

Using 3D Molding Polylines

Reference Number: **KB-02882**

Last Modified: **July 16, 2021**

The information in this article applies to:



QUESTION

What are 3D Molding Polylines and how can they be used?

ANSWER



The 3D Molding Polyline tool is much like the normal Molding Polyline tool but more flexible. A molding polyline must be drawn in plan view, so one advantage of 3D molding polylines is that you can draw them in elevation or section views and create vertical moldings. Another advantage of 3D molding polylines is that they do not have to be coplanar, meaning that a given edge can go in any direction in all three dimensions.

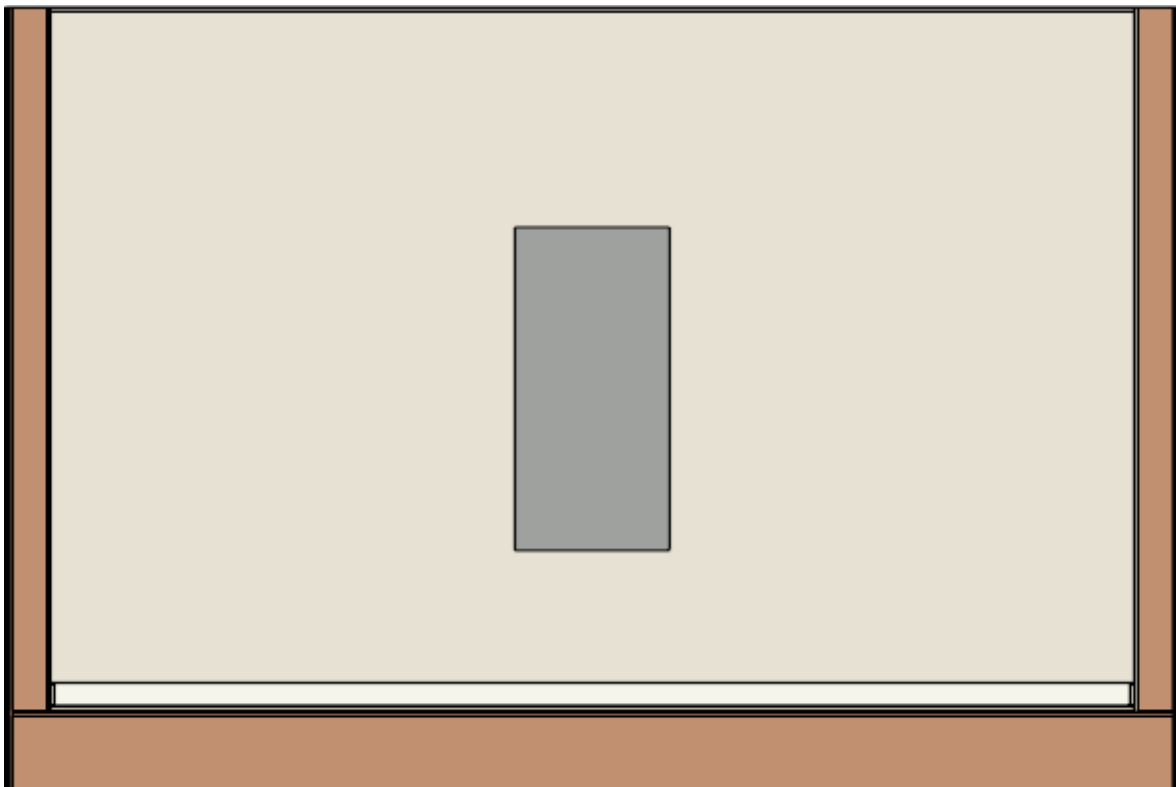
The following image illustrates three objects; each derived from a similar shape using a polyline solid (left), a molding polyline (center), and a 3D molding polyline (right):





In this article, an oblong mirror will be created, and a custom frame will be generated using a 3D molding polyline.

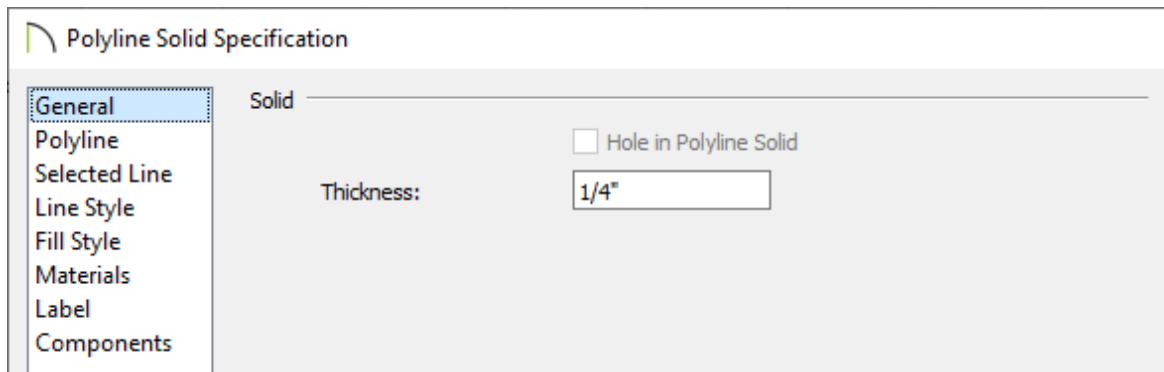
To create the mirror

1. Navigate to **3D> Create Orthographic View> Cross Section/Elevation**  from the menu, then click and drag towards the wall that will have the mirror.
2. Select **Build> Primitive> Polyline Solid** , then click and drag to create a rectangular polyline solid.





In this example the polyline solid is 2' by 4' in size.

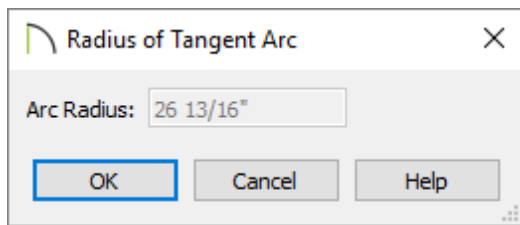
3. Using the **Select Objects**  tool, click on the polyline solid to select it, then click the **Open Object**  edit tool.
4. In the **Polyline Solid Specification** dialog that displays next:



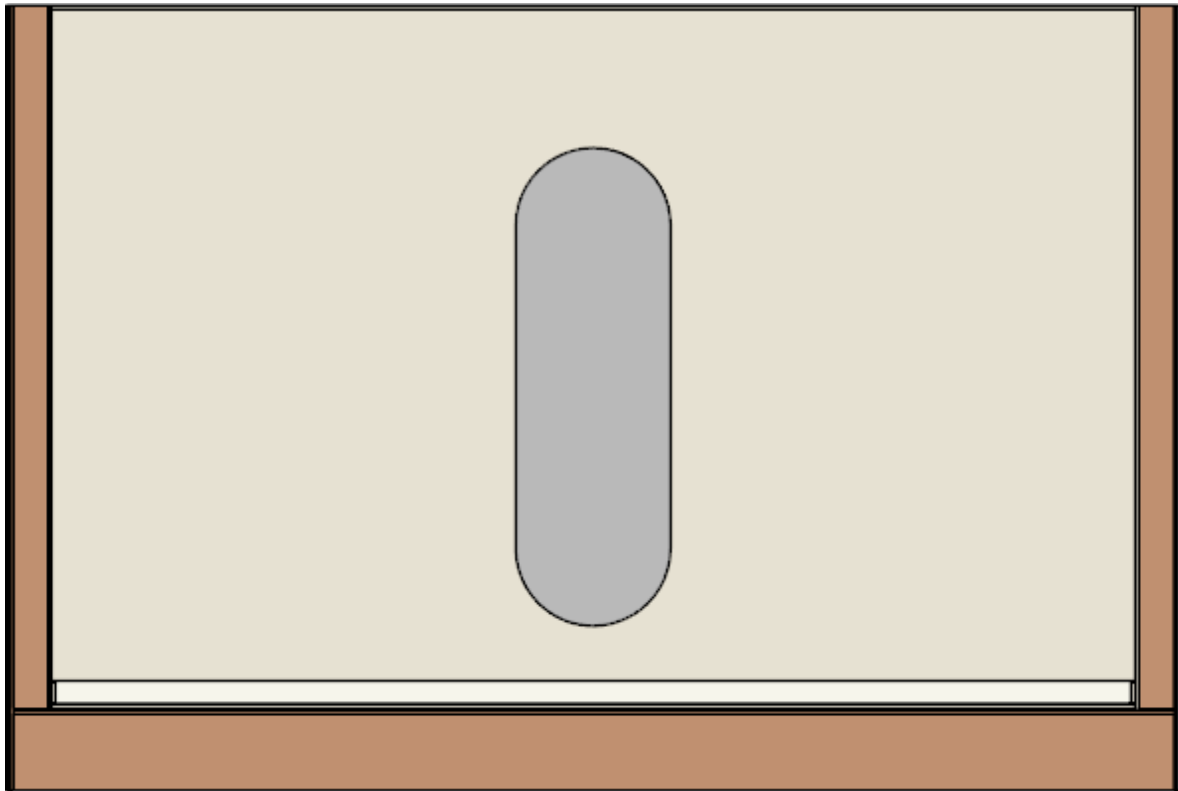
- On the **GENERAL** panel, set the Thickness to 1/4".
 - On the **MATERIALS** panel, select the **Polyline Solid** component and click the **Select Material** button. Browse to or search for a "Mirror" material, select it, then click **OK**.
 - Click **OK** again to close the dialog and confirm the changes.
5. With the polyline solid still selected, click on the upper edge to make this the active edge.

The edge of a polyline based object that has the largest edit handle is the active side. All other sides will have smaller edit handles.





6. Select the **Change Line/Arc**  edit tool to convert the upper edge to an arc.
7. Click the **Make Arc Tangent**  edit tool. In the **Radius of Tangent Arc** dialog that appears, click **OK**.



8. Repeat steps 6-7 for the lower edge



To create the frame using a 3D molding polyline

1. Using the **Select Objects**  tool, select the polyline solid, then navigate to **Edit> Copy and Paste in Place** .
2. With the new, copied polyline solid selected, click **Convert to Plain Polyline**  edit tool.
3. Next, click the **Convert Polyline**  edit tool.
4. In the **Convert Polyline** dialog that displays, choose the **3D Molding Polyline** option

and click **OK**.

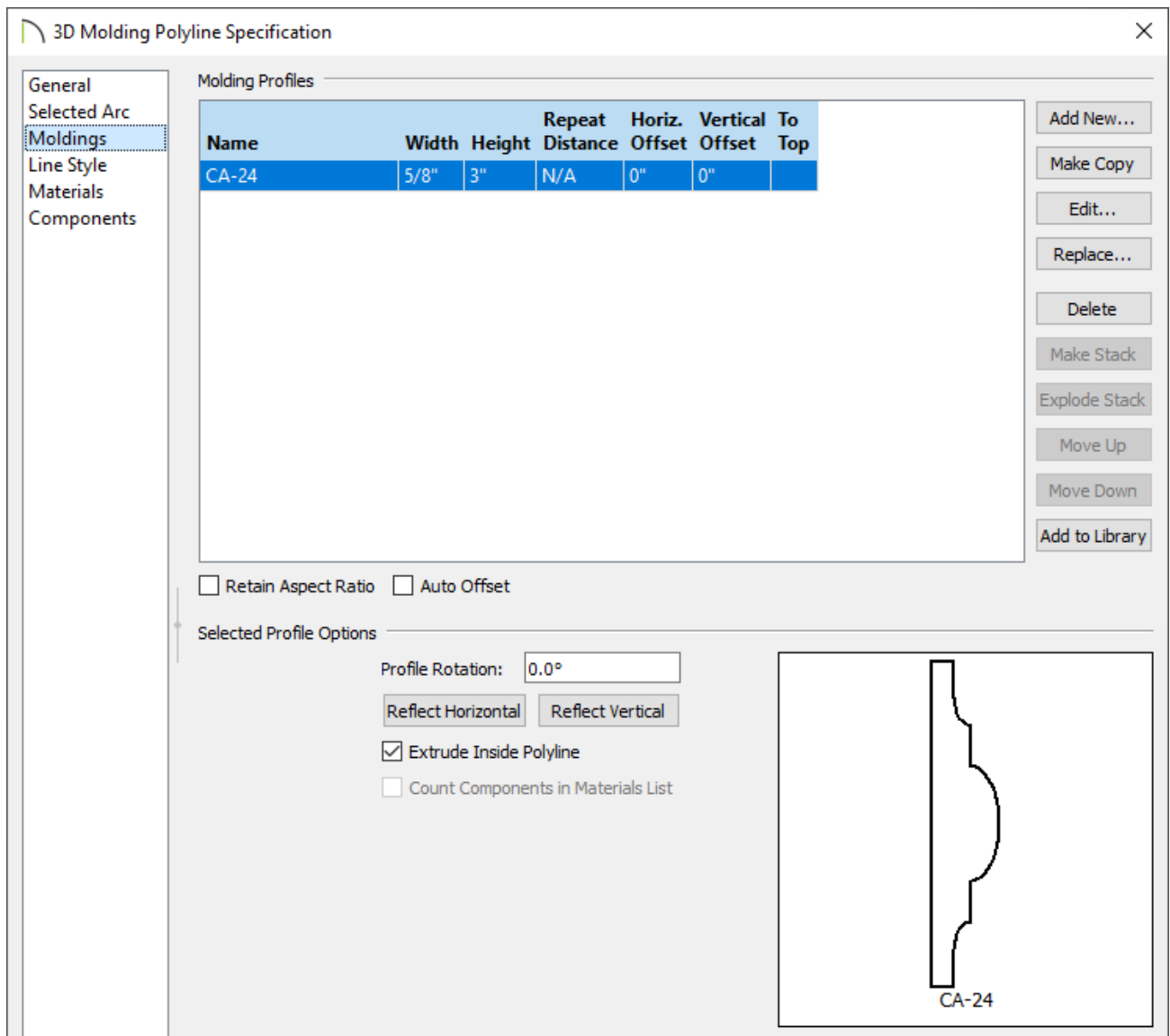
The image shows a software dialog box titled "Convert Polyline". It has a close button (X) in the top right corner. The dialog is organized into several sections, each with a horizontal line separator:

- Architectural**: Contains radio buttons for Slab, Slab with Footing, Hole in Ceiling Platform, Trey Ceiling, Hole in Floor Platform, Landing, Hole in Roof / Custom Ceiling, Polyline Solid, Countertop, Solid Hole, and Backsplash.
- Moldings**: Contains radio buttons for Molding Polyline and **3D Molding Polyline** (which is selected and highlighted by a mouse cursor).
- Terrain**: Contains radio buttons for Elevation Line, Terrain Break, Garden Bed, Terrain Feature, Sprinkler Line, and Terrain Perimeter.
- Roads**: Contains radio buttons for Road (Center Line), Road Median, Road (Perimeter), Sidewalk (Center Line), Road Stripe (Center Line), Sidewalk (Perimeter), and Road Marking (Perimeter).
- Other**: Contains radio buttons for Polyline Distribution Path, Polyline Distribution Region, Material Region, Materials List Polyline, Revision Cloud, Rope Light, and Walkthrough Path.
- Layer Options for Converted Object**: Contains three options: "Default Layer for Converted Object Type (Moldings)" (selected with a radio button), "Same Layer as Original Object (CAD, Default)" (radio button), and "Specify Layer:" (radio button). The "Specify Layer:" option has a dropdown menu showing "CAD, Default" and a "Define..." button next to it.

At the bottom of the dialog are three buttons: "OK", "Cancel", and "Help".

Note: 3D molding polylines can also be created by navigating to Build> Trim> 3D Molding Polyline, then clicking and dragging in your desired view.

5. In the **3D Molding Polyline Specification** dialog which opens next, click on the **MOLDINGS** panel.



- Notice that a square molding profile is already chosen. Click **Replace** and browse to a more appropriate molding.

In this example, the CA-24 chair rail profile is used.

- Set the **Width** and **Height** of the molding to be the thickness and depth of the frame desired for the mirror.

In this example, the Width is set to 5/8" and the Height is set to 3".

- Specify any other properties such as the profile's rotation and offset.

The ability to reflect a molding profile is not available in X12 and prior versions.

- Select the **MATERIALS** panel to choose an appropriate material for the molding profile, then click **OK** to close the dialog and confirm the changes.

7. Take a **Camera**  view to see the results.



Consider blocking the polyline solid and the 3D molding polyline together so the mirror is treated as a single entity. To learn more, please see the "Creating an Architectural Block" resource in the [Related Articles](#) section below.

Related Articles

[Creating an Architectural Block](https://www.homedesignersoftware.com/support/article/KB-00191/creating-an-architectural-block.html)

[\(https://www.homedesignersoftware.com/support/article/KB-00191/creating-an-architectural-block.html\)](https://www.homedesignersoftware.com/support/article/KB-00191/creating-an-architectural-block.html)

[Creating an In-ground Swimming Pool \(/support/article/KB-00773/creating-an-in-ground-swimming-pool.html\)](/support/article/KB-00773/creating-an-in-ground-swimming-pool.html)

[Creating and Editing Molding Profiles \(/support/article/KB-00166/creating-and-editing-molding-profiles.html\)](/support/article/KB-00166/creating-and-editing-molding-profiles.html)

[Generating 3D Ductwork \(/support/article/KB-02840/generating-3d-ductwork.html\)](/support/article/KB-02840/generating-3d-ductwork.html)

[Modeling Custom 3D Objects \(/support/article/KB-00761/modeling-custom-3d-objects.html\)](/support/article/KB-00761/modeling-custom-3d-objects.html)

[Using Molding Polylines to Create a Custom Column \(/support/article/KB-02791/using-molding-polylines-to-create-a-custom-column.html\)](/support/article/KB-02791/using-molding-polylines-to-create-a-custom-column.html)

[Using Polyline Solids \(/support/article/KB-02925/using-polyline-solids.html\)](/support/article/KB-02925/using-polyline-solids.html)



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