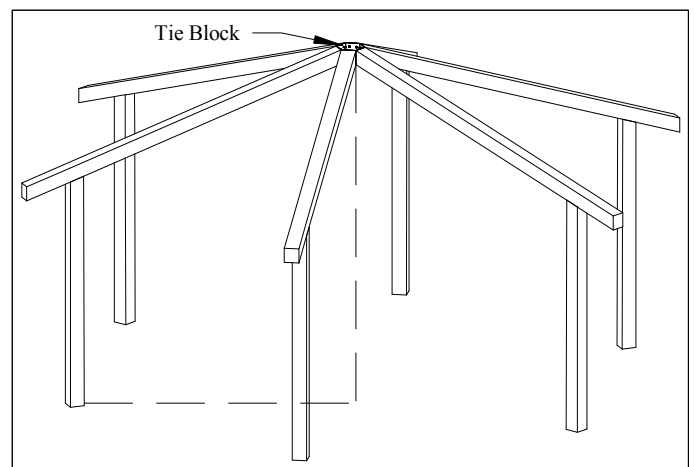


## STEP 4

- Set the Post Spacing per layout plans
  - Referring to the Special Anchoring Instructions attached, anchor the Posts to the Slab or Footings
- DO NOT COMPLETELY TIGHTEN BOLTS AT THIS TIME**

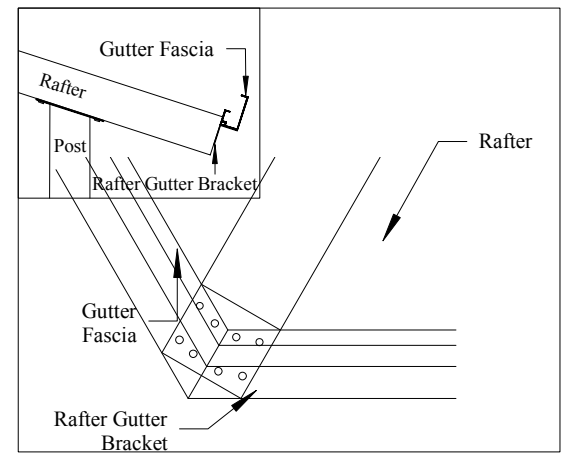
## STEP 5

- After referring to the enclosed plans, set the height from the bottom of the Tie Block to a line level with the bottom of the Post Plates
- NOTE: this is extremely important in being able to square the unit, plumb posts, make connections, prevent gaps, and installing all components  
(a fork lift, basement screw floor jack, or lumber and shim support may be used to set Tie Block height  
Adjusting the height of the Tie Block up or down during installation can help in making connections of various components; however be certain to re-set to correct height afterwards.)



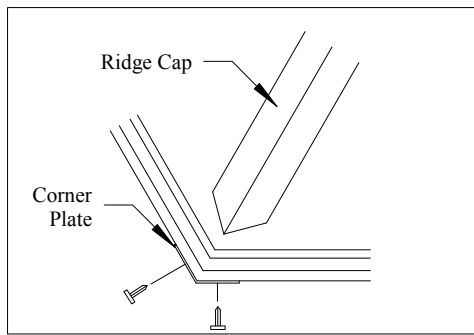
## STEP 6

- Place a Gutter Fascia piece on the Gutter Brackets at end of the Rafters, making sure that the ends are centered on the Brackets. Secure each end with 4 of the larger #14 x 3/4" Drill Screws. Do a Gutter piece across from the 1st and continue in this fashion. NOTE: Due to the variety of site or frame conditions, there is one piece that is marked to "install last". This piece is longer than the others and has only one end cut on an angle. AFTER five pieces have been installed measure the last opening and cut this last piece on the correct angle and length needed, and install it may be necessary to use a heavy-duty ratchet strap to make the last connection.



## STEP 7

- Attach the corner plates to the Gutter Fascia using (8) 3/4" Drill Screws  
*It is very important that this step is followed!!*



## STEP 8

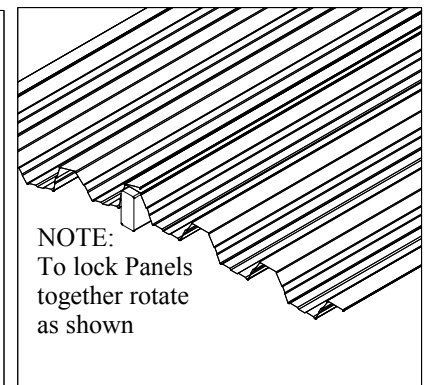
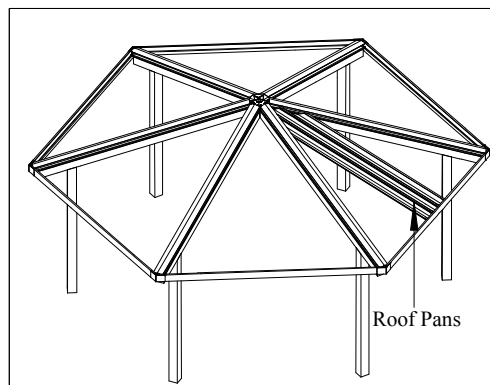
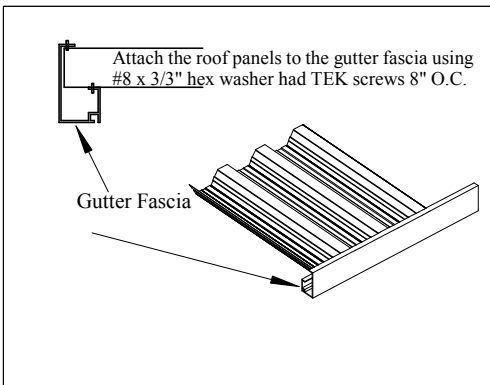
- At this time, the final leveling, squaring, and plumbing of the frame can be done and all Bolts tightened

## STEP 9

- Using the 1-1/4" Drill Screws, attach the 6 Ridge Caps to the top of the Rafters, screwing through on side of the bottom lip of the Ridge Cap into the side of the Rafter, on 12" Centers. Be sure the Ridge Cap is even with top end of Rafter before attaching to Rafter  
NOTE: On occasion, the Ridge Cap must be made in 2 pcs. Install the shortest piece at the top and work down

## STEP 10

- The Roof Panels are boxed and numbered, as to each section of the roof; do NOT mix one box with another. Start in the center of each section with longer roof panels and snap the lock of the Roof Panels together. Secure to Ridge Cap and the lip of the Gutter with the 3/4" Drill Screws on 8" centers  
NOTE: Place the Tie Block Cap on top of the unit and fasten to the Ridge Cap prior to installing the Roof Panels of the last section. Be sure to maintain 24" spacing on Roof Panels



## STEP 11

- We recommend drilling 1-1/2" holes in the bottom of the Gutter at several locations, or Downspouts may be used to drain water from the Gutters

## NOTE:

Touch up paint has been supplied with your shelter to cover minor scratches or bolts and screw heads to give your shelter that finished look. Use a template for touch up painting to achieve a good finish and minimize over spray.