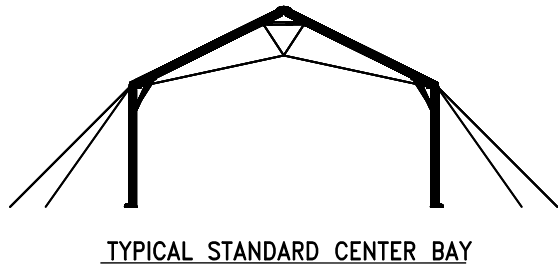
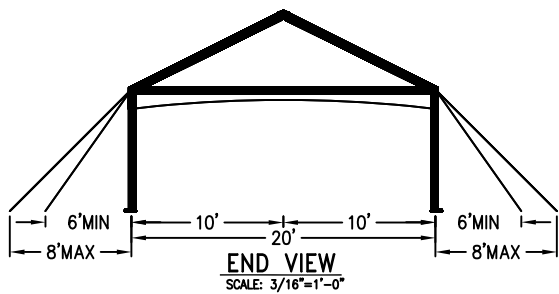
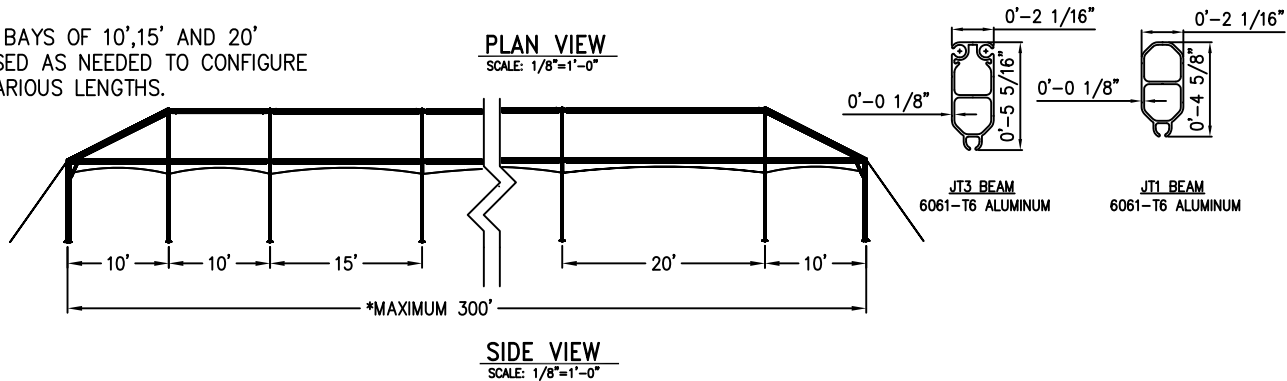
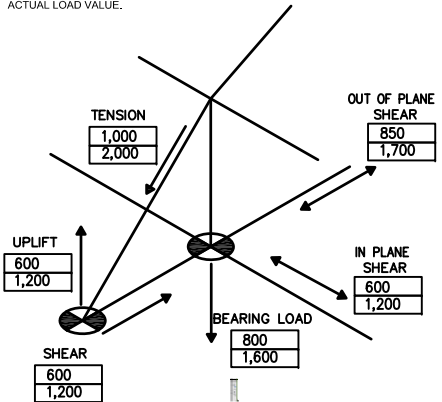


*MODULAR BAYS OF 10',15' AND 20' CAN BE USED AS NEEDED TO CONFIGURE TENT IN VARIOUS LENGTHS.



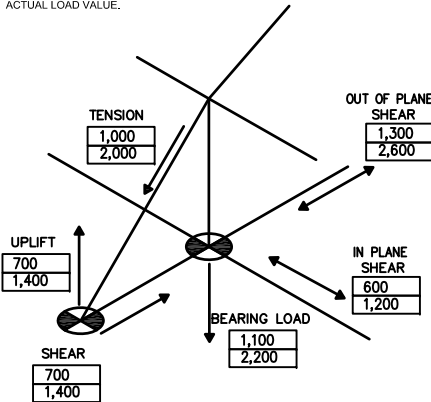
SAMPLE		20' WIDE-10' BAYS & 20' X 20' HIP END TENT
1,000	ACTUAL LOAD VALUE	
2,000	MINIMUM DESIGN LOAD FOR ANCHORING SYSTEM*	

* MINIMUM DESIGN LOAD FOR ANCHORING SYSTEM IS CALCULATED USING A FACTOR OF SAFETY = 2.0. SOME FIXED MECHANICAL ANCHORS HAVING ULTIMATE LOADS IN EXCESS OF THIS SPECIFIED LOAD CAN BE USED, BUT THOSE ANCHORS MUST ALSO HAVE ALLOWABLE/ WORKING LOADS GREATER THAN ACTUAL LOAD VALUE.



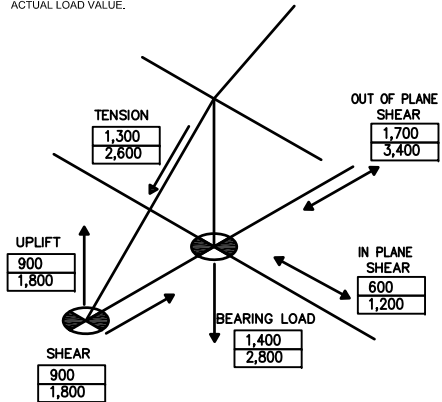
SAMPLE		20' WIDE-15' BAYS & 20' X 20' HIP END TENT
1,000	ACTUAL LOAD VALUE	
2,000	MINIMUM DESIGN LOAD FOR ANCHORING SYSTEM*	

* MINIMUM DESIGN LOAD FOR ANCHORING SYSTEM IS CALCULATED USING A FACTOR OF SAFETY = 2.0. SOME FIXED MECHANICAL ANCHORS HAVING ULTIMATE LOADS IN EXCESS OF THIS SPECIFIED LOAD CAN BE USED, BUT THOSE ANCHORS MUST ALSO HAVE ALLOWABLE/ WORKING LOADS GREATER THAN ACTUAL LOAD VALUE.



SAMPLE		20' WIDE-20' BAYS & 20' X 20' HIP END TENT
1,000	ACTUAL LOAD VALUE	
2,000	MINIMUM DESIGN LOAD FOR ANCHORING SYSTEM*	

* MINIMUM DESIGN LOAD FOR ANCHORING SYSTEM IS CALCULATED USING A FACTOR OF SAFETY = 2.0. SOME FIXED MECHANICAL ANCHORS HAVING ULTIMATE LOADS IN EXCESS OF THIS SPECIFIED LOAD CAN BE USED, BUT THOSE ANCHORS MUST ALSO HAVE ALLOWABLE/ WORKING LOADS GREATER THAN ACTUAL LOAD VALUE.



GENERAL

The information on this drawing pertains only to the 20x Jumbotrac Hip Ended Frame Tent, designed and manufactured by Aztec Tents, Inc., Torrance, CA. If used for review or approval of a particular installation, this drawing should be accompanied by the assurances of the manufacturer's engineer that the materials, sizes and specification requirements on this drawing will be met or exceeded, and by the assurances of the installer's engineer that the anchoring requirements and the installation and maintenance recommendations will also be met or exceeded. The following criteria, results, design loads and typical material sizes are considered appropriate for many applications and installations of this standardized structure. The adequacy and appropriateness of the engineering criteria selected for the structure should be reviewed for each installation and site based on local climate, wind conditions, geographical locations, exposure, duration of installation, occupancy and building code requirements.

1. ENGINEERING CRITERIA

The tent system has been evaluated using the criteria set forth in the document "Minimum Design Loads for Buildings and Other Structures: ASCE/SEI Standard 7-10" published by The American Society of Civil Engineers.

Exposure Category C (open terrain with scattered obstructions having heights generally less than 30 ft) has been assumed. The standard 50 year mean recurrence interval has been reevaluated for a 7.5 year return period to account for the temporary nature of the tent installation. Installations of longer than 180 days exceed the evaluation criteria used and are not allowed without special consideration being taken.

This tent complies with an ASCE/SEI 7-10 design wind speed of 100 mph (3-second gust). If a wind speed of 100 mph or greater is forecast the tent should be taken down and removed from the site. If a wind speed of 38mph or greater occurs or is forecast, the tent must be evacuated.

The structure is not engineered for snow or live loading.

External pressure coefficients from ASCE/SEI 7-10 Figure 28.4-1 (enclosed, partially enclosed buildings) have been used to calculate surface pressures. Wind gusting is taken into account in the analysis. Two different wind directions have been assessed for wind loads over the entire tent. Analysis has been performed with side walls. All information pertains to structures mounted at grade on a horizontal ground plane without nearby escarpments, ridges, or hills.

2. DESIGN LOADS AND MATERIAL SPECIFICATIONS

2.1 Tent Frame Sections

Tent frame sections are JT1 & JT3 Aluminum Extrusions, 6061-T6 alloy.

2.2 Tent Fittings

All tent fittings are fabricated from 1/4" Schedule 40 steel pipe.

2.3 Tiebacks for Perimeter Edge Posts

Tiebacks can be a rope, cable, webbing or similar structural member with tensile capacity.

Recommended Factor of Safety for Perimeter Edge Post Tiebacks: 3 times the maximum design tension

Maximum design tension = 1,300 lbs.

Tiebacks must have a combined breaking strength of 3,900 lbs. Using multiple tiebacks at each column location to achieve the designated load is acceptable.

2.4 Connecting Hardware

All connecting hardware including assembly pins, baseplates, and ratchet tensioners shall have allowable working loads of 2.0 times the maximum design loading.

2.5 Tent Base Reactions

Tent base reactions are specified in the tent drawings on this sheet. A Factor of Safety of 2.0 is included in the reactions shown.

3. INSTALLATION

3.1 All anchor locations must be laid out accurately as shown on the attached diagram to a tolerance $\pm 4"$ 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 $\pm 1"$ in any direction.

3.2 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 post/mast 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.

3.3 Ensure that the anchors installed are adequate to resist the pull out loads shown on the diagram. Actual testing of some individual anchors to 75% of the anchor pull-out load is recommended.

3.4 Certification of this structure is valid only with the use of Aztec supplied and assured components or those which meet or exceed the requirements of this drawing throughout the installation of this structure, with the exception of the anchoring devices which must be determined by the installation engineer as noted in 3.3 above.

3.5 Rainwater Ponding - If rainwater ponding occurs at any point on the fabric, evacuate the tent, remove the water and adjust the tension of the roof fabric back to design levels to achieve positive drainage.

All the above requirements must be adhered to in order for the structure to obtain proper geometry, as-installed pre-stress, and anchor holding strength, all of which are necessary to achieve full design wind load resistance capacity.

Interior bays (rafter to rafter lengths of 10', 15' and 20') can be deleted as required on a case by case basis to make the tent shorter in length. This does not affect the structural capacity of the tent in any way.

4. INSTALLATION PROCEDURE GUIDELINES

Correct field installation of a rental tent requires diligence and considerable skill and expertise which can be obtained only through the proper field training and experience of a professional rental tent supervised installation crew. This is instrumental to obtaining the optimal structural behavior of the Tent.

General Installation Guidelines

Clear the site to prepare for the planned activity.

Do not install the tent under or near overhead power lines. It is recommended that no part of the tent be any closer than 50' to any overhead power line or utility pole.

Use drop cloths to prevent soiling or damaging the fabric membrane.

Pad and tape objects with sharp projections which will remain on site under the tent.

Check for sub-grade utilities before installing the anchors.

Build framework on the ground (See installation manual for the step by step process)

Locate the public circulation routes with clearance from anchoring devices. Identify clearly.

Cover any sharp edges on anchoring devices with protective material.

Check and methodically adjust the tiebacks into final design geometry to obtain proper stresses to secure the framework to the anchoring device. Any components showing visible signs of damage should be immediately replaced.

Proper safety equipment should be used at all times to ensure a safe installation and take down. Safety equipment such as hard hats, steel toe shoes, safety glasses and other equipment, as required, should be utilized at all times.

The weather should be carefully considered by the Owner and/or Installer before raising or lowering the fabric tent since the fabric cannot transmit design wind loads or shed rainwater loads (potential ponding) as it is being installed or removed. It is recommended that raising or lowering the fabric tent be performed when the wind speed is less than 15 mph. The decision of when to raise or lower the fabric tent should be the responsibility of the experienced rental tent installation supervisor based on conservative life safety considerations and judgment.

Adequate and appropriate installation and maintenance procedures are necessary to achieve and sustain full design load capability for the Tent. The Owner and/or Installer are fully responsible for assuring that the tent is properly installed and maintained.

Follow additional installation instructions provided by the manufacturer.

5. INSPECTION

Each component of the 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 repaired or replaced immediately.

6. ANCHORING

A Factor of Safety of 2.0 times the design load is commonly used for ground anchors of temporary structures.

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 Owner and/or Installer of the 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 on this drawing.

Reduced anchor performance can occur under wet soil conditions and needs to be accounted for. 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 large device, or by using multiple smaller devices.

7. MAINTENANCE

A variety of material and weather factors can result in fabric stretch, web belt stretch, rope stretch, mast base settling, anchor settling, changes to design geometry, etc. Changes to the design geometry of the tent, and consequently the structural performance characteristics of the tent, can occur while the tent is in service and not attended by the professional installer.

It is recommended that a Maintenance Agreement be arranged between the Client and the Installer involving periodic inspections and adjustments.

All information and recommendations contained herein have been prepared by at the request, acceptance and approval of Aztec Tents.

Additional installation and anchoring information entitled "The IFAI Procedural Handbook For The Safe Installation And Maintenance Of Tentage" is published by the Tent Rental Division of the Industrial Fabrics Association International.

It is understood and expected that some damage to the membrane and/or other non-structural components may occur in conditions below the overall design wind velocity rating of the tent system. This damage may result in components requiring repair or replacement as necessary.

<input checked="" type="checkbox"/> FOR REFERENCE
<input type="checkbox"/> FOR INSTALLATION
EVENT/CLIENT:
SITE ADDRESS:
NUMBER OF TENTS:
DURATION DATES:

REVISION HISTORY			
REV.	DESCRIPTION	BY	DATE
CONFIDENTIAL			
ENGINEER:	N/A	DATE:	2/16/2016
PAGE:	1 OF 1	DRAWN:	HUGO.R

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JUMBOTRAC

20x JUMBOTRAC HIP
STRUCTURAL DRAWING

ZXXXXXX

PART NUMBER: