

DIY Garden Arch

3/30/25

What Comes in the Kit

To complete this project, you will need a 4-foot bender. It is an optional add-on to the kit when placing your order since you only need one bender to make multiple projects on this list.

- 10 qty EMT connectors
- 4 qty EMT splices
- 10 qty EMT caps
- #8 self-tapping screws
- Optional 4 ft. bender
- Optional trellis netting 6x20

What You Will Need to Buy Locally

5 or 6 pieces of 10-foot x $\frac{3}{4}$ inch EMT pipe, depending on your desired height and width.

Tools to have on hand

- Metal saw
- Power drill
- Measuring tape
- Marker
- $\frac{1}{4}$ hex head driver
- $\frac{9}{16}$ deep socket driver
- 4-foot hoop bender
- Hammer
- Twine or Wire

Build Instructions

Bending your hoops

1. Mount bender on sturdy object with enclosed bolts, or 3"+ wood screws. Install the bender 5-6 feet above the ground to provide enough working space. To keep the hoop steady, mount the bender on a flat surface that's at least 4 feet long. This will ensure the hoop bends in the desired direction without curving when upright.
2. Mark EMT at 22 $\frac{1}{2}$ " from both ends and then at 46 $\frac{1}{2}$ " from both ends.

3. Bend at 22 ½" and 46 ½", remove from the bender, flip, and bend at 22 ½" and 46 ½" from the opposite end you started with. Bend the pipe along the rib of the bender until the pipe lightly touches the bender. Do not overbend!
4. Repeat this process for the second hoop. The resulting hoops will be about 47 inches tall.

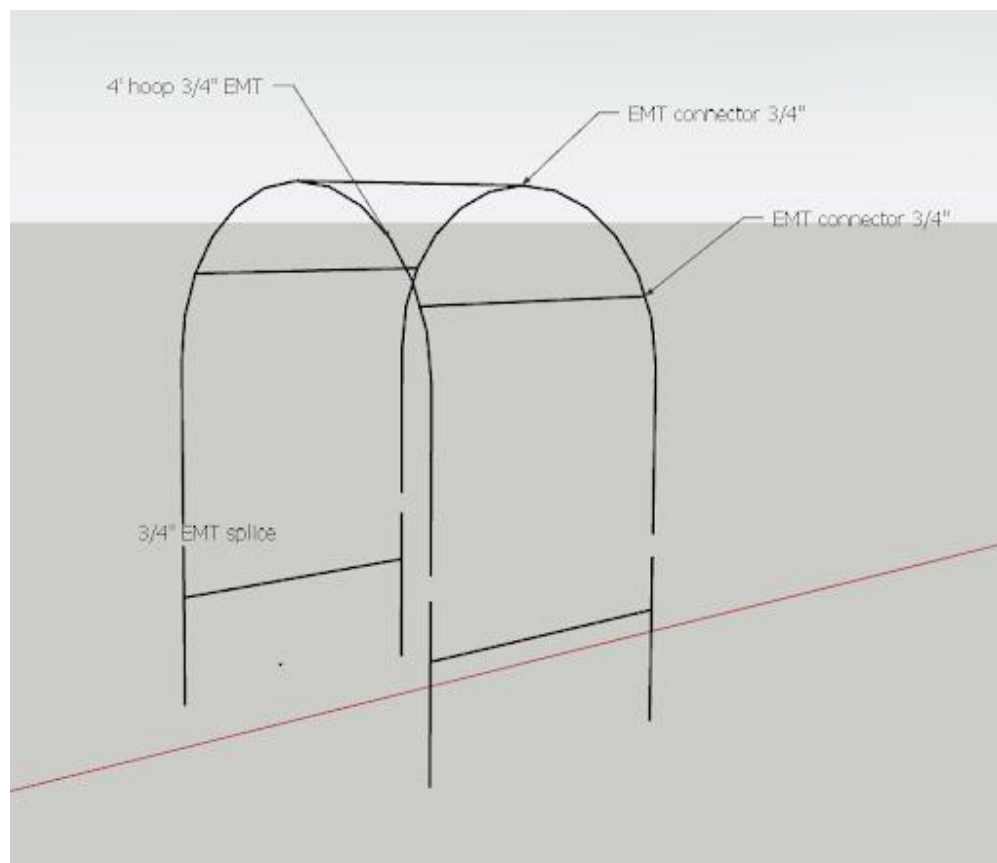
Cutting Pipe Lengths

Decide how tall and long you want your garden arch to be. Keep it within a few feet of your height for ease of picking fruits or flowers from the arch. For the rest of these instructions, we will assume a desired height of around six and a half feet with a width of three feet.

With the hoop about four feet tall, you will need four legs that are three feet tall. (You can increase or decrease the height by changing the length of these legs.)

These legs will be inserted six inches into the ground when you place the arch in its permanent position. Alternatively, you can sink some ½" rebar into the ground and place the legs of your arch over them.

1. Mark each of your three remaining straight pieces of EMT at 3', 6', and 9' from the end.
2. Cut each piece along the marks. This will result in nine total 3' pieces.



Building the Arch

In these steps, you will complete the construction of the arch before moving it to its final spot. If your planned installation location is soft enough to easily push a piece of EMT 6 inches into the ground, proceed with the instructions below.

If the ground is particularly hard, you can use four 2-foot sections of $\frac{1}{2}$ inch rebar hammered into the ground to slide the arch legs over. Alternatively, you can hammer the legs of the arch into the ground before attaching them to the hoops in step 2. For both methods, the hoops are used to mark the spots on the ground and place the legs.

1. Insert an EMT splice into each end of the hoops and secure with a self-tapping screw.
2. Place a three-foot section of EMT on the other end of each splice and secure it with another self-tapping screw. You have now completed the hoops sections of your arch.
3. Hammer the EMT caps in the ends of all your 3-foot pieces of EMT.
4. Use two EMT cross-connectors to connect the hoops together at the apex of the hoops with one of the 3-foot sections. The straight piece should be under the hoops. Tighten the nuts with the socket driver.

5. The bottom cross sections of EMT should be installed near what you intend to be the ground level. Use cross-connectors to secure one piece on each side of the arch about 6 inches from the bottom.
6. Place the remaining two cross pieces at the point where the hoop curve transitions to straight.
7. Place the arch in its final location. It is easiest to do this step with a second person. Push the EMT into the ground so that the bottom cross-section hits the ground.

Now you can either attach trellis netting up and over the arch for vines to grow on or use twine tied around the cross pieces. For more permanent support, you can also use wire wrapped around and up the cross pieces.