# PRODUCT MANUAL







If YOU can IMAGINE it... WE can BUILD it

ADENA A-FRAMETM



# **AWARNING**

This tent product is not intended to be used as a shelter from severe weather. Evacuate immediately if threatening weather occurs (or is forecasted) or any condition arises concerning the safe use of this product. Threatening weather includes electrical storm systems, moderate to high wind (excess of 38mph), heavy rains, snow, or any condition that raises any doubt to the structural integrity of the tent

# **ACAUTION**

The installation of electrical, plumbing, lighting, appliances and/or HVAC equipment are not covered within this manual. Users/Installers shall follow local code requirements for the installation of these items using certified personnel. Aztec Tents shall be indemnified and held harmless from any such use or injury resulting from its use.

## **Important Safety Information**

Proper personnel safety equipment should be worn at all times during the installation of any tenting products.

Hard Hat

Safety Glasses

Work Gloves

Long Pants

Steel Toe Boots

OSHA Approved Harness and restraint system (for off ground activities)



Thank you for your recent purchase from AztecTents. The following procedures will help you through your installation. If you ever run into problems with the installation of your AztecTent give one of our sales/service professionals a call. Other product specific information, contact information, diagrams, and other operational support is available on our web site at www.aztectent.com.

#### **Contents**

| General Care & Guidelines                 |       |
|---|-------|
| General Fabric Care & Maintenance         | 4     |
| General Hardware Care & Maintenance       | 5     |
| Fabric Flame Retardant Information        | 5     |
| Anchoring                                 | 5     |
| Anchoring Tie Downs                       | 6     |
| Pre-Installation Guidelines               | 6     |
| General Installation Guidelines           | 6     |
| Post Installation Guidelines- Maintenance | 7     |
| Safety & Evacuation Planning              | 7     |
| General Take Down/Removal Guidelines      | 7     |
| Special Care for Unsupported Clear Fabric | 8     |
| Other Resources                           | 8     |
| Tools Required for Installation           | 8     |
| Optional Items & Accessories Available    | 8     |
| Installation Procedure                    | 9-15  |
| Adena™ A-Frame Squaring Details           | 16    |
| Adena™ A-Frame Assembly Details           | 17    |
| Adena™ A-Frame Parts Images               | 18-19 |
| Adena™ A-Frame Engineering Specifications | 20    |
| Adena <sup>™</sup> A-Frame Components     | 21    |
| Adena™ A-Frame Kit Packages   Black       | 22    |
| Adena™ A-Frame Kit Packages  Timber       | 23    |

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#### **General Fabric Care & Maintenance**

The vinyl fabric developed for this tent system requires specific attention during installation, cleaning, and storage to maintain its maximum life span. Please follow the following care and maintenance guidelines provided for this product.

GROUND CLOTHS: The usage of ground covering material under the tent during installation and dismantle will protect the tent fabric from soiling and from minor surface abrasions. A ground cloth can also help keep the tent top dry if the ground surface (i.e. dirt, grass, etc.) is wet during the installation or dismantle.

MILDEW TREATMENT: The fabric is pretreated with mildew inhibitors that help prevent the growth and spreading of mildew and fungus. Although treated, proper care should be given to prevent potential growth. If you see mildew wipe it away immediately with a clean towel and diluted soap solution. Never fold your fabric for storage if the fabric is even slightly wet. Mold/Mildew spores in the air and on the ground will come in contact with the fabric while installed. To grow, all the mildew needs is moisture and some source of food (often found in dirt that might be on the tent). Your best bet is to keep your fabric clean and dry to prevent mildew growth.

FABRIC CLEANING: The best way to clean the vinyl tent fabric is with a soft towel or soft bristled brush immersed in a diluted solution of warm water and our tent cleaning solution. A diluted and mixed solution of a tablespoon of traditional dish soap with a gallon of warm water will also work, but extra caution should be placed on insuring that this cleaning solution is thoroughly rinsed from the fabric, especially with clear vinyls (See special notes on working with clear vinyls).

You will need a large, smooth, flat space slightly larger than the section of fabric. This space should be covered with a ground protecting layer to avoid damaging the tent membrane when moving in the washing area. Small impediments, sharp objects and rough surfaces all have the potential to damage the membrane you are trying to clean.

Follow the instructions for the proper dilution ratio of your cleaning product. Apply the diluted solution directly to the fabric using 1) a towel immersed in the solution, or 2) a spray bottle or larger pressurized spraying apparatus to evenly cover the fabric with the solution. Let this sit on the fabric for about one minute to allow the mixture to penetrate the fabric. Using a soft towel or soft bristled polypropylene brush (some can be mounted to a long handle to allow you to stand while working), gently work the cleaner into the fabric using only mild pressure. While harder bristled brushes can work, they will end up microscopically scratching the fabric, potentially permanently damaging the fabric and making it harder to clean the next time. The process of hand cleaning the fabric will allow you to apply only enough diluted solution to get the fabric clean. This will help limit the amount of water placed on the fabric to expedite drying time. Never allow the tent cleaner to dry on the fabric. For this reason, larger tents might be better to clean in sections. Once the cleaning is complete be sure to rinse away any cleaning solution completely from the tent membrane.

Full immersion of the fabric in water is not recommended. The use of commercial front loading or top loading washing machines is not recommended and will void the warranty of the fabric. These machines cause an excessive amount of stress to the fabric and can force water into the fabric causing increased occurrences of mildew growth and shorten the life of the fabric. As with any cleaning, the fabric should be hung to dry completely before folding and storage. Cleaners that include chlorine bleach, and/or any petroleum based solvents will degrade the fabric, discolor the fabric and shorten its life span.

If you have a difficult stain that cannot be removed with traditional cleaning, please consult with your sales person before trying any other chemicals that might end up damaging the material further. Do not use other chemicals or cleaners unless instructed by your sales professional.

FABRIC DRYING: The best way to dry the vinyl tent fabric is to hang-dry in a low humidity environment. Circulating air around the surface of the hanging fabric with the use of fans will also speed the drying process and improve drying time in more humid environments. Please also assure that subassemblies and other components within the tent system are dry before folding. These subassemblies can be reinforcements, lace lines, webbing, rope, thread, and/or any other part that is permanently affixed to the main tent membrane. The use of commercial drying equipment and any drying using heat will void the warranty of the fabric. DO NOT STORE YOUR FABRIC WET. Fabric folded and stored wet will mildew.

TENSIONING: Do not over tension your tent fabric during installation, use, or removal. Over tensioning can cause permanent damage to the tent membrane. The most obvious sign of over tensioning would be stress wrinkles at the tension points. Be sure to confirm that your frame/pole components match the tent design. In cases where the ground is not level, over tensioning is possible by trying to force the tent to dimension.

STORAGE RECOMMENDATIONS: The fabric for the tent system shall be stored dry in a cool, dry place in the protective storage bags included with your purchase. Other types of bags are acceptable as long as they can protect the fabric from the environmental elements of the storage area. Optimal storage temperature is between 50°F and 70°F.

INSPECTION: Prior to each use, each component of the tent system needs to be thoroughly inspected to assure its structural stability has not been compromised. Fabric components that are ripped, torn, frayed, or damaged shall be immediately replaced and not used. Structural components of the fabric membrane are the most critical including but not limited to the main fabric membrane, structural reinforcements and webbing, web termination plates/rings/fasteners, and connection points from fabric panel to fabric panel or connection points between the fabric panel and the hardware support system.

#### **General Hardware Care & Maintenance**

The hardware components developed for this tent system requires specific attention during installation, cleaning, and storage to maintain its maximum life span. Please follow the following care and maintenance guidelines provided for this product.

OXIDATION: The hardware components for this tent system have been supplied to you with specialty coatings to help limit oxidation. With usage, these coatings will need to be maintained in order to limit oxidation and for the product reach its full intended lifespan. With plated or powder coated steel components, any rust should be removed immediately with a stiff wire brush and sprayed with either a galvanizing spray or durable paint to seal the steel from the elements. Anodized aluminum components will get scratched over time and these scratched areas can develop a thin black oxidation common with mill finish aluminum. This black oxidation can cause staining to any fabric components that come in contact with the pole/component. Your best preventative measure will be to avoid scratching of the anodized coating by avoiding any sharp edges that might be come in contact with the aluminum member.

HARDWARE CLEANING: It is very important to keep your hardware components clean and free of dirt, oxidation, and other chemicals especially if those hardware components come into contact with any fabric components during installation, use, or take-down of your product. Any dirt, oxidation, or chemical on the surface of the hardware member can transfer the contaminant to the fabric causing permanent staining, or permanent damage to the fabric membrane. If hardware components are found to be soiled, wipe down immediately to remove the foreign matter.

STORAGE RECOMMENDATIONS: The hardware for the tent system shall be stored dry in a cool, dry place. Anodized aluminum component can be stored outside, but should be covered to prevent foreign matter from collecting on the components that might stain or damage the fabric membrane during installation or use. Any/all steel components shall be stored indoors in a dry/low humidity environment.

INSPECTION: Prior to and after each use, each component of the tent system needs to be thoroughly inspected to assure its structural stability has not been compromised. Hardware components that are bent, cracked, frayed, or damaged shall be immediately replaced and not used. Specific attention should be paid toward any devices used for anchoring including ratchets, ropes, cables, and web straps.

## **Fabric Flame Retardancy**

All vinyl fabric used in the production of our tents, walls, and accessories are certified flame retardant per NFPA 701, Canadian CAN-ULC-S109-03, British Standard BS 7837:1996, and are registered with the California State Fire Marshal. These vinyl products are produced so that they are inherently flame retardant, and thus will never require additional applications of flame retardant chemicals.

Every section of fabric produced by AztecTents contains a label identifying its flame resistance characteristics and date produced. This label matches a hard copy of the flame certificate that is mailed to you after receipt of your goods.

If at any time you need to be issued a duplicate flame certificate, you can request one from our customer service representatives. Please be sure to have the invoice number and date of production available when requesting duplicate flame certificates.

## **Anchoring**

All anchoring locations must be laid out accurately as described in the manual and diagrams contained within (in advance of laying out the fabric) to a tolerance of  $\pm$  in any direction (right or left, forward or back, up or down, etc.) All column base locations must be laid out to a tolerance of  $\pm$  in any direction for any standard supported tents and within a tolerance of  $\pm$  for any product utilizing keder channels.

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 to resist the pull out loads specified in the product manual.

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.

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

Additional installation and anchoring information entitled "The IFAI Procedural Handbook ForThe Safe Installation And Maintenance Of Tentage" is published by the Tent Rental Division of the Advanced Textiles Association (ATA).

## **Anchoring Tie Downs**

Although we use high quality thread and webbing for all of our sewn tie-down components, ultraviolet light from the sun will slowly breakdown these fibers over time. Chemicals, cleaners, or other products should not be used on webbing tie-down components as its use might accelerate this aging process. Damaged, abraded, cut, or frayed straps should never be used.

Additionally, these straps should never be used for other tie-down applications other than securing the tent for which they were purchased (i.e. securing equipment on a pallet, truck, or trailer). Seasonal installations should replace tie-down straps annually or sooner if any damage is noted. Other straps used in short term applications should be tested periodically to assure that they meet the intended working load for their design. Straps shall expire 5 years from the date of their manufacture (noted on the item tag) and shall not be used.

### **Pre-Installation Guidelines**

Correct field installation of this tent system 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.

- Obtain any required permits or inspections needed by local codes and regulations.
- Clear the site to prepare for the planned activity.
- Check for sub grade utilities before installing any anchoring devices.
- Check for any overhead obstructions that might interfere with the tent installation. Do not install any tent within 50' of any overhead utilities, power lines, or other obstructions. Installation under or within close proximity to trees should be avoided.
- Locate the public circulation routes with clearance from anchors around the exterior of the site. Identify clearly.
- 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.
- Cover any sharp edges on anchoring devices with protective material

### **General Installation Guidelines**

Each component of the tent should be inspected at the beginning of installation for visual signs of damage by the installer. All damaged materials should be repaired or replaced immediately.

The weather should be carefully considered by the Owner and/or the Installer before raising the tent since the hardware and fabric cannot transmit design wind loads or shed rainwater loads (potential ponding) when it is not fully anchored, installed, and/or tensioned. It is recommended that installation or removal of the fabric members be performed when the wind speed is less than 15 mph. The decision to raise or lower the fabric of the tent should be the responsibility of the experienced rental tent installation supervisor based upon conservative life safety considerations and judgement.

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.

Certification of this tent structure is valid only with the use of AztecTent supplied and assured components or those which meet or exceed the requirements of the design throughout the installation of this structure, with the exception of the anchoring devices which must be determined by the installation engineer.

## **Post Installation Guidelines / Maintenance**

Each component of the tent should be inspected at the end of installation for visual signs of damage by the installer. Additionally, an inspection should be performed after any severe weather/wind events that might have affected the overall integrity of the design. All damaged materials should be repaired or replaced immediately.

A variety of material and weather factors can result in fabric stretch, web belt stretch, rope stretch, mast base 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/User of the tent and the Installer involving periodic inspections and adjustments.

If rainwater ponding occurs at any point on the fabric, evacuate the tent, remove the water, and adjust the tie back rope/web prestress tension and/or fabric tensioning over the frame back to its design geometry to achieve positive drainage.

It is understood and expected that some damage to the fabric membrane and/or 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.

## **Safety & Evacuation Planning**

It is the responsibility of the Owner and/or the Installer to warn the User and or Occupants of the tent system that this product is not intended to be used as a shelter from severe weather. Aztec assumes no liability for such use. An evacuation and communication plan for the area covered within this tented space is imperative and shall be thoroughly communicated to all users and potential occupants of the tent. Severe weather including electrical storm systems, moderate to severe wind, heavy rains, snow, or any condition that raises any doubt to the structural integrity of the tent are immediate signs that an evacuation is necessary. Severe bodily injury and/or death can occur. A best practices document published by the American Rental Association covering this topic can be downloaded in the client resources section of our website at the following link: https://www.aztectent.com/sites/default/files/client-resources-files/ARA%20 Best%20Practices Evacuation%20Planning.pdf

Common signs that warrant the immediate evacuation of this tent:

- Any movement, displacement, or failure of any of the anchoring devices or support hardware.
- Any component failure in part or whole
- Any tear or puncture in the fabric membrane
- Any forecasted moderate to severe weather condition
- Any collection or accumulation of snow or ice on the tent
- Strong winds causing movement and/shifting of the tent or tent support structure
- Strong winds causing small branches to be ripped from trees
- Any lightning or electrical storms
- Hail or frozen precipitation any larger that pea size
- Any fire or smoke within close proximity of the tent
- Any small of gas, exhaust, or other odor from any combustible material

In the event of forecasted sever weather, hurricane, or other such early warning, it is recommended to immediately evacuate the tent and time permitting take down the tent and remove from the site.

## **General Take Down / Removal Guidelines**

The weather should be carefully considered by the Owner and/or the Installer before lowering the tent since the hardware and fabric cannot transmit design wind loads or shed rainwater loads (potential ponding) when it is not fully anchored, installed, and/or tensioned. It is recommended that installation or removal of the fabric members be performed when the wind speed is less than 15 mph. The decision to raise or lower the fabric of the tent should be the responsibility of the experienced rental tent installation supervisor based upon conservative life safety considerations and judgement.

Unless otherwise noted in the procedures that follow, the removal of this tent system shall follow the same procedures outlined but in the reverse order.

Once unassembled, each component of the system should be inspected for any signs of visual damage by the installer. All damaged materials should be marked or identified so that repair or replacement of these materials can occur prior to the next use of the product.

## **Special Care For Unsupported Clear Fabric**

The clear fabric used in window style sidewalls, clear sidewalls, and clear tent tops needs to be managed differently than standard tent fabric. Polyester scrim is what gives standard tent fabric its strength, stability and durability. Laminated tent fabric enjoys the benefit of encasing this woven layer of rip-stop polyester between the layers of colored vinyl film. Clear vinyl does not enjoy those benefits. Because of this, clear vinyl has a very low tolerance to ultra violet ray exposure, wind, airborne particulate matter, hot or cold temperatures, elasticity due to wind and rain and handling. Any or all of these factors will cause clear fabric to under perform when compared to traditional tent fabric.

Exposure to ultra violet rays for an extended amount of time as will occur with time over the life of the product, will cause the fabric to appear milky or opaque. Putting away and storing damp or wet clear vinyl will result in a foggy hue in the clear film. Usually, this fogginess will disappear when the walls are left open to dry and warm up. Steady wind can whip clear vinyl back and forth and cause surface or through cracks in the fabric. Heat in excess of 85°F (29°C) will cause clear vinyl to stretch and distort. Although our clear vinyl has a cold crack rating of near freezing, that rating is for a static environment. Any introduction of wind or manipulation by handling will cause failure (cracking like glass) in colder conditions. Use of clear fabric in temperatures less than 50°F should be avoided. Airborne particulate matter will abrade the surface and cause the finish to become less translucent.

Clear tent tops are also very susceptible to water ponding as they are highly elastic. If rain is forecasted during the use of these products it is recommended to take additional precautions and more frequent inspections throughout the duration of the rainfall to inspect for potential ponding on the roof fabric. If rainwater ponding occurs at any point on the fabric, evacuate the tent, remove the water, and adjust the tie back rope/web prestress tension and/or fabric tensioning over the frame back to its design geometry to achieve positive drainage.

Special attention should be paid to the cleaning of these items. Use only the softest towels when cleaning the clear membrane to avoid scratching the highly polished surface, and wipe dry to avoid water spots. Use standard diluted tent cleaning solution. DO NOT USE OTHER CHEMICALS. Optimal storage temperature is between 50°F and 70°F.

#### Other Resources

American Rental Association- www.ararental.org
Tent Rental Division of the Advanced Textiles Association

## **Tools Required for Installation**

Sledge Hammer For driving anchoring stakes
Drop Cloths For protecting fabric membrane
Pull Ropes For pulling fabric membrane over roof

12' LadderGeneral installation toolUtility KnifeGeneral installation toolTape MeasureGeneral installation tool

Marking Paint/Chalk Used to mark anchoring locations and tent boundaries

## **Optional Items & Accessories Available**

Side Wall Panels To enclose walls of tent

Wall Tension Bars To secure the bottoms of the walls from moving in breezy conditions

Additional Anchors Additional anchors used to secure the tent system

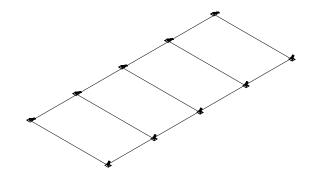
Ballast Plates Used to secure ballast to the tent base

Transport Rack Used to efficiently move beam components from warehouse to truck

## **Installation Procedure:**

#### Step 1:

Mark all the baseplate locations with paint or chalk. Secure each baseplate to ground with two (2) 1"x 42" stakes. Drive your anchor stakes straight into the ground. Squaring diagram can be found on page 16 of this manual.

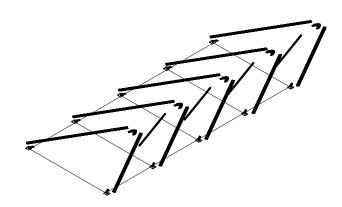


#### **NOTICE**

The anchoring devices included with the purchase of this tent will not be suitable for every application or ground condition. It is the installers responsibility to confirm that the anchoring devices used will support the recommended resistance load requirements specified in the appendix of this manual. Additional or different types of anchors may be needed depending on ground conditions.

#### Step 2:

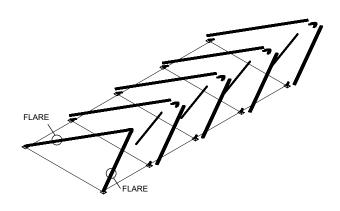
Lay out the parts of the tent in place so they are easy to access. See the specific diagram for your size at https://www.aztectent.com/products/adena



#### Step 3:

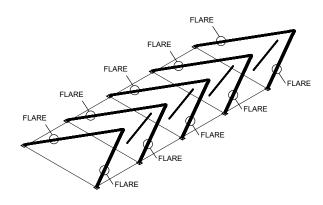
Assemble the first beam arch. Start by connecting both rafters to the end crown fitting. Be sure to orient the rafter beam so the flared opening in the keder is on the lower side of the beam arch. Next, slide the Adena Base Fitting into the bottom end of the rafter beam. Connect and pin one side of the beam to the baseplate, then the other. Using three installers in this step will allow for easier positioning as you align the Base Fitting to connect to the baseplate.

\*\*The beam design features a push button design in which no tools are required for arch assembly. Installers should wear gloves during installation to avoid pinching during the fitting to pipe connection.



Step 4:

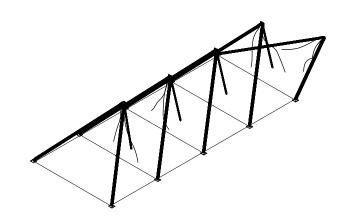
Continue to assemble the remaining beam arches and connect to baseplates as in previous step.



#### Step 5

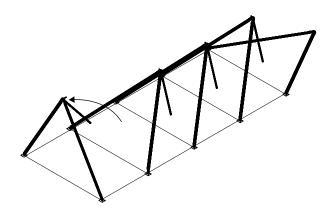
Lift and install the swivel end of the ridge purlin on all but the last beam arch and use the purlin to prop the beam in an angled position. NOTE: that on slippery surfaces the purlin end touching the ground shall be secured to prevent the purlin from sliding out, resulting in the beam crashing to the ground. At this time, connect the non-turnbuckle end of the roof cables to the crown fittings as needed by engineering. Please review the engineering documentation in this manual for roof cable requirements. Position and bolt the roof cable bracket to the required rafters with a 3/8"-16 X 3" Hex Bolt. On gable beams, please insure that the bolt heads are on the outside of the tent and that the bolt threads, nut and roof cable bracket are on this inside of the tent. to avoid conflict with gable fabric panels.

NOTE: Over-tensioning of these bolts can result in compression of the rafter frame member causing the finish paint to pop off the extrusion and brackets. We recommend using a hand-held wrench or drill gun with lower clutch setting to prevent from overtightening. Impact tools should be avoided.



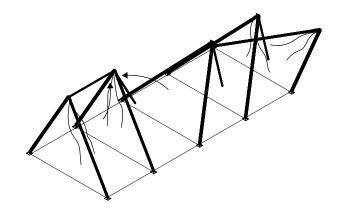
#### Step 6:

Tilt up the first beam to a vertical position and hold securely in place.



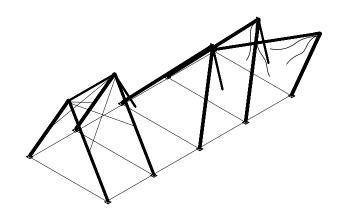
Step 7:

Tilt up the second beam arch and use the purlin fork to connect the drop end of the first bay ridge purlin into the second arch crown.



#### Step 8:

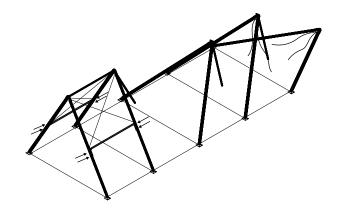
Connect the roof cables turnbuckle ends to the Adena Roof Cable Brackets using the 3/8" Screw Pin Shackle. You can take up slack in the cable by tightening, but do not fully tighten at this time.



#### Step 9:

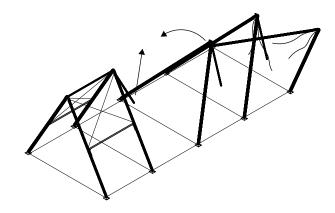
Install both portal braces below the roof cables with the 3/8"-16 x 5" bolts, washers, and locknuts.

NOTE: Over-tensioning of these bolts can result in compression of the rafter frame member causing the finish paint to pop off the extrusion and brackets. We recommend using a hand-held wrench or drill gun with lower clutch setting to prevent from overtightening. Impact tools should be avoided.



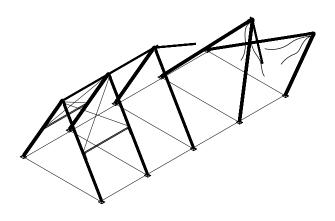
#### Step 10:

Tilt the third beam into a vertical position and use the purlin fork to connect the drop-end of the second bay ridge purlin into the third arch crown



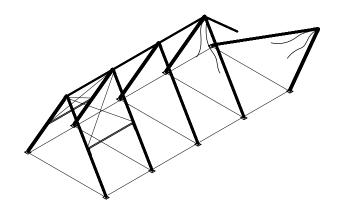
Step 11:

Continue tilting the beams into position and using the purlin fork to connect the drop-end of the ridge purlin into the adjacent arch crown.



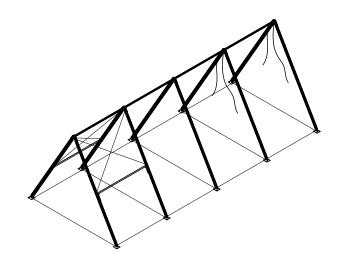
Step 12:

Depending on the length of your tent, repeat step 11 until you get to the final end arch of your tent.



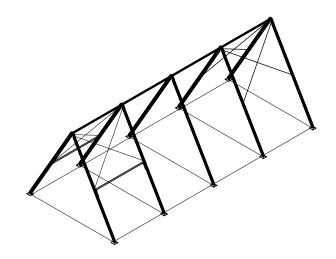
Step 13:

Tilt up the final beam arch and connect the adjacent ridge purlin to the end crown on the final arch.



#### Step 14:

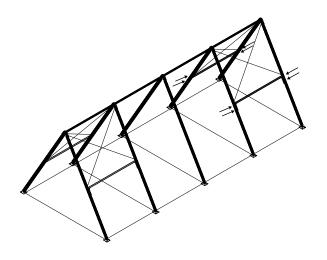
Connect the roof cables turnbuckle ends to the Adena Roof Cable Brackets of the final bay using the 3/8" Screw Pin Shackle. You can take up slack in the cable by tightening, but do not fully tighten at this time. Consult engineering documentation in this manual to verify if/when these and/or additional cables are needed.



#### Step 15

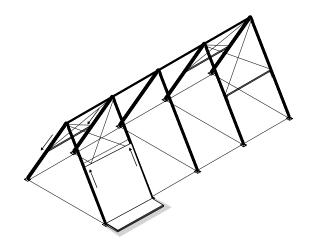
Install both portal braces below the roof cables with the 3/8''- $16 \times 5''$  bolts, washers, and locknuts. Consult engineering documentation in this manual to verify if/when these and/or additional portal braces are needed.

NOTE: Over-tensioning of these bolts can result in compression of the rafter frame member causing the finish paint to pop off the extrusion and brackets. We recommend using a hand-held wrench or drill gun with lower clutch setting to prevent from overtightening. Impact tools should be avoided.



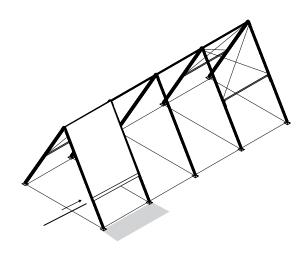
#### Step 16:

Position a drop cloth under the first roof panel to be installed and open the roof panel on the drop cloth. Connect pull ropes to to the web pull loop on the panel and insert the leading edge of the keder upwards through the flared opening in the rafter beam on each side of the bay. Once both leading edges are equally inserted in both rafter beams, use the pull ropes (with smooth and even tension) to pull the panel up and over the ridge of the tent. It is suggested that the rope pullers back away from the tent to provide a better angle when going up and over the ridge. Stop pulling when the trailing edge of the fabric nears the flare opening.



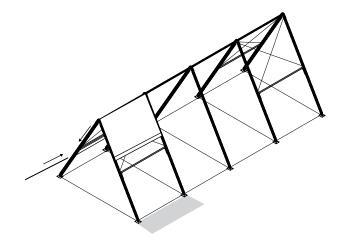
#### Step 17:

Insert the Adena Tension Bar 9'4" into the pocket on the trailing edge of the panel being installed. Once in the pocket, slide the Adena Roof Tensioner Mid fittings into each end of the tension tube and align to enter the keder in the rafter at the flare in the rafter beam.



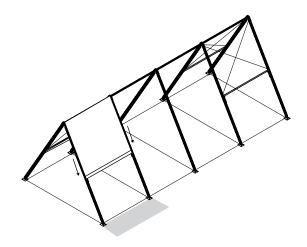
#### Step 18:

Continue to pull the roof panel toward the leading edge side and stop once the leading edge comes 10" past the flare opening on the leading edge beams. Insert the Adena Tension Bar 9'4" into the pocket on the leading edge of the panel being installed. Once in the pocket, slide the Adena Roof Tensioner Mid fittings into each end of the tension tube and align to enter the keder in the rafter at the flare in the rafter beam.



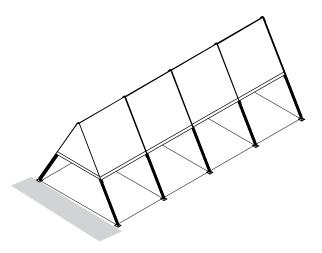
Step 19:

Pull panel back by holding the trailing edge Adena Tension bar and pull the panel back toward your drop cloth and center the panel lengthwise in the bay. Continue to install other roof panels in the same method.

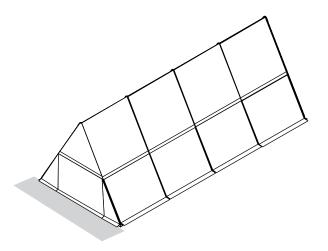


#### Step 20:

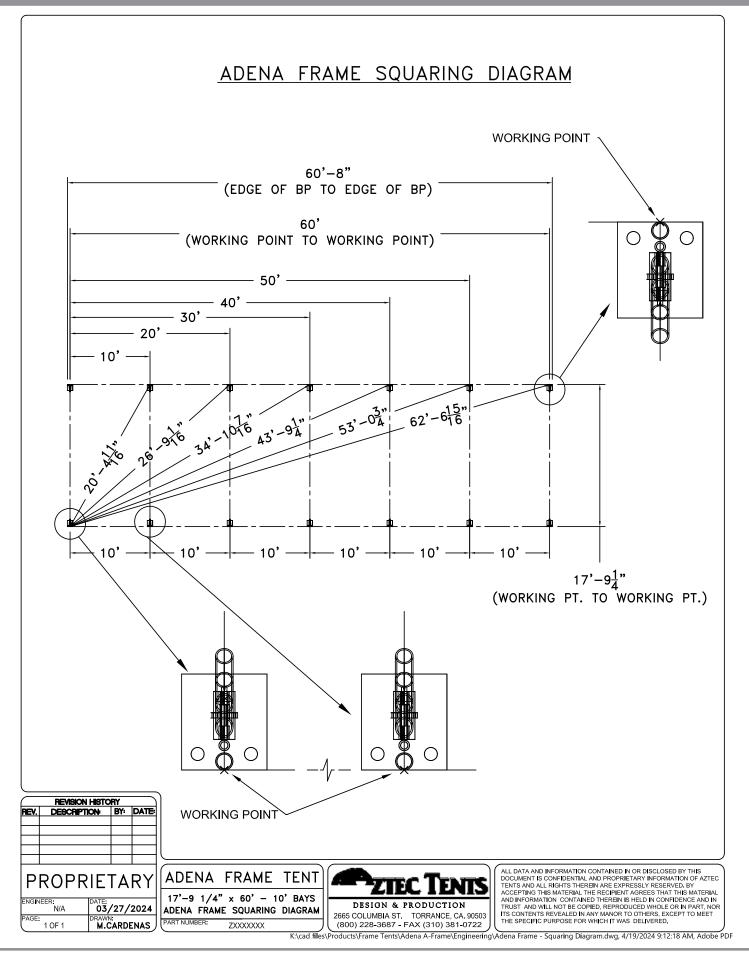
Install optional gable panels if desired. Feed the the "keder only" section of the gable through the rafter flare and go up and over the crown until even on both sides. Velcro the gable fabric to the keder section.



## Step 21: Install sidewalls if required.

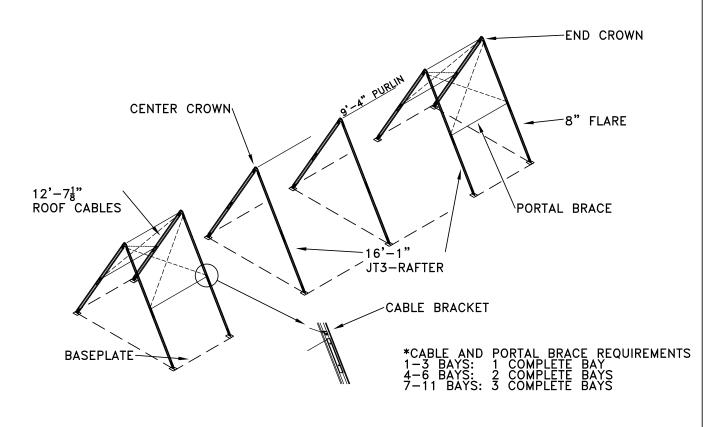


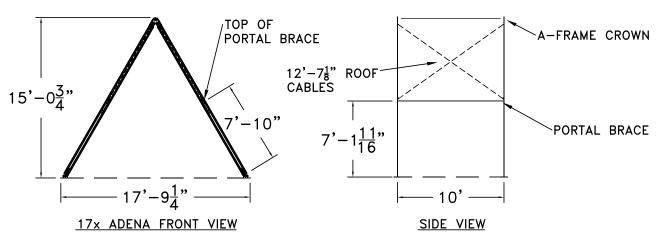
## Adena™ A-Frame Squaring Details



## Adena™ A-Frame Assembly Details

### ADENA 17x FRAME ASSEMBLY DETAILS





| ( REVISION HISTORY |            |      |                     |       |
|--------------------|------------|------|---------------------|-------|
| REV.               | DESCRIPTIO | #    | BY:                 | DATE: |
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ADENA FRAME TENT

O4/01/2024

DATE:
O4/01/2024

TAX ASSEMBLY DETAIL

PART NUMBER: ZXXXXXXX

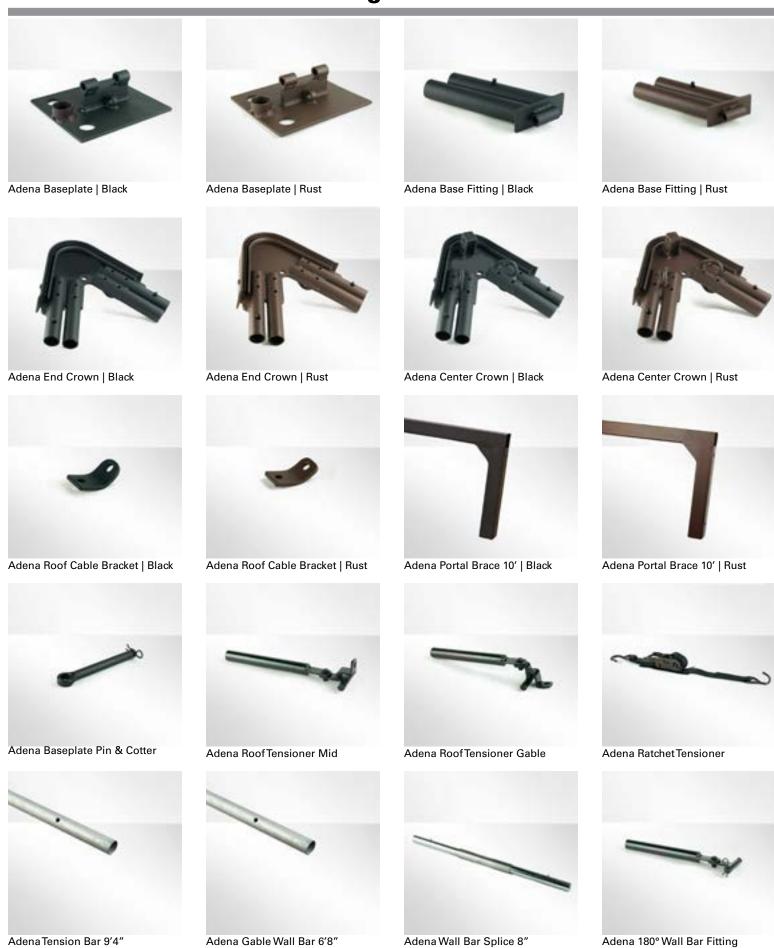
# DESIGN & PRODUCTION 2665 COLUMBIA ST. TORRANCE, CA. 90503

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(800) 228-3687 - FAX (310) 381-0722 THE SPECIFIC PURPOSE FOR WHICH IT WAS DELIVERED.

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## Adena™ A-Frame Parts Images



# Adena™ A-Frame Parts Images



Adena 90° Wall Bar Fitting



Adena Roof Cable 17x10 | Black



Adena Roof Cable 17x10 | White



Adena Rack System w/Wheels



10' Adena Ridge Purlin | Black



10' Adena Ridge Purlin | Timbe



16'1" Adena JT3 Rafter | Black



16'1" Adena JT3 Rafter | Timber



JT Purlin Tool



Adena Rack Spacer Panel

## Adena<sup>™</sup> A-Frame Engineering Specifications

#### **Design Criteria:**

Code: ASCE 7-16

Code Wind Speed: 110 mph Basic Wind Speed (Reduced for temporary installation <180 days)

Effective Wind Speed: 57 mph

Exposure C Risk Category III

#### Cable & Portal Bracing Requirements:

Wire rope X-cables and portal bracing required on first bay. Tents with 1-3 bays require one (1) braced bay. Tents with 4-6 bays require two (2) braced bays. Tents with 7-11 bays require three (3) braced bays. Bracing shall be at both ends of the tent on 4+ bay tents. At no time shall there be more then four (4) consecutive un-braced bays. All X-Cabling shall utilize minimum 1/4" Wire Rope. Portal frames shall be provided in the same bays on each side of the tent.

#### **Hanging Loads:**

Load of 100lbs per beam arch has been allocated for suspended equipment. Suspended equipment shall only be hung from the primary beam arches or crown fitting only. Purlins and portal braces are not designated for hanging loads.

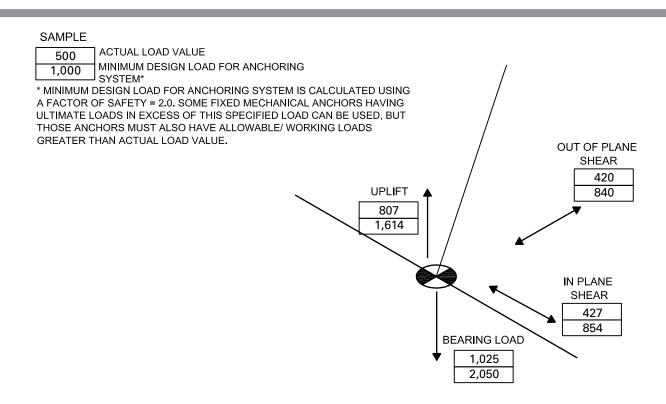
#### **Baseplate Reaction Forces:**

Soil conditions will vary from site to site. The included anchoring package for this tent may need to be supplemented with additional or alternate anchoring to meet the loads below. The below chart lists the required resistance loads that must be supported by the anchoring system to meet the engineering loads specified under the code. A Factor of Safety of 2.0 times the design load has been used for the pull out tension in lbs that the anchoring devices must resist in the direction of the load. Ensure that the anchors installed are adequate to resist pull out loads show on the diagram. Actual testing of some individual anchors to 75% of the anchor pull-out load is recommended. Anchoring can be achieved with earth anchors, stakes, foundations, concrete anchor bolts, or ballasted weight.

#### Notes:

Tent not to be located near abrupt changes in topography.

## Adena™ A-Frame Load Summary- 17' Width



# **Adena™ A-Frame Components**

| Fittings/Components            | Item Number   | Roof Panels                    | Item Number          |
|--------------------------------|---------------|--------------------------------|----------------------|
| Adena Baseplate   Black        | Z290F00005B   | 17x10 3pc Adena Top Kit   WHT  | Z26617CG1001         |
| Adena Baseplate   Rust         | Z290F00005R   | 17x10 3pc Adena Top Kit   BLK  | Z26617CG1021         |
| Adena Base Fitting   Black     | Z290F00010B   | 17x10 3pc Adena Top Kit  CLR/W | Z26617CG103501       |
| Adena Base Fitting   Rust      | Z290F00010R   | 17x10 3pc Adena Top Kit  CLR/B | Z26617CG103521       |
| Adena End Crown   Black        | Z290F00015B   | 17x10 Adena Roof Panel   WHT   | Z26617CM1001         |
| Adena End Crown   Rust         | Z290F00015R   | 17x10 Adena Roof Panel   BLK   | Z26617CM1021         |
| Adena Center Crown   Black     | Z290F00020B   | 17x10 Adena Roof Panel   CLR/W | Z26617CM103501       |
| Adena Center Crown   Rust      | Z290F00020R   | 17x10 Adena Roof Panel   CLR/B | Z26617CM103521       |
| Adena Roof Cable Bracket   Bla | Z290F00025B   | 17x Adena Gable Panel   WHT    | Z26617GABLES01       |
| Adena Roof Cable Bracket   Rus | Z290F00025R   | 17x Adena Gable Panel   BLK    | Z26617GABLES21       |
| Adena Portal Brace 10'   Black | Z290F00030B   | 17x Adena Gable Panel   CLR/WH | Z26617GABLES3501     |
| Adena Portal Brace 10'   Rust  | Z290F00030R   | 17x Adena Gable Panel   CLR/BL | Z26617GABLES3521     |
| Adena Purlin End Hinge   Black | Z290F00035B   | ·                              |                      |
| Adena Purlin End Hinge   Rust  | Z290F00035R   | C' de coell De coele           | Marine Marine Island |
| Adena Purlin End Drop   Black  | Z290F00040B   | Sidewall Panels                | Item Number          |
| Adena Purlin End Drop   Rust   | Z290F00040R   | 7x10 1pc Adena Side Wall-WHT   | Z26801071001         |
| Adena Baseplate Pin & Cotter   | Z290F00045    | 7x10 1pc Adena Side Wall-BLK   | Z26801071021         |
| Adena RoofTensioner Mid        | Z290F00050    | 7x10 1pc Adena Side Wall-CLR/W | Z2680107103501       |
| Adena RoofTensioner Gable      | Z290F00055    | 7x10 1pc Adena Side Wall-CLR/B | Z2680107103521       |
| Adena Ratchet Tensioner        | Z290F00060    | 7x17 3pc Adena Gable Wall-WHT  | Z26803071701         |
| Adena Tension Bar 9'4"         | Z290F00065    | 7x17 3pc Adena Gable Wall-BLK  | Z26803071721         |
| Adena Gable Wall Bar 6'8"      | Z290F00070    | 7x17 3pc Adena Gable Wall-CLR/ | Z2680307173501       |
| Adena Wall Bar Splice 8"       | Z290F00075    | 7x17 3pc Adena Gable Wall-CLR/ | Z2680307173521       |
| Adena 180° Wall Bar Fitting    | Z290F00080    | *17x Adena Gable Wall C   WHT  | Z268ZG17C01          |
| Adena 90° Wall Bar Fitting     | Z290F00085    | *17x Adena Gable Wall C   BLK  | Z268ZG17C21          |
| Adena Roof Cable 17x10   Black | Z290F00090    | *17x Adena Gable Wall C   CLR/ | Z268ZG17C3501        |
| Adena Roof Cable 17x10   White | Z290F00095    | *17x Adena Gable Wall C   CLR/ | Z268ZG17C3521        |
| Adena Rack System w/Wheels     | Z290F00100    | *17x Adena Gable Wall L   WHT  | Z268ZG17L01          |
| Adena Black Cable/Portal Kit   | Z290F00105    | *17x Adena Gable Wall L   BLK  | Z268ZG17L21          |
| Adena Timber Cable/Portal Kit  | Z290F00110    | *17x Adena Gable Wall L   CLR/ | Z268ZG17L3501        |
| 10' Adena Ridge Purlin   Black | Z290JT10904PB | *17x Adena Gable Wall L   CLR/ | Z268ZG17L3521        |
| 10' Adena Ridge Purlin   Timbe | Z290JT10904PT | *17x Adena Gable Wall R   WHT  | Z268ZG17R01          |
| 16'1" Adena JT3 Rafter   Black | Z290JT31601RB | *17x Adena Gable Wall R   BLK  | Z268ZG17R21          |
| 16'1" Adena JT3 Rafter Timbe   | Z290JT31601RT | *17x Adena Gable Wall R   CLR/ | Z268ZG17R3501        |
| •                              |               | *17x Adena Gable Wall R   CLR/ | Z268ZG17R3521        |
|                                |               |                                |                      |

## Adena™ A-Frame Kit Packages | Black

#### 17x10 Adena Gable Frame | Black

| 4  | Adena Baseplate   Black        | Z290F00005B         |
|----|--------------------------------|---------------------|
| 4  | Adena Base Fitting   Black     | Z290F00010B         |
| 2  | Adena End Crown   Black        | Z290F00015B         |
| 4  | Adena Roof Cable Bracket   Bla | Z290F00025B         |
| 2  | Adena Portal Brace 10'   Black | Z290F00030B         |
| 4  | Adena Baseplate Pin & Cotter   | Z290F00045          |
| 4  | Adena RoofTensioner Mid        | Z290F00050          |
| 4  | Adena RoofTensioner Gable      | Z290F00055          |
| 4  | Adena Ratchet Tensioner        | Z290F00060          |
| 4  | Adena Tension Bar 9'4"         | Z290F00065          |
| 4  | Adena Roof Cable 17x10   Black | Z290F00090          |
| 1  | 10' Adena Ridge Purlin   Black | Z290JT10904PB       |
| 4  | 16'1" Adena JT3 Rafter   Black | Z290JT31601RB       |
| 4  | 3/8"-16 x 3.0" Hex Bolt GR2 BI | Z6330.375HX03.0GR2B |
| 8  | 3/8"-16 x 5.0" Hex Bolt GR2 BI | Z6330.375HX05.0GR2B |
| 24 | 3/8" Flat Washer Black         | Z6330.375WB         |
| 12 | 3/8"-16 Hex Lock Nut GR5 Black | Z6330.375NBGR5LOCK  |
| 1  | JT PurlinTool                  | Z298F00730          |
| 8  | 1" x 42" Double Headed Stake   | Z51100070           |

#### 17x10 Adena Mid Frame | Black

| 2 | Adena Baseplate   Black        | Z290F00005B   |
|---|--------------------------------|---------------|
| 2 | Adena Base Fitting   Black     | Z290F00010B   |
| 1 | Adena Center Crown   Black     | Z290F00020B   |
| 2 | Adena Baseplate Pin & Cotter   | Z290F00045    |
| 4 | Adena RoofTensioner Mid        | Z290F00050    |
| 2 | Adena Ratchet Tensioner        | Z290F00060    |
| 2 | Adena Tension Bar 9'4"         | Z290F00065    |
| 1 | 10' Adena Ridge Purlin   Black | Z290JT10904PB |
| 2 | 16'1" Adena JT3 Rafter   Black | Z290JT31601RB |
| 4 | 1" x 42" Double Headed Stake   | Z51100070     |
|   |                                |               |

# Adena™ A-Frame Kit Packages | Timber

#### 17x10 Adena Gable Frame | Timber

| 4  | Adena Baseplate   Rust         | Z290F00005R         |
|----|--------------------------------|---------------------|
| 4  | Adena Base Fitting   Rust      | Z290F00010R         |
| 2  | Adena End Crown   Rust         | Z290F00015R         |
| 4  | Adena Roof Cable Bracket   Rus | Z290F00025R         |
| 2  | Adena Portal Brace 10'   Rust  | Z290F00030R         |
| 4  | Adena Baseplate Pin & Cotter   | Z290F00045          |
| 4  | Adena RoofTensioner Mid        | Z290F00050          |
| 4  | Adena RoofTensioner Gable      | Z290F00055          |
| 4  | Adena Ratchet Tensioner        | Z290F00060          |
| 4  | Adena Tension Bar 9'4"         | Z290F00065          |
| 4  | Adena Roof Cable 17x10   White | Z290F00095          |
| 1  | 10' Adena Ridge Purlin  Timbe  | Z290JT10904PT       |
| 4  | 16'1" Adena JT3 Rafter   Timbe | Z290JT31601RT       |
| 4  | 3/8"-16 x 3.0" Hex Bolt GR2 BI | Z6330.375HX03.0GR2B |
| 8  | 3/8"-16 x 5.0" Hex Bolt GR2 BI | Z6330.375HX05.0GR2B |
| 24 | 3/8" Flat Washer Black         | Z6330.375WB         |
| 12 | 3/8"-16 Hex Lock Nut GR5 Black | Z6330.375NBGR5LOCK  |
| 1  | JT PurlinTool                  | Z298F00730          |
| 8  | 1" x 42" Double Headed Stake   | Z51100070           |

#### 17x10 Adena Mid Frame | Timber

| 2 | Adena Baseplate   Rust         | Z290F00005R   |
|---|--------------------------------|---------------|
| 2 | Adena Base Fitting   Rust      | Z290F00010R   |
| 1 | Adena Center Crown   Rust      | Z290F00020R   |
| 2 | Adena Baseplate Pin & Cotter   | Z290F00045    |
| 4 | Adena RoofTensioner Mid        | Z290F00050    |
| 2 | Adena Ratchet Tensioner        | Z290F00060    |
| 2 | Adena Tension Bar 9'4"         | Z290F00065    |
| 1 | 10' Adena Ridge Purlin  Timbe  | Z290JT10904PT |
| 2 | 16'1" Adena JT3 Rafter   Timbe | Z290JT31601RT |
| 4 | 1" x 42" Double Headed Stake   | Z51100070     |





#### **Aztec Tents**

2665 Columbia Street Torrance, CA 90503 Toll Free (800) 228-3687 Fax (310) 381-0722