

16 ft. Wide Mono Gothic Fig. 1

Fig. 1

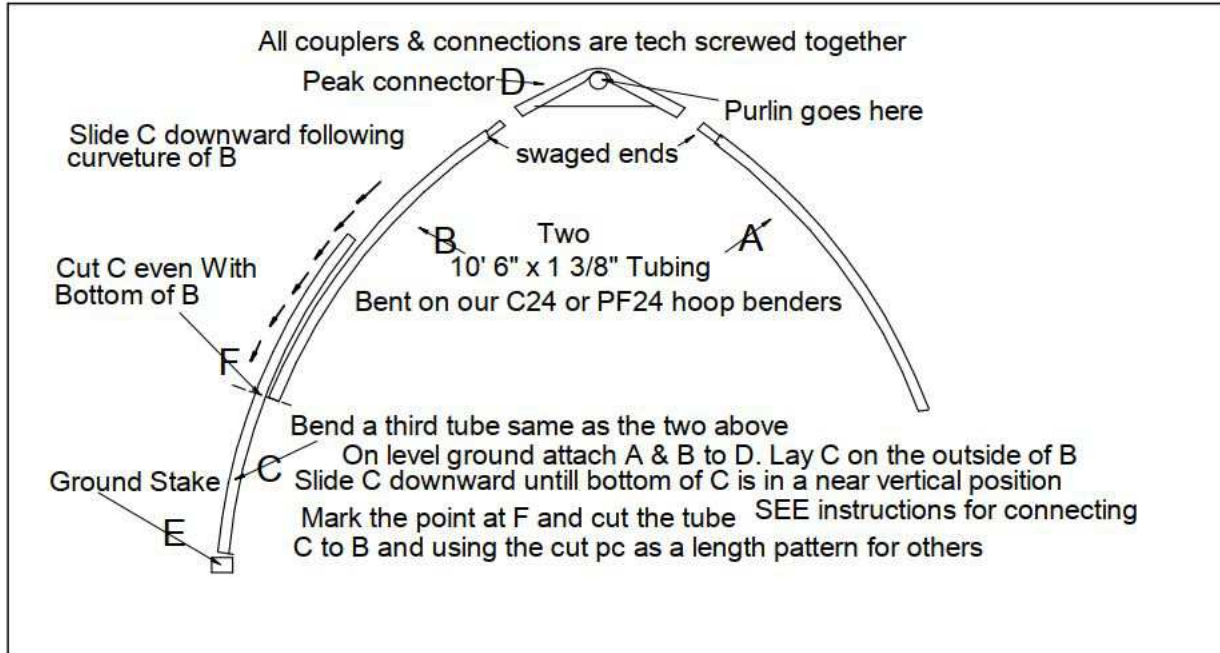


Fig. 2

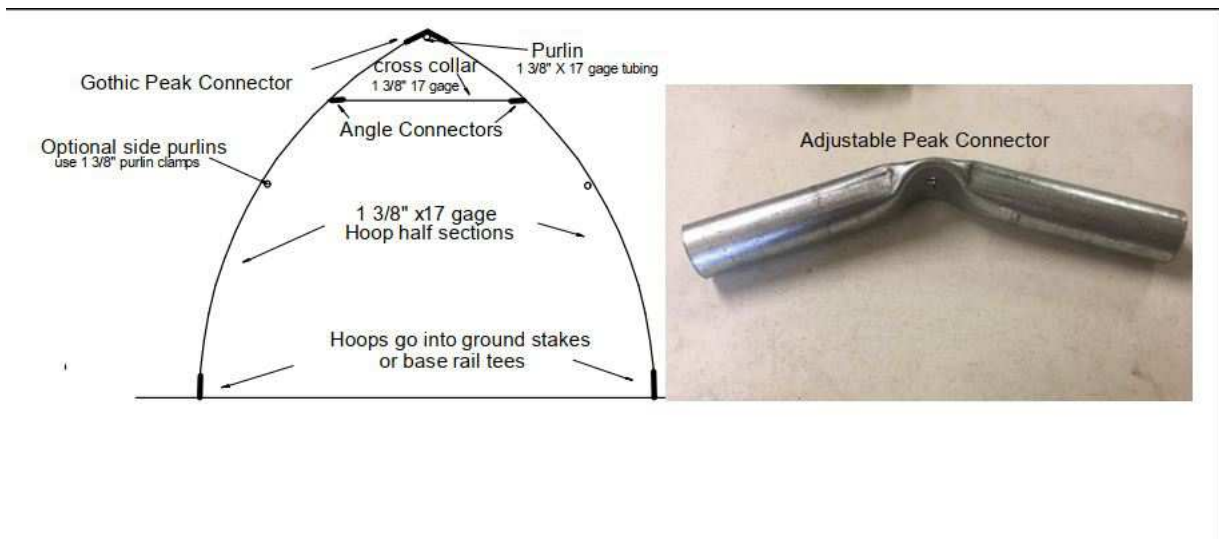
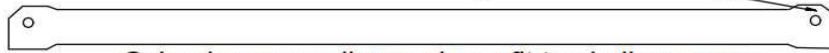


Fig. 3

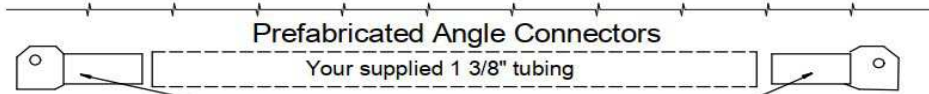
Sniped corners or not, either way works



Making your own collars & Snip corners if needed

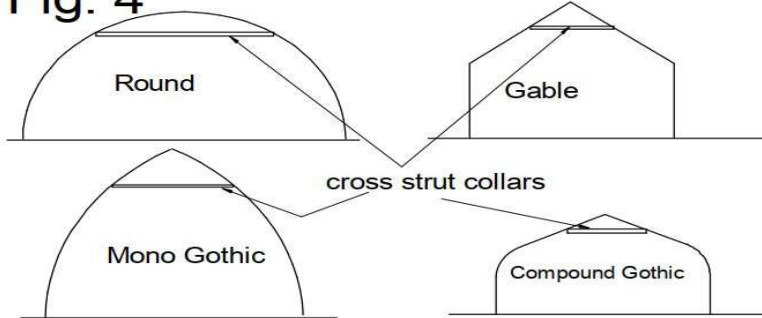


Sniped corners allow a closer fit to shallow curves
Band clamps must be purchased to attach your own collars to hoops



Using our prefabricated angle connectors, band clamps are included

Fig. 4



Installing collars increases frame strength against snow loads and wind on any greenhouse design

Typical 16 ft. Wide Gothic Using Fixed Gothic Peak

Fig.1 shows our Mono design using our fixed 150 degree Gothic prefabricated welded connector. Two full lengths of tubing (fig.1 see "A & B") are bent on either model of our 24 ft benders and installed small end into the peak connector laying flat on level ground.

Variable Widths Using Our Adjustable Gothic Peak

Variable width Mono Gothic's can be achieved by using our adjustable angle peak connector fig #2. By increasing or decreasing the angle of the Peak Connector, changes the angle of the hoop sections relevant to the horizontal ground. This also changes the required length of "C" as it makes its curve downward to achieve a vertical position for installing into 1 5/8" ground stakes. Cross struts or collars on every hoop are required when using Adjustable Peak Connectors. These can be fabricated onsite or use our pre-fabricated multi angle connectors for 1 3/8" fence tubing.

Bending The Hoops

The bending process is the same as if bending for a round 24 ft hoop, regardless of which peak connector you use; except you are using only two full sections and part of another (see fig. 1 "C") Section "C" may need to be variable in length as a result of metal alloy used in tubing. To determine the length need for "C" bend a third tube same as A&B then lay it beside either A or B as shown in fig. 1. Refer to the pdf- [Quick Start 24 ft. Hoop Bending](#) These 16 ft. Mono hoops use the same radius as our 24 ft Round hoops and are all bent the same as outlined in the quick start guide for bending 24 ft. hoops.

Understanding Alloy & It's Effect On Bending

It is important to understand what controls the finished hoop size when bending this metal tubing. The bending tool itself does for the most part control the hoop size however; there is an invisible element that can affect the finished hoop size "the ALLOY of the metal itself". Here is how. If your tubing was made from a harder than average metal it will produce a wider radius. If it was made from softer than average metal it will produce a smaller radius. There is no possible way to predict or find out what the alloy is in your specific tubing. Either way the bender will produce a perfect curved radius. This is why building the first hoop in the manner described is required to find the proper length of section "C" in fig #1. All other hoops can quickly follow with precut & bent sections.

Finding The Length Of Section “C”

Slide the third tube down or up alongside A or B until you can visually determine that it will be lined up in a vertical position for entry into ground stakes later. Then mark “C” at location “F” which is the bottom of A or B. Cut the tubing at “F” then cut another tube the same length (bend another tube if needed) most of the time you can get two pieces for “C” out of each bent full length tube.

Connecting “C” Section To Sections “A & B”

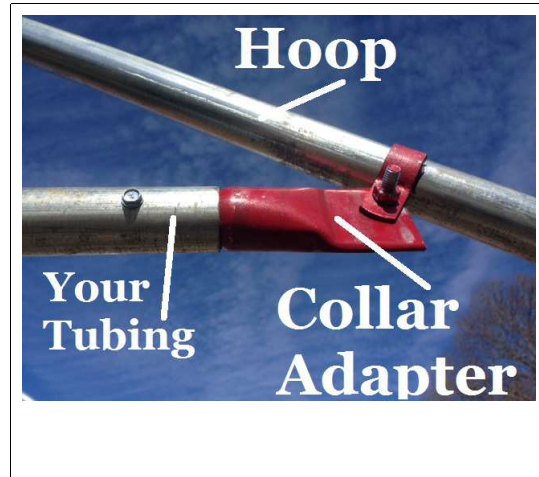
To splice these to the bottom of A & B you will need to purchase some 1” emt by 10’ long tubing from the hardware store then bend it on the bender same as bending the 1 3/8” except because the emt has now swaged end you will do the finish of on both end with the large end of the bender lever bar by sliding the lever bar over the ends of the 1” emt 3” then do the finish bending stroke.

Cut the bent emt into 8” lengths then inserting one separate 8” piece into the end of each “C” section 4 inches, creating your own swaged end and secure with tech screw, be sure that the curve in the emt is turned the same direction as the curve in A or B. Now insert the sections of “C” to A & B by sliding the remaining 4’ of emt into A & B.

The Cross Collars On Every Hoop

The angle cross strut (aka collar) can be fabricated onsite by determining the length of 1 3/8” tubing for your collar then flatten two inches of each end (flatten each in same direction) drill a 5/16 hole in one corner of each end 3/8” from end and edge see fig. #3. NOTE: that collars can be installed on any style greenhouse round, Gothic or gable for extra load carrying strength, they are recommended in heavy snow prone areas see fig #4. The lower the collar is installed the more strength is added. If using our prefabricated angle connectors simply insert one into each end of your tubing and secure with two #10 x 3/4” self drilling screws (tech screws)

The angle cross strut (aka collar) is connected to the hoop using the included adapter and Band Clamp and your own 1 3/8" tubing cut to the desire strut length (if you purchased the frame sets) otherwise if you are making your own cross struts then see example in Fig. 3



Remember

Refer to the pdf- **Quick Start 24 ft. Hoop Bending** Because these 16 ft. Mono hoops use the same radius as our 24 ft round hoop and are all bent the same as outlined in the quick start guide for bending 24 ft. hoops.