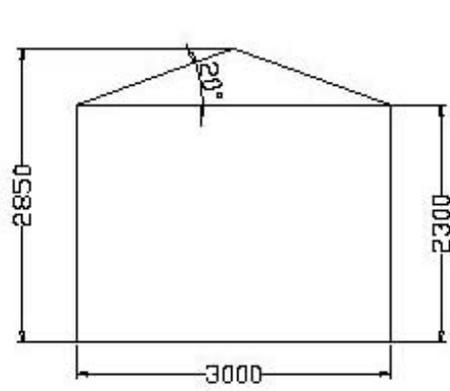




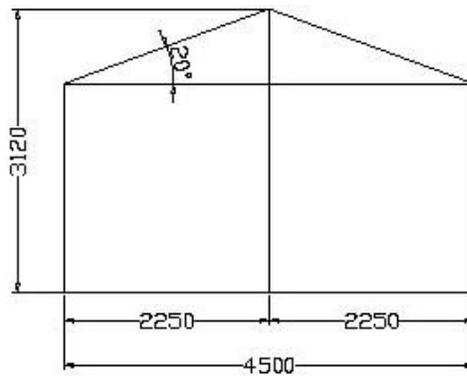
***TECTONICS* UK**

***Multispan Bar Tension Construction***

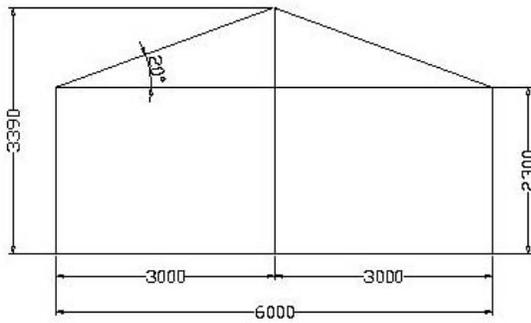
# Multispan Dimensions



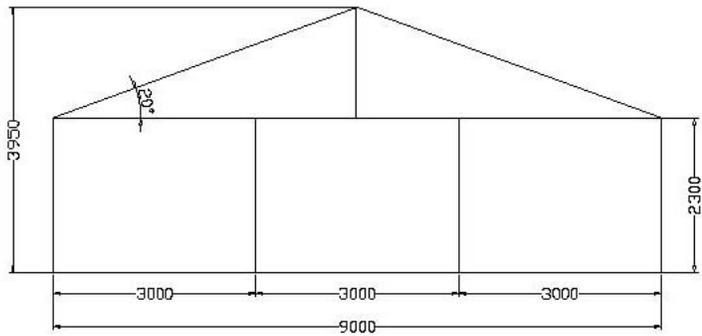
**3m**



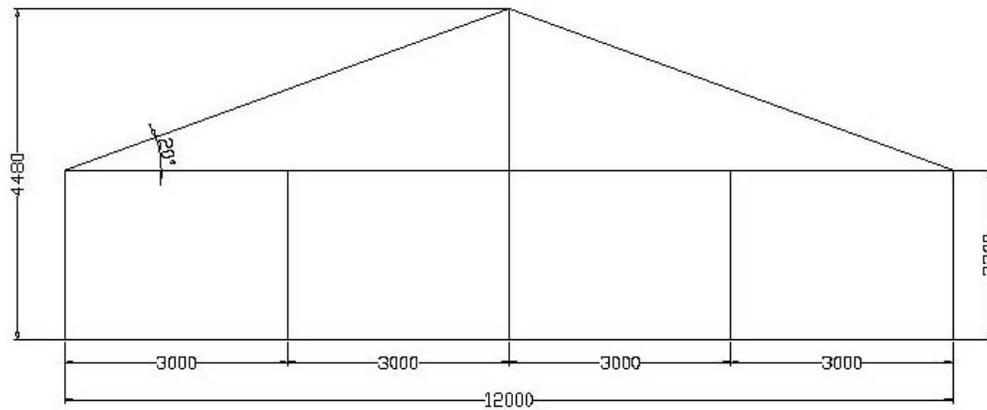
**4.5m**



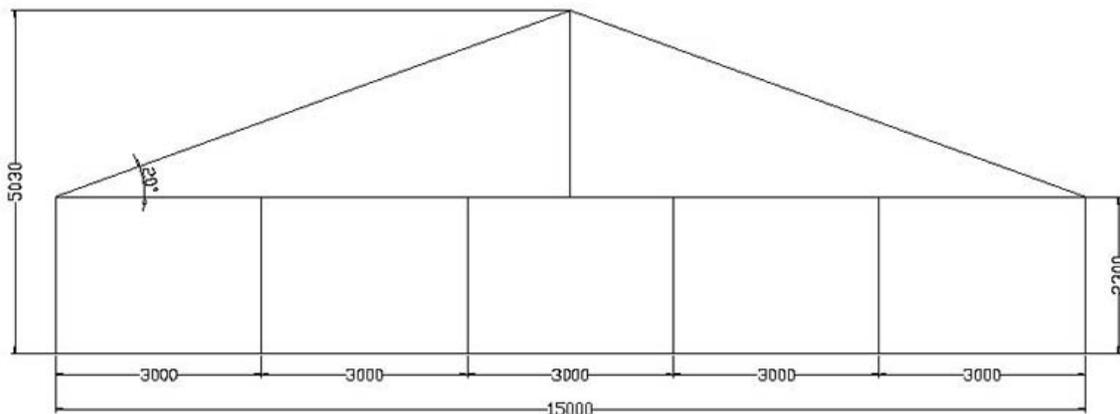
**6m**



**9m**



**12m**



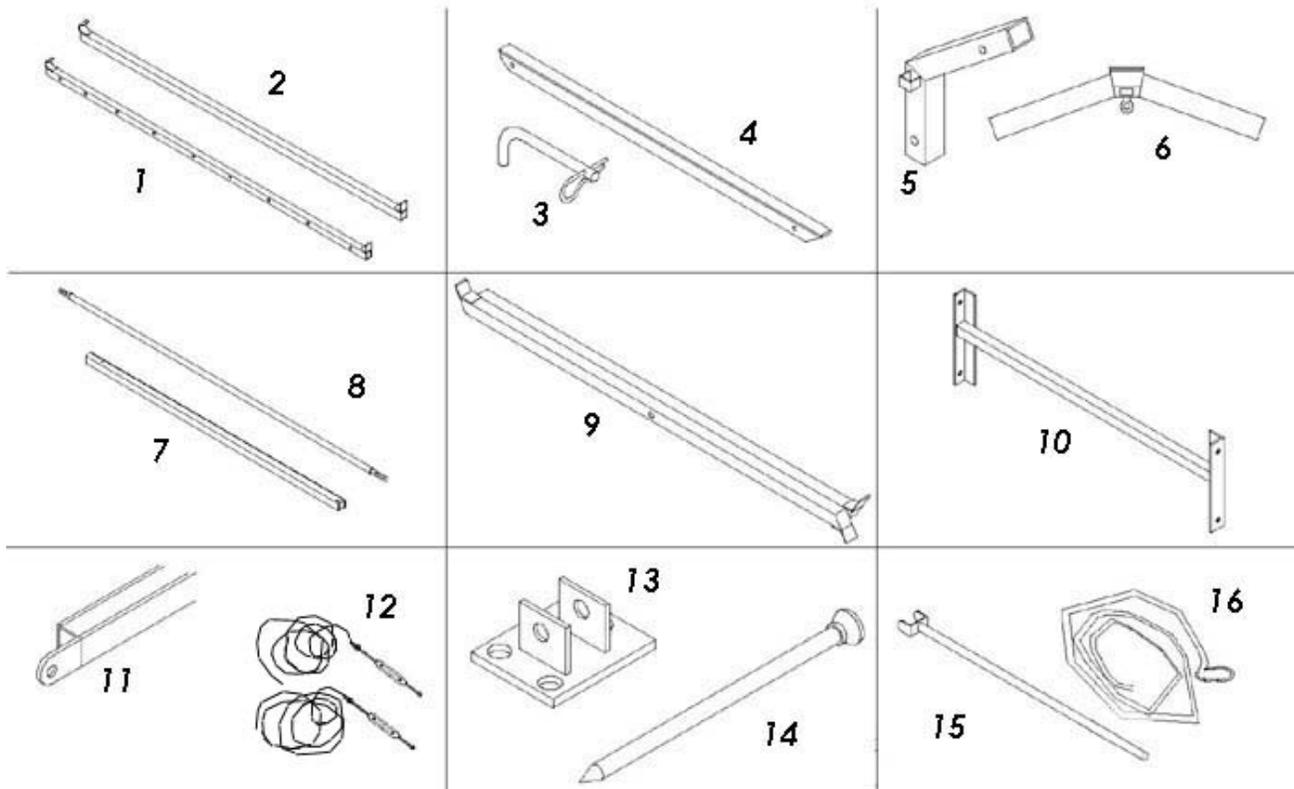
**15m**

## Multispan Bar Tension

1. Lay out all components and assemble them following the arrow sequence shown (figure 1). Take a **footplate** and attach it to a **leg**, using the larger of the two locating pin types. Make sure that the end of the plate with the single hole is facing outwards, and secure with an **R-Clip**, ensure that the **R-Clip** locates on the outside of the **leg**. Ensure that the hole on the leg for the ratchet strap is facing outwards. Repeat this for the other side. Now attach the **Eave knuckle** to the top of the **leg** using a bolt and wing nut, secure through the top hole on both the eave knuckle and the leg. Take the end of a **roof beam** with two holes in and slide it onto the first **eave knuckle**, securing it with the smaller of the two locating pins through the second hole up in the **roof beam**. Insert the **roof knuckle** into the other end of the **roof beam**, slide the second roof beam onto the **roof knuckle**, and secure the other end to the **eave knuckle** as before.
2. Now undo the **4 roof wires**. Take two of the ends **without the bottle screws** and bolt them through the top holes in the **roof beams** and **roof knuckles**.
3. Assemble the next loop in exactly the same way, making sure that you attach the other two roof wires to the underside of the roof beams and roof knuckles. Carry on and assemble the other loops, using roof pins and R-Clips to secure the Roof Knuckles to the Roof Beams instead of the roof wires.
4. Once you have assembled all the loops, take the 2 pairs of scissors and place them by the feet of the first loop. With 2 people, one either side of the loop, lift the loop and bolt the scissors into the 2 remaining holes in the **Legs** (figure 3). Rest the loop on the other end of the scissors and go to the next loop, lift and bolt it to the other end of the scissors. Take an **eave rail** each and place the curved hook into the bracket on the inside of the **eave knuckle** swing the other end up and hook it into the bracket on the opposite eave knuckle. Now put the purlins into this bay. Slot the curved hook into one of the brackets on the roof beam using the purlin prop provided, push the other end up and drop it into the brackets on the opposite roof beam. Repeat this for the other purlins.
5. Take two more eave rails and slot the curved hook end into the bracket on the **eave knuckle** of the loop which is already standing, lift the next loop and drop the other end of the **eave rail** into the brackets on the **eave knuckles**. Then hook on the **purlins** as before. Repeat this process for the remaining bays.
6. Take the 4 flat plates with welded pins, remove the **R-Clips** from the **foot pins** on the 4 corner **legs**, slide one plate onto each **foot pin** with the welded pin facing outwards and replace the **R-Clips**.
7. Take the **4 end legs** and attach **footplates** as before. To secure to the loop, bolt to roof beams through the hole approximately 2/3 up roof beam on the bay ends. Attach the **gable eave rail brackets** to the ends of the roof beams on the outside corners by locating the fixed bolt on the bracket through the 2<sup>nd</sup> hole from the bottom of the roof beam and securing with a wing nut. Then attach the **gable eave rails** (using the ones with shaped ends for the corners) which locate into the brackets on the end legs with a drop down pin and R clip. At the corners the eave rail locates on to the other fixed bolt on the eave rail bracket and secures with a wing nut.
8. Now put on all the **ground rails**. Remove the **R-Clips** from foot pins, place the slotted ends of the ground rails over the foot pins and replace the **R-Clips**. Square up the tent and secure the feet to the ground with the **iron stakes** provided.
9. One person take the two blue ropes and throw the ends with the carbine hooks over the top of the tent, keeping hold of the other end of both ropes. The other person go to the other side of the frame, take a **roof sheet** (making sure that the flaps on the sheet are facing down) and attach the carbine hooks on the ropes to the 'D' Rings on two corners of the **roof sheet**. Slide one corner into the inside channel on one of the roof beams. Do the same for the opposite corner of the **roof sheet**, keeping the ropes taut. Each take the end of a rope and pull together until the roof sheet is evenly placed. Repeat for all **roof sheets**. **NB: You must pull evenly and together to ensure the sheet does not jam up.**
10. Now go back to your **roof wires**. Take the end of a **roof wire**, loosen the **Bottle screw** to give as much play as possible, and attach it to the bottom hole of the diagonally opposite **roof beam**. Repeat this for the other **3 roof wires**. Tension the wires using the **bottle screws**. **NB: if the roof wires do not fit, your frame is not square**, if so, you will need to remove the Iron stakes of this bay and square it up.
11. Now secure the **roof sheets** in place. Take a **bar tension rail** and feed through the pocket at each end of the roof. Where the eye at the end of the rail meets the one from the next rail attach the hook of the ratchet strap, hooking the other end into the hole on the outside of the leg. Tighten ratchet strap evenly each side of roof. Repeat this at all the **legs**.

(continue overleaf)

12. Take the gable end triangles and slide them into the outside channels on the **roof beams**. (**Make sure that the inside of the gable is facing inwards**). Now lace the centre point of the gables together. Feed the bar tension rails through the pocket at the bottom of the gable, attach ratchet straps as for roofs and ratchet down.
13. Take a **wall**, and from the inside of the tent, slide the keder slugs on the top edge into the slot on the underside of the eave rail, working from the centre outwards. Then with one person either side, slide the keder at the sides down the channels at the side of the **Legs** from the top to the bottom. **NB : You must work evenly and together to ensure wall does not jam**. Go back outside and slide the **ground rail** into the pocket at the bottom of the **wall**, push the ends into the pins on the back of the feet and secure with an **R-Clip**. Repeat this for all **walls**.



1. Eave Rail
2. Purlin
3. Locating Pin and R-Clip
4. Roof Beam
5. Eave Knuckle
6. Roof Knuckle
7. Leg
8. Ground rail
9. Scissors
10. Portal Beam
11. End Leg
12. Roof Wires
13. Foot Plate
14. Iron
15. Purlin Prop
16. Throw Over Rope

Figure 1

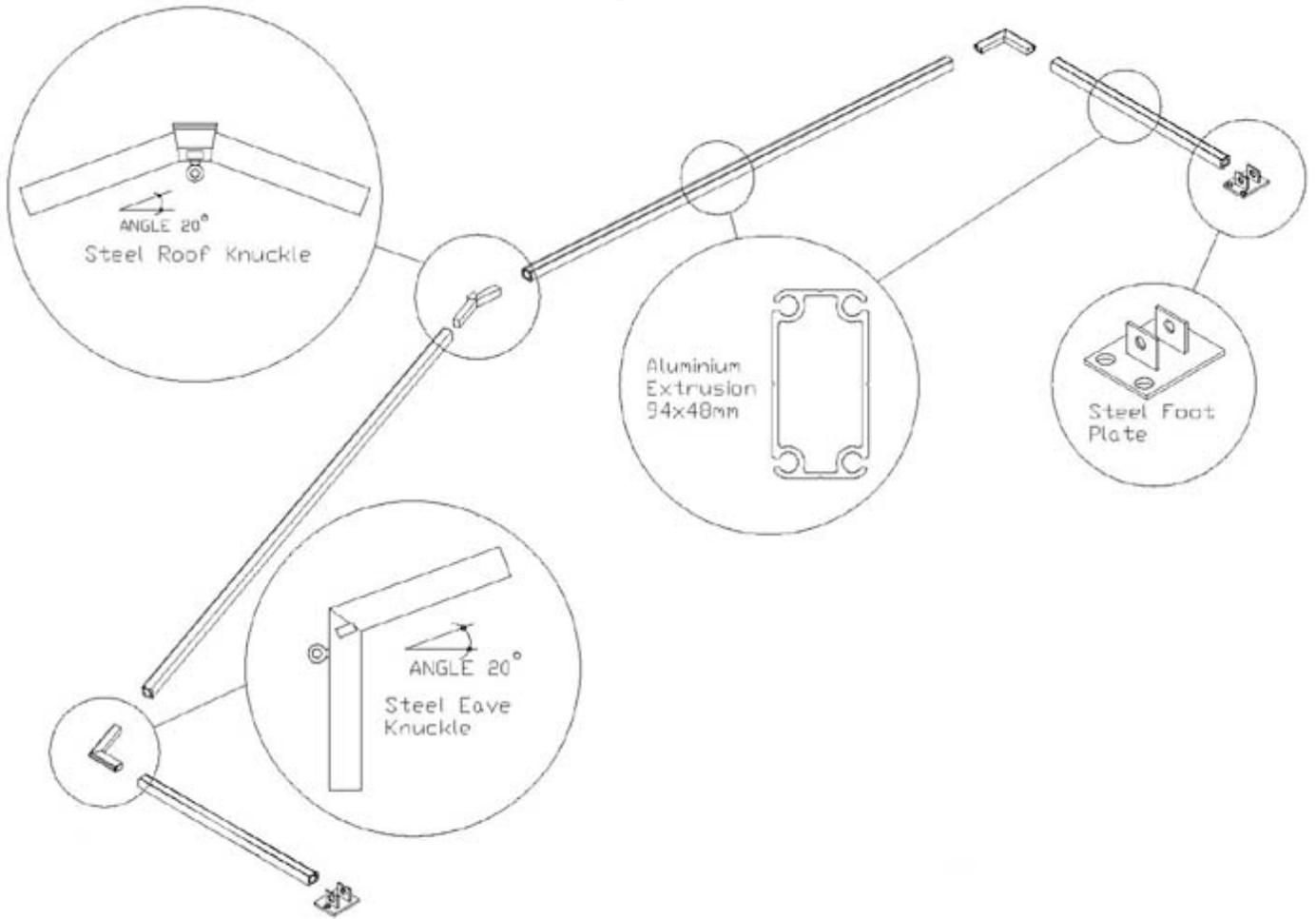


Figure 2

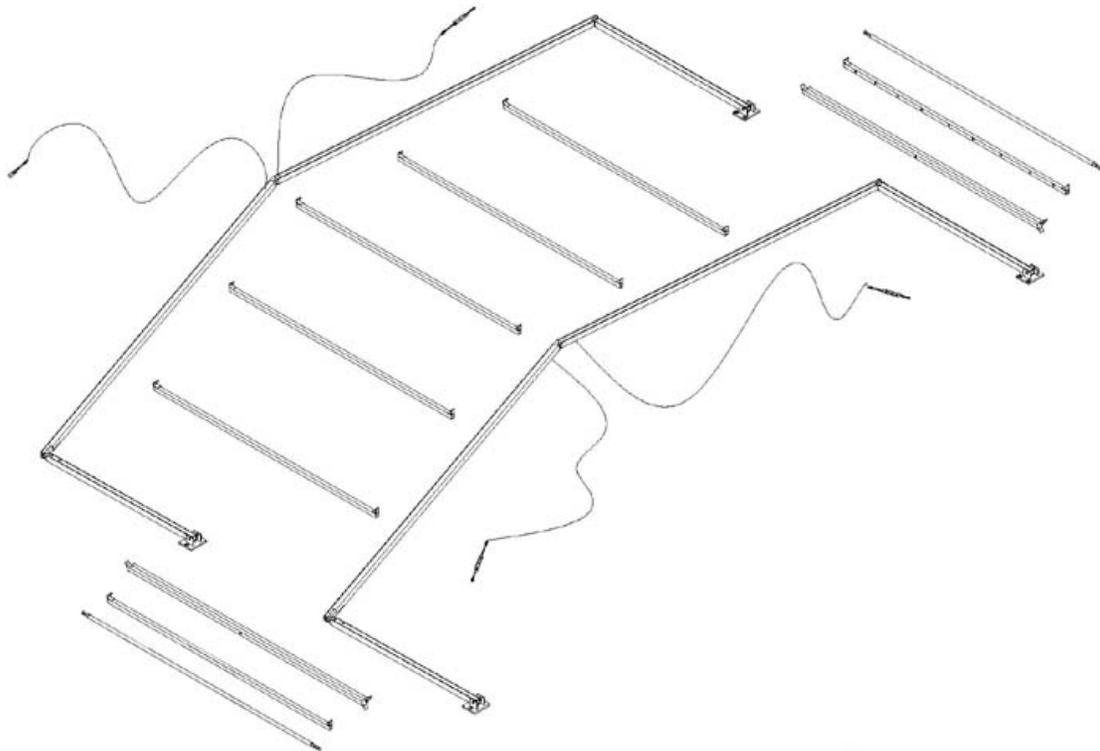


Figure 3

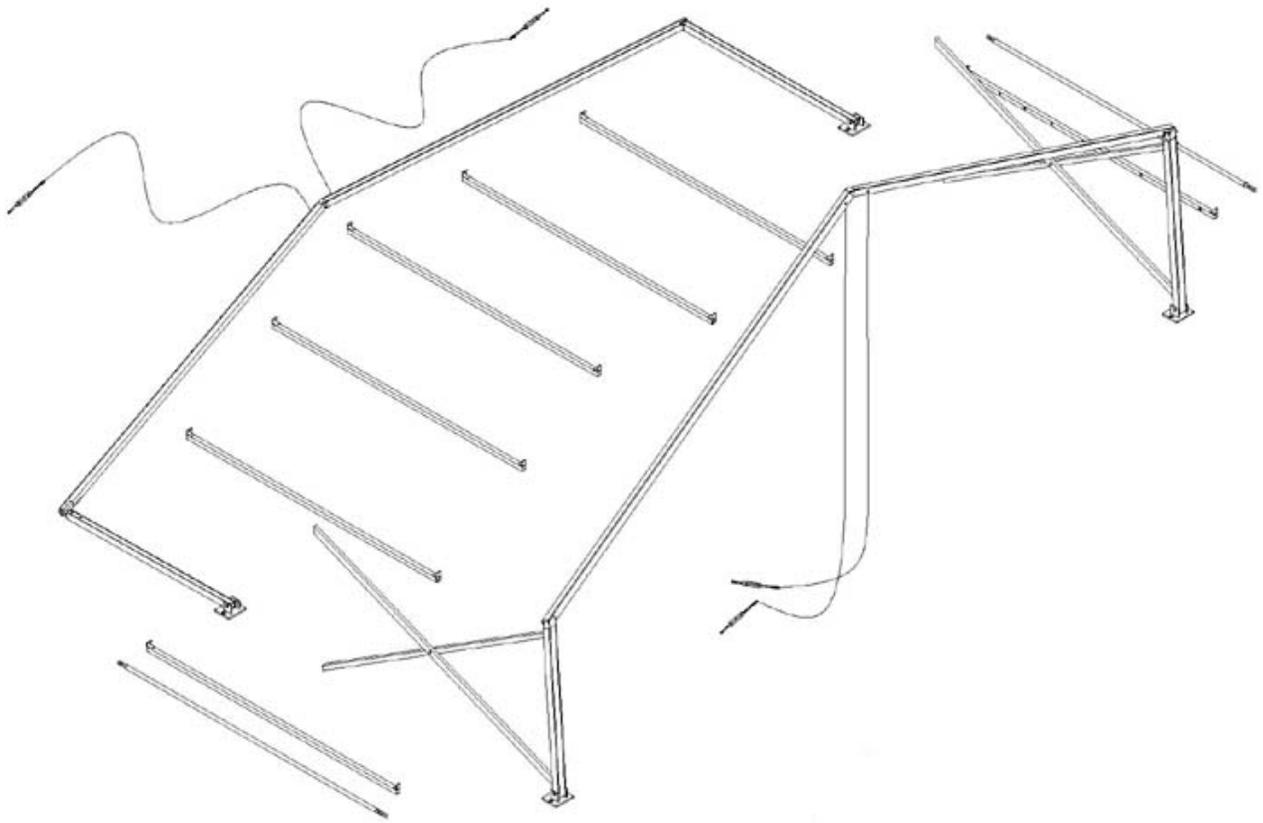


Figure 4

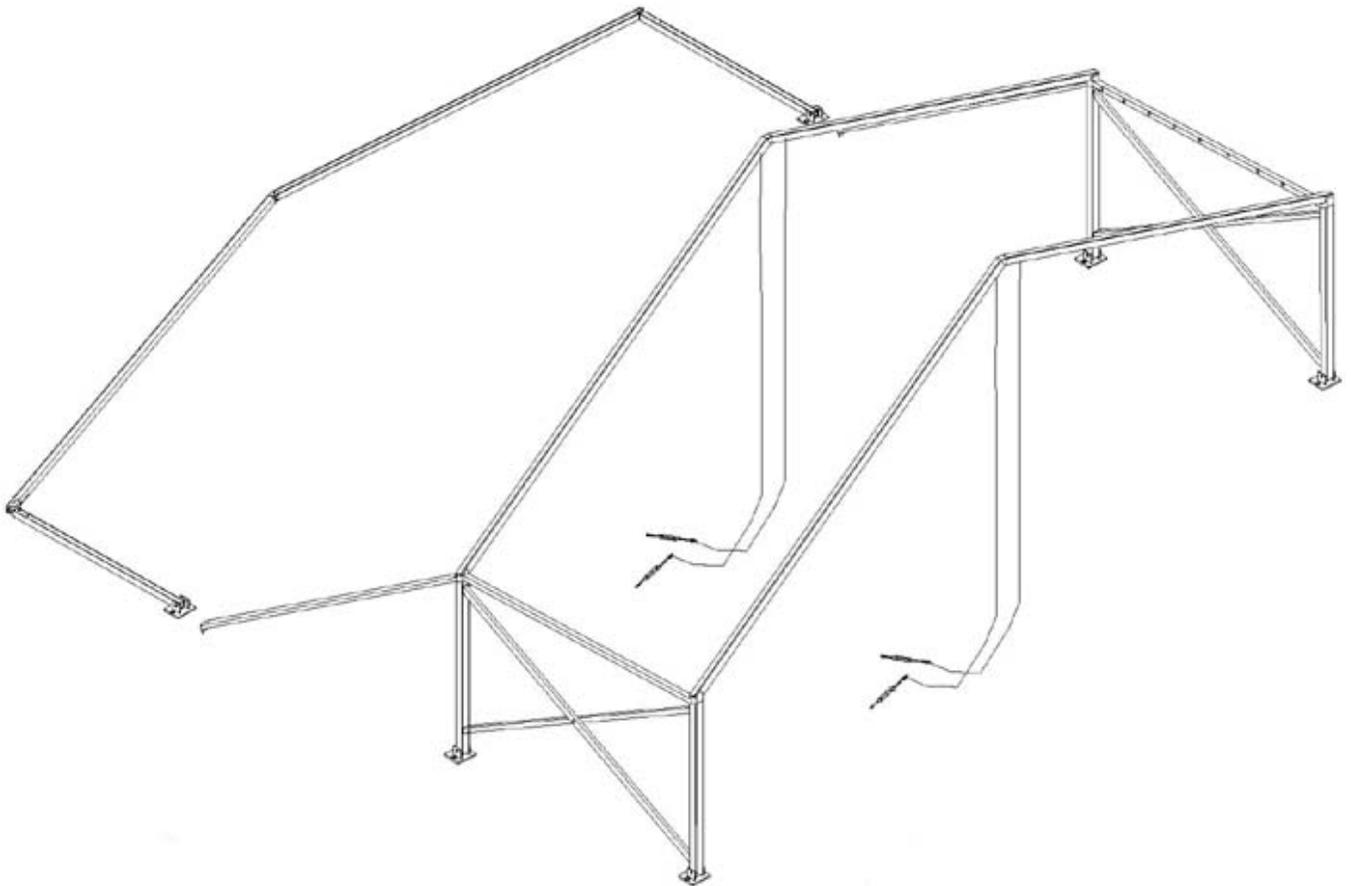


Figure 5

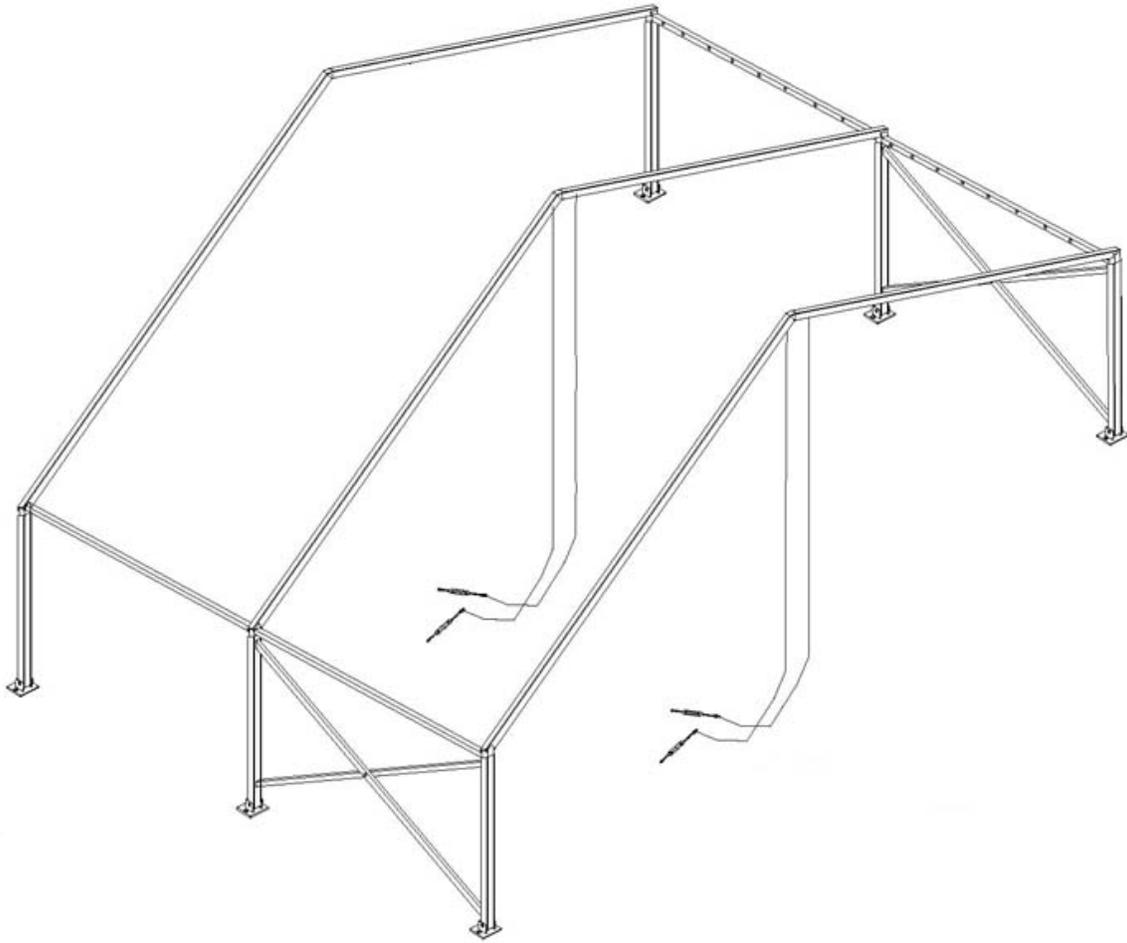


Figure 6

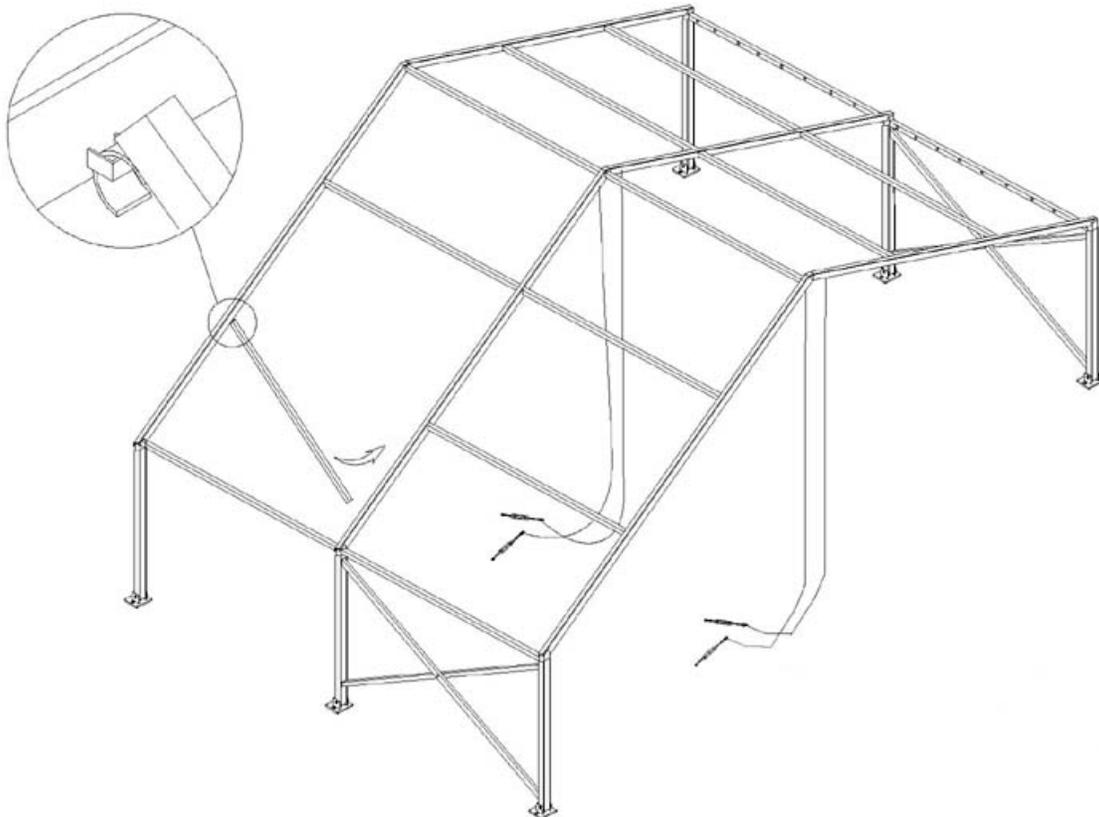


Figure 7

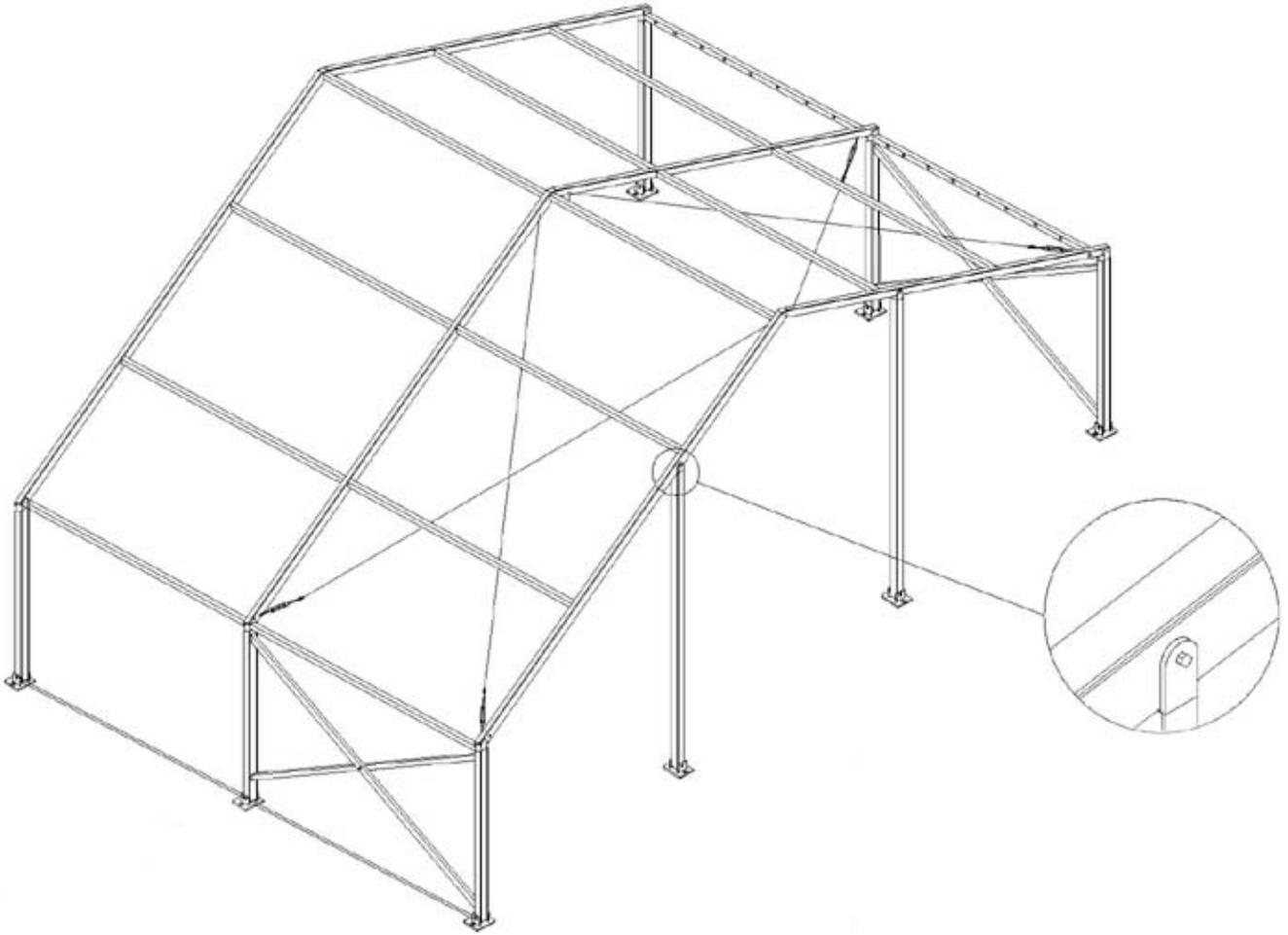


Figure 8

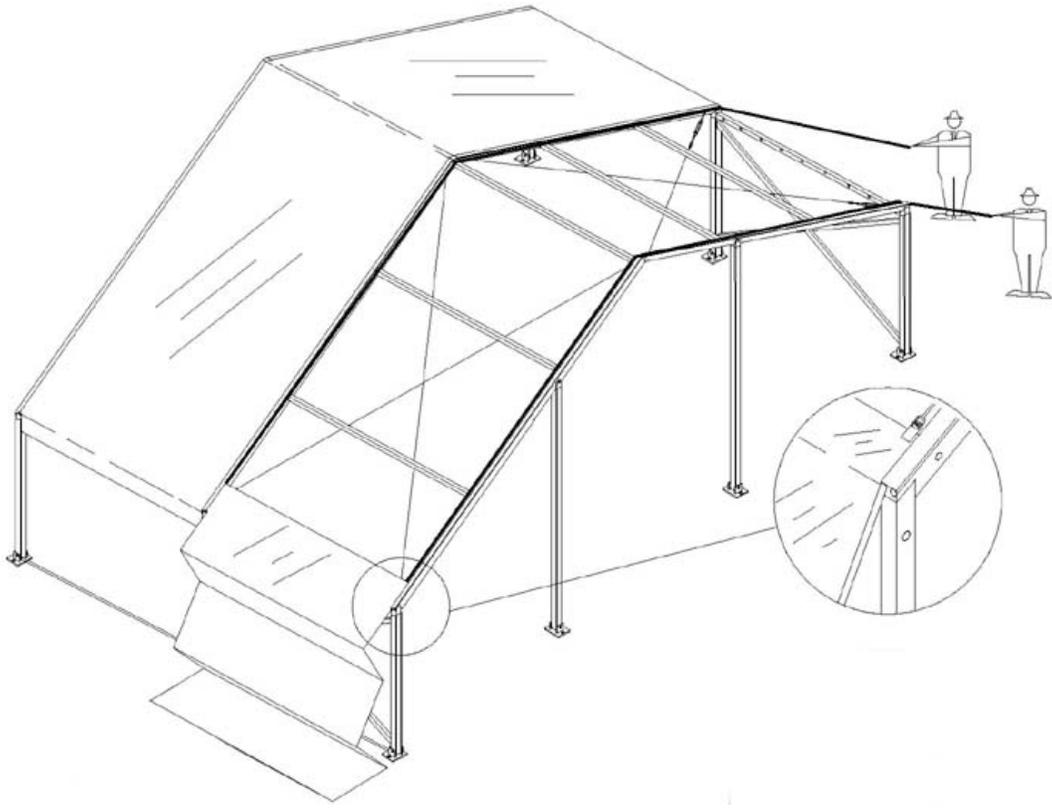


Figure 9

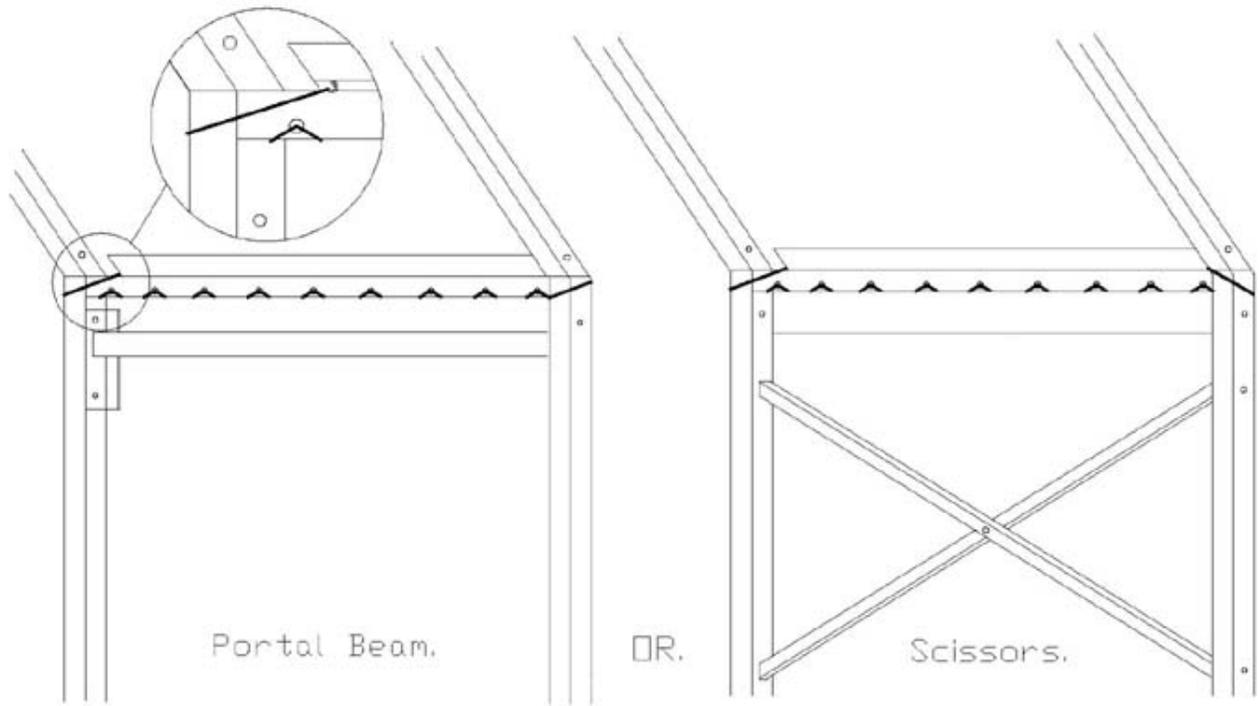


Figure 10

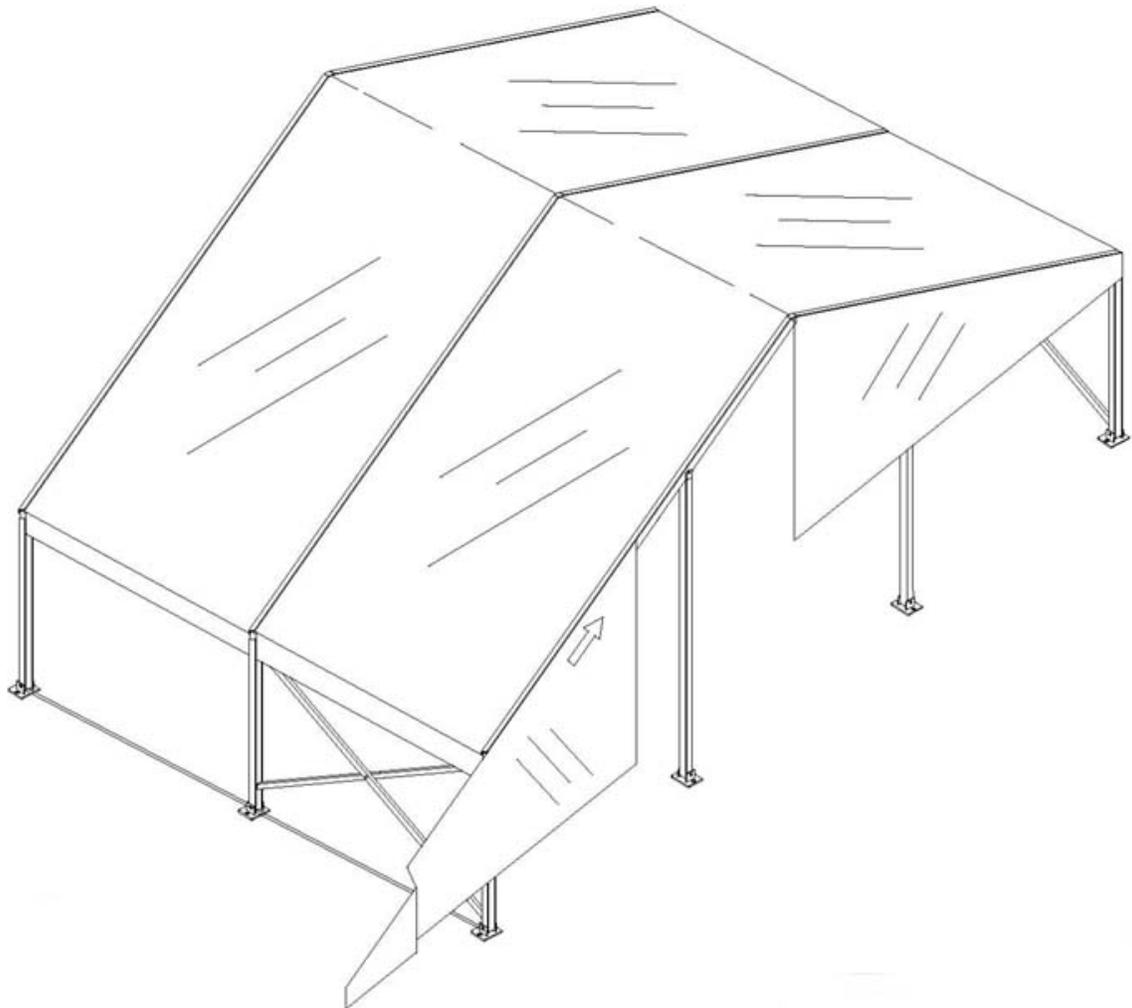


Figure 11

