

Building a Gazebo



Bill of Materials

850' 1-1/4" x 1-1/4" x .083 square tubing

760' 1/2" x 1" x .083 square tubing

6 - 14" cut-off blades

Build something out of the ordinary — a gazebo!

Cut sixteen pieces of 1-1/4" inch square tubing into ten-foot lengths. Cut sixteen 8' lengths also.

Place two of the 10' pieces and two of the 8' pieces on the shop floor and arrange to form a rectangle. Tack the tops together. Square up the corners and weld.

Measure from the center of the top to the corner on the left-hand bottom side to get the angle needed for the inside framework. Cut sixteen more pieces of the same material to fit from center top to the bottom corners. The rectangles require two each. Put the two pieces in the rectangle, and weld them one after the other.

Measure from the bottom up, 1'3" on both sides of the inside pieces, square with the rectangle. Put a mark on each piece of tubing. Measure from the bottom up 3'3" and put two marks at the end of the tape. Measure from mark to mark and cut four pieces of the same material for the bottom and top marks. Weld the tubing in place. Measure up 8'3" to the very top, make a mark on each side and cut eight pieces to match. Weld the tubing in place.

The second material was 1/2" x 1", and .083" thick. Mark the top 8' frame at 16" all the way across (five marks). From the center mark to either side, take measurements. Measure both halves and cut. Sixteen pieces of 1/2" x 1" x .083 thick square tubing are needed. Cut them using the same angle as before.

Put the pieces in the rectangle in a diamond pattern. Weld the pieces in place.

At the bottom edge of the top of the fence rail, square to the bottom, put in five pieces of tubing 1'6", to each side straight to the bottom. This bottom fence rail will be on four walls.

Put the finished wall up level on sawhorses and use as a pattern for the other walls.

To build the eight rafters cut eight 12' pieces and eight 6' pieces of 1-1/4" tubing. Place one of each on the floor and put the ends together at a 90° angle. Weld together. Measure from outside end to outside end. Cut eight more pieces of tubing to this measurement. Weld to the corners of the right angle section. From the top of the 6' stock measure diagonally down 6' and put a mark. Measure from the mark to the inside bottom corner. Cut out eight pieces and weld one in place. Use this pattern for the following seven sections.

The measurements for the other set of rafters are 4' x 1'. Measure and cut eight of each. Place one of each piece end-to-end at a 90° angle, square and weld. Measure from outside end to outside end and cut eight more pieces to this measurement. Weld one of these pieces to a right angle section. Measure on the 1' side, down diagonally 1-1/2' and measure to the inside corner. Cut out eight pieces to this measurement and weld one in place. Use this section as a pattern for the other seven

Cut out eight 5' pieces of tubing. These pieces will stand upright on the top rafters. Measure from the bottom diagonally up, and 1' across to find the length of the braces. There will be one for each leg. Cut sixteen pieces and weld each brace.

Build one octagonal shape, 6' from corner to corner. Set on top of the braces.

All sections of the gazebo have now been cut and welded.

Tack the walls together to form an octagon shape. From the bottom to the top run a weld about 1-1/2" every foot.

Butt two ends of the first set of rafters together, tack together and butt two more on each side. Butt a rafter in each hole facing out from the center and weld together. With a fork lift and chain, set the first roof on top of the walls and weld together.

Place the octagon and braces on top of the roof and weld the bottoms of the braces to the tops of the rafters.

Butt up the second set of rafters and weld. Set them on top of the octagon.

