

HEXAGON BACKDROP CONSTRUCTION

MATERIALS USED

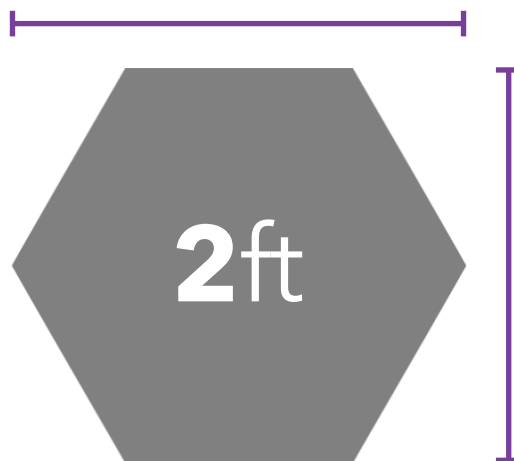
Coroplast
30 Pound Test Double-Braided Fishing Line
4" Long Pieces of Scrap Lumber
Split Shot Fishing Weights
1/2" Steel Conduit

STEP ONE: MEASURE EVERYTHING TWICE

Measure the distance from the stage floor to the hanging point in the ceiling and the horizontal distance from one end of the stage to the other. Roughly estimate the total number of hexagons needed based on this distance and the desired space between each row.

STEP TWO: CUT COROPLAST

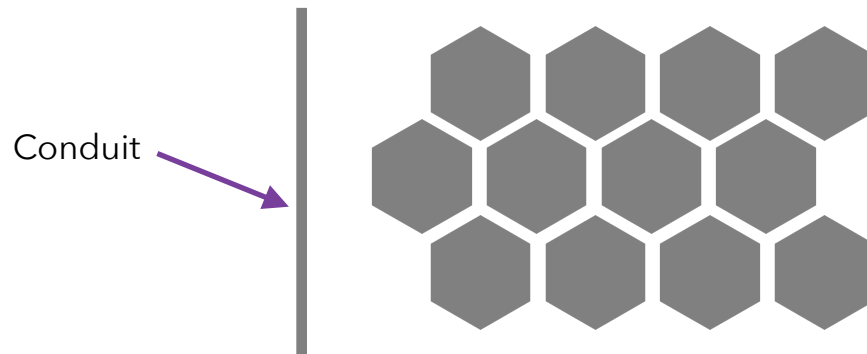
Cut the coroplast to size using a laser CNC if available. A mechanical cutting machine can also be used, but it will result in rough edges, similar to what happens when a piece of paper is torn from a notebook. We smoothed these edges by running over them with a sharp knife, a laborious process.



STEP THREE: BUILDING THE LAYOUT

On a large, flat area, such as an auditorium floor, begin by placing one of your cut pieces of conduit where the "top" of the stack will be. Make sure to leave adequate space below the conduit (the amount is up to you) for your desired beginning height. Below the conduit, lay the hexagons out on the floor as if they were hanging from the ceiling. Make sure that the coroplast's channels are running vertically.

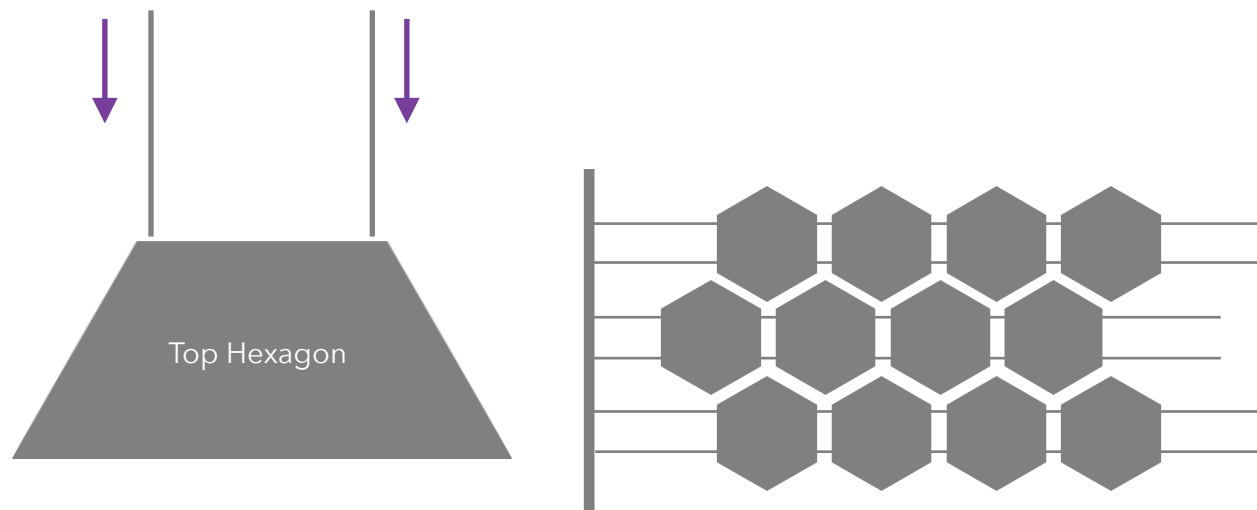
We found it easiest to use several 4" long pieces of lumber as spacers to keep the hexagons even and straight. Not only did this provide the vertical spacing, it also provided the horizontal spacing between the rows.



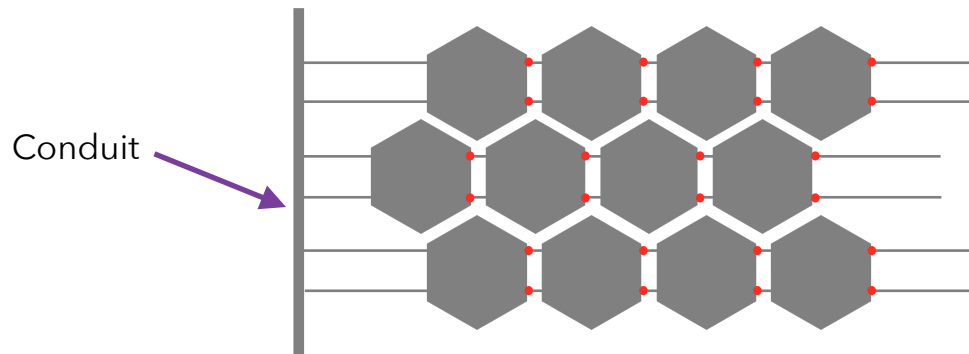
STEP FOUR: STRING THE HEXES

Once a section of hexagons is laid out, begin feeding the fishing wire through one of the farthest complete vertical channels on the upper edge of the upper hexagon. We found that the fishing wire was stiff enough to simply push it through from the top of the hexagon and out the bottom. Repeat this process through each hexagon until you have a few feet of excess wire at the top and bottom of each stack. Repeat for the other farthest vertical channel of each hexagon.

By now, you should have a stack of hexagons connected by two long pieces of fishing wire. Repeat this for each stack in the section.



Once the section is strung up, it's ready for the split shot fishing weights. Position a split shot fishing weight along the string below the uppermost hexagon, getting it as close to the hexagon's bottom edge as possible. Using a pair of pliers, crimp the weights around the fishing line tightly. Repeat this for the other side of the hexagon. Then repeat for every hexagon in the stack, working your way from top to bottom.



STEP SIX: TIE THE LINES

Once all of the hexagons in a section have been strung and weighted, use the remaining line at the stop of the stack to tie the stack to the metal conduit. We found that the easiest way to do this was to position the conduit along a straight line in the floor. Be sure that the distance from the top of the hexagon to the conduit is the same on both lines. This will help avoid a tilting stack. Repeat for all stacks in the section.

STEP SEVEN: LIFTOFF

By now, all the hexagons in the section should be strung, weighted, and tied to the conduit. In order to get each section up to the ceiling, a two person lift is needed. Have two people grab each end of the conduit and, making sure to pull straight, bring the conduit up onto the side of the lift so that it may be held by two people standing in the lift. The two people in the lift then go up to the ceiling, holding the conduit along the way. The hexagons will simply drape over the edge.

STEP EIGHT: HANGING

Up at the ceiling, attach the hexagon conduit to your stage infrastructure. We used heavy duty zip ties, about eight for each section of four stacks.

STEP NINE: ADJUSTMENT

Upon hanging, some of the hexagons may not be straight. This can be fixed by simply uncrimping the split shot fishing weight on the offending side, moving it up or down the line, and recrimping. You may also have to move the stacks left or right in order to achieve even spacing. This can be done by simply sliding the knots along the conduit.

STEP TEN: REPEAT FOR OTHER SECTIONS

STEP ELEVEN: LIGHT IT UP

Once all of the sections are strung up, secured, and hanging, it's time to light it up. Coroplast reflects whatever light you throw at it, making it an ideal candidate for this purpose. In our case, we used American DJ Mega Bars in front along the bottom, pointing up almost vertically at the hexagons but with a slight tilt towards them. This covered the bottom half. For the top half, we used existing ceiling mounted LED pars placed about 15-20 feet in front of the hexagons. At first, this looked uneven, but with some adjustment and once the house lights are off, it blends fairly well.

We also had an extra few small LED bars hanging around, and we put them on the floor just behind the center sections pointing almost straight up. This provides a unique outline to the bottom 1/3 of the hexagons and adds another layer of depth.

