

GUY ROPE LOAD TABLE (Lbs.)

| | 10 PSF UP/DOWN | 20 PSF UP/DOWN | 70 MPH WIND EXP.C |
|-------------------------------|----------------|----------------|-------------------|
| CORNER GUYS | 1306 | 2612 | 2400 |
| LACE LINE AND END CENTER GUYS | 2035 | 4070 | 3460 |
| INTERMEDIATE GUYS | 750 | 1500 | 1279 |

NOTE: GUY LOADS ABOVE INCLUDE DEAD LOADS AND PRESTRESS LOADS, BUT NO SAFETY FACTOR.

DESIGN:

1. THIS DRAWING CONVEYS, IN PRINCIPLE, THE ENGINEERING CRITERIA USED IN THE DESIGN OF THE 40 FT. WIDE ARMBRUSTER POLE TENT. WHEN USED FOR REVIEW OR APPROVAL, THIS DRAWING SHALL BE ACCOMPANIED BY THE MANUFACTURER'S ASSURANCES THAT THE CONSTRUCTION DETAILS USED IN THE ACTUAL MANUFACTURE OF THIS TENT ARE THOSE WHICH HAVE BEEN APPROVED, IN ADVANCE, BY THIS ENGINEER.

THE ADEQUACY AND APPROPRIATENESS OF ENGINEERING CRITERIA SELECTED FOR THIS STRUCTURE SHOULD BE REVIEWED FOR EACH SITE AND INSTALLATION, BASED ON LOCAL CLIMATE AND WIND CONDITIONS, GEOGRAPHICAL LOCATION, EXPOSURE, DURATION OF INSTALLATION, OCCUPANCY AND CODE REQUIREMENTS.

2. THIS TENT HAS BEEN DESIGNED FOR 3 LOAD CASES:

- A. 10 PSF UNIFORM UP/DOWN.
- B. 20 PSF UNIFORM UP/DOWN.
- C. 70 MPH WIND, EXPOSURE "C"

IN CASES (A.) AND (B.), UNIFORM UP/DOWN DESIGN LOADS, LOADS WERE APPLIED ACTING VERTICALLY.

IN CASE (C.), EXPOSURE "C" IS TAKEN AS THAT DEFINED IN ASCE 7-93, "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES", USING CORRESPONDING GUST RESPONSE FACTORS AND EXPOSURE FACTORS. THIS IS DEFINED AS "OPEN TERRAIN WITH SCATTERED OBSTRUCTIONS HAVING HEIGHTS GENERALLY LESS THAN 30 FT. THIS CATEGORY INCLUDES FLAT OPEN COUNTRY AND GRASSLANDS."

- 3. STAKING OF THIS TENT IS NOT A PART OF THIS DESIGN INASMUCH AS EACH SITE IS UNIQUE AS TO GROUND CONDITIONS, EXPOSURE, ETC. THIS DESIGN DOES PROVIDE TABULATED GUY ROPE LOADS FOR EACH OF THE ABOVE DESIGN LOAD CASES; NOTE THAT THESE ARE ACTUAL, UN-FACTORED LOADS.
- 4. IT IS ASSUMED THAT THIS TENT IS INSTALLED AT-GRADE ON A HORIZONTAL GROUND PLANE.
- 5. IT IS ASSUMED THAT THIS TENT WILL HAVE AN OCCUPANT LOAD OF FEWER THAN 300 PERSONS AND BE INSTALLED FARTHER THAN 100 MILES FROM AN HURRICANE COASTLINE.
- 6. THIS TENT IS NOT DESIGNED FOR SNOW EXPOSURE.
- 7. THIS TENT IS NOT DESIGNED TO CARRY PONDED WATER.
- 8. THIS DESIGN ASSUMES NO SIDEWALLS.
- 9. THIS TENT IS NOT DESIGNED AS A HAVEN IN A STORM. IT SHOULD BE EVACUATED IN THE EVENT OF A STORM.

MATERIALS:

1. FABRIC SHALL BE HEAVY DUTY 16 OZ./SQ. YD. VINYL-LAMINATED POLYESTER, FLAME-RETARDANT, 3-PLY, 1000 DENIER, 9 X 9 WEFT-INSERTED WEAVE.

FABRIC SEAMS SHALL BE RF-WELDED, SIZED TO DEVELOP AT LEAST 90% OF THE TENSILE STRENGTH OF THE FABRIC JOINED.

WHERE SEWN STITCHING IS REQUIRED, THREAD SHALL BE UV-RESISTANT POLYESTER, MANUFACTURED FOR THAT PURPOSE.

2. WEBBING SHALL BE 2" WIDE POLYESTER W/5000 LB. MIN. BREAKING STRENGTH (MAX. ELONGATION AT BREAK = 12%), MILDEW-TREATED AND UV-RESISTANT.

3. POLES SHALL BE 6061-T6, ALUMINUM SCHEDULE 40 PIPE.

4. GUY ROPES SHALL BE 5/8" DIA., 3-STRAND, TWISTED POLYPROPYLENE W/ A MIN. BREAKING STRENGTH OF 5600 LB.

ROPES FITTINGS SHALL BE MANUFACTURED FOR THE EXPRESS PURPOSE OF TERMINATING ROPE OF THIS TYPE, AND WHEN INSTALLED, SHALL DEVELOP AT LEAST THE BREAKING STRENGTH OF THE ROPE.

5. HARDWARE SHALL BE LOAD RATED.

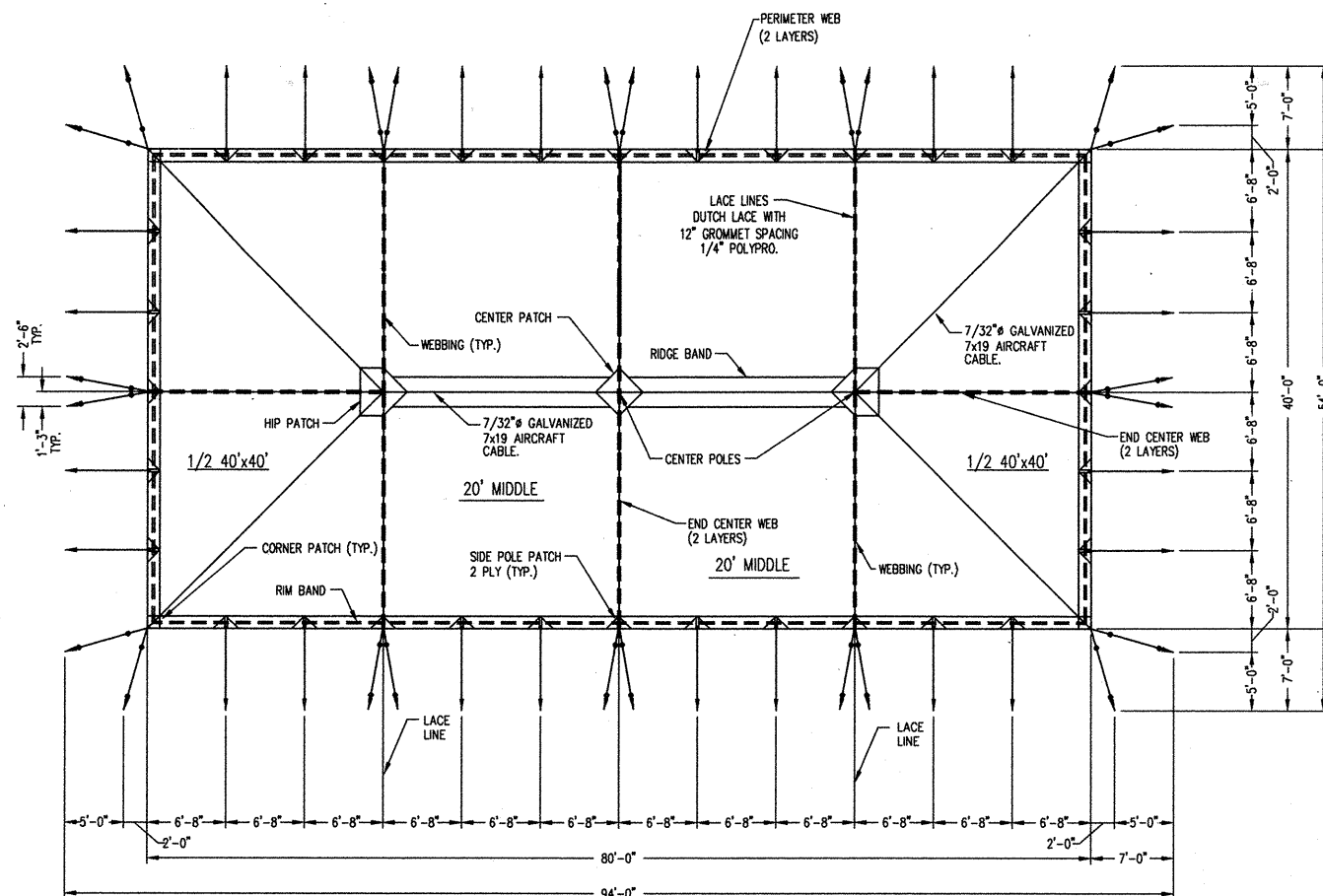
6. SIDEPole TABS AND CORNER TABS SHALL BE AISI 304 STAINLESS STEEL.

7. CENTERPOLE RINGS SHALL BE AISI 304 STAINLESS STEEL.

8. STAKES ARE NOT SOLD AS A PART OF THIS PRODUCT SO AS TO EMPHASIZE THE DUTY AND THE RESPONSIBILITY OF THE INSTALLER TO CHOOSE STAKES OF THE APPROPRIATE NUMBER, TYPE, AND SIZE TO DEVELOP THE NECESSARY HOLDING POWER FOR THE SITE CONDITIONS WHERE THE TENT WILL BE INSTALLED.

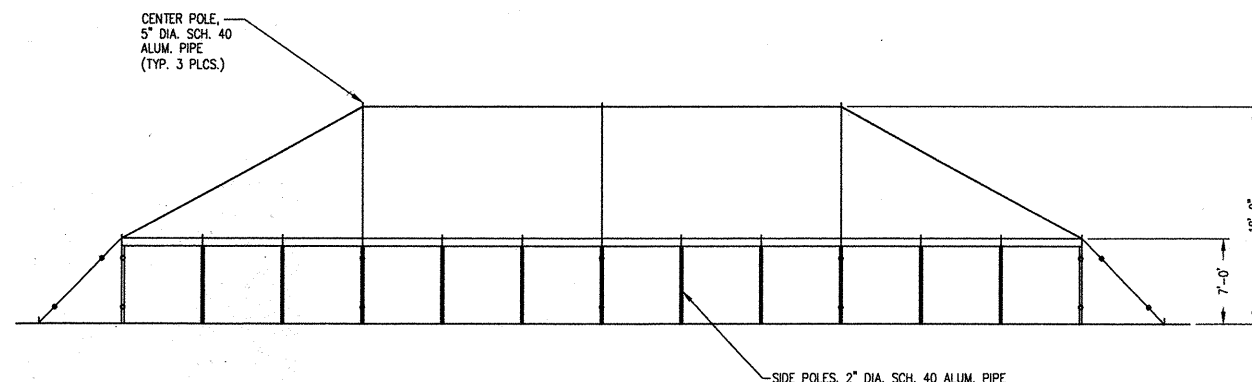
INSTALLATION:

- 1. SITE SELECTION AND ANCHORING OF THIS TENT IS THE RESPONSIBILITY OF THE INSTALLER.
- 2. EACH COMPONENT OF THIS TENT SHOULD BE INSPECTED AT THE BEGINNING OF EACH INSATALLATION; DAMAGED MATERIALS SHOULD BE REPLACED BEFORE INSTALLATION BEGINS.
- 3. ALL ANCHOR LOCATIONS MUST BE ACCURATELY LAID OUT.
- 4. BEFORE INSTALLATION IS COMPLETE, ADEQUATE TENSION MUST BE APPLIED TO THE GUYING ROPES IN ORDER TO STRETCH THE FABRIC TAUT. CORRECT PULLING OUT AND DRESSING OF THIS TENT REQUIRES DILIGENCE, PATIENCE, CONSIDERABLE SKILL, AND EXPERTISE WHICH CAN ONLY BE OBTAINED THROUGH PROPER IN-FIELD TRAINING.
- 5. THIS DRAWING DOES NOT CONSTITUTE AN INSTALLATION MANUAL.
- 6. A VARIETY OF WEATHER AND MATERIAL FACTORS CAN RESULT IN UNEXPECTED STRUCTURAL PERFORMANCE OF THIS TENT WHILE IT IS UNATTENDED BY THE INSTALLER. THUS, THE INSTALLER SHOULD ARRANGE TO MONITOR WEATHER REPORTS AND MAKE PERIODIC INSPECTIONS AND ADJUSTMENTS TO THE TENT DURING THE COURSE OF ANY GIVEN DEPLOYMENT.



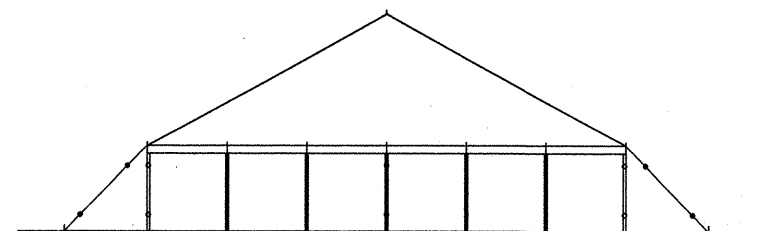
PLAN

SCALE: 1/8" = 1'-0"



SIDE ELEVATION

SCALE: 1/8" = 1'-0"



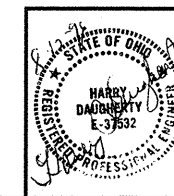
END ELEVATION

SCALE: 1/8" = 1'-0"

CHK'D. BY:

WORK THIS DRAWING WITH AM40-2

ARMBRUSTER
ESTABLISHED 1875
TENT MAKER
800-637-4326



PLAN, ELEVATIONS & NOTES

| | | |
|----------------------|------------------------------|------------------------|
| SCALE: NOTED | APPROVED BY: Harry Daugherty | DRAWN BY: GAS |
| DATE: 7-17-96 | REVISED | |
| 40' POLE TENT | | |
| For: ARMBRUSTER MFG. | | DRAWING NUMBER: AM40-1 |