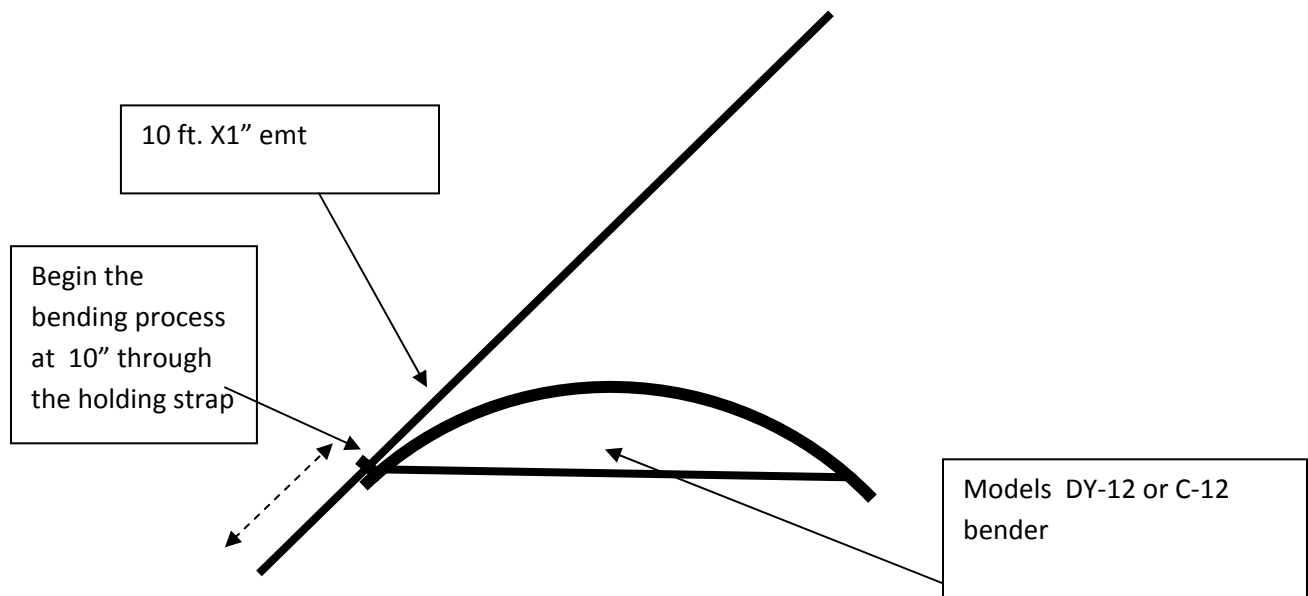


# 10'X10' Portable "Modified" Gothic Hoophouse

Here is a quick easy gothic hoop design built using the C-12 or DY-12 our [Quick Hoop Benders](#). Produces a nice gothic hoop 10 feet wide with high peak profile making it great for snow load areas of the country. It can also be built using either 1 3/8" fence top rail tubing or the less expensive 1" emt tubing. The two hoop sections result in a 145 degree connection angle at the peak. Fittings can be found on the internet from several sources. Here is a starter link to one fitting supplier. **Note, If using Our gothic base connectors you must start bending at 10" mark to achive a vertical connection to the connectors.**

**Detailed Instructions in the following pages**



Mark two each pcs of 1" emt 10" inches from the end of each pipe with any paint marker. These ends will be the bottom of the gothic hoop. Began bending 1" emt by sliding the 10" inches of the marked end of the tube through the holding strap of the Model DY-12 or Model EC-12 bender. Proceed with bending, making sure each bending stroke stops before reaching end of the bender, and insuring that the tubing remains level with the bender on the output side of the bender... For the last bending stroke insert special lever bar and bend until junction of lever bar/emt contact the bender body. Remove tubing, repeat steps on second emt tube. **Note, If using Our gothic base connectors you must start bending at 10" mark to achive a vertical connection to the connectors. Otherwise you can reduce the base width began the bending process at a value less than 10" inches.. Or widen the base width began bending at a value more than 10" inches .**

Watch Carol Coleman Video on building this Gothic Hoophouse Click the You Tube Link below

<http://youtu.be/KBmhPVL0QZs>

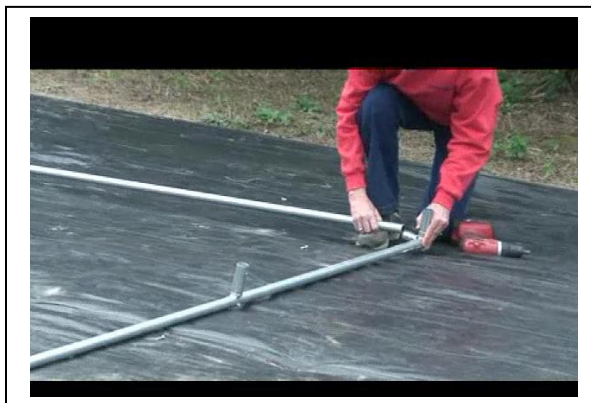
## STEP #1

Begin by building the base rails consisting of two side rails and two end rails. Using two 117 ¼" lengths of 1" emt tubing, (NOTE: In the Video these were already PRE CUT) NOW mark the two side rails only at 38 5/8" from each end On a flat surface slide the two tee connectors onto each side rail, position them at the centered on the 38 5/8" marks (Carol is point to below). Now slide each three way corner onto the ends of each slide rail Note that the corner connectors must be on their side (the corners are made of three tubes) the longest of those tubes must **be laying flat as show below.** Now secure the corners and tee's to the side rails with self drilling screws



## STEP #2

Assemble the base as show below. The side rails have all the connectors already on them. Now using two 117 ¼" lengths of 1" emt slide them into each corner connector and install self drilling screws to secure all base rail connections.



### Step #3

**Marking the three perlin.** Using three, FULL, 10' foot lengths of 1" emt tubing, (DO NOT CUT THESE) On each tube place a mark at 40" from each end as show below. Then set these aside for now.



### Step #4

**Mount the Bender.** Mount the bender to any stable work surface. Note the photo at left shows 1"x2" wood strips attached to the work surface, this helps hold the tubing level with the bender during the bending process. In photo at left Carol used only a small hand level nearby to rest the tubing on near the end of the bending process.



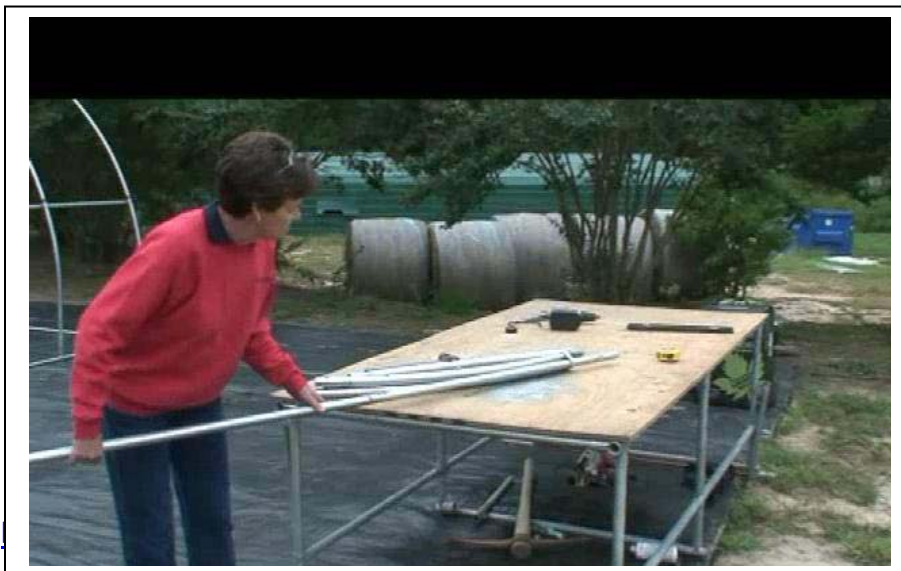
### Step #5

**Bending the hoops.** Using eight 10" foot lengths of 1" emt. Measuring from one end of each tube. Mark each tube at 44" from the end and another mark at 10". As Carol show below.



## Step #6

**Bending the hoops.** The hoop bending begins on each tube at the 10" mark (position the 10" mark at the holding strap. Shown below.





Release the pressure and push about one half of the tubing you just bent through the holding strap



Repeat this step pulling and pushing about half of each bending stroke through the holding strap, add the lever bar (supplied) when needed for leverage.



[//youtu.be/KBmhPVL0QZs](https://youtu.be/KBmhPVL0QZs)

Notice Carol is pointing where the lever bar has been slide into the 1" et Now make the last pull by pulling the lever bar until it touches the bender it self. This hoop section is completed, now bend the other seven tubes the same way.



## Step #7

**Adding the side perlin connectors to the hoop sections.** Each of the eight hoop half sections must have the side perlin connector now. Slide the perlin cross connector onto the hoop sections up to the 44" mark, tape it in place with any strong tape as shown below.



## Step #8

**NOTE: Please read Step #10 before proceeding with Step #8**

**Assembling the four hoops.** Using the Gothic Peak connectors show at right, slide each hoop half section into the connector. Secure with self drilling screw. Top Center perlin will install later through this hole.



Now install each of the four completed hoops into the base side rails. **In the photo below we have already pushed the three straight perlins, through & into the three installed hoops (we taped the perlin connectors too and set aside earlier) before we installed the last hoop "fourth" hoop.** Remove the tape from the side perlins, check to make sure all connectors are at their marked position from the side perlins and install self drilling screws in all predrilled connector holes **(except the hole at each end hoop that connects the end gothic peak connectors to the top/center perlin.)**



## Step #9

**Installing the Scissor doors.** For each door cut two pcs of 1" emt to desired length so that each tube will clear the ground when installed. Photo at left Carol is attaching the 1" emt door tubes by inserting the two 3" long adapter tubes into the door tubes, then securing them with self drilling screws.



Push the door adapter hinge tube into the top/center perlin and secure with self drilling screw **(If you have already screwed the end gothic peak to the top/center perlin then you will need to remove the screw before inserting the hinge into the perlin, then reinstall the screw)**





It helps to tie the door tubes to the side perlin while securing the door hinge to the perlin shown at left. Photo on right is door installed and scissor tubes open.



## Step #10

While not required; before installing the last hoop into the base rail, it is helpful to place the fourth hoop on top of the two pcs. Of end poly as shown below and trim poly 12" larger than the hoop.



## Step #11

**Installing the poly Covering.** You must have a minimum of 6" of poly over hang , 12" is recommended it can be trimmed later. If you order the poly from us <http://shop.hoopbenders.net> this 10x 10 gothic house requires a total of 24'x24' poly which you split into two 12x24s one is for the top and the second one is split again into two 12'x12' s this is for the two ends. Place snap clamps as few as possible for now just to hold the top cover in place, you will remove them one at a time and re clamp them as you install the end plastic over the top cover.



Split both end pcs in half as shown at left. Photo at right Carol is removing the clamps that were used to hold top cover on then pulling the end poly over the hoop and reclamping. Be sure that each of the two scissor door tubes have at least 6" of poly past them in order to snap clamp the poly to the door tubes.

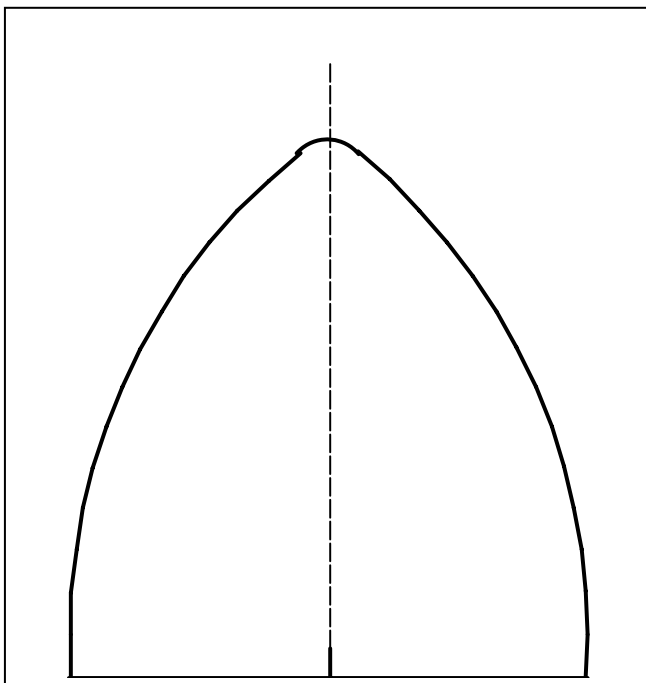


Photo at left Snap clamp poly to the door tubes. Doors can be tied back with rope as Carol is doing with the left door tube or by pushing any smaller pipe or rod through the poly into the side perlin to support the door tube as she done with the right door tube.



Photo at left shows how Carol built a snap latch by screwing a larger 1 3/8" snap clamp reversed over the 1" snap clamp that hold the poly to the inner door tube, she then simply swings the left tube over the 1 3/8" snap clap and pushes the left doo tube into it forming a quick secure latch. The doors can also be tied shut with small rope. Now go back and add as many snap clamps as needed on the end hoops, base rails and door every 2 feet is recommended. Shown in photo at right is how Carol installed a single self drilling screw in the center of every snap clamp to make sure it does not loosen in high winds.

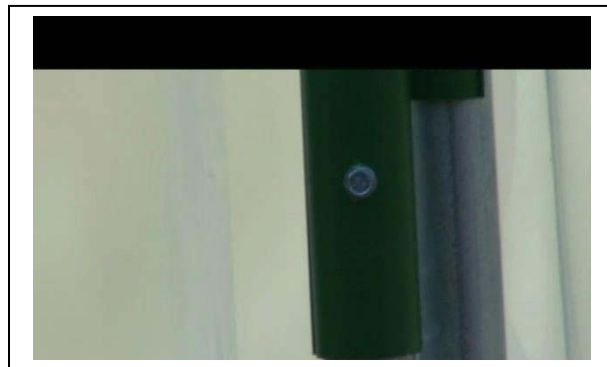


Photo at right shows Carol anchoring the hoop house using 1/2" rebar which has bent with hooks on the ends they are simply driven into the ground with the hook over the base rail. The length of any anchoring stale can only be determined by your local soil conditions. Carol is using 18" stakes in our tightly compacted clay earth. Three stakes to each of the four sides is recommended.

