



## TIP

### *Making a Custom Symbol in Chief Architect*

## INTRODUCTION

Being able to make your own symbols in Chief Architect can be very useful. Not many users take the time to learn how to do this because they believe it to be a difficult task. However, as this tip tutorial will demonstrate, making a symbol in Chief Architect is easy to do. In this tutorial, we will be creating a unique door symbol.

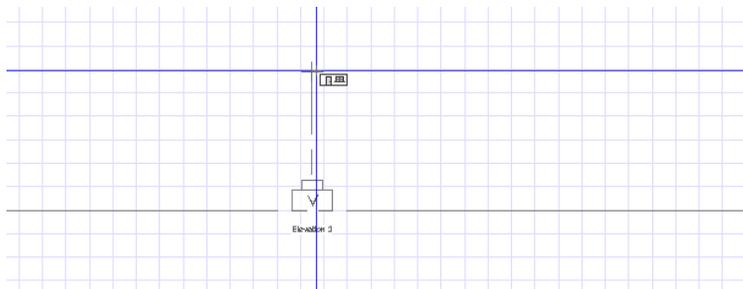
Although there are a myriad of doors that you can choose from in Chief Architect, you will more than likely run into a situation where you will need to display a special door (maybe even a one of a kind door) that your client wants in his or her new home or remodel. There are many different ways to create custom door symbols in Chief Architect. This tip will show you how to achieve this by using solids to create a custom panel door and then how to add it to your library so that you can use it in another plan(s).

## CREATING A DOOR SYMBOL

### Drawing the Shape

To create any symbol in Chief Architect you want to start with a new, blank plan file. This is because you want only the symbol to be captured when you use the **Convert to Symbol** tool.

1. If you have Chief Architect running select **File ► New Plan**. If the program is not running, then go ahead and start Chief Architect and select **New Plan** from the **Welcome to Chief Architect** splash screen. Activate  **Object Snaps**.
2. Now that you have your new plan, start by clicking the  **Cross Section/Elevation** tool button (or select **3D> Create Orthographic View> Cross Section/Elevation**). Create a cross section/elevation view.

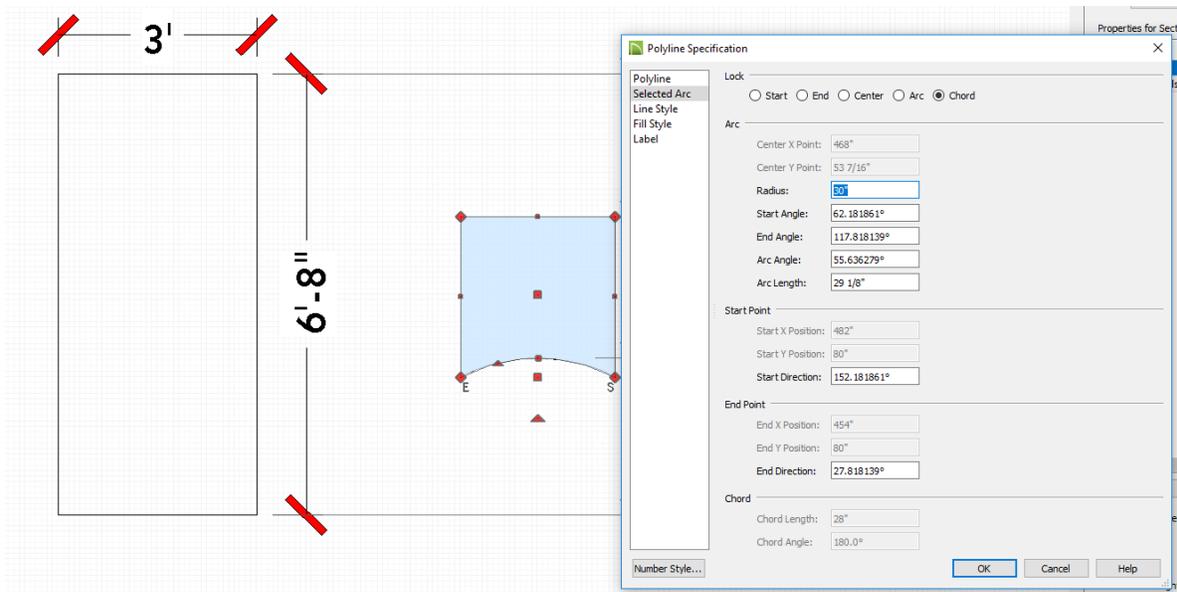


## Creating a Door Symbol

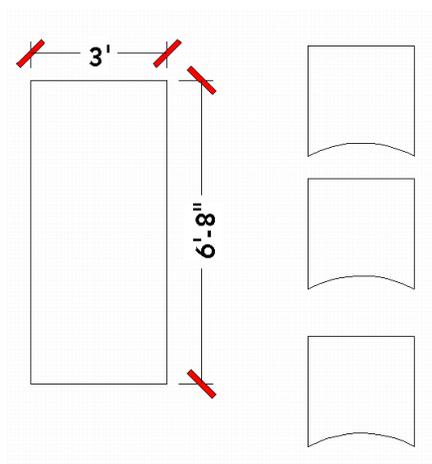
3. In this new elevation click the  **Rectangular Polyline** tool button (or select **CAD> Boxes> Rectangular Polyline**) and draw a polyline to the dimensions that you need. For my example, I will be using the dimensions **36" x 80"** (or **3' x 6'-8"**).



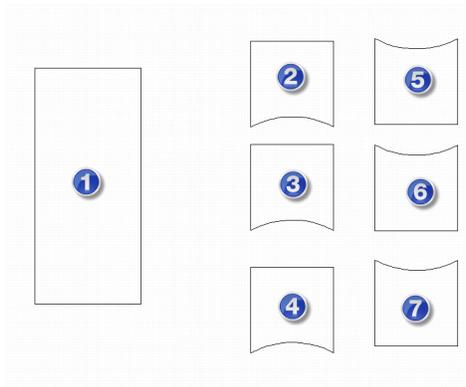
4. Place a second polyline, **28" x 29"**, next to the first polyline.
5. Select the bottom of the new polyline and click the  **Change Line/Arc** edit button. Adjust the arc to the inside. Open the arc's specification dialog and give it a **30"** radius with the **Chord** locked.



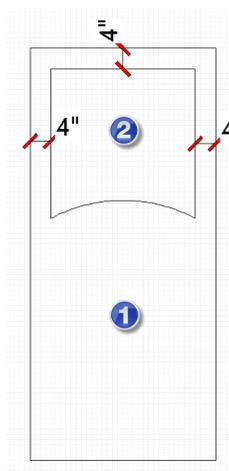
6. Make two copies of the new polyline using  **Copy/Paste** edit button.



7. Draw polyline 5 (see the following illustration), 28" x 29", next to the polyline 2 (just make a copy of polyline 2 and rotate it 180°). Make two copies, 6 and 7.

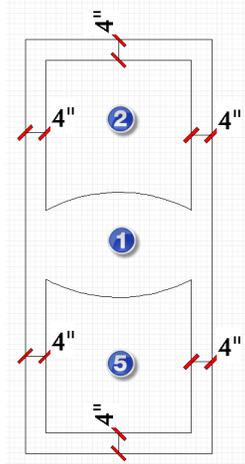


8. Move polyline 2 into the top of your door template (#1), as shown in the following illustration.

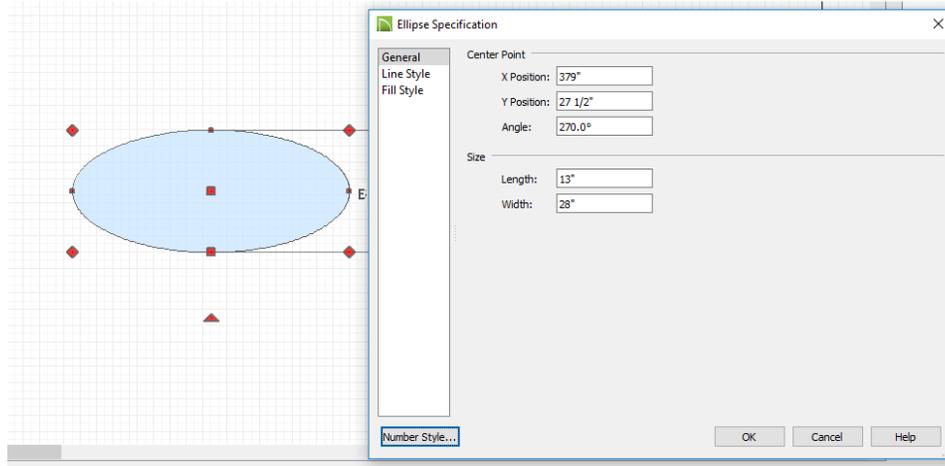


9. Move polyline 5 into the bottom of your door template (#1).

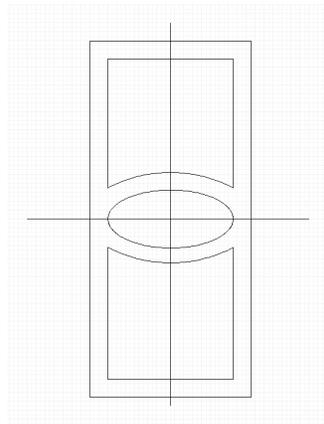
## Creating a Door Symbol



10. Using the  **Ellipse** tool draw an ellipse that is 13" in length and 28" wide. Make 2 copies.



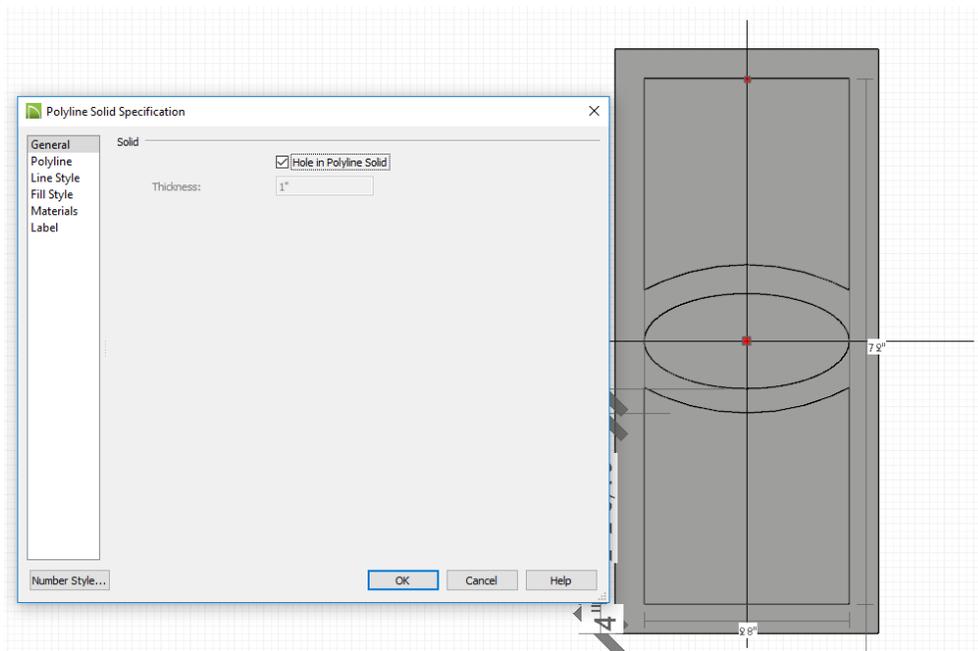
11. Using the  **Point to Point Move** edit tool, place the center of the first ellipse at the center of the door (draw lines to locate the door center).



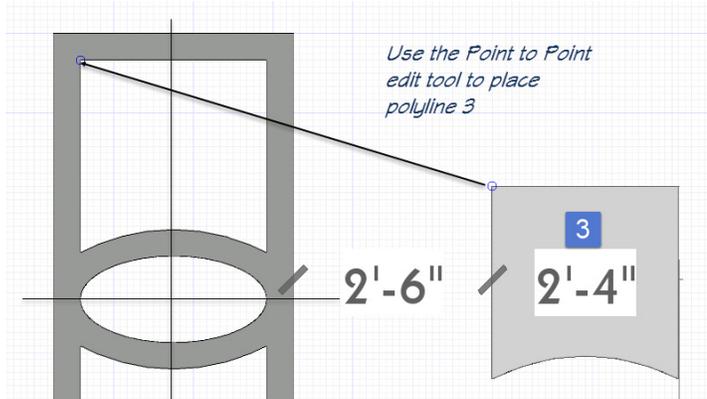
### Converting to Solids

Now that the general layout of the door panels is finished, you can begin converting the polylines into solid objects.

12. Select the door outline and click  **Convert Polyline** edit tool. The **Convert Polyline** dialog displays. Select **Polyline Solid**. Click **OK**. The **Polyline Solid Specification** dialog displays. On the **General** panel, specify a **Thickness** of **2"**. Click **OK**.
13. Group select the top and bottom polylines (polylines 2 and 5) and the ellipse and click  **Convert Polyline** to convert these into polyline solids as well. Specify these as holes in the larger door polyline solid by checking the **Hole in Polyline Solid** check box in the **Polyline Specification** dialog. Click **OK**.



14. Select polyline 3, and convert it to a polyline solid, specifying its thickness to be **1/4"** thick. Use the  **Point to Point Move** edit tool to place it in the hole created by polyline 2 at the top of the door.



## Creating a Door Symbol

15. Go to the plan view and center the  $\frac{1}{4}$ " polyline solid in the door (hint: easy to do using the  **Center Object** edit tool).

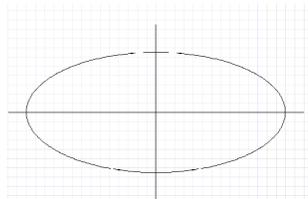


16. In the elevation view, select polyline 6, and convert it to a polyline solid, specifying its thickness to be  $\frac{1}{4}$ " thick.

Use the  **Point to Point Move** edit tool to place it in the hole created by polyline 5 at the bottom of the door.

17. Go to the plan view and center the  $\frac{1}{4}$ " polyline solid in the door.

18. In the elevation view, draw lines to locate the center of the first copy of the ellipse. Extend the lines beyond the boundaries of the ellipse.



19. Select the copy of the ellipse, and convert it to a polyline solid, specifying its thickness to be  $\frac{1}{4}$ " thick. Use the



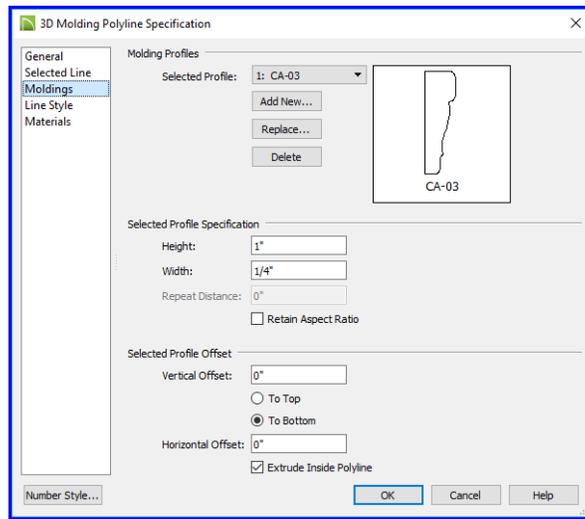
**Point to Point Move** edit tool to center it in the hole created by the first ellipse (use the lines you drew earlier to locate the center of the door). You may need to temporarily disable the **Midpoint** snap to display the **Intersections** snap.

20. Go to the plan view and center the  $\frac{1}{4}$ " polyline solid in the door.

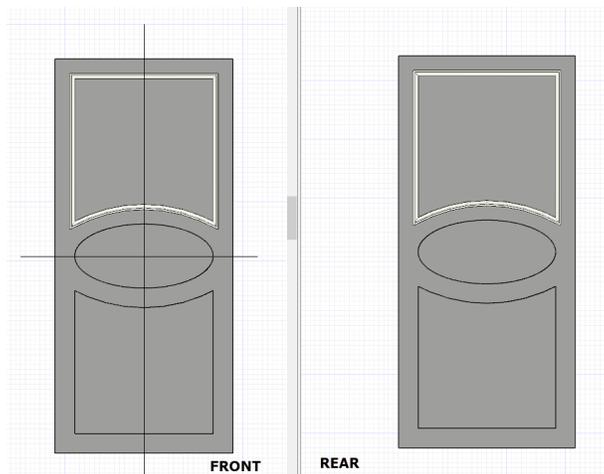
## Finishing the Panels

We can now finish the door by adding the trim to the panels.

21. In the elevation view, select the polyline 4 and click the  **Convert Polyline** button. Select **3D Molding Polyline** and click **OK**. The **3D Molding Polyline Specification** dialog displays. Go to the **Moldings** panel. Assign a different molding profile by clicking **Replace**. In this example I will be using profile **CA-03** and making it **1"** high and  **$\frac{1}{4}$ "** wide. Click **OK**. Make a copy of the 3D Molding Polyline.

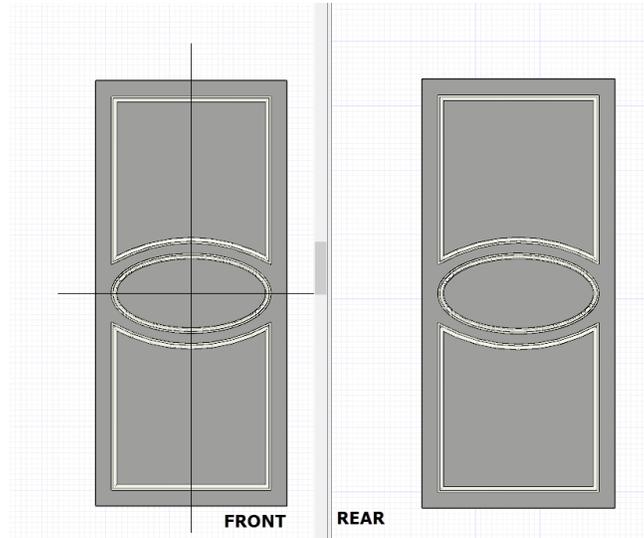


22. Return to plan view and draw a selection marquee around the new 3D molding polyline using the  **Select Objects** tool.
23. Move the molding into place and line it up to the outer front edge of the door. Align the copy to the outer rear edge of the door.
24. Take an elevation view of the rear of the door.
25. In both the front and rear elevation view, use the  **Point to Point Move** edit tool move the 3D Molding Polyline into place. If the molding profile ends up facing the door, you will need to use the  **Reflect About Object** edit tool to turn the profile to the outside (**Hint:** Draw a vertical line outside the door, select the molding profile and click the edit tool. Place the axis line over the line you drew and then click the mouse button. Move the molding profile back into place on the door).



26. Follow the same procedure to create and place a 3d molding polyline for the panel at the bottom of the door and for the ellipse.

## Creating a Door Symbol

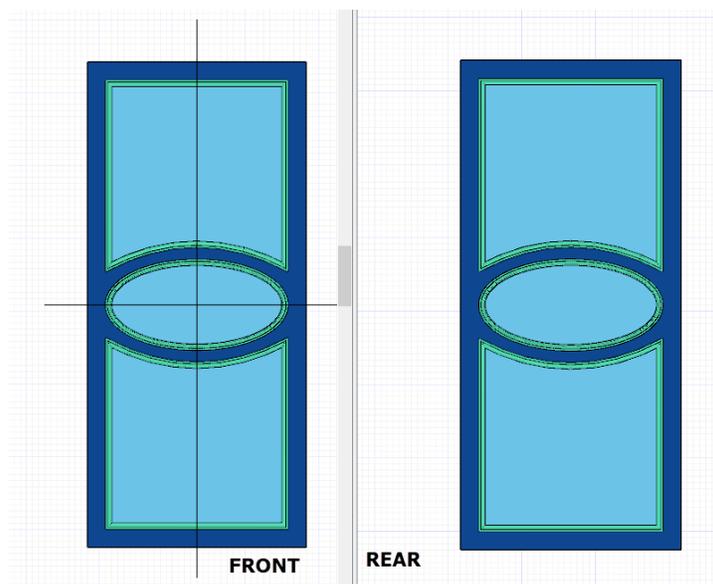


### Converting to a Door

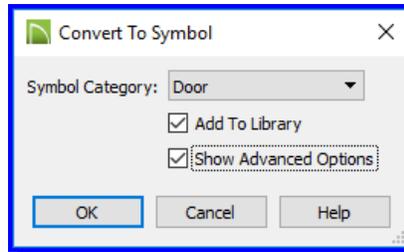
Now that the door is built, we are ready to convert it to a symbol and add it to the library. But first, we should assign some materials to the door. In this example I will be using some generic blues and greens to serve as place holders for the different components.

If all the pieces of the door are left with their default material, you will not be able to customize the materials fully as you might wish later on.

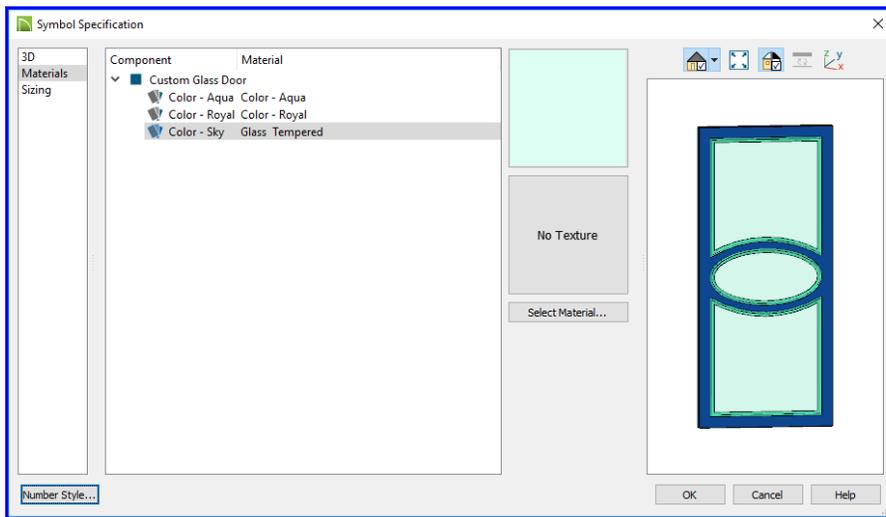
27. Go to the front elevation view, and click the  **Material Painter** tool button and select a material of your choosing.
28. Apply a different material to the trim, panels, and door as shown in the example below. Do the same for the other side of the door. You will find it helpful to tile both the front and rear elevation views.



29. Close the **Elevation** views and click the  **Perspective Full Overview** tool button (**3D> Create Perspective View> Full Overview**).
30. Within the **Full Overview**, select **Tools> Symbol> Convert to Symbol**. The **Convert To Symbol** dialog displays. For **Symbol Category**, select **Door** from the drop-down list. Check **Add To Library** and check **Show Advanced Options**. Click **OK**.



31. The **Symbol Specification** dialog displays. Go to the **3D** panel and specify the **Symbol Name** that you want displayed in the **Library Browser**.
32. You can customize and rename the materials on the **Materials** panel. Click **OK** to finish adding the door to your library.



Do you have a different way of developing a symbol in Chief Architect? Do you have a symbol that you have developed that you would like to share with other users?