# BUILDING SIZE 20' W x 40' L x 10'- 6"H ERECTION PROCEDURE & DRAWINGS

# 20' W x 40' L Tent Parts List

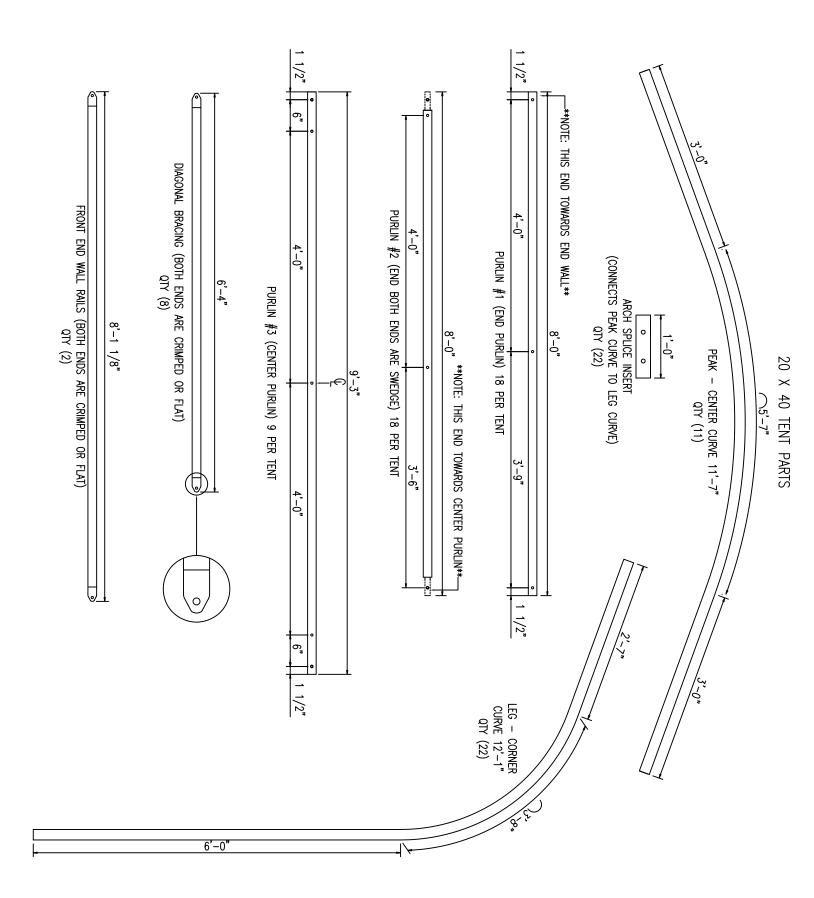
Description	Quantity
Peak - Center Curve - 11'-7" Length	11
Leg - Corner Curve - 12'-1" Length	22
Purlin # 1 - 8' (End Wall Purlin) NOTE: MUST CHECK HOLE DISTANCES	18
Purlin # 2 - 8' (Both Ends are Swedged) NOTE: MUST CHECK HOLE DISTANCES	
Purlin # 3 - 9'-3" (Center Purlin)	
Arch Splice Insert - 1 3/4" x 2 3/4" x 1' Long	22
Angle Clip - 2" x 2" x 3/16" (Installed on Corner Base Plates & Man door to secure Rails)	6
Diagonal Brace - 6'-4" Long	8
Front End Wall Lower Rail - 8'-1 1/2" (Installed on each side of personnel door)	2
Rear End Wall Lower Rail -	1
Rear End Wall Lower Rail - Swedged	1
Arch Base Plates - 4" x 10" x 3/8" Thick	18
Arch Base Plates - Corners - 4" x 10" x 3/8" Thick w/ Pad Eyes	4
Man Door (3' wide x 6'-10") & Door Hardware	1
Man Door Header	1
Man Door Header - Swedged	1
Man Door Strips to Sandwich fabric to frame - 1" wide x 6'-10" Long	2
Man Door Strip to Sandwich fabric to frame - 1" wide x 2'-10" Long (Across Top)	1
Fabric Connecter Flap Cable (5/16" 7x19 Galvanized Cable @ 40'L each)	2
End Wall Fabric Cable (5/16" 7x19 Galvanized Cable @ 40'L each)	2
Main Cover Fabric Cable (5/16" 7x19 Galvanized Cable @ 40'L each)	2
1 1/3" Diameter Pipe for Pole Pockets located on inside of Main Cover (4 per side)	8
Cable Hardware Kit (Cable clamps - 2 per cable end; double them up for safety)	24
Nut/Bolt/Washer Package (Detailed Below)	1
Exterior Fabric Package(Front & Rear End Walls, Main Cover, Floor & Tent Connector Flap)	1
Interior Fabric Liners (Front & Rear Interior End Walls, Interior Main Cover)	1
Erection & Fabric Floor Grommet Rope (2@ 60'sidewalls +2@30' end walls)	180 ft
Ratchets & Webbing (Used to secure main cover 1 1/3" Diameter Pipe to Lower Purlin)	16
Electrical Package (Detailed on page 6 of this manual and in Electrical Drawing)	1
Erection Tool Kit (Stakes & Guy Ropes)	1
Tent Repair Kit (Double Sided Tape, 12 SQ FT Fabric & Screen, 6 Anchors & 1 Pint Glue)	1

# Nut/Bolt/Washer Package List

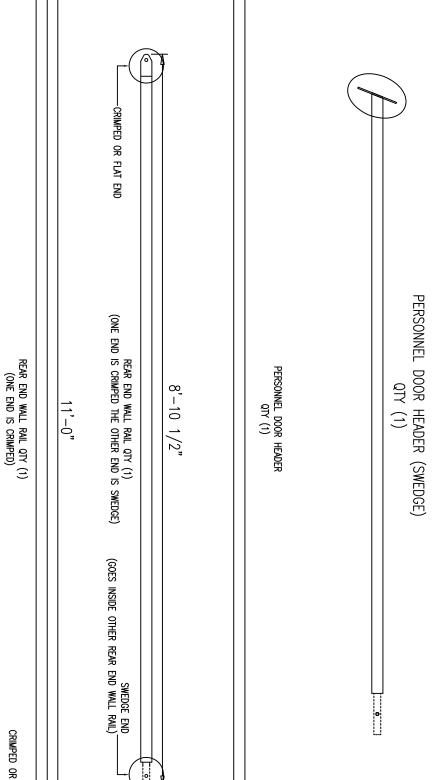
Location & Description	Size	Quantity
Arch Splice & Base Plate Connection	5/16" x 2 3/4"	66
Purlin to Arch; Purlin & Diagonal to Arch	5/16" x 5"	99
Purlin, Rail & Man Door Header Splices	5/16" x 2"	36
Front & Rear End Wall Rails (Crimped Ends)	5/16" x 1 1/4"	6
Man Door Header & Strips to sandwich fabric to door frame	1/4" x 1 1/2" Self Tappers	28
Base Plate & Door Anchor Bolts & Stakes	5/8" Diameter x 8 1/2" Long	46 each

Please read and understand instructions completely before assembly.

Please layout frame parts and check against parts list to understand each part and its location.



# 20 X 40 TENT PARTS (PAGE 2)



CRIMPED OR FLAT END-

# API 20'W x 40'L TENT INSTRUCTION MANUAL

### **Step 1 Frame Assembly**

- 1. Assemble all Arches. There are 4 corner base plates located on the first and last arches. There are 18 center base plates located on the remaining 9 arches. Tighten all arch inserts and make sure bolts heads are located on the outside of the arch. An arch is made of 1 center peak curve, 2 corner leg curves and 2 base plates. Please review all the instructions & drawings before beginning assembly.
- 2. After all arches are assembled. Make sure all bolts are tightened and that all bolt threads are facing inside the tent. Bolt heads should be against fabric.
- 3. Note: Tie a rope (approx. 20 ft long) from base plate to base plate to keep the arch from spreading while standing up the arch. Do this for all arches until purlins are installed.

# **Step 2 Standup Center Arches**

- 1. Starting with the center arches. Use Rope & Stakes to standup arches 5,6 & 7.
- 2. Next, use the (9) center purlins #3 (9'-3" length) to connect them together. Do not tighten the 2 lower purlin yet, they share the bolts with the Diagonal Bracing.
- 3. Use (4) Diagonal braces, as show in step 2, to secure the arches. Now, bolts can be tightened.

# **Step 3 Standup Remaining Center Arches**

1. Using Purlin #2 (note: this purlin gets installed only 1 way). Make sure the end with hole distance 3'-6" is toward the center purlin. See tent parts drawings. There are 9 purlins per bay. Continue erecting arches working your way to the end walls.

# Step 4 Installing End Wall Arches & Diagonal Bracing

- 1. Using Purlin #1 (note: this purlin gets installed only 1 way). Make sure the end with hole distance 3'-9" is toward the Purlin #2. See tent parts drawings. There are 9 purlins per bay. Continue erecting arches working your way to the end walls. Finally, end wall arches are installed.
- 2. Now, install the 4 remaining Diagonal Bracing as shown in drawing 4B. Then, tighten purlin bolts.
- 3. Please see drawings for end wall assembly.

# **Step 5 Square-Up Tent Frame**

1. Check that the width of each arch is 20'. Then, tie a rope diagonally from corner to corner and check the measurement of each rope. They should be equal.

# **Step 6 Install Base Plate Anchor Stakes**

1. After tent is checked for square; install base plate anchor stakes to secure arches.

# **Step 7 Man Door Installation**

- 1. Personnel (Man) Door needs to open in. While door is on the ground, position metal straps on the door frame. Be careful that they do not impede the door from opening or closing, and drill pilot holes (optional) for the ¼" tek screws. Remember metal straps sandwich the fabric to the door frame.
- 2. Standup door and install door headers through the square tube on top of the door frame. The door header is made of (2) parts. The "Man Door Header" and "Man Door Header Swedge." Secure header to the front end wall arch using the ¼" Self Tapping screws. Once door is centered and square, then it can be anchored.

# Step 8 Fabric Installations Exterior & Interior (Floor, End Walls, and Then Main Cover)

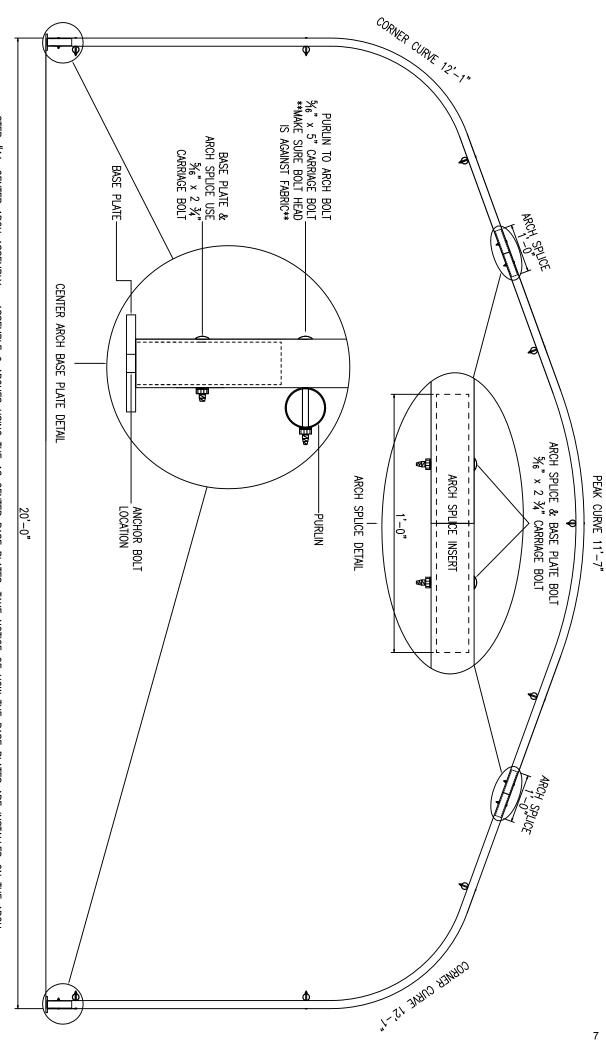
- 1. Install the fabric floor first. The end with the 3' cutout goes toward the front (cutout is for personnel door). Once the floor is layed out it can be laced to the lower purlins along both side walls and the front & rear end wall rails. Use the (2) pieces of rope (approximately 60' long each for the side walls), starting from each front end wall corner lace the grommets to the lower purlin. Do the the same for the front & rear end walls.
- 2. Front & Rear End Wall Fabric. They are different, there is an inside and outside to each piece. The rear end wall has a zipper. The inside of each fabric end wall has velco straps to secure end walls to the end wall rails. The rope in each end wall is replaced with a 40' long cable. After the end wall is secured to center purlin through the cutout in the top of the fabric, pull the cable through the eyelets on each base plate then make a loop using a cable clamp. Then use a comealong to tighten the fabric on the end wall arch. Use another cable clamp to secure the cable in a taut position in front of the base plate eyelets.
- 3. The interior liner is built into the front & rear fabric end walls. No additional installation is needed.
- 4. After the front & rear end walls are installed, now the interior main cover can be installed. The main cover interior liner is either shipped separately or attached to the exterior main cover fabric (similar to the end walls). The interior liner gets pulled over the frame first then the exterior main cover. Use the double side tape to secure the liner to the exterior cover around the screen windows and the edge of the liner.
- 5. Main Cover Fabric. Replace the rope with cable on each end of the cover. Next, slide the 1 1/3" diameter pipe through the pipe pockets on the interior of the fabric. There are (4) 9' long pipes per side. Use ropes to pull the cover over the frame. The cable will be secured in a similar fashion as above. Pull each end of the cable through the eyelets of the base plate and use the cable clamps to make a loop. Tighten the main cover fabric from both sides at the same time using a comealong on each side of the tent.
- 6. Drawing 8B: Use the ratchets to secure the pipe in the main cover to the lower purlins along the side of the frame.

# **Step 9 Electrical Installation**

1. See Electrical Drawing for Panel, Lighting & wiring locations.

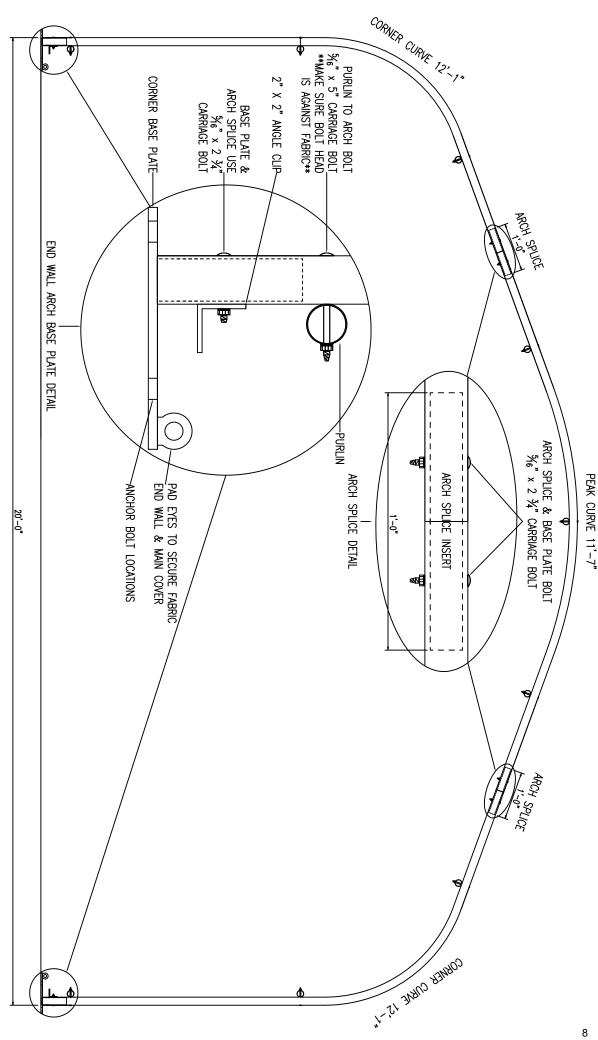
### **ELECTRICAL PARTS BREAKDOWN PER TENT**

- 1 DISCONNECT PANEL (OUTSIDE)
- 1 MAIN PANEL (INSIDE)
- 1 6' X 35' HOME RUN OUTLET
- 1 6' X 15' HOME RUN OUTLET
- 1 16' LIGHT CONNECTION CORD
- 1 25' LIGHT CONNECTION CORD
- 2 6' OUTLET STARTER CORDS
- 4 6' X 6' MIDDLE OUTLETS

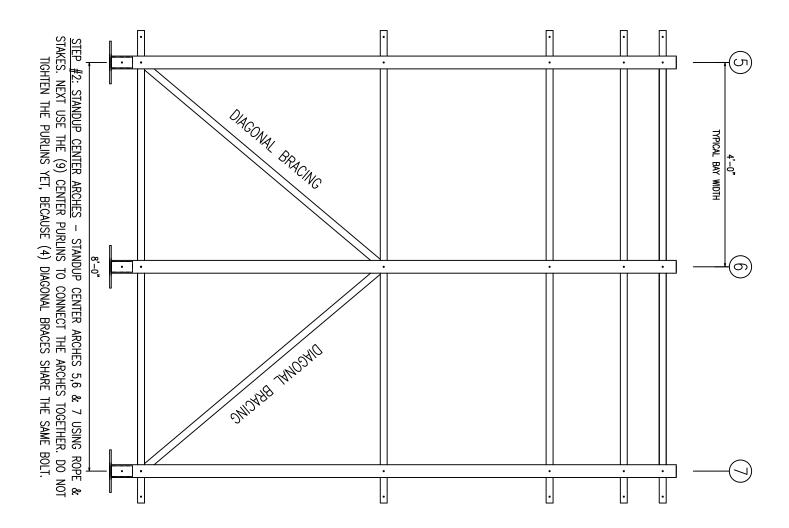


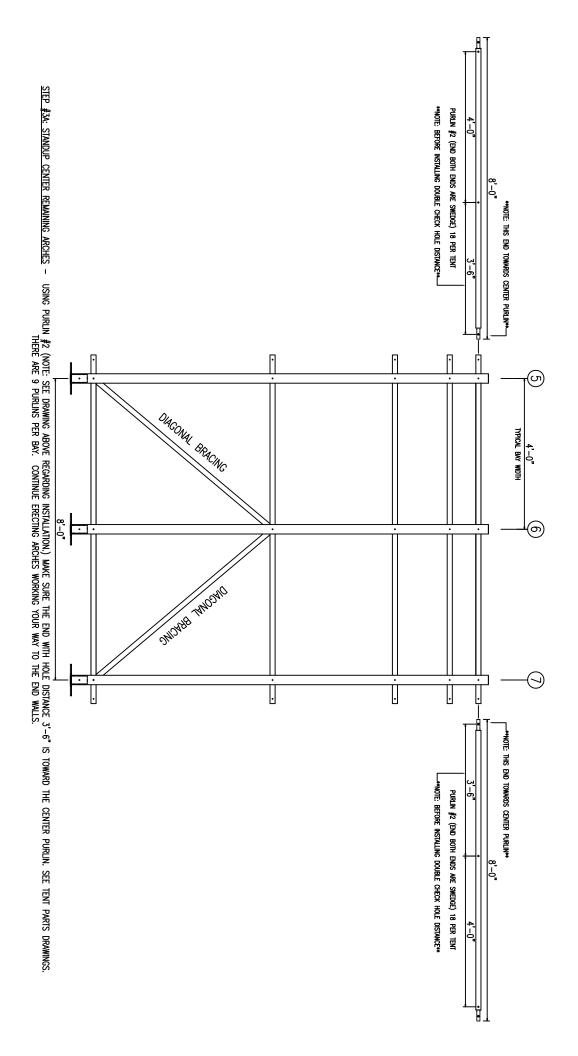
STEP #1A: CENTER ARCH ASSEMBLY — ASSEMBLE 9 ARCHES USING THE 18 CENTER BASE PLATES. TAKE NOTICE OF HOW THE BASE PLATES ARE INSTALLED ON THE ARCH.

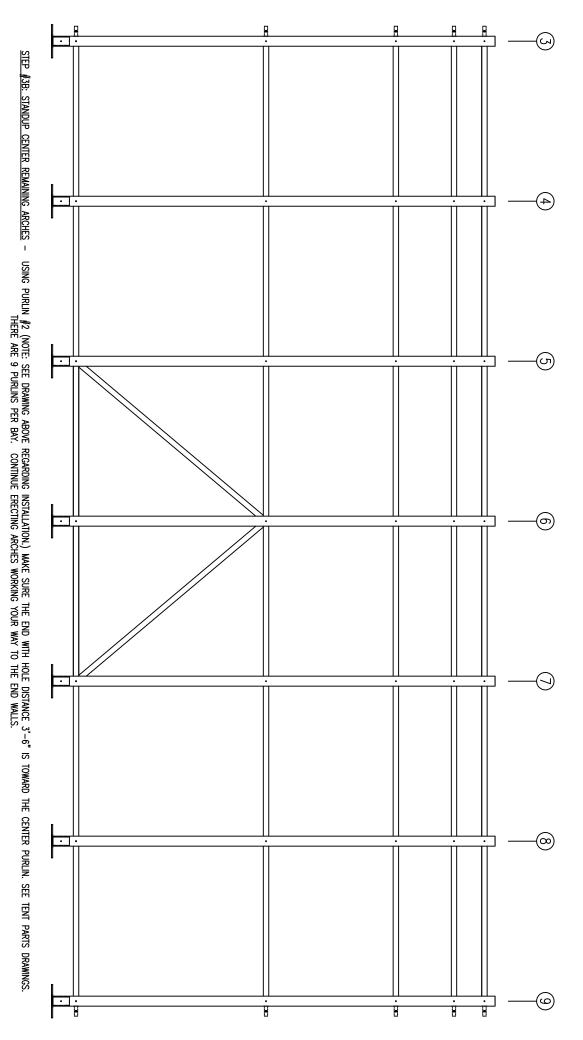
NOTE: ALL BOLTS ARE INSTALLED WITH THE HEAD FACING THE FABRIC, SO NOT TO DAMAGE THE COVER OR END PANELS.

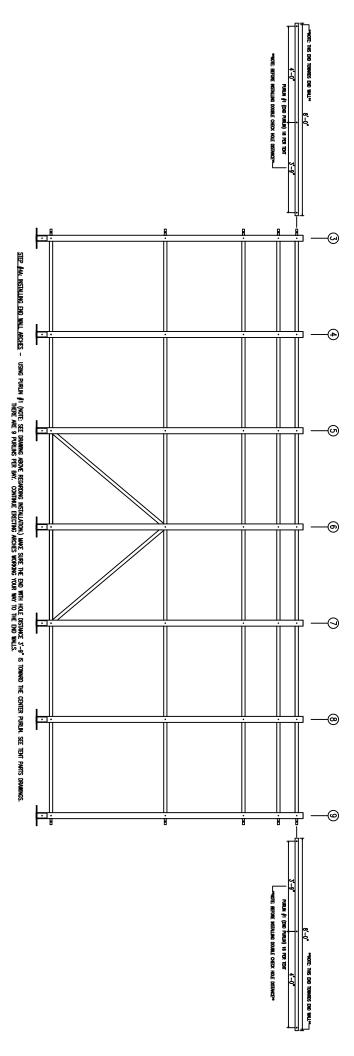


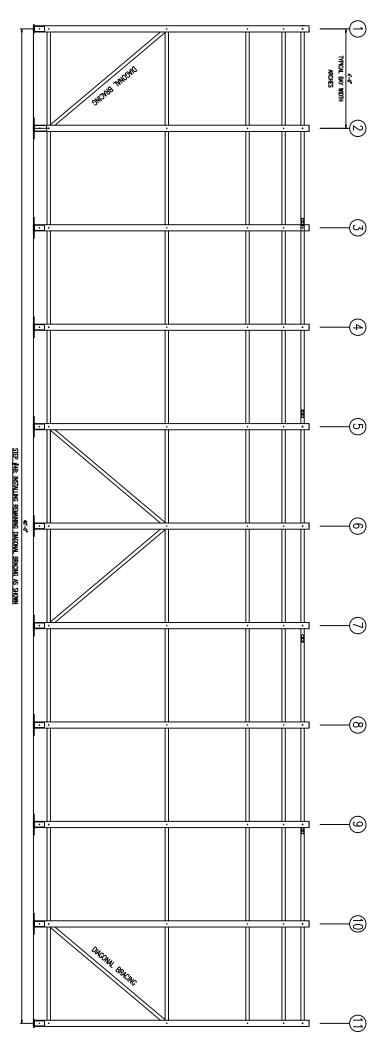
STEP #1B: END WALL ARCH ASSEMBLY — ASSEMBLE FIRST & LAST END WALL ARCHES USING THE 4 CORNER BASE PLATES. TAKE NOTICE OF HOW THE BASE PLATES ARE INSTALLED ON THE ARCH.
PAD EYES TOWARD EACH OTHER. NOTE: ALL BOLTS ARE INSTALLED WITH THE HEAD FACING THE FABRIC, SO NOT TO DAMAGE THE COVER OR END PANELS.

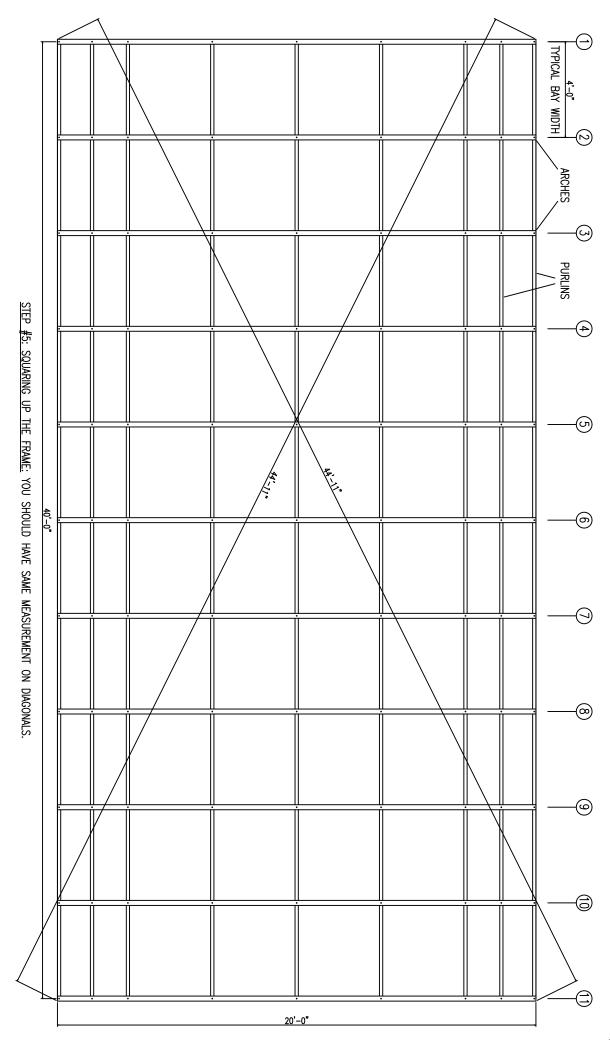


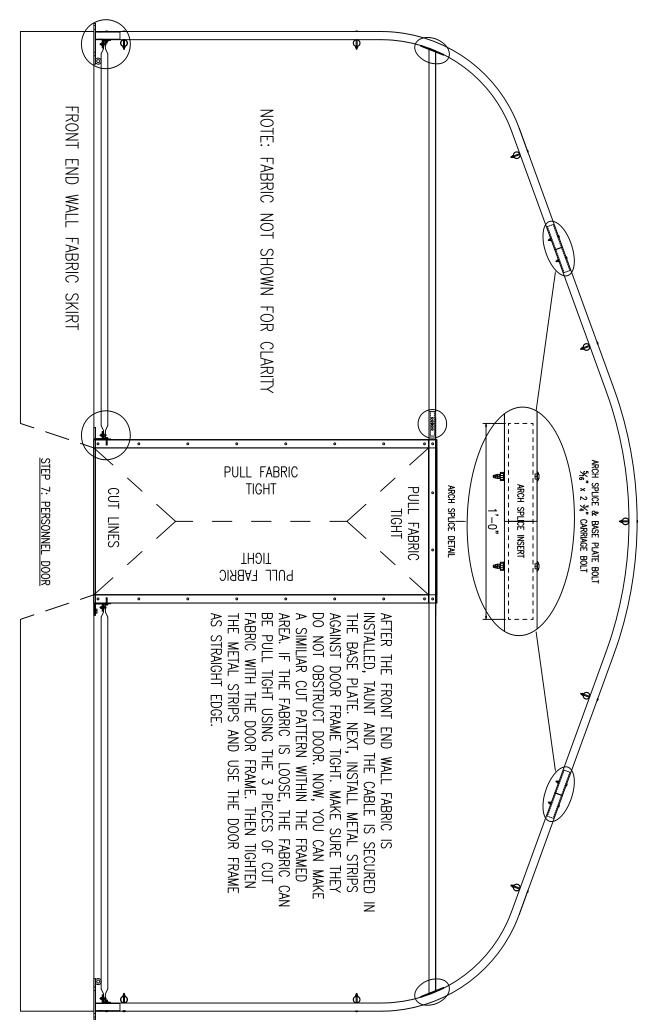


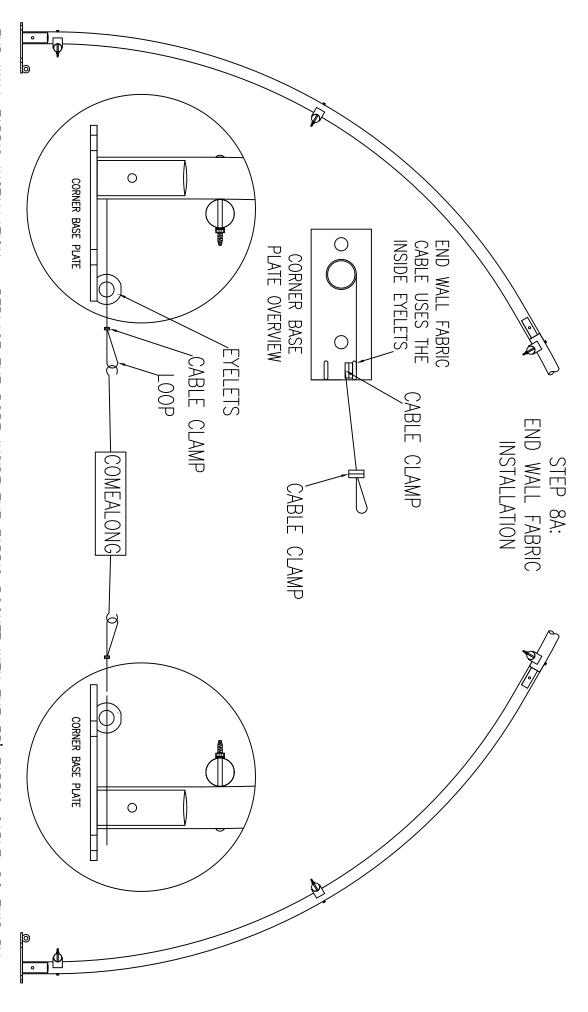












FINALLY, AFTER CABLE & FABRIC ARE TIGHT USE ANOTHER CABLE CLAMP TO SECURE THE CABLE IN A TIGHT POSITION INFRONT BOLT HOLDING THE TOP CENTER PURLIN AND PUT THE PURLIN THROUGH THE 6" CUTOUT IN THE TOP CENTER OF THE FABRIC SECURING THE CABLE TO ROPE AND PULLING IT THROUGH. NOW, HANG THE FABRIC OUTSIDE THE ENDWALL FRAME, LOSEN THE OF THE BASE PLATE EYELET. CABLE WILL RUN UNDER THE PURLIN. NOW, MAKE A LOOP ON EACH END OF THE CABLE USING THE CABLE CLAMPS TO MAKE END WALL FABRIC INSTALLATION = REPLACE THE ROPE INSIDE THE FABRIC POCKET WITH THE 35' FABRIC CABLE, DO THIS BY THE LOOP TIGHT, AFTER IT HAS BEEN PASSED THROUGH THE INNER EYELET. THEN, USE A COMEALONG TO TIGHTEN THE CABLE

