In this project you will be doing some Extrude Planer Curve, Loft, Fillet Edges and other basic moves. It helps when you use the different layers to distinguish you pieces apart. Selecting lines can be confusing when you have allot of lines.

First create a pattern like the one below, this will be the base pillar and the half circle is the base for the column to be lofted (done near the end).
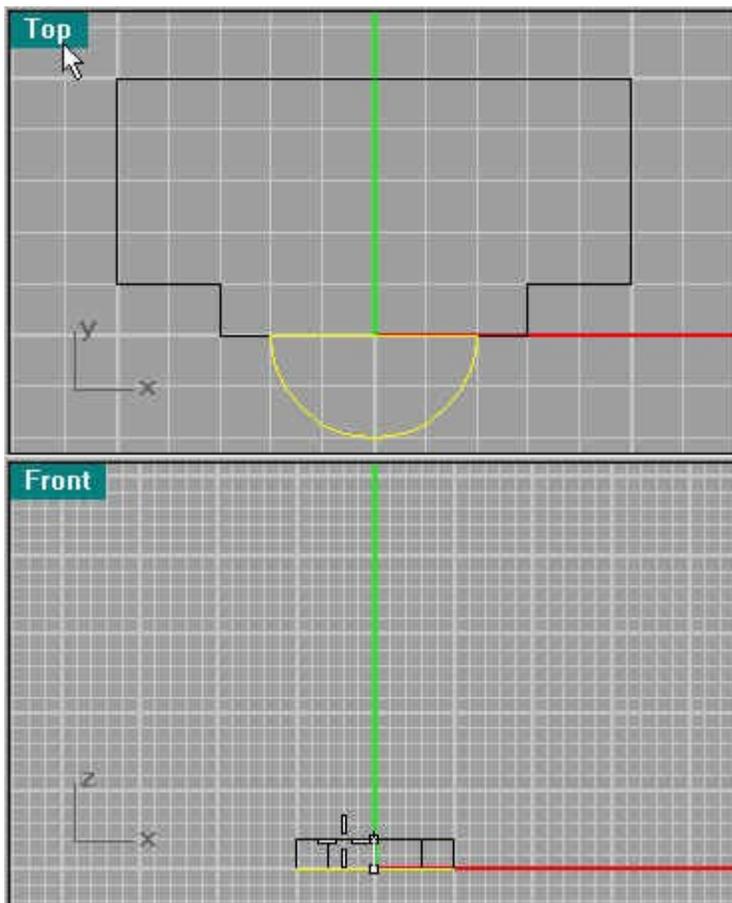


Highlight the base configuration and use Solid/Extrude Planar Curve to a height of 2 units. Then use Solid/Fillet Edge to round of the edges (.1u). This gives better detail to the pillars as they are stacked.
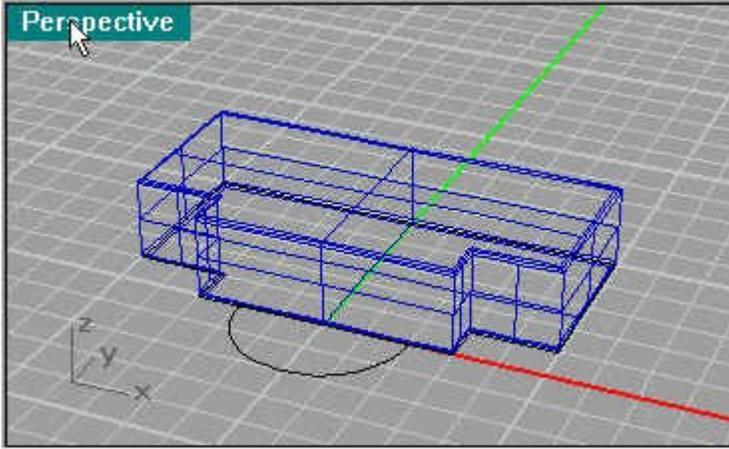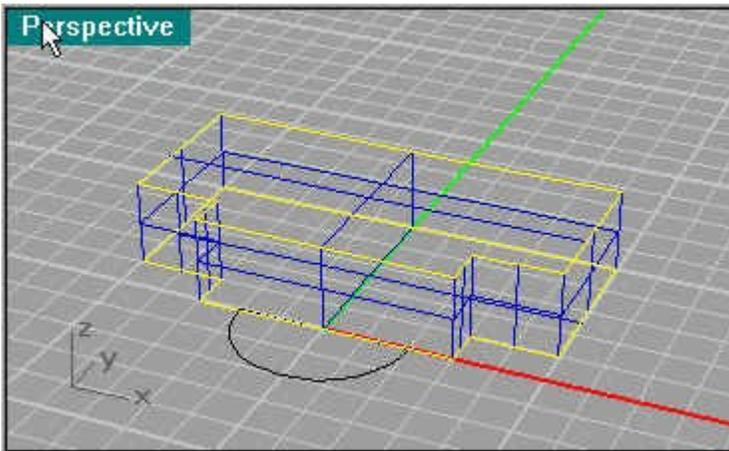
Next duplicate the pillars using Copy, and stack them 5 high.
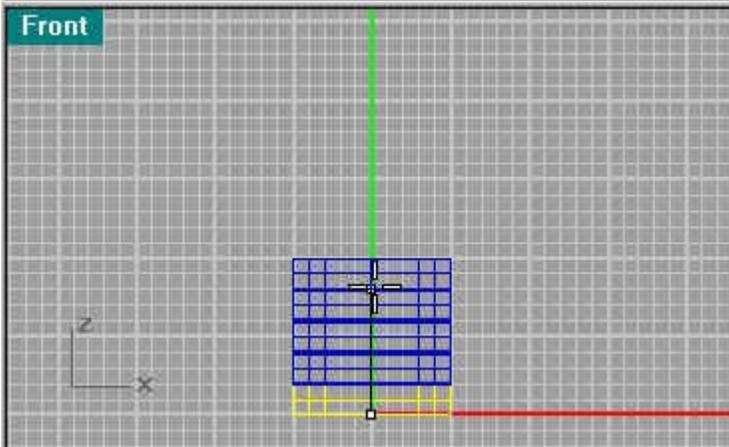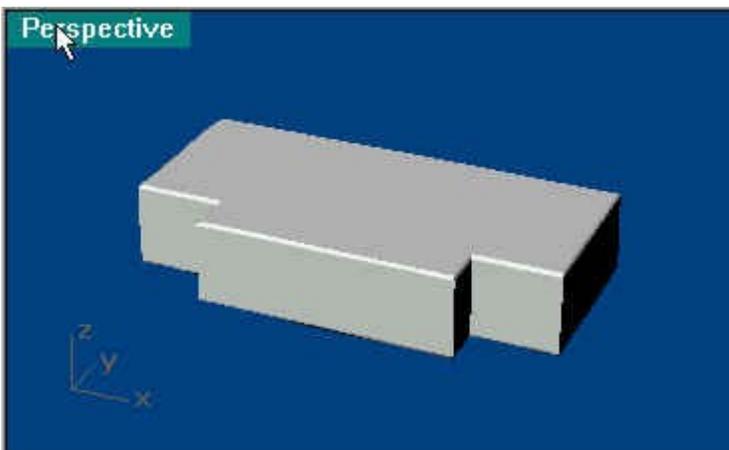
Next move the first pattern to the top pillar so we can use it as a rail. Create an edge using Curve/Line/Line Segment, this will be railed around to create the next pillar. Make sure you move the curve you just made inwards to about the middle of the rail so it touches it. When you have created that, use Surface/Sweep 1 Rail.
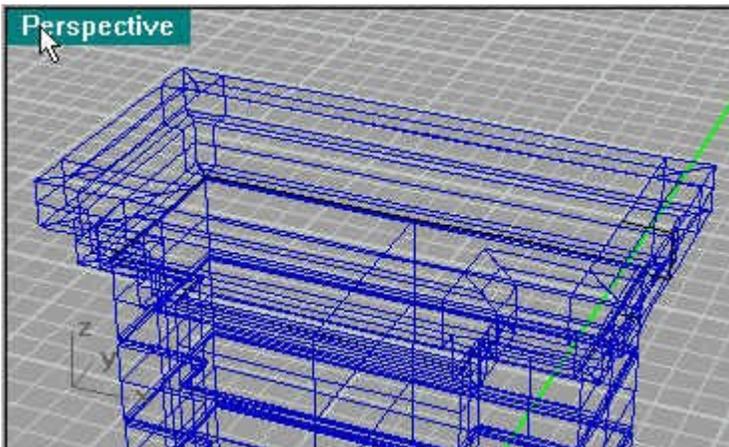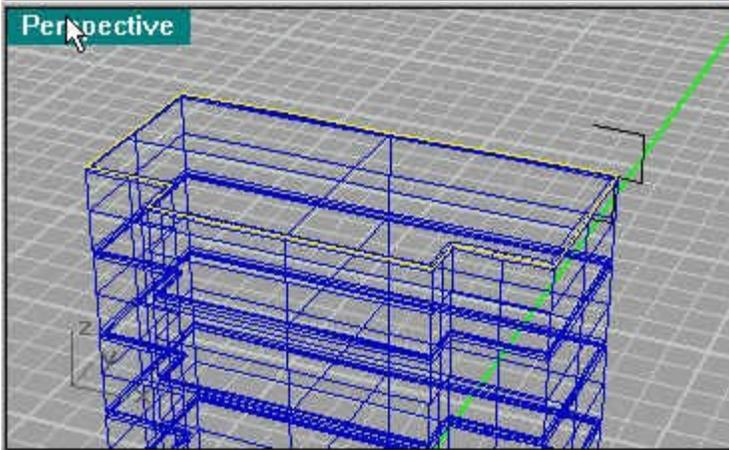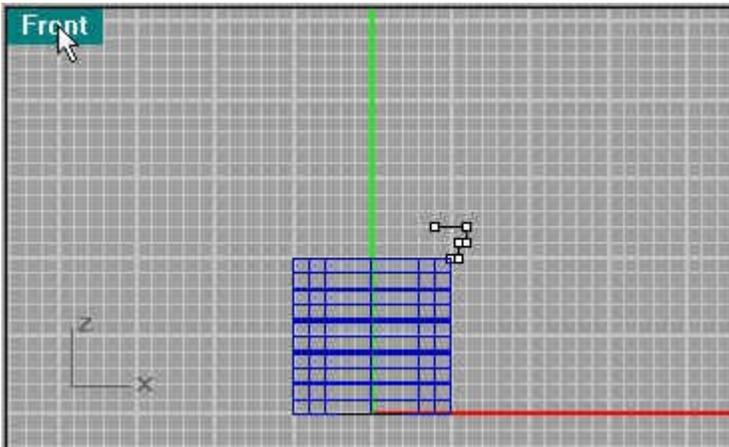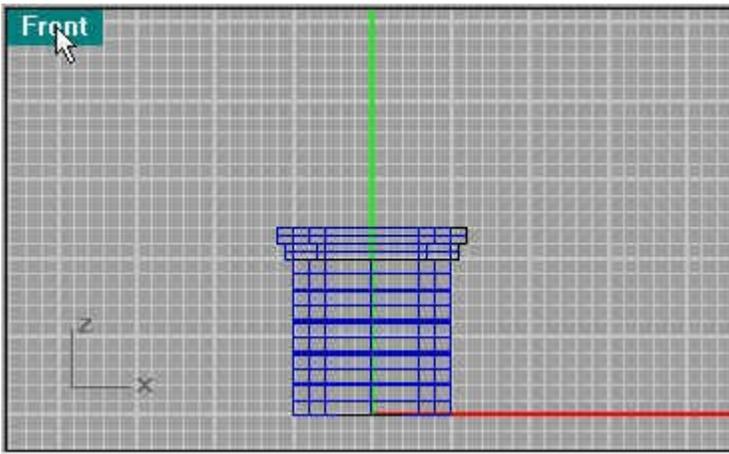
Again bevel the edges using Solid/Fillet Edge.
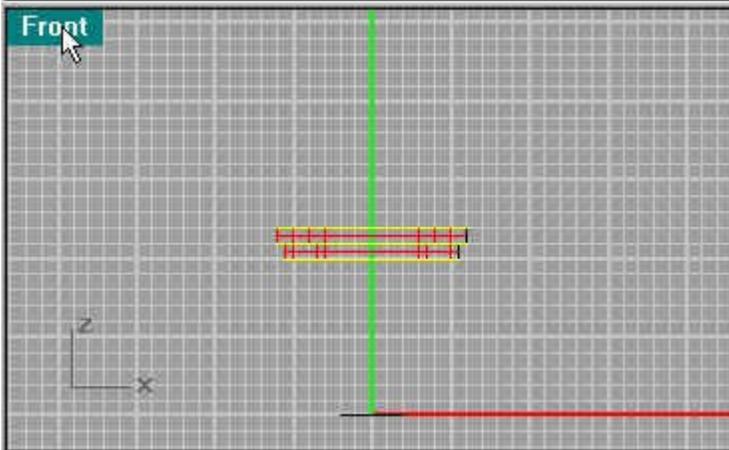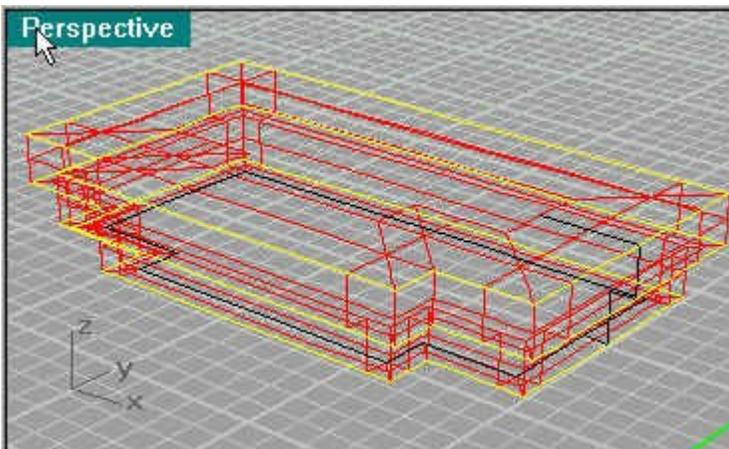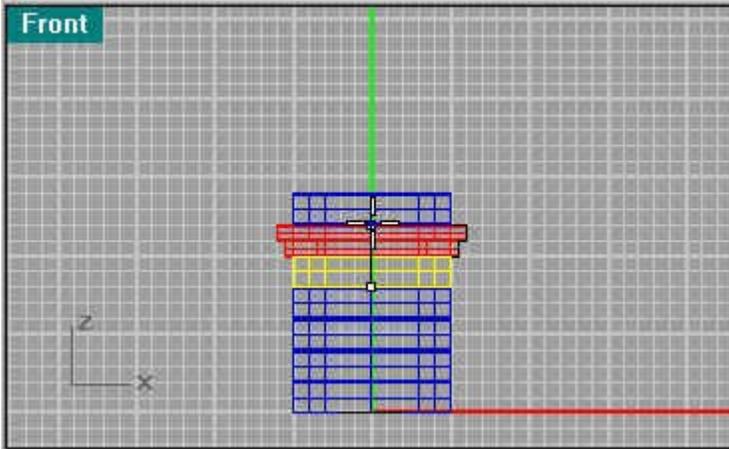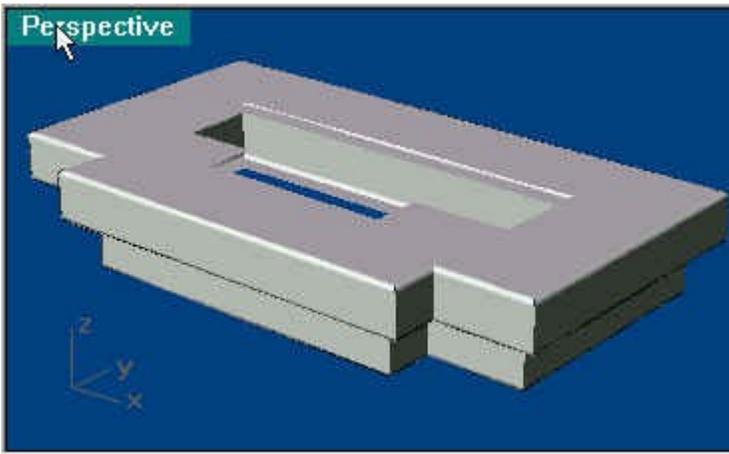
Add another pillar from the beginning. Then move the pattern up for another Rail. Create a curve as highlighted below.
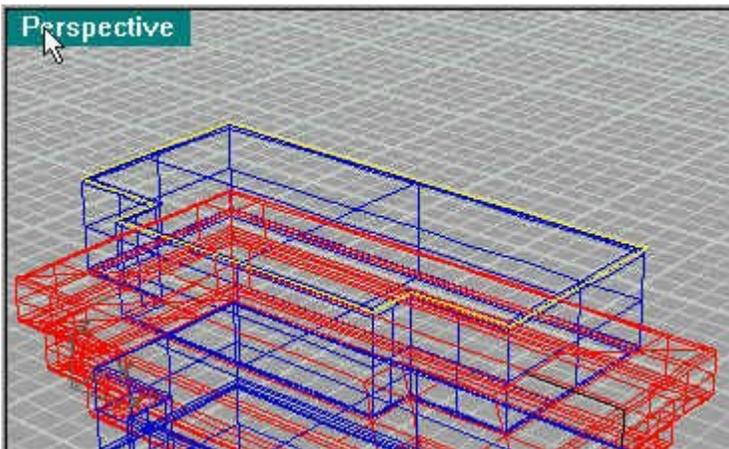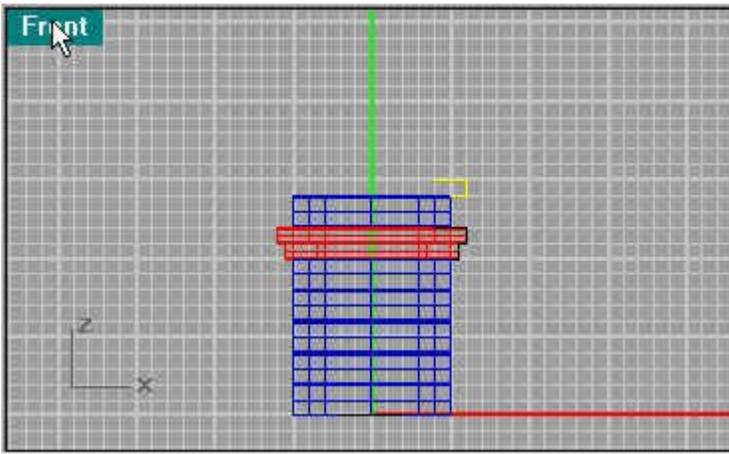
Then Sweep the curve as you did before to create the next pillar.
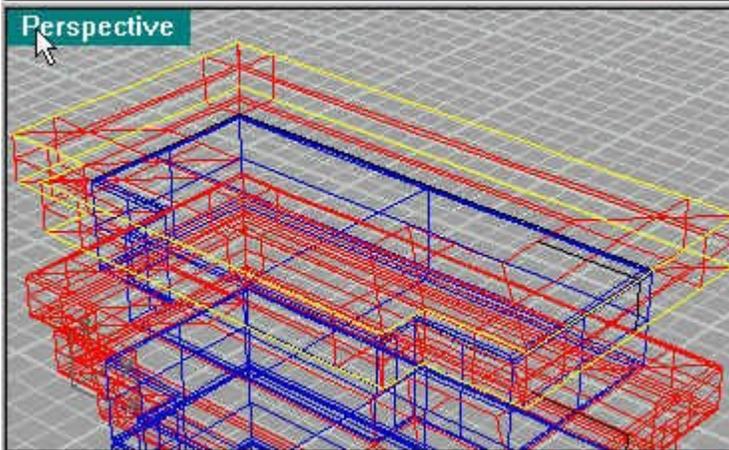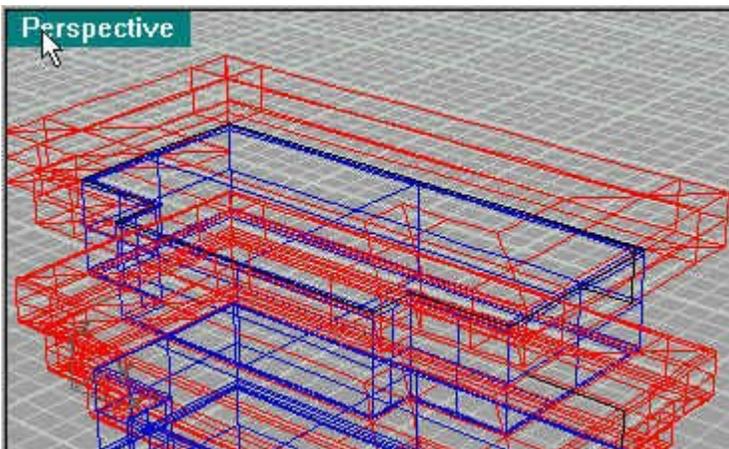




Next make make a half circle as shown (disregard the 2nd one on the left). Then make a segment going from the center of the circle to the center line.
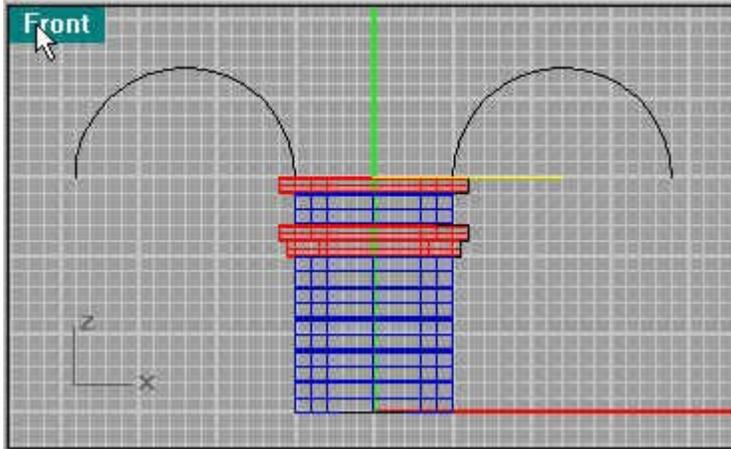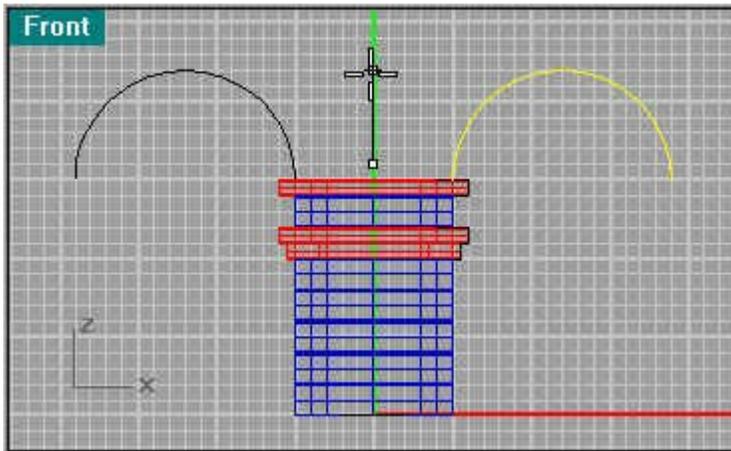
Use Transform/Array/Along Curve (6) to create even lines along the curve. Next use the Split command to separate the half circle into 5 segments. These will be your blocks later.
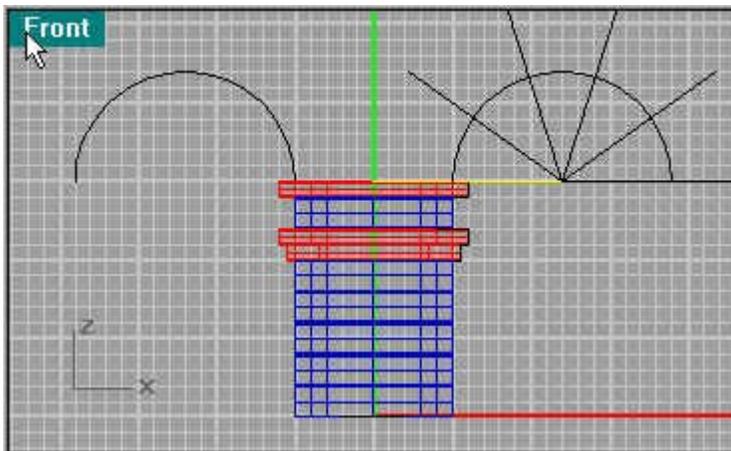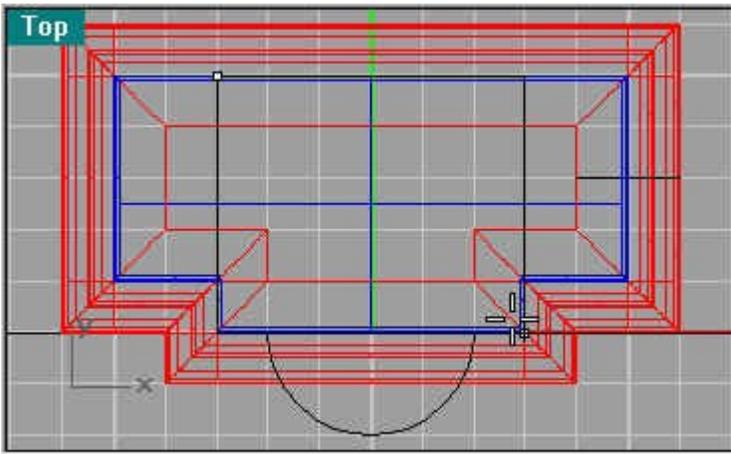
Next use Curve/Rectangle/Corner ☐ to Corner to create a square as shown above. Then extrude the square with Extrude Planer Curve to 5u as shown below. Then select the edges to be rounded (Fillet Edge).
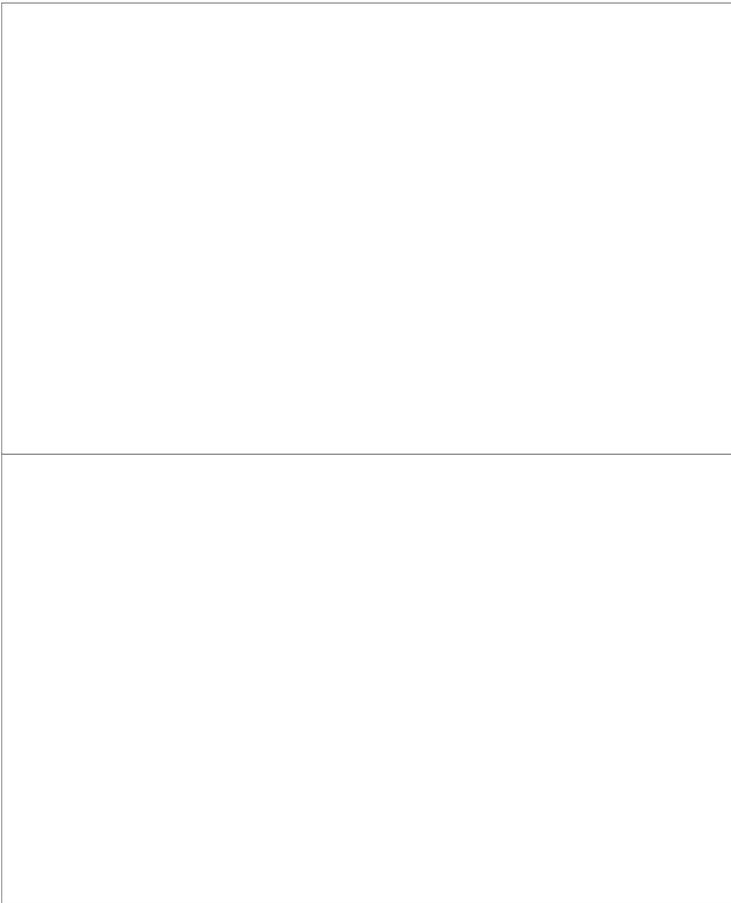


Next create a line segment as shown making sure you connect to the top and base of the curve segment (I use Snap to End then switch it off so it doesn't wonder).
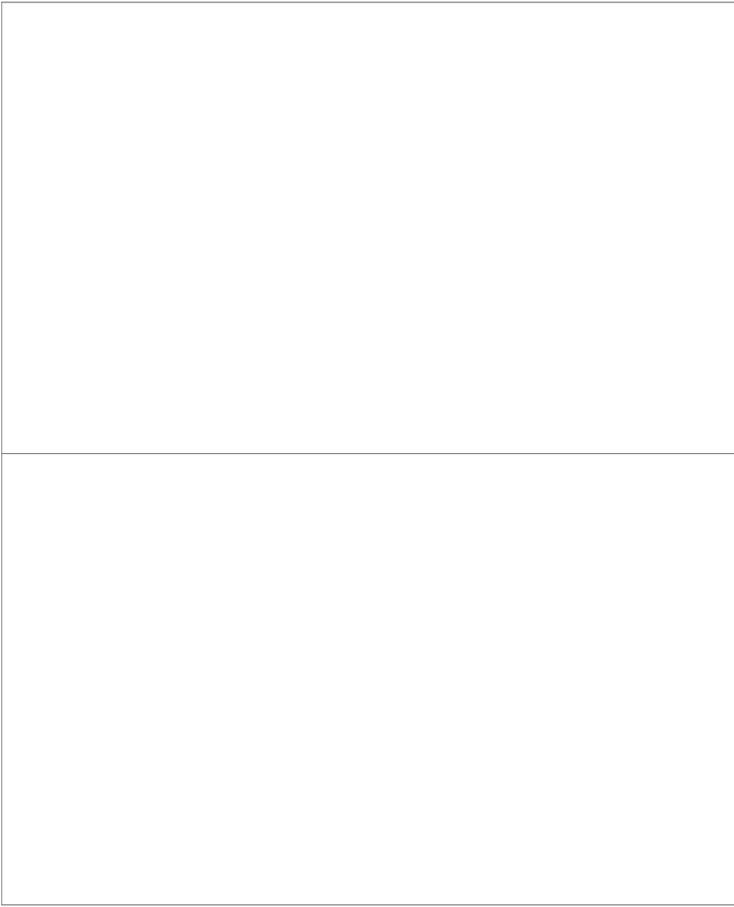
Next use Join☐ so the segments are one piece. Next move the segment back a unit so it lines up with the pillar edge.
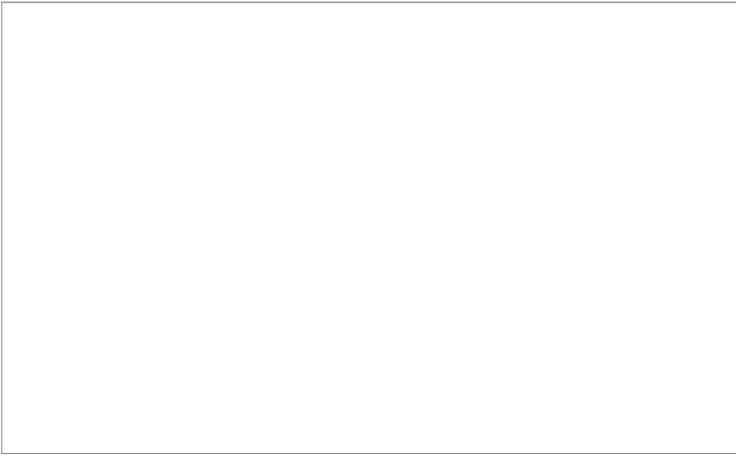
Next use Extrude Planar Curve to the back line to create your next block. Bevel the edges.
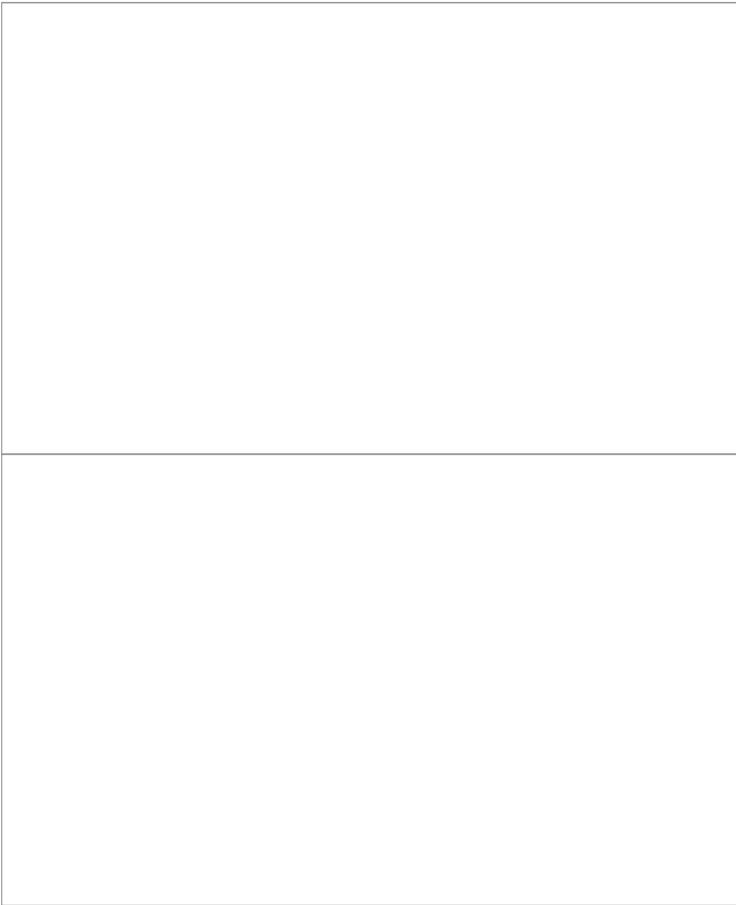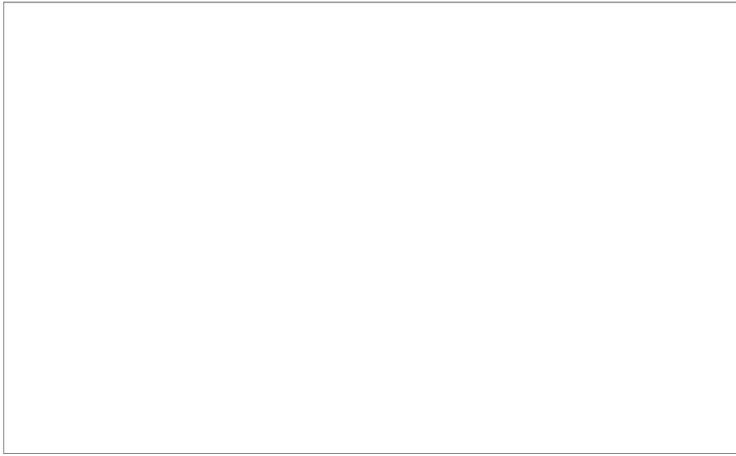
As you can see the pieces are starting to shape up.

Duplicate the large block and place it one high. Next create another line segment as you did before to create another curved block. Make sure you know were the segments are attaching too, especially if you use snap. You want the segments to be one again with the next curve segment.
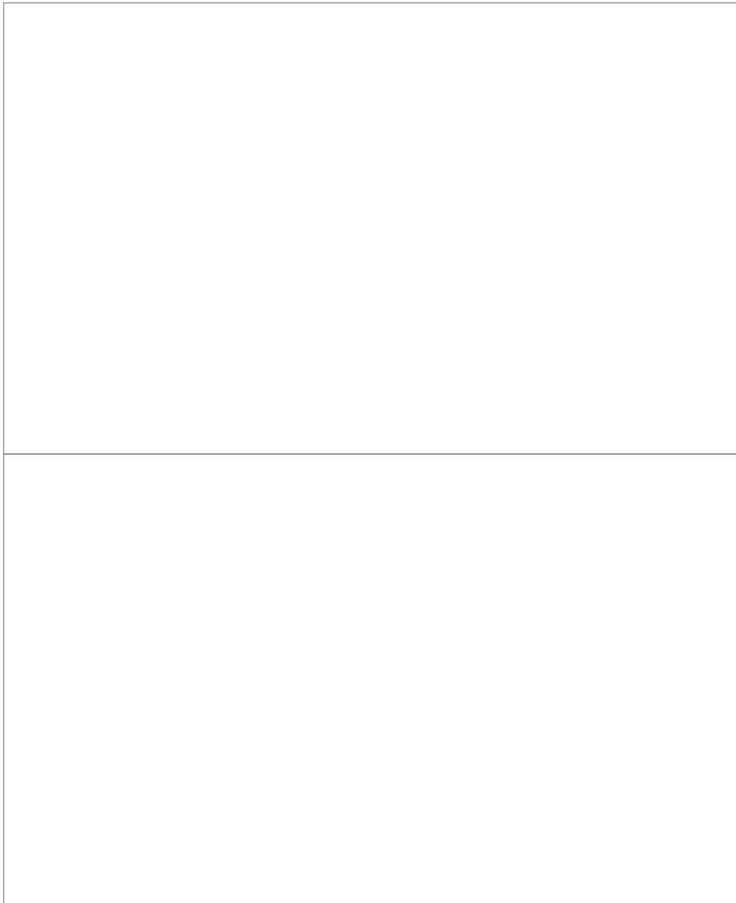
Use Extrude Planar Curve again to create you next block.
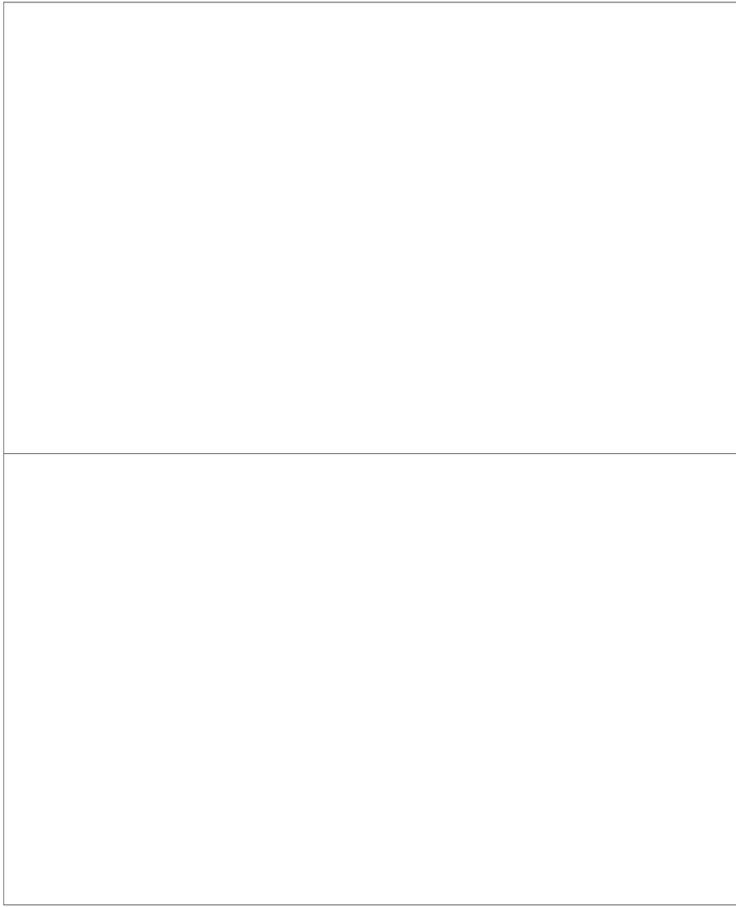
The next level has been finished (after the main pieces are done you can mirror copy them).
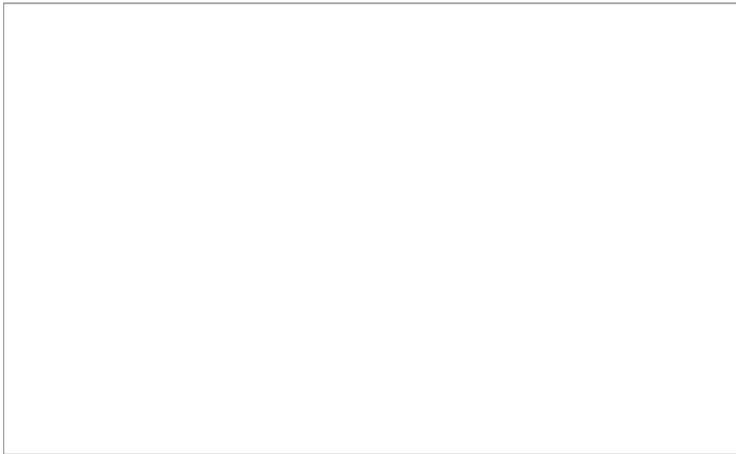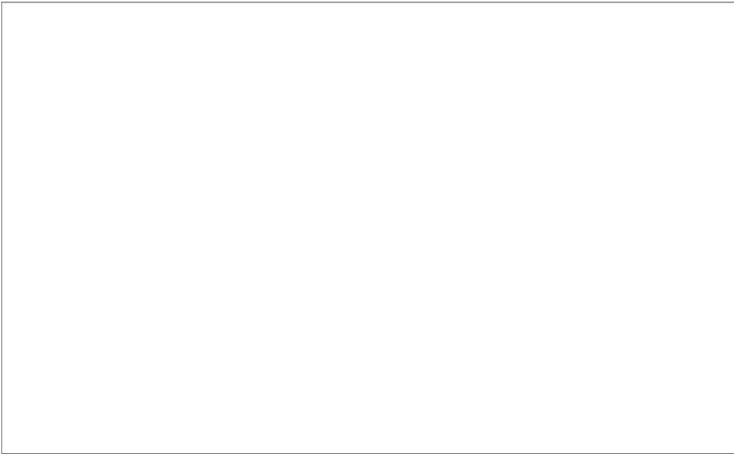
Next create two more line segments as your molding. I used .2 for the beveling the lower molding then .1 for the upper ones edge. I used Curve/Arc/Start End Direction for the curve using snap to end. Join all segments to make them one again. Then use Extrude Planar Curve. I extruded it from the center line to the center of the arch, this way you can tile it to however wide and many arches you want. Bevel the edges with .1 (I forgot to do the side edges, this would give it a look of blocks, so its up to you if want it to look like one long piece or blocks)
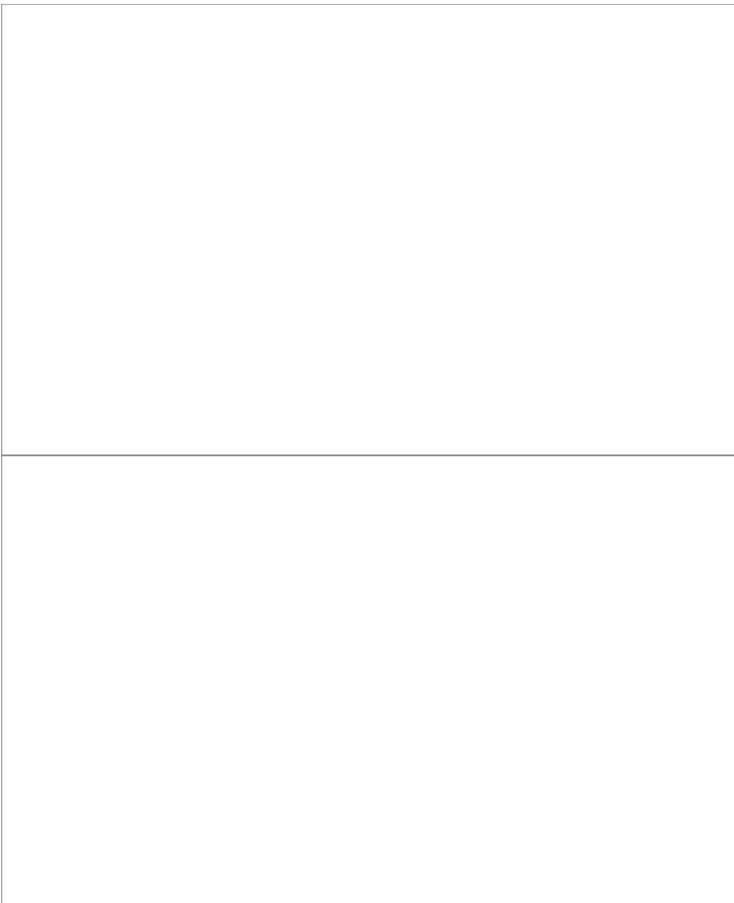
Here you see the almost final piece, back to the column.
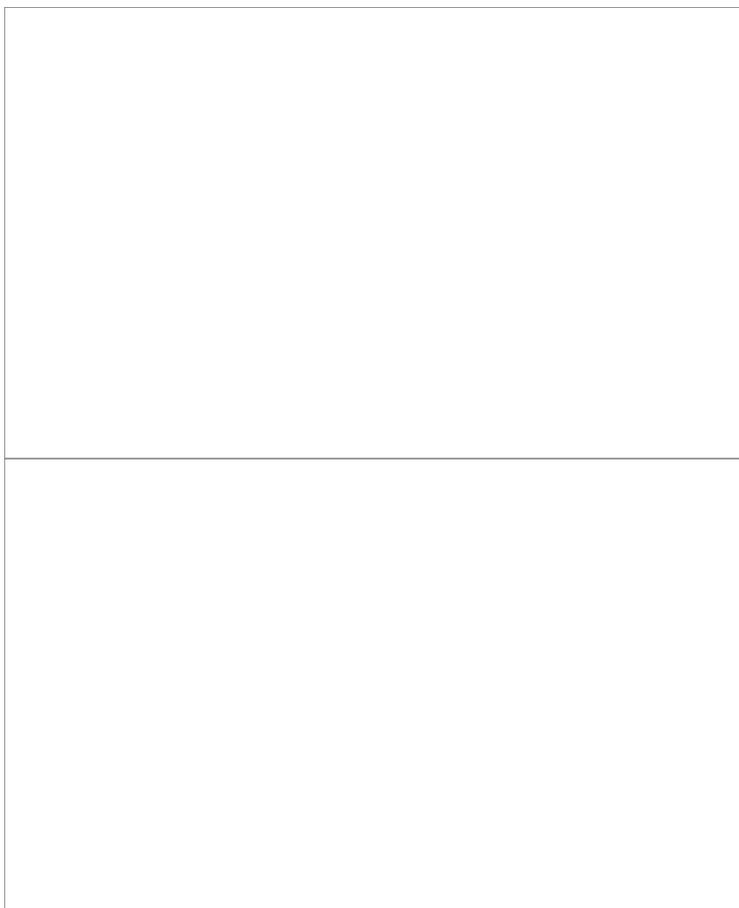
Create another full half circle a little smaller (1.5 rad).
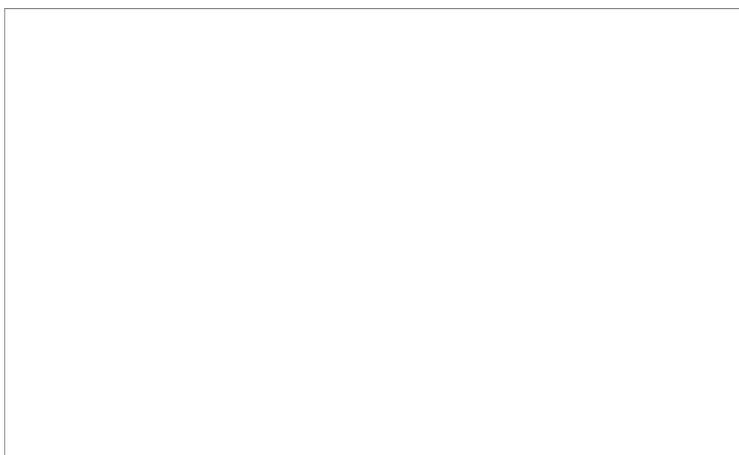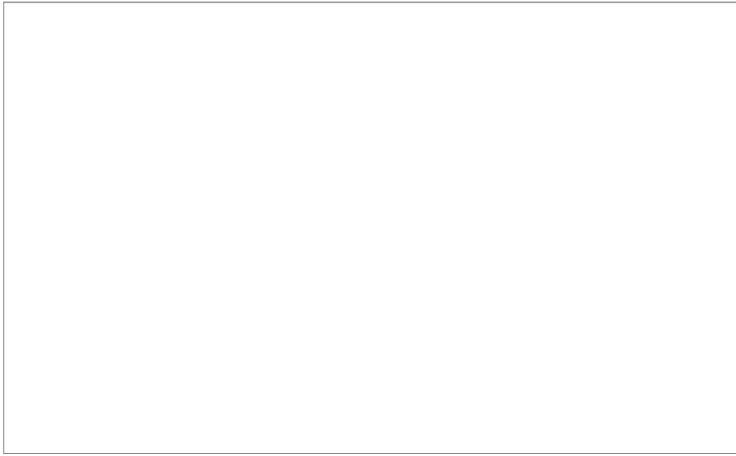
Move it to 1/2 unit from the top molding. Then use Loft.

Now in reality the Column was in segments and part of each block, they just tapered it as they carved the rock. If you want it more realistic, then after completing this page go to Segmenting.
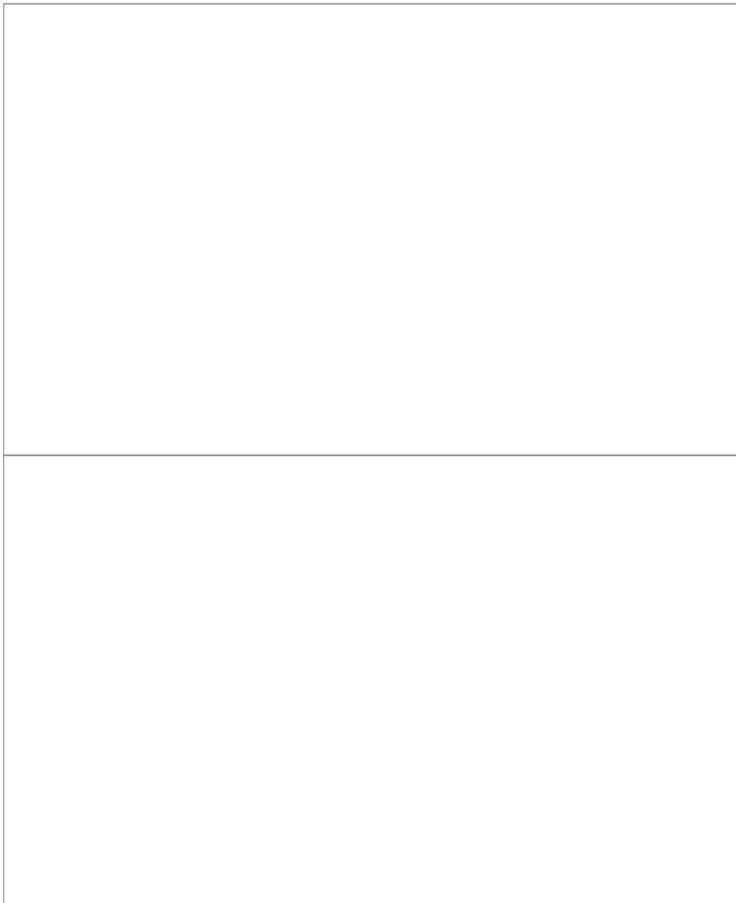
After you have created the Column create a rectangle that covers the top of the column, 3x1.5.
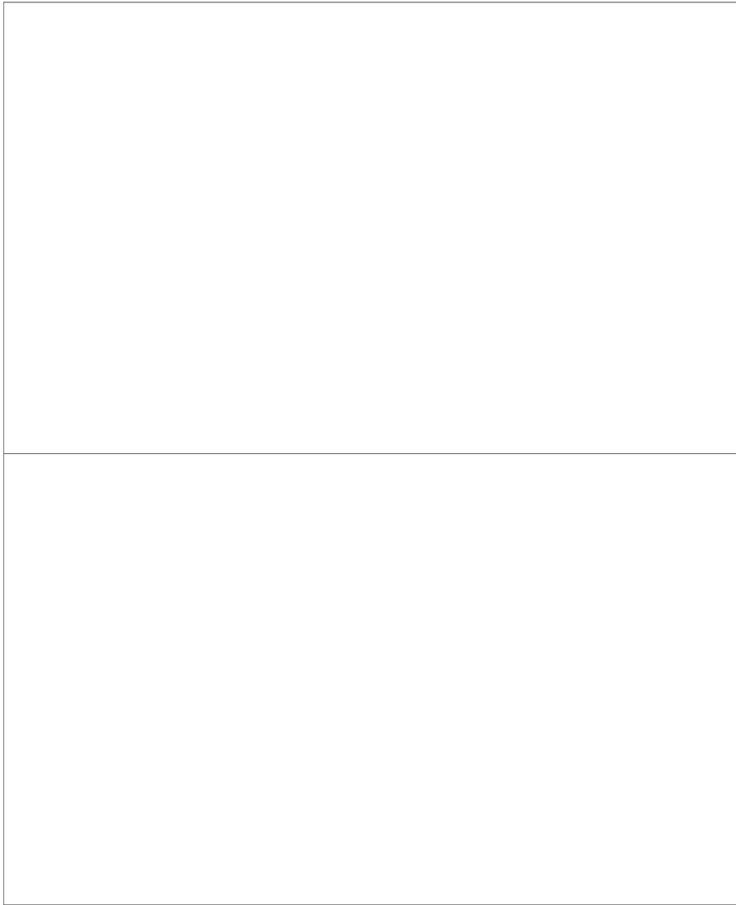
Use the Extrude Planar Curve to fit between the Molding and column. If you use -.5 in the command line it will extrude down automatically, .5 will go up. Select edges to be beveled. This piece actually doesn't need to be beveled but I did it anyway. If I did it again I don't think I would (maybe .05).
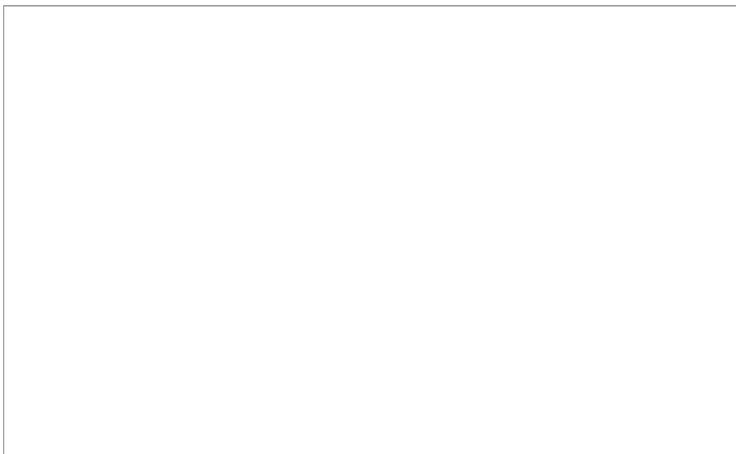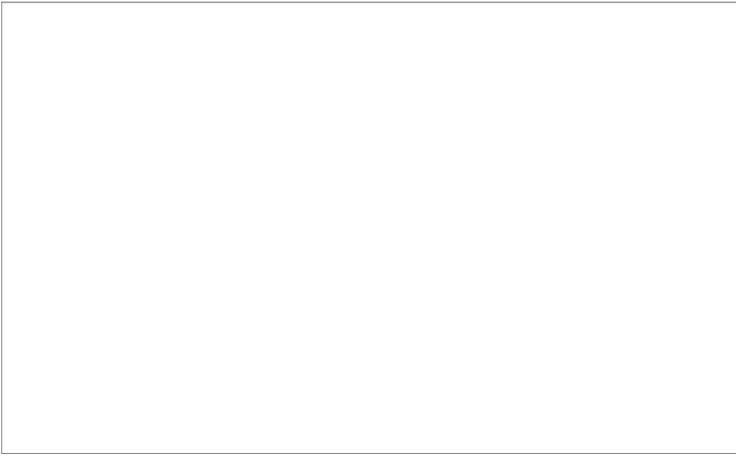
Next select all the pieces except the keystone (switch off your line segment layer) and do a mirror.
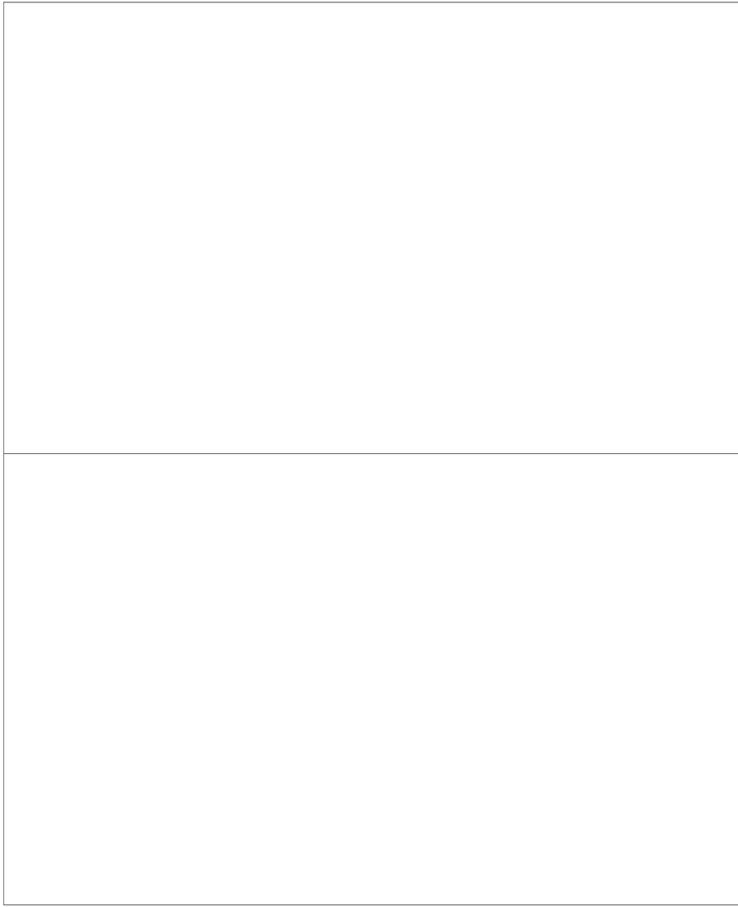
And their you have it. Join pieces together to make multiple arches.