

Carver

Premium Commercial Greenhouse

Assembly Manuals for Models:

10'(w) x **16'**(d) x 8'(h)

10'(w) x **27'**(d) x 8'(h)

Riverstone



"Green Products for a Brighter Future"

PARTS DESCRIPTION

1" X 2" GROUND
RAIL WITH
WELDED
STANCHIONS

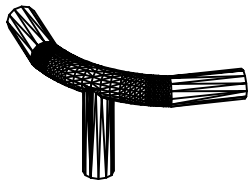
1" X 2" X 10'
RECTANGLE
TUBING FOR
ENDWALL
GROUND RAIL

1 5/8" X 5 1/2" PURLIN

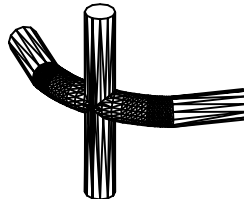
1 5/8" X 5 1/2" RAFTER

1 5/8" X 5 1/2" LEGS

2" X 2"
SQUARE
TUBING USED
FOR STUDS AND
ENDWALL
FRAMING



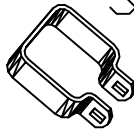
3 WAY CONNECTOR



4 WAY CONNECTOR

STANDARD PARTS

2" X 2" SQUARE BAND



TEK-SCREW



1 5/8" BAND



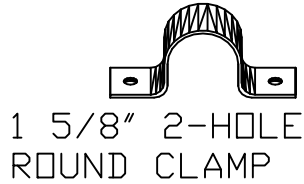
5/16" NUT



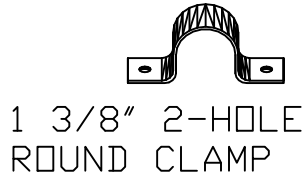
5/16" X 1 1/4" BOLT



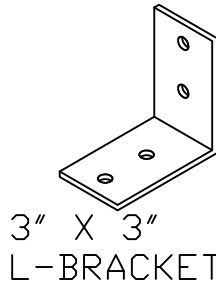
3" CONCRETE ANCHOR BOLT



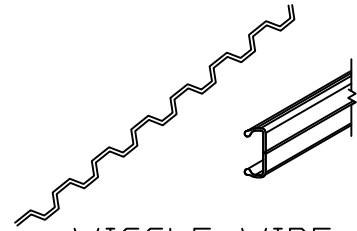
1 5/8" 2-HOLE ROUND CLAMP



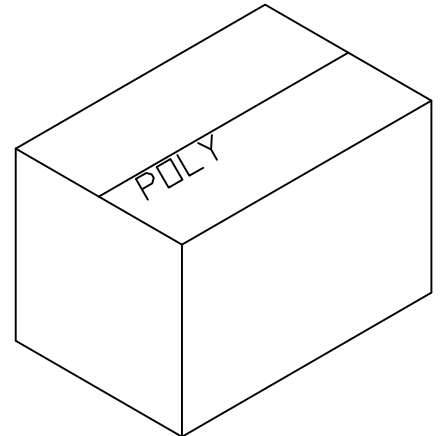
1 3/8" 2-HOLE ROUND CLAMP



3" X 3" L-BRACKET



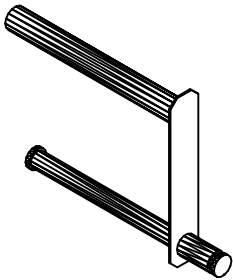
WIGGLE WIRE & WIRE LOCK BASE



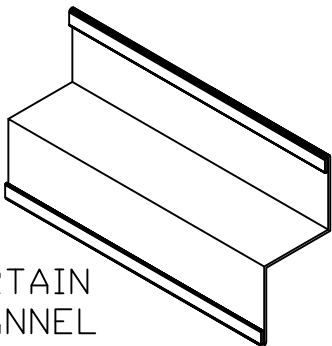
BOX OF POLY

OPTIONAL PARTS

CURTAIN PARTS



CURTAIN CRANK

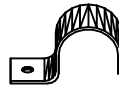


CURTAIN CHANNEL

BENCH PARTS



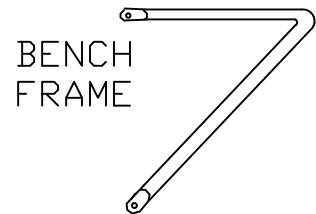
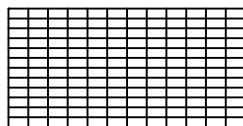
2" ROUND BAND



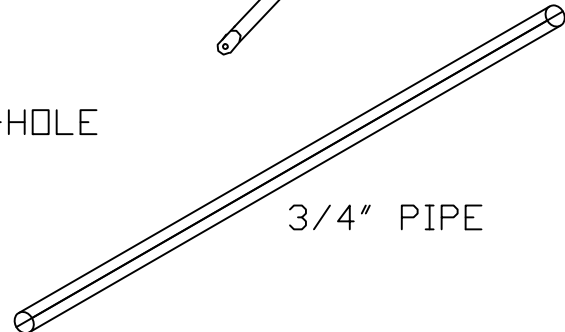
3/4" 1-HOLE CLAMP

BENCH PARTS

WIRE FOR BENCH TOP

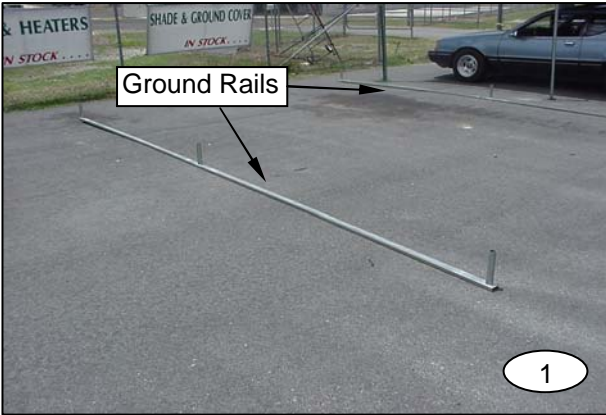


BENCH FRAME

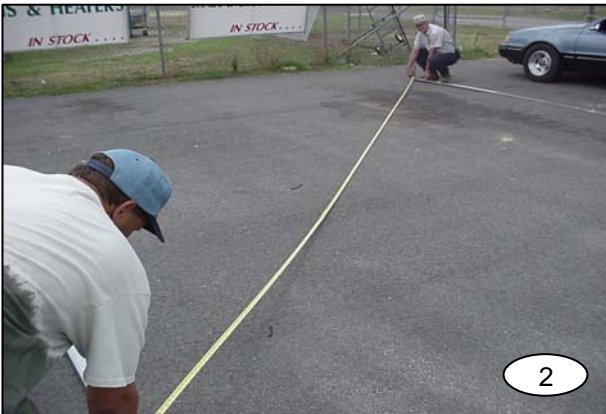


3/4" PIPE

HOBBY HOUSE		
DRAWING NO. HH1b	DATE: 04-27-04	DRAWN BY: ERICA



NOTE:When setting the width for the E-Z Grow Hobby House the Outside to outside measurement should be 10' 4".Example 10 X 16 is 10' 4" X 16' outside to outside.



Square the structure by measuring diagonally from corner to corner . When the diagonal measurements are the same the structure will be square. (see photo 2.)

Example: 10'-4" wide x 16' long = 19'-9/16" diagonal measurements.

Note: These measurements are approximate, your measurements may be different.

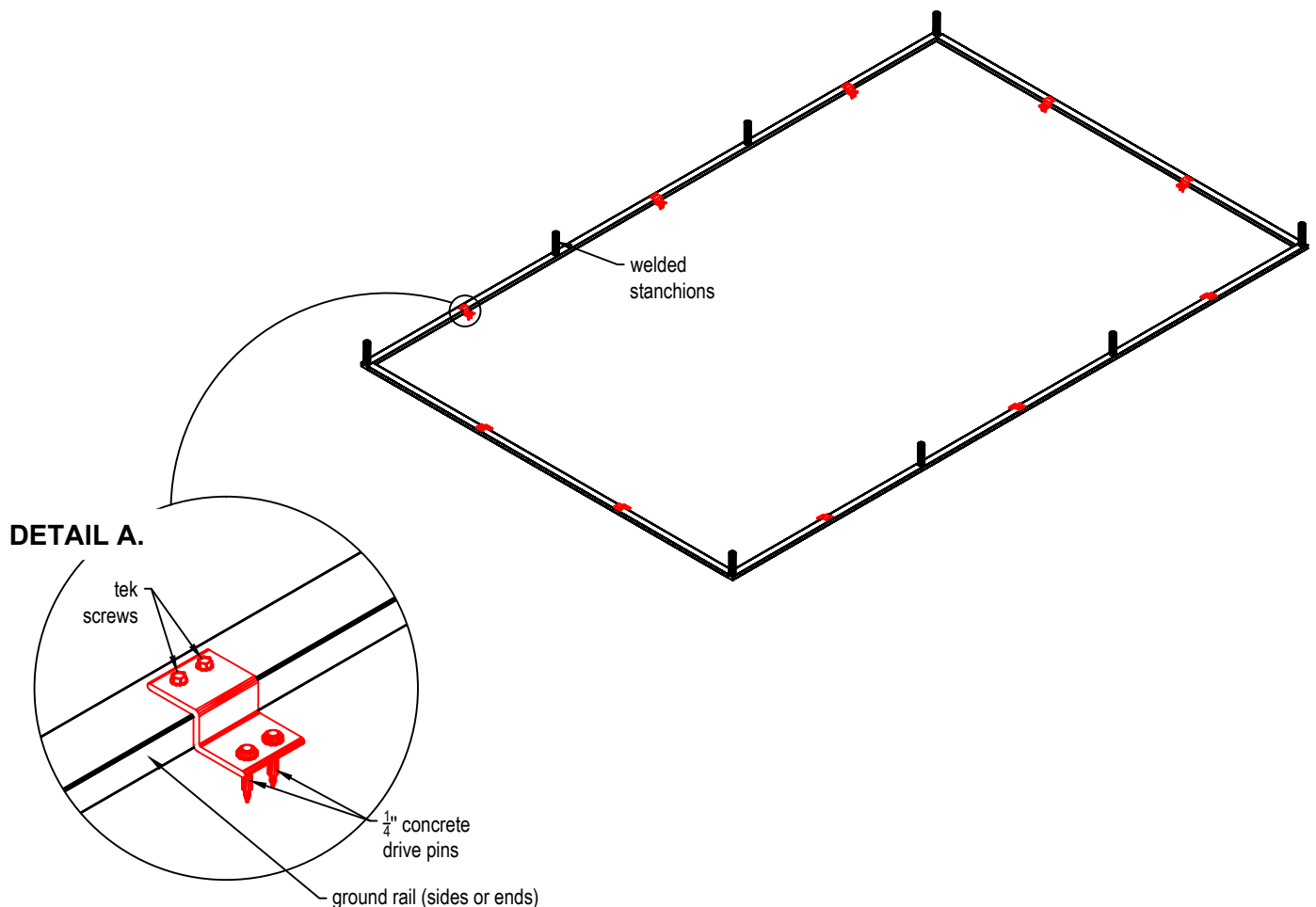
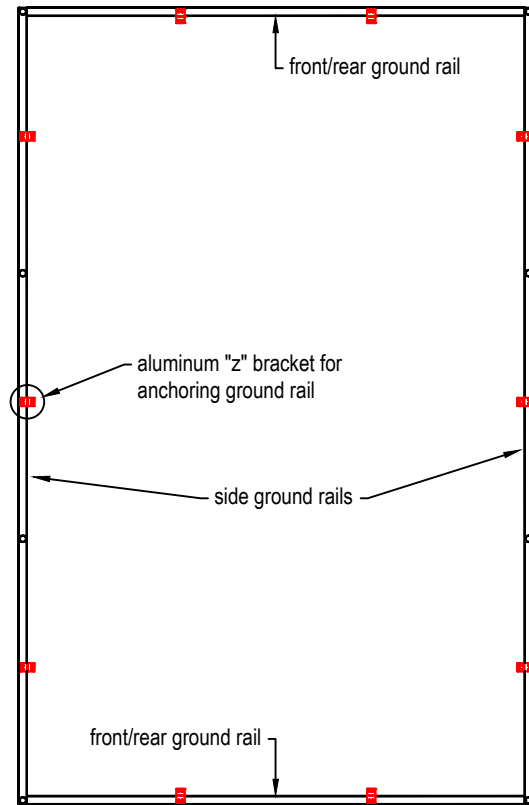
Once the ground rails are squared anchor the rails using the 12" spiked provided as shown in photo 3,4&5..



CONCRETE MOUNTING OPTION

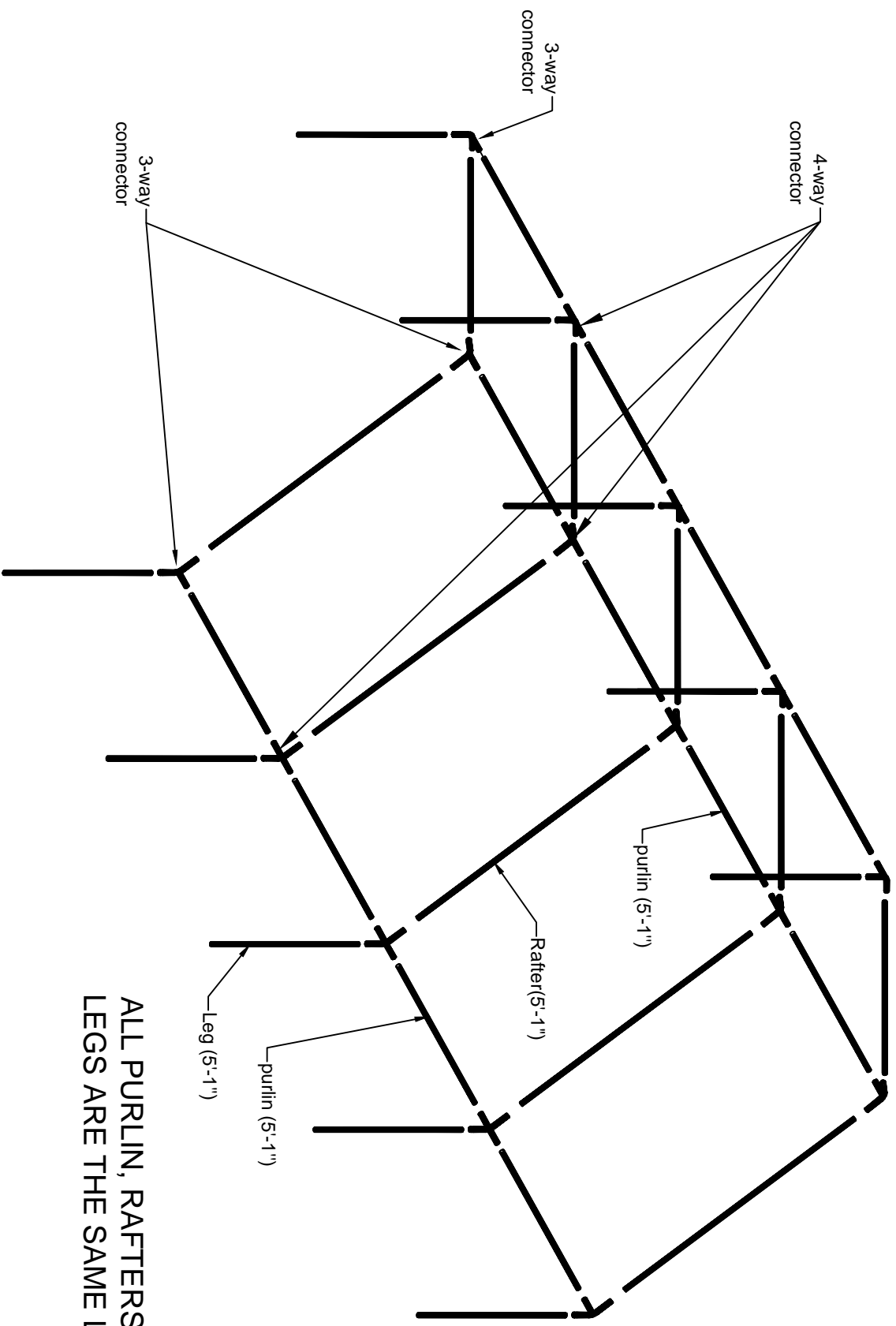
Secure aluminum "z" bracket onto side groundrails, evenly spaced between welded stanchions, using #14 tek screws.
Front & Rear ground rail: place the "z" brackets approximately 16" from each end as shown in diagram to the right.

DETAIL A. shows further attachment details.



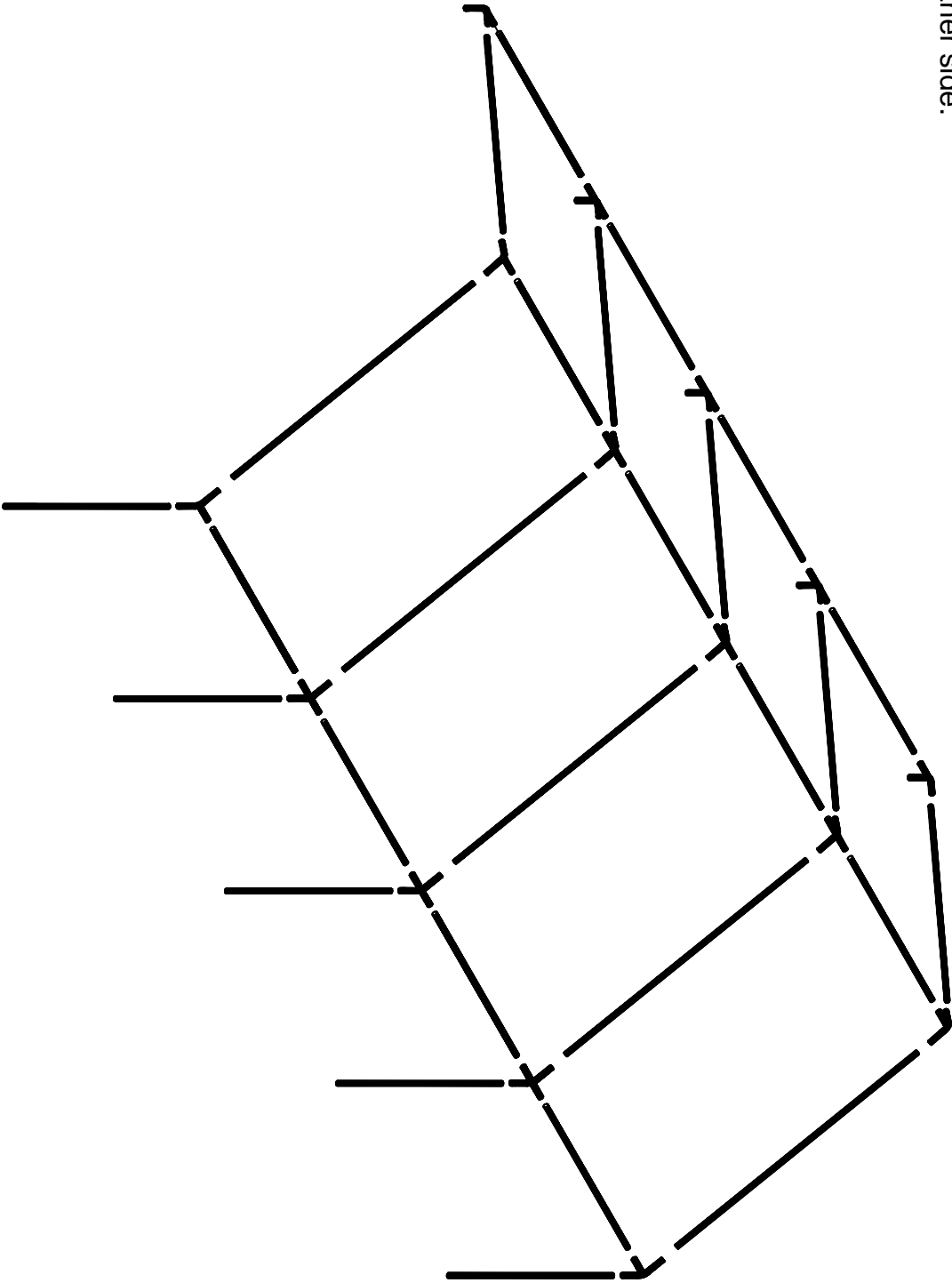
ASSEMBLING THE FRAME

1. Identify **3-way & 4-way connectors**. 3-way connectors are for the ends and 4-way connectors are for intermediate rafters, legs and at the peak of greenhouse.
2. Assemble frame as shown in below diagram. DO NOT assemble legs at this time, completed frame must be lifted and placed on the legs then onto anchor posts.



ALL PURLIN, RAFTERS AND LEGS ARE THE SAME LENGTH.

Position 2 men approximately along one side of the greenhouse. Holding legs in one hand, lift up one side of greenhouse and insert legs into connectors. Repeat on the other side.

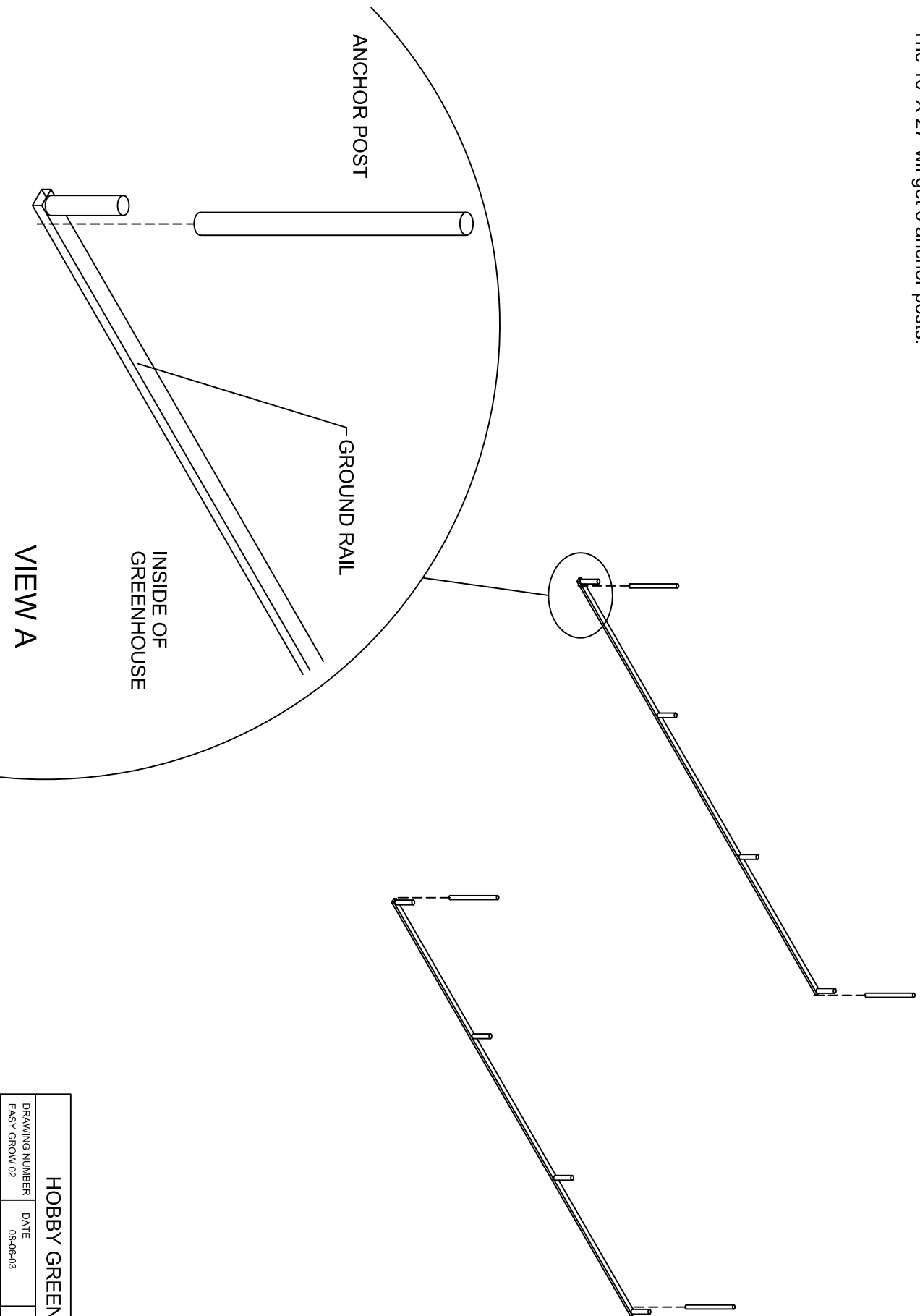


ANCHORING TO GROUND

Atlas recommends setting the anchor posts in concrete.
The concrete should be approximately 12" across X 30" deep.

The 10' X 11' & the 10' X 16' will get 4 anchor posts.

The 10' X 27' will get 6 anchor posts.



VIEW A

INSIDE OF
GREENHOUSE

ANCHOR POST

GROUND RAIL

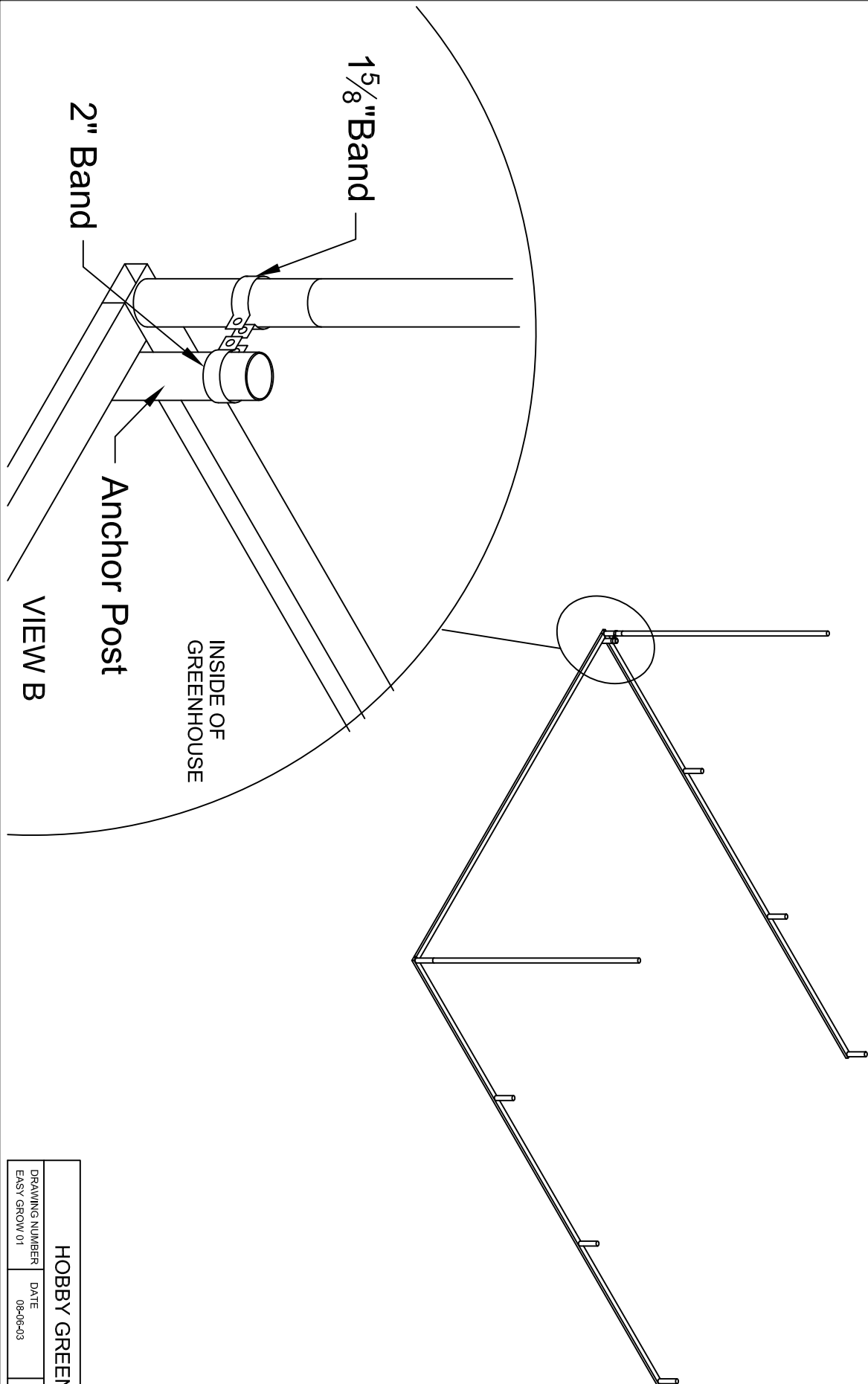
HOBBY GREENHOUSE			
DRAWING NUMBER	DATE	DRAWN	
EASY GROW 02	08-06-03	ALAN	

ANCHORING TO GROUND

Set the anchor posts in the ground leaving enough above ground to attach the round bands to.

Attach the 1-5/8" band to the greenhouse and the 2" band to the anchor post as shown below.

Bolt the two bands together with the supplied bolts and nuts.



HOBBY GREENHOUSE		
DRAWING NUMBER	DATE	DRAWN
EASY GROW 01	08-06-03	ALAN



Note: Slide the legs on top of the welded stanchions of the ground rails.

Attach the endwall ground rails using the 3x 3 L-brackets. Use Tek-screws to secure the ground rail to the frame as shown in above picture.

OPENING MEASUREMENTS FOR FANS, SHUTTERS AND DOORS
{SUPPLIED BY ATLAS}

Fan opening for:

18" Box wall "Quietaire"	24 1/2" High X 24 1/2" Wide
30" Slant wall "Quietaire"	35 5/8" High X 34 3/4" Wide
36" Box wall "Quietaire"	40 1/2" High X 40 1/2" Wide
36" Slant wall "Quietaire"	42 1/4" High X 41" Wide
42" Slant wall "Quietaire"	48 1/2" High X 47" Wide
48" Slant wall "Quietaire"	54 1/4" High X 52 3/4" Wide
56" Slant wall "Quietaire"	65" High X 63" Wide

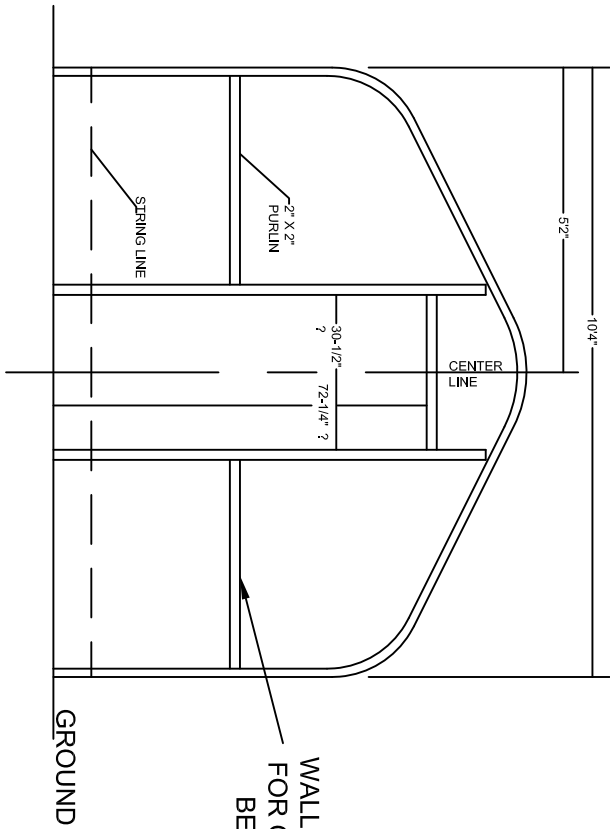
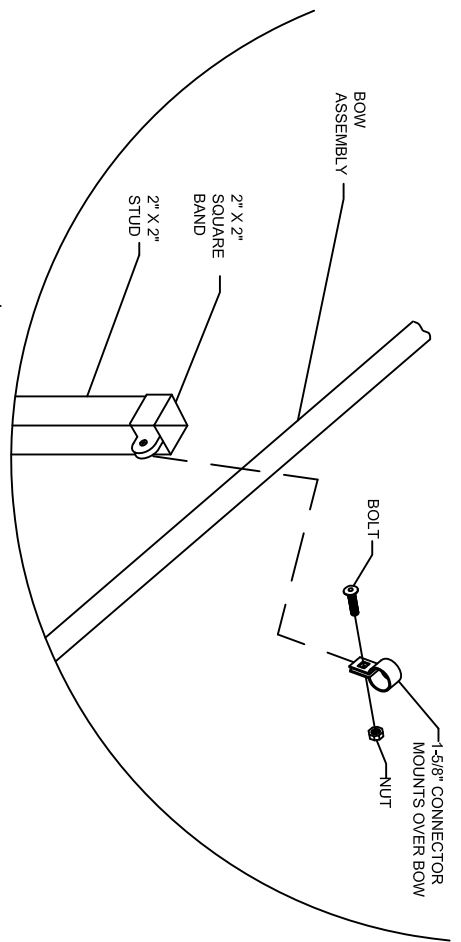
Shutter openings for:

24" Shutter	24 1/2" Square
30" Shutter	30 1/2" Square
39" Shutter	39 1/2" Square
45" Shutter	45 1/2" Square
48" Shutter	48 1/2" Square
60" Shutter	60 1/2" Square

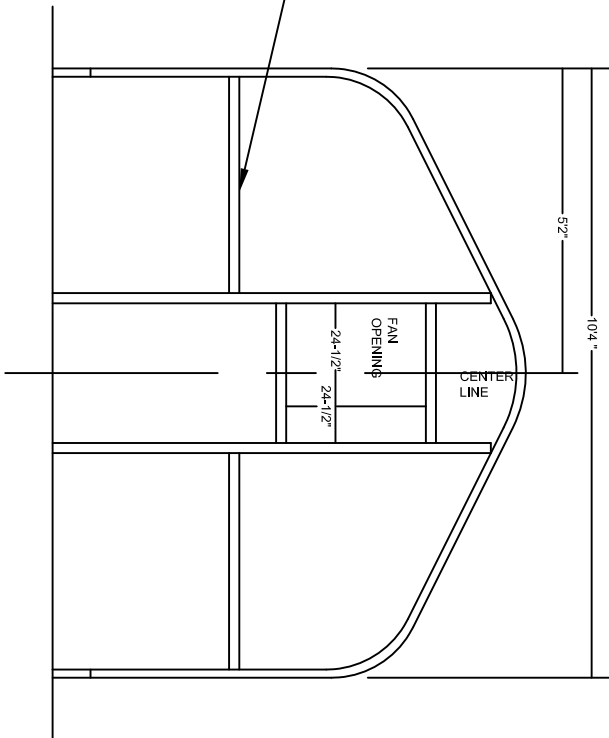
Door openings for:

42" X 6'6" Swing door	Set openings 42 1/2" Wide X 78 1/2" High
4' X 6'8" Swing Door	Set openings 48 1/2" Wide X 80" High
36" X 6'8" Swing door	Set openings 36" Wide X 80" High
6' X 6'8" French Door	Set openings 72" Wide X 80" High
4' X 7' Single Sliding door	Set openings 46" Wide X 82" High
8' X 7' Double slide door	Set openings 96" Wide X 82" High

NOTE: Measurements are inside to inside.



WALL SUPPORT FOR OPTIONAL BENCHES

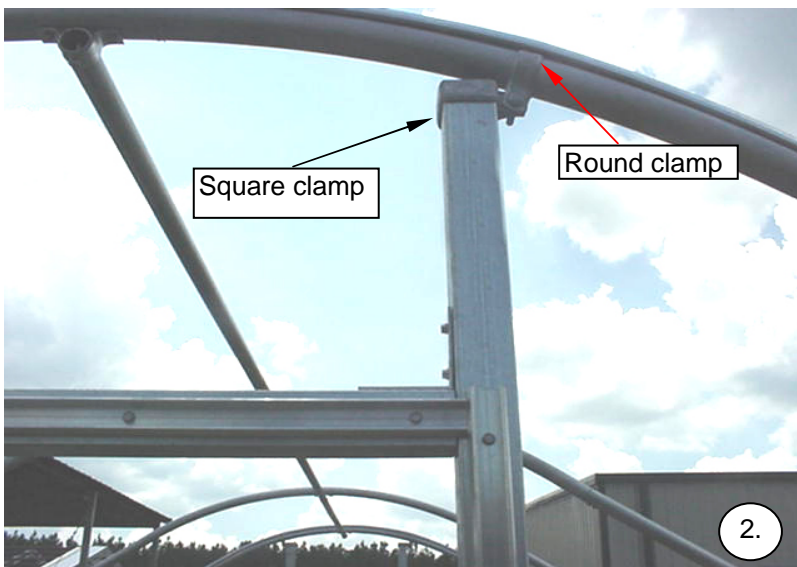


HOBBY HOUSE	
DRAWING NUMBER HOB10a	DATE 8-23-07 / rev. 02-10-11
DRAWN MITCH / TODD	



Frame out the door 30-1/2" wide x 72-1/4" high.

1.



End wall framing attaches to the bow using a round clamp on the bow and a square clamp on the 2"x2" stud. **See photo 2.**

2.



Attach the 2" x 2" studs to the end ground rail using 3" x 3" L-bracket as shown.



The Shutter opening is 24-1/2" Wide x 24-3/4" High.
Attach horizontal 2x2 using L-brackets as shown.

Note the L brackets will attach on the outside of any openings.

Example: On top of the door header, on bottom of the lower horizontal for shutter and on top of the upper horizontal for shutter.





You must field cut the ridge purlin to exact length of the ground rails.



Attach ridge purlin with Tek-screws and two hole clamps. The ridge purlin attaches under all bows.





The ridge purlin is connected under all bows using 2-hole clamps.



Prepare to attach wire lock base to the top of the end bows, around the openings and around the base of the greenhouse.

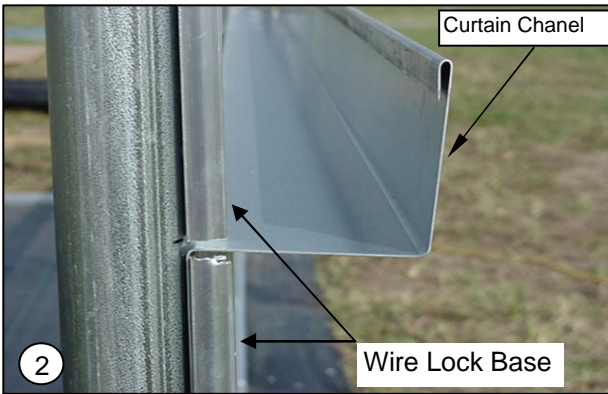
OPTIONAL Cutrain will require wire lock on the Side Purlins at the eave.





If you ordered the optional curtain system,

attach the curtain channel approximately 28" above the ground rail. (See photo #1).



When framing is complete, wire lock base will be attached on top of the end bows as shown in pictures 4 & 5. The wire lock base will go from the bottom of the ground rail over the end bow, down to the curtain channel, then from the curtain channel down to the bottom of the ground rail as seen in picture 2.



Identify the curtain crank rod. Attach wire lock base along the length of the crank rod.





Attach Wire Lock Base over the end bows using Tek-screws.

The wire lock base will bend over the curvatures as shown.

Place screws approximately 12" to 16" apart.



Once the framing is complete attach wire lock base over the top of each end bow from the bottom of the ground rail over to the bottom of the ground rail on the opposite side as shown. Wire lock base also attaches all the way around the base of the greenhouse screwing directly to the ground rails, and around all door and fan openings.



IMPORTANT

NEVER APPLY POLY TOO LOOSELY. IF POLY IS LOOSE, IT WILL SAG BETWEEN FRAMING MEMBERS AND “POCKET” WATER AND /OR SNOW. THIS MAY RESULT IN SEVERE STRUCTURAL DAMAGE

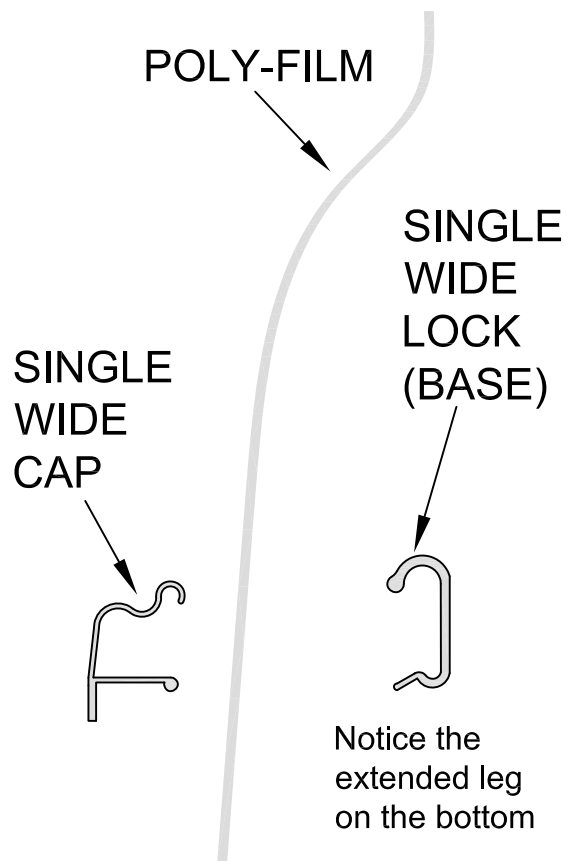
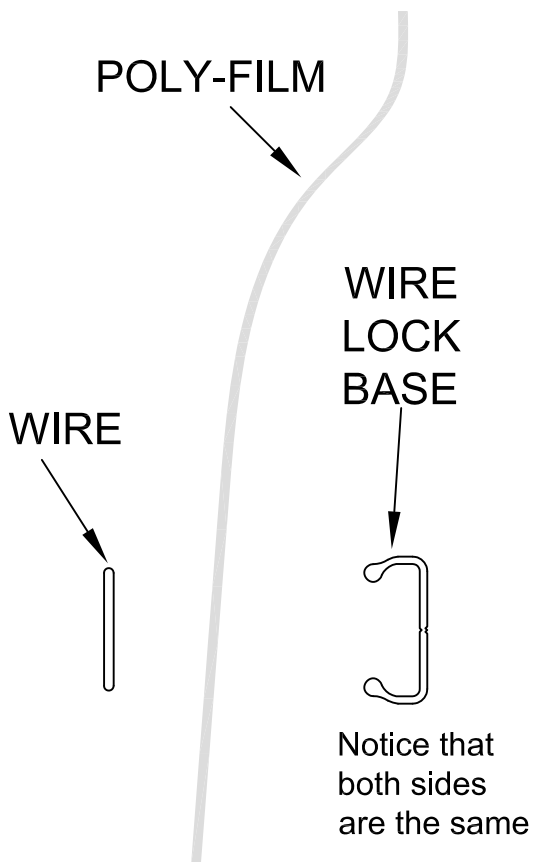
IMPORTANT!!!

BE SURE TO USE THE SINGLE WIDE CAP WITH THE SINGLE WIDE LOCK BASE -- NOT THE WIRE LOCK BASE.

SEE THE DRAWINGS BELOW TO BE SURE YOU ARE USING THE SINGLE WIDE CAP WITH THE RIGHT BASE.

Wire lock base is in 8' lengths.

Single wide lock base is in 10' lengths.



IF YOU USE THE SINGLE WIDE CAP WITH THE WRONG BASE, IT **WILL NOT HOLD!!!**



Cover the ends first .



Secure the poly in place by wiggling the wire into the channel as shown.

Helpful Hint:
It is easier to start at the top and work your way down.



Cover the other end in the same manner.



Trim around the door and fan openings leaving approx. 1" over hang.

Lay out the poly along the side of the greenhouse and pull it over the top as shown.





Pull the polyfilm over the greenhouse, attach the side without the curtain at the groundrail first. Pull the polyfilm tight and secure it at the eave on the curtain side.

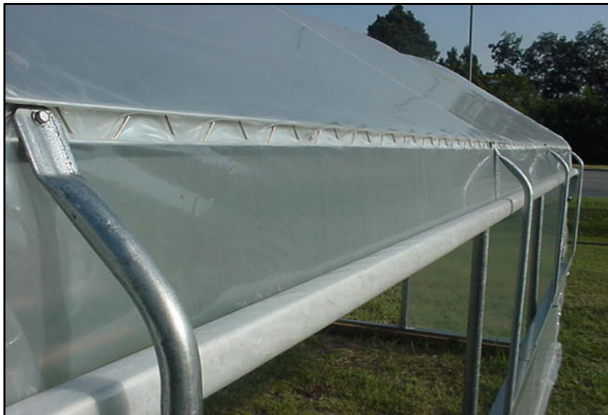
Note: DO NOT cut the polyfilm at the eave, the curtain and the roof poly are the same piece.

Lay the curtain rod in the curtain channel on top of the polyfilm with the wire lock base pointing up. Fold the poly film up so you can lock the polyfilm to the crank rod using the wiggle wire. Be sure the crank rod lays flat in the curtain channel while you are locking the polyfilm in place.

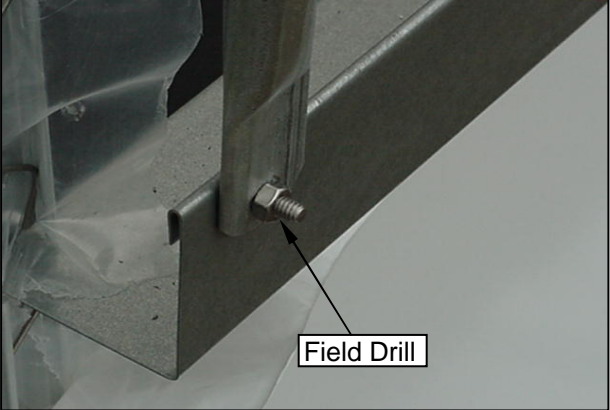
NOTE: Be sure to position the crank rod so that the swedged will insert into the crank handle

After you are **certain** you have the polyfilm properly locked in place cut the polyfilm and attach the piece you cut off to the bottom knee wall

NOTE: It is easier if you start from the center and work to the ends when locking poly into place.



OPTIONAL CURTAIN SYSTEM



Roll the curtain up so it rolls to the inside attach the curtain guides using a Tek-screw at the top and or bolt and nut at the bottom as shown, you will need to drill the holes in the curtain channel for the bolts and nuts.



Slide the crank in so it will lock the curtain in its up position, pull the crank out to roll the curtain down.



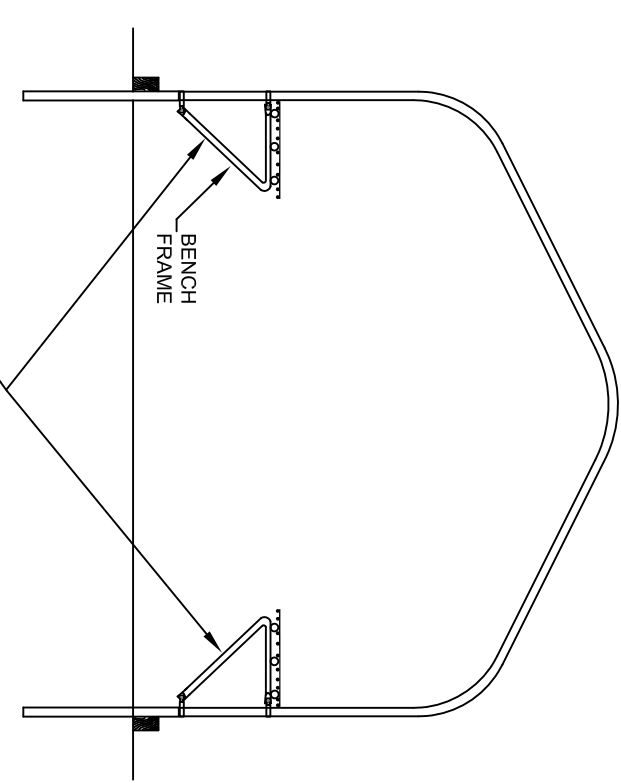
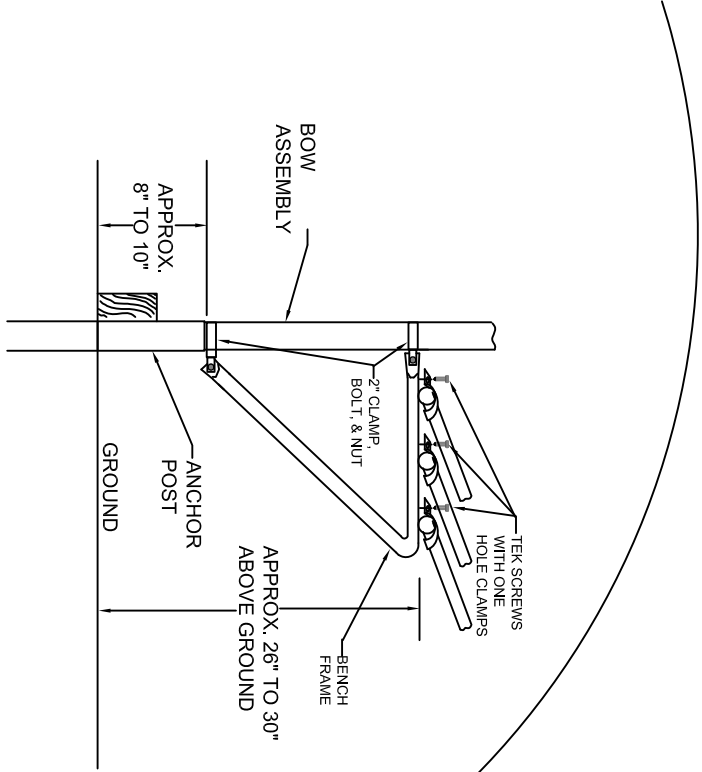
Starting at the top on one end begin securing the poly in place using "extra" wire, stager the wire humps.

After you have secured both ends, secure the poly in place along the groundrail.

When you are finished securing the poly in place trim the excess leaving approx. 3" over-hang on the ends and approx. 6" overhang along the side walls.



INSTALLATION OF (OPTIONAL) BENCH SYSTEM



- STEP 1 - LAYOUT BRACES.
- STEP 2 - PLACE 2" CLAMP AROUND BOW ASSEMBLY
- STEP 3 - ATTACH BENCH FRAME APPROXIMATELY 26" TO 30" FROM GROUND.
- STEP 4 - ATTACH 3 RUNS OF TOP RAIL USING ONE HOLE CLAMPS WITH TEK SCREWS AS SHOWN.

HOBBY BENCH INSTALLATION			
DRAWING NUMBER	DATE	DRAWN	
HOB13	3-14-01	RICK	

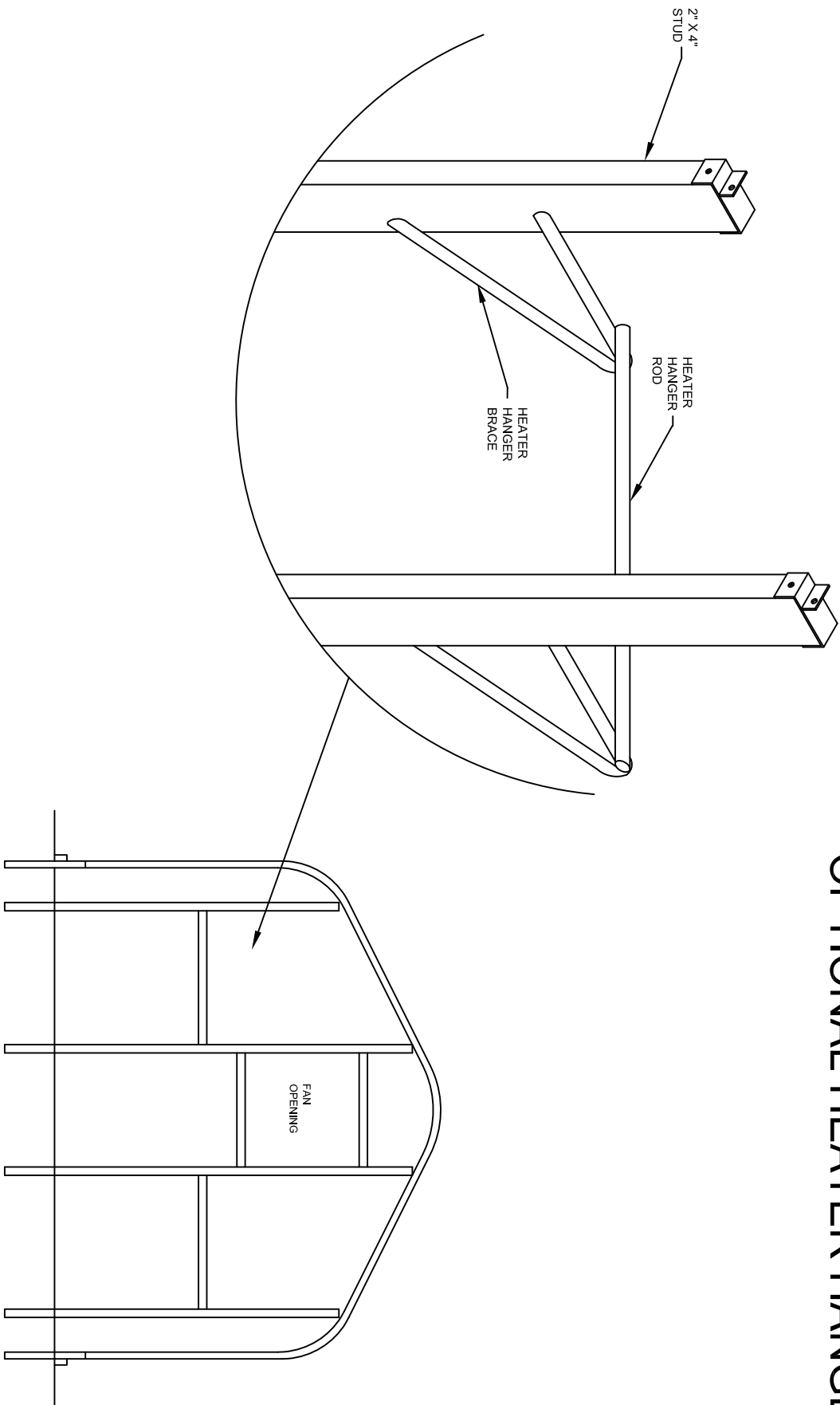
Attach the top rail on to the top of the endwall horizontal as shown in picture 1& 2 using the 3/4" clamps and tek screws.



Tie the benchwire to the top rails using the aluminum wire ties provided in your hardware box .



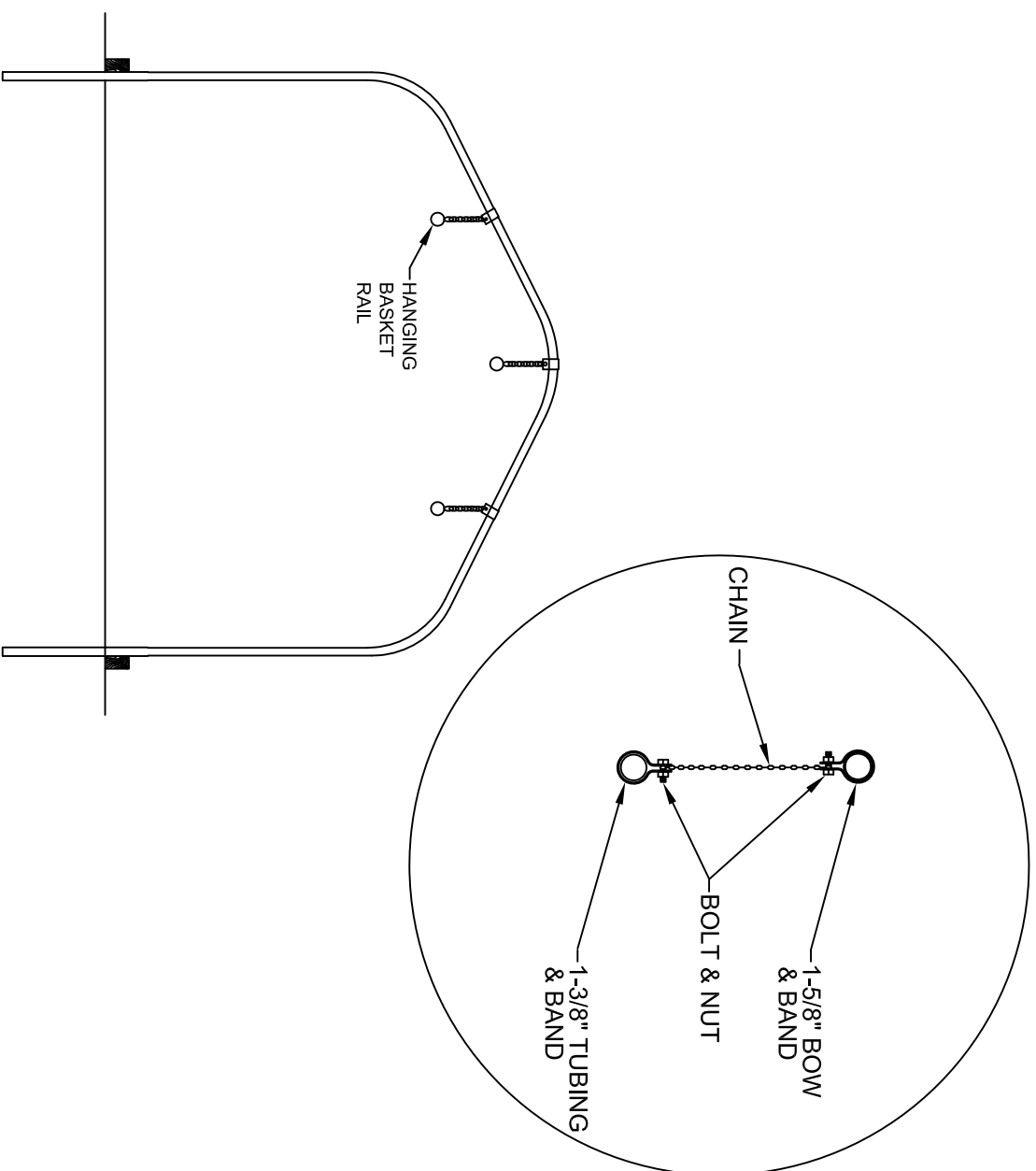
OPTIONAL HEATER HANGER



- 1) ATTACH THE HEATER HANGER BRACES TO THE END WALL STUDS USING THE SUPPLIED WOOD SCREWS.
 - 2) ATTACH THE SUPPLIED EYE BOLT TO THE TOP OF THE HEATER.
 - 3) SLIDE THE HEATER HANGER ROD THROUGH THE EYE BOLT.
 - 4) SET THE HEATER HANGER ROD (WITH ATTACHED HEATER) ON THE HEATER HANGER BRACES AND SECURE THE ROD IN PLACE USING THE ONE HOLE CLAMPS.
- SECURE THE ONE HOLE CLAMPS WITH TEK-SCREWS. AFTER YOU HAVE THE ROD SECURED, DRILL A TEK-SCREW THROUGH ONE HOLE CLAMP AND INTO THE ROD TO KEEP IT FROM SLIPPING.

HOBBY HOUSE		
DRAWING NUMBER	DATE	DRAWN
HOB15	3-14-01	ALAN

INSTALLATION OF (OPTIONAL) HANGING BASKET RAILS



- STEP 1 - PUT THE 1- $\frac{5}{8}$ " BANDS AROUND THE BOW.
- STEP 2 - ATTACH A PIECE OF CHAIN TO THE 1- $\frac{5}{8}$ " BAND.
- STEP 3 - ATTACH THE 1- $\frac{3}{8}$ " BANDS TO THE 1- $\frac{3}{8}$ " TUBING.
- STEP 4 - ATTACH THE 1- $\frac{3}{8}$ " BANDS TO THE BOTTOM OF THE CHAIN.

HOBBY BASKET RAILS		
DRAWING NUMBER HBRT	DATE 12-12-01	DRAWN ALAN