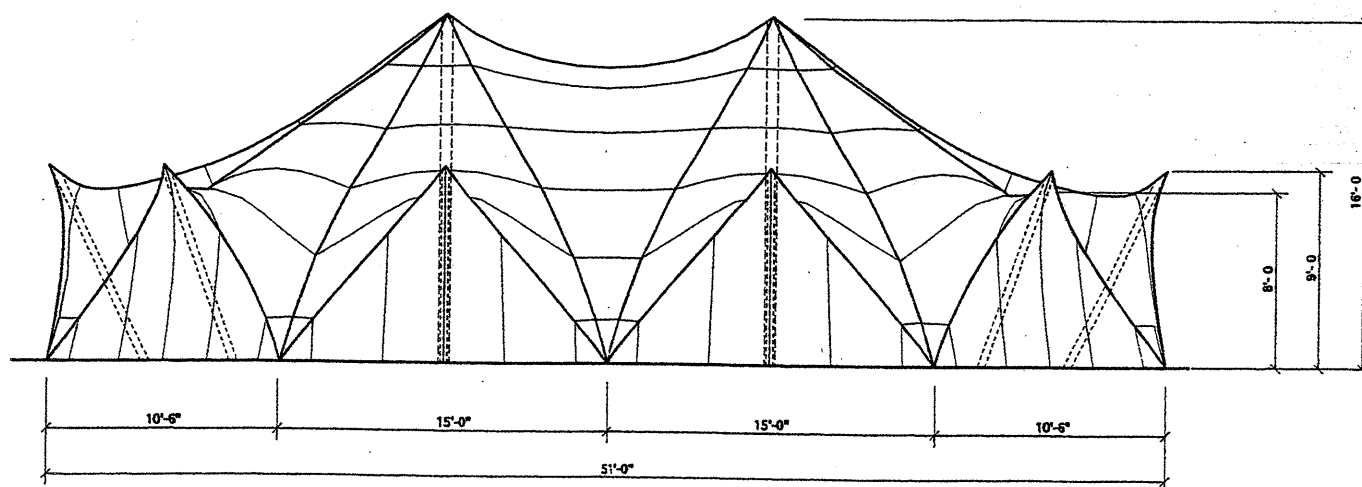
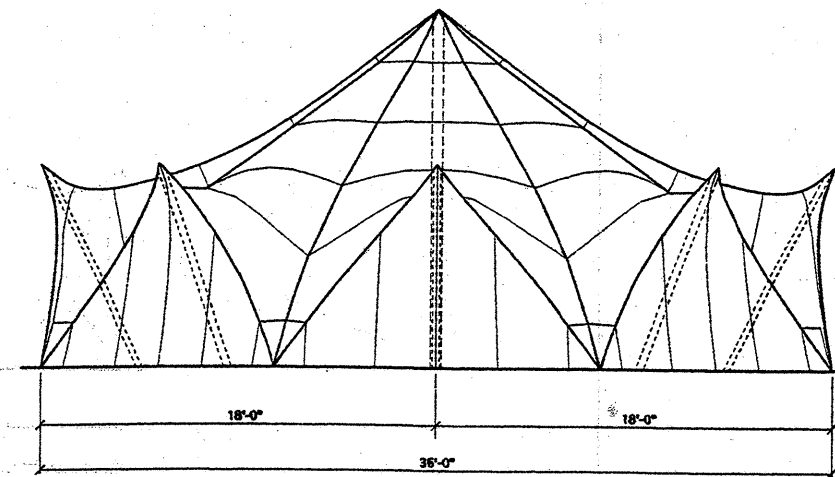


PLAN
SCALE: 1/4" = 1'-0"



FRONT ELEVATION
SCALE: 1/4" = 1'-0"



END ELEVATION
SCALE: 1/4" = 1'-0"

GENERAL

The information on this drawing pertains only to the Armbruster 30' wide Tension Tent, a Future Tents® Design by Todd Dalland of FTL Associates, New York, manufactured exclusively by Armbruster Manufacturing Company, Springfield, Illinois. The following criteria and typical material sizes are considered appropriate for many applications and installations of this standardized structure.

ENGINEERING CRITERIA

The equilibrium surface form of this tent has been determined using computer programs for geometrically non-linear analysis involving finite elements and techniques of dynamic relaxation. All information pertains to structures mounted at grade on a horizontal ground plane.

INSTALLATION TIPS

- All anchor locations must be laid out accurately as shown on the attached diagram (in advance of laying out the fabric) to a tolerance of plus or minus 6" in any direction (right or left, forward or back, up or down, etc.) All column base locations must be laid out accurately to a tolerance of plus or minus 3" in any direction.
 - Anchor and column locations shown on the diagram assume a perfectly flat site. If the actual site has variations in elevation that prevent all the anchors and column bases from being at the same level, new anchor locations and/or column lengths must be accurately calculated to preserve original design geometry and vectors.
 - Make sure that the anchors installed are adequate and that they conform to the layout as shown on this drawing.
 - Make sure adequate tension to pull the fabric tight (pre-stress load) is applied to the guying cables before installation is complete.
 - Measuring the angle of the masts and side poles offers a very good check on the geometrical accuracy of the installation. This can easily be done with an Angle-o-meter. As illustrated in this drawing, each and every sidepole should be inclined from front to back 58.5° above the horizontal ground plane and from side to side, lie in a plane perpendicular to the horizontal ground plane. The center poles should be perpendicular to the horizontal ground plane.
- Note:** All the above considerations must be carefully met in order for the structure to obtain proper geometry.

MATERIALS SIZES AND SPECIFICATIONS FOR THE ARMBRUSTER 30' WIDE WIND VERSION TENSION TENT

1. FABRIC:

Use Vinyl-laminated polyester fabric with a top-coating to resist UV degradation and soiling.

2. WEBBING BELT REINFORCEMENTS:

EDGE WEBBING BELTS:

Polyester webbing with maximum elongation of 12% to 15% at break.

PERIMETER CATENARY WEBBING BELTS:

Polyester webbing with a maximum elongation of 12% to 15% at break.

Every webbing belt shall be individually terminated at each end fitting and sewn back onto itself for a distance adequate to develop the full breaking strength of the belt. Thread for stitching belts to fabric should be high quality UV resistant polyester.

3. COLUMNS:

Center Poles:
Length: 16'

Side Poles:
Length: 10'

INSPECTION

Each component of each Armbruster 30' wide Tension Tent should be inspected at the beginning and the end of each installation for visual signs of damage by the installer. All damaged materials should be replaced immediately.

ANCHORING

A wide variety of ground anchoring devices are commonly used. Soil conditions and resulting ground anchor holding capacities vary from site to site, and can vary within a particular site. The installer of the Armbruster 30' wide Tension Tent is fully responsible for assuring that the selection and installation of the anchoring devices is adequate and appropriate to resist the pull-out loads.

Due to the possibility of reduced anchor performance under wet soil conditions, care should be taken that water is not allowed to drain or collect near anchors.

Anchoring device holding capacity can be developed using a single larger device, or by using multiple smaller devices.

INSTALLATION

Correct "pulling out" and "dressing out" of a rental tent requires diligence and considerable skill and experience and is instrumental to obtaining optimal structural behavior of the Armbruster 30' wide Tension Tent.

GENERAL GUIDELINES:

- Clear the site to prepare for the planned activity.
- Drop cloths can be used to prevent soiling or damage to the fabric membrane.
- Any objects with sharp projections which must remain on site under the tent should be padded and taped.
- Tent sections are placed on site, unrolled, and laced together, and secured to anchorages and attached to masts by hand.
- Before lift-up, all equipment is checked for operational condition.
- Center poles are raised to their final position.
- Columns and guy ropes are then checked and methodically adjusted into final design geometry to obtain proper loading in the fabric. Any components showing visible signs of damage should be replaced immediately.

MAINTENANCE

Since a variety of materials and weather factors can result in fabric stretch, webbing belt stretch, rope stretch, mast foot settling, anchor settling, etc., changes to the design geometry of the tent, and consequently the structural performance characteristics of the tent can occur while the tent is unattended by the installer.

It is recommended that for many installations the installer make periodic inspections and adjustments.

All information and recommendations contained herein have been prepared by FTL Associates at the request of Armbruster Manufacturing Company and have been accepted and approved by Armbruster Manufacturing Company.

36' WIDE TENSION TENT

no.	date	revision
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