

Using the Extrude Object Edit Tool

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QUESTION

How do I use the Extrude Object edit tool to turn a Face object into a 3D solid?




ANSWER

The Extrude Object edit tool can be useful for creating a solid object instantly from a 2-dimensional face object. Faces are two-sided, can display in 3D views, and can be used to create custom solid objects.

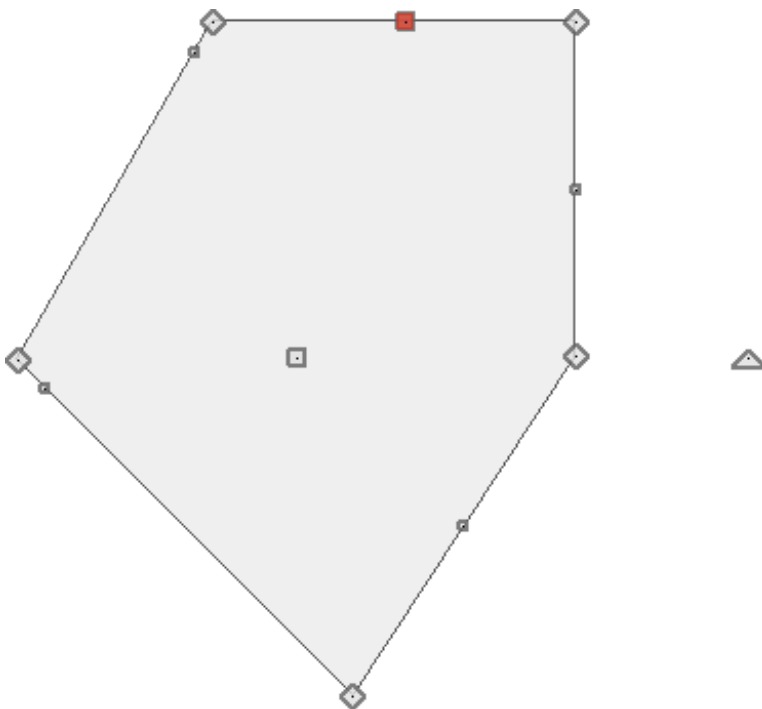
For the purposes of this example, we will start by drawing a face in the 2D floor plan view, however, faces can also be drawn in Cross Section/Elevation views. We will then extrude the face to create a basalt column.

To create the face

1. Select **Build> Primitive> Face** , move your mouse in to the drawing area, then click, drag and release the mouse button to draw the first edge.
2. Click to define the endpoints of additional edges, then click at the original starting point to finish drawing.



Note: A Face must have at least three edges.

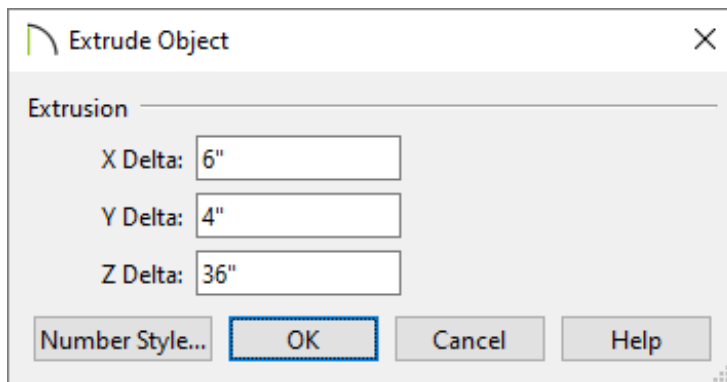
If you are having trouble clicking at the original starting point, you may have disabled Endpoint snapping. To toggle it back on, select Edit> Snap Settings> Endpoint. A small checkmark will display on the icon when this feature is enabled.



3. Once drawn, Faces can be then be extruded to create solid objects.

To extrude the face

1. Using the **Select Objects**  tool, select the newly created face.
2. Click on the **Extrude Object**  edit tool.
3. In the **Extrude Object** dialog:



- Set the **X Delta**.

In this example, this value was set to 6", which will offset the extruded surface 6" to the right, relative to your plan view.


- Set the **Y Delta**.

In this example, this value was set to 4", which will offset the extruded surface 4" up, relative to your plan view.

- Set the **Z Delta**.

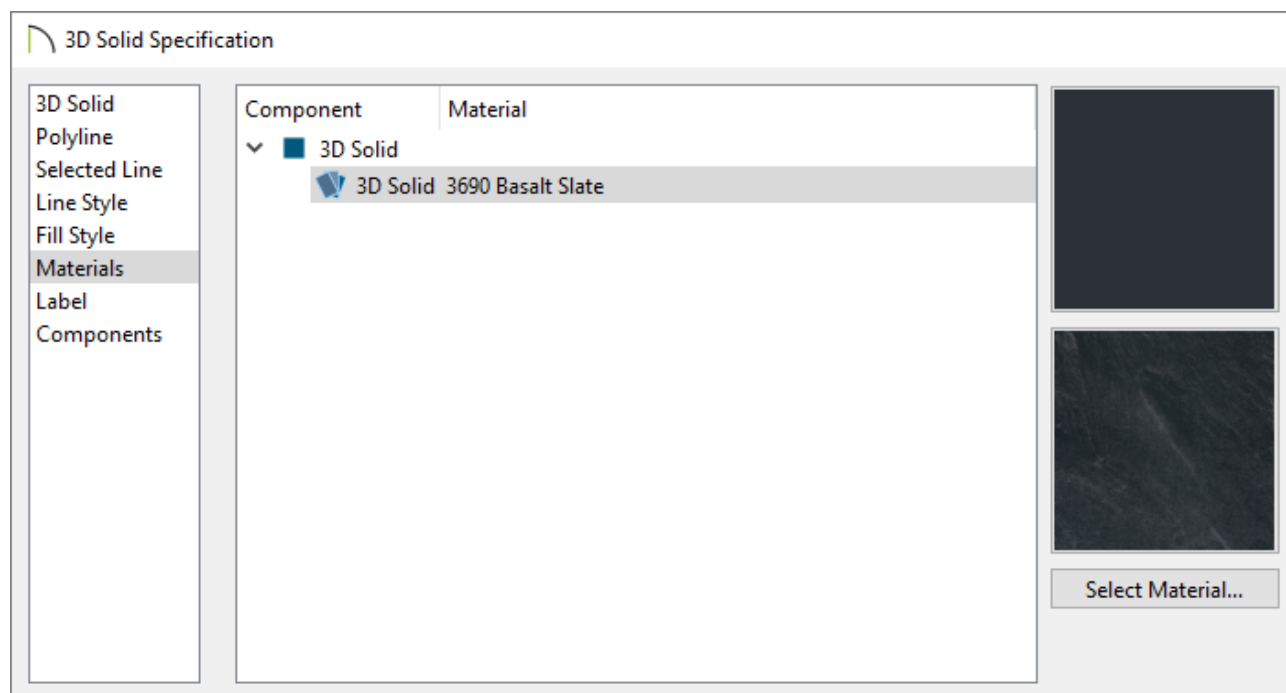
In this example, this value was set to 36". This determines the vertical distance of the extrusion, setting the height of the shape in this example.

- Click **OK**.

4. Select the newly created shape and click on the **Open Object**  edit tool to display the **Shape Specification** dialog, where you can access the **MATERIALS** panel and

choose an appropriate material, then click **OK** to apply the change.

For the purposes of this example, we browsed to the Manufacturer Catalogs> Formica> Formica Brand Laminate> Honed Finish> 3690 Basalt Slate.



If you have created another type of primitive, such as a Box or Pyramid, you can also choose the Explode Shape edit tool in order to convert its sides into individual faces, which can then be extruded to create a wide variety of different types of objects.


Often you can use these tools in combination with the Solid Union, Intersection, and Subtraction edit tools to create almost any type of custom shape desired. These shapes can then be converted into 3D symbols, such as fixtures or furnishings, for use in future plans. To learn more, see the [Related Articles](#) section below.

Related Articles

- [Beveling the Top of a Concrete Column \(/support/article/KB-00796/beveling-the-top-of-a-concrete-column.html\)](/support/article/KB-00796/beveling-the-top-of-a-concrete-column.html)
- [Converting an Object into a Symbol \(/support/article/KB-00809/converting-an-object-into-a-symbol.html\)](/support/article/KB-00809/converting-an-object-into-a-symbol.html)
- [Locating and Importing 3D Symbols \(/support/article/KB-00117/locating-and-importing-3d-symbols.html\)](/support/article/KB-00117/locating-and-importing-3d-symbols.html)
- [Modeling Custom 3D Objects \(/support/article/KB-00761/modeling-custom-3d-](/support/article/KB-00761/modeling-custom-3d-)



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