

1. Create a bar (Filled Region) from Detail Item template, lock the left side of that bar to the "Reference Plane "Center (Left/Right)"; setup dimension parameters "Bar Length" = 9", and "Bar Width" = 3", as "Instance" Parameter Data. This filled region can be any color, and I prefer to use Invisible Lines as the boundaries.
2. Add following dimensions to that filled region: "Bar Width" (any dimension), with EQ from Reference Plane "Center (Front/Back)". Click it and in "Option" bar, under Label change it to "Bar Width". Do the same to setup "Bar Length". The bar will be flexed accordingly. Save this family as "Bar-POT".
3. Create another family "POT" from Detail Item Line Based template. Add dimension parameters "Bar\_Length" and "Bar\_Width", with values other than 0 (if the value is zero, then it will create error warnings, that's what I missed). I like to set the parameters with different names between nested families and the host family. Load family "Bar-POT" into "POT" family. Lock it to the reference planes. Click on that "Bar-POT"; then the "Bar-POT" will be shown in "Properties". On the right, some buttons will be shown. Click on the button for "Bar Length", the "Associate Family Parameter" window will be popped up, select "Bar\_Lengh", click OK; that button will have "=" added in the middle. Do the same on "Bar\_Width". Click on any place to de-select the "Bar-POT". Click on the "Family Types" icon in "Properties" panel, the "Family Types" window will be popped up, change the values to flex it to see if works.
4. Adding more parameters into this newly created "POT" family. Such as "Gap", "Increment" and group them under "Graphics"; "n" as "Integer" type of parameter under "Other" as an Instance parameter. Type Length / Increment into the Formula field for "n". I was using the following values: Length=9'-9", Gap=3", Increment=1'-0". The "n" will be turned to 10. This number 10 will be used to create the array.
5. Create a new reference plane 1'-6" from the "Left" reference plane. Create a dimension from the "Left" reference plane. Click on that dimension, in Option Bar, change the Label to "Increment"; that dimension will be changed to 1'-0".
6. Create a new reference plane 0'-6" from the "Left" reference plane. Create another dimension from the newly created reference plane to the Increment reference plane. Click on that dimension, in Option Bar, change the Label to "Gap"; that dimension will be changed to 0'-3".
7. Select that "Bar-POT" nested family, click on "Array" icon, change the number to 10, at 1'-0" increment. Now you got 10 Bars. Click on any bar, you will see something shown very quick on top of that array. Move the cursor toward that "something", you can select it and change it to "n=Length / Increment.
8. Load this "POT" into a project. In Families, select that POT, draw a line, now you can control the "Bar\_Length", "Bar\_Width" by playing with those numbers through "Type Parameters".
9. If you want to adjust the "Gap" and "Increment", then you have to repeat the steps #7 & #8 mentioned above.

I will post this POT into RevitCity, under Annotations.