



## *VersaQuonset 16*

*(16' x 80')*



Detailed Assembly Instructions and Part List

*The following materials are included in your complete Quonset package. If you ordered a basic or special package, please see your packing list for specific building components*

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### **MATERIALS INCLUDED IN COMPLETE PACKAGE**

- √ 21 – Structure pipes (hoops)
- √ 4 – Purlin Pipes (One end swaged)
- √ 21 – Cross connectors w/ bolts
- √ 4 – 1 3/8" x 21' Purlin pipes (non-swaged) for end bracing
- √ 24 – Cross connectors with bolts for attaching end bracing
- √ 42 – Rebar #4, 30" length
- √ 42 – Galvanized wire, 8" lengths
- √ 12 – 1"x6"x16' Treated lumber
- √ 10 – Soil anchors, 28" length
- √ 3 – Machine bolts to connect purlin pipes
- √ 10 – U-bolts to attach soil anchors

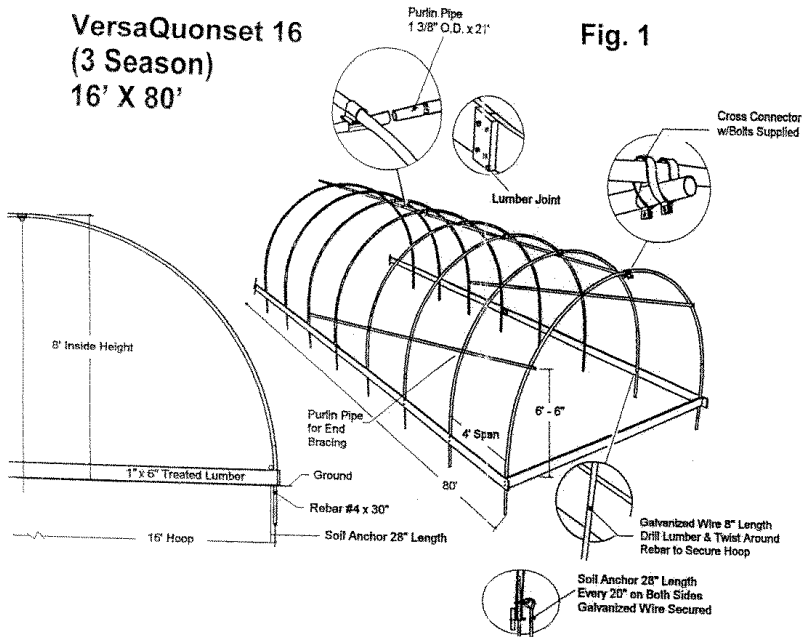


## TOOLS & SUPPLIES NEEDED FOR CONSTRUCTION

- √ 8 to 10 Pound sledge hammer
- √ 200 ft. of string or nylon twine
- √ 100 ft. tape measure
- √ Linesman pliers
- √ Hand or power saw
- √ 7/16" Deep well socket w/ratchet handle
- √ Power drill with 1'4" & 3/16" bits
- √ Hack saw
- √ 100 ft. Extension cord
- √ #7 Galvanized nails
- √ Two ladders
- √ Medium Screwdriver
- √ Electrical Tape

## RECOMMENDED COVER

- √ Poly - 28' width at variable lengths
- √ Shade Cloth – 24' width at variable lengths



# DETAILED ASSEMBLY INSTRUCTIONS

## BASE BOARD & REBAR

- 1 Locate the exact position where the completed Quonset will stand. Using a sledge hammer, drive rebar into the ground on all four corners leaving 10" above ground level. With a tape measure, measure corner to corner to make sure it is square. Tie nylon twine or string to all four corners to form a rectangle

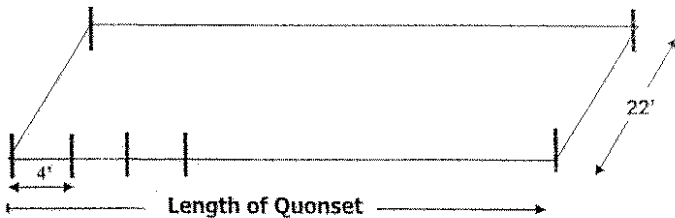
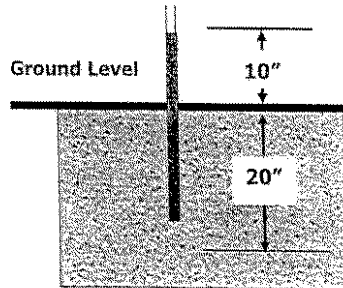


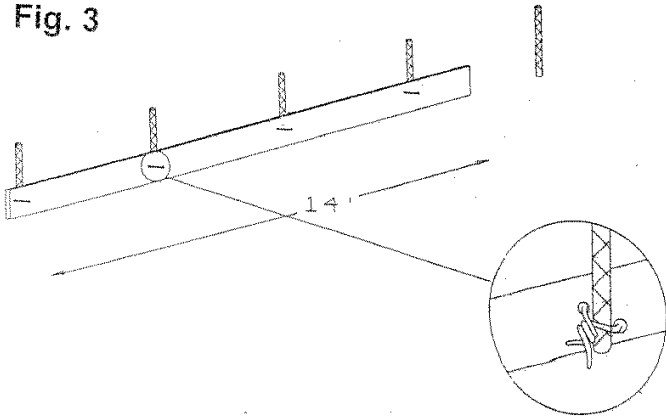
Fig. 2



- 2 On sides of Quonset, drive remaining rebar every 4 feet. Do this on INSIDE of string, leaving 10" of rebar above ground level. Remove string.
- 3 Starting at corner, lay out 1" x 6" base board on OUTSIDE of rebar, leaving 1" extra outside of Quonset dimensions. Cut first piece of 14' as this will eliminate the problem of the junction of the two boards at rebar.

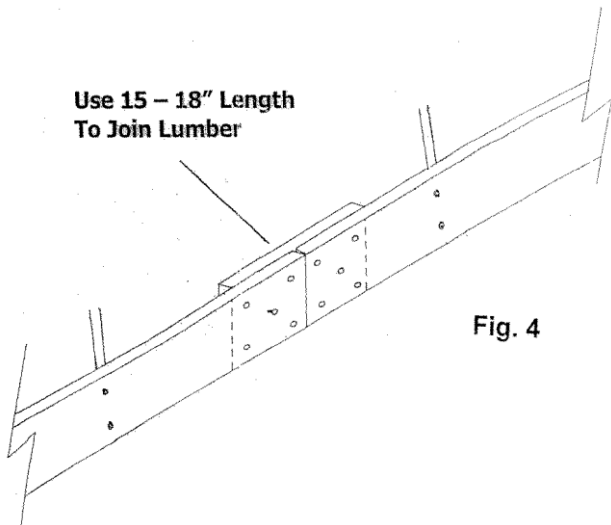
- 4 With boards standing on edge up against rebar, use a 3/16" drill bit two holes diagonally half way down on board on each side of rebar. Bend galvanized wire and insert into holes to attach rebar to 1" x 6" base board. Using linesman pliers; twist wire 4 to 5 times and cut off excess. Bend loose wire ends towards ground.

**Fig. 3**



**Opposite View**

- 5 Use a saw to cut extra lumber into 10 pieces, about 15-18" in length. At each junction of 1" x 6", use a 15-18" piece to join lumber together. Join lumber on inside of Quonset using #7 galvanized nails. Bend down excess nails.



**Fig. 4**

- 6 Auger soil anchors on the inside of each of the four corners and every twenty feet of house on both sides. Place as close to rebar as possible.

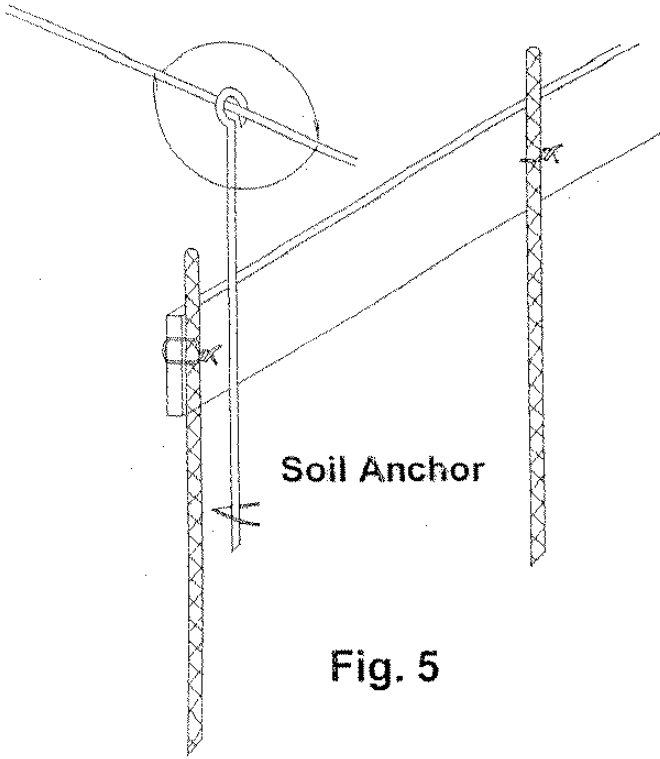


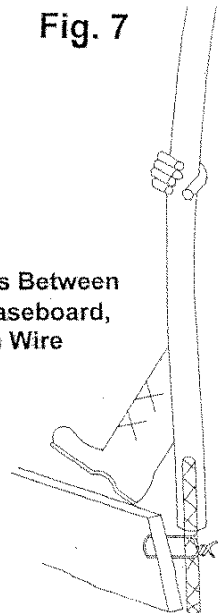
Fig. 5

### STRUCTURE PIPES (HOOPS) & PURLINS

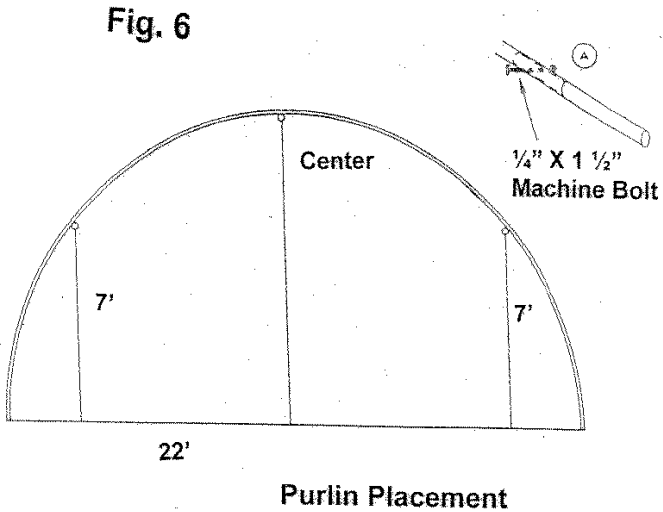
1. Structure pipes (hoops) may now be installed. Starting at one end and working to opposite end, each hoop fits over exposed rebar. Hoop should NOT rest on base board; it should be nested between rebar and base board, resting on wire (see Fig. 7). For a symmetrical house, place all splices on the same side.

Fig. 7

Nest Hoops Between Rebar & Baseboard, Resting on Wire



- Depending on length of house, all purlins should be joined together so that you have one length of pipe. DO NOT cut to Quonset length; you will cut off any excess later when instructed. Drill purlins using  $\frac{1}{4}$ " drill bit and join with  $\frac{1}{4}$ " x  $1\frac{1}{2}$ " machine bolt (see Fig. 6-A). Attach completed purlin pipe to hoops using cross connectors.



- To install purlin, locate exact center of house. Place purlin below hoop (See. Fig. 7). Tighten first/end cross connector so it does not slip out, then loosely attach purlin at every 4<sup>th</sup> hoop to hold in place. Loosely attach remaining connectors, starting at one end of house and repeating down entire length.

### **TIGHTENING CROSS CONNECTORS**

- Start with first/end hoop. Working down length of house, make sure hoops are plumb and straight. To check plumb, tie string across the width of the house from the bottom of both ends of the hoop being checked to just above the  $1$ " x  $6$ " baseboard. Then, tie a string with plumb/weight

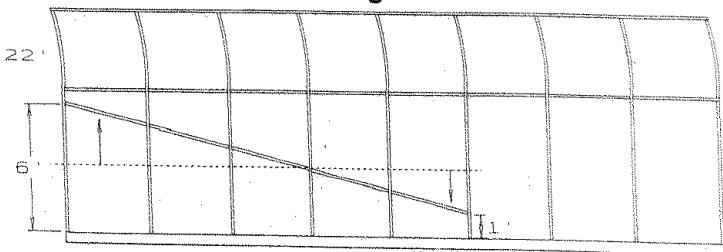
from the TOP CENTER of the hoop where purlin is attached. If weight lines up with the string, the hoop is plumb and straight. If not, adjust the hoop on the purlin until the weight meets the string.

2. When hoops are straight, tighten cross connectors using 7/16" deep well socket on all three purlins, one hoop at a time. Work down length of the house, periodically checking the plumb of previously tightened hoops.

## **ATTACHING END BRACING**

1. Use one purlin, 6 cross connectors, and a 7/16" socket or wrench. Start from first/end hoop and attach one end of the purlin about 4' above ground level. DO NOT TIGHTEN. Use another cross connector to attach the opposite end of the purlin near the ground stake on the 6<sup>th</sup> hoop (counting the end hoop). DO NOT TIGHTEN.
2. Push on center of the corner brace and attach it to one of the mid hoops. Then, attach remaining 3 cross connectors **loosely**, making sure Quonset is still plumb and square. Once all connectors are attached, push up on the forward end of the purlin (at first hoop) and down on the opposite end. Do this until brace is in position (see Fig. 8). Set end brace by tightening all cross connectors with a 7/16" deep well socket. Repeat the process for all four corners.

**Fig. 8**





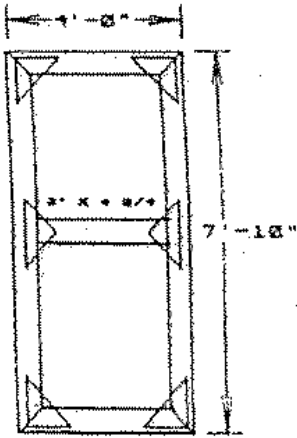
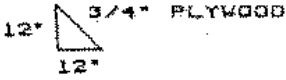
3. **After complete assembly**, use a hack saw to cut off any excess purlin there may be and tape ends to prevent damage to the covering.

### **ATTACHING SOIL ANCHORS**

1. Attach soil anchors to the hoop by sliding U-bolt around hoop and then through eye of soil anchor. Make sure threaded ends of the U-bolt are pointing to inside of Quonset so they will not interfere with covering. Tighten U-bolt as securely as possible, bending the plate around the soil anchor.

*If you require additional information or special assistance, please give us a call at 630-365-1990*

**ADDITIONAL INFORMATION**



Door Frame

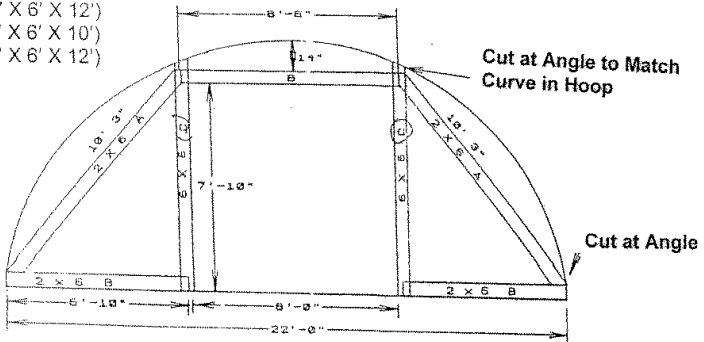
**Parts List**

- 7 - 2' X 6' X 8' (Enough for 2 doors)
- 4 Hinges
- 1 - 4 X 8, 3/4" Plywood  
(Cut into 12" X 12" squares. Cut squares diagonally to look like diagram above. You will need 6 pieces per door.)

**Optional Door**

Parts List:

- C = 2 (6' X 6' X 12')
- B = 3 (2' X 6' X 10')
- A = 2 (2' X 6' X 12')



## WHEN USING CHANNEL LOCK TO SECURE POLY:

- The ½" Tek screw (or self-drilling screw) is used to apply the base to metal, such as a Quonset hoop. The screw is applied every 12".
- To attach the base to wood, use the stainless steel nut and bolt. They should be placed every 2'. Pre-drill a ½" hole through the base and wood.
- To apply the spring into the base, weave back and forth. Remove the same way to prevent damage to the spring so it can be used again.

