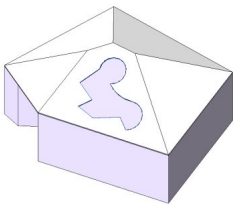


**Please Note:** If you're new to Revit, you may be interested in my "[Beginner's Guide to Revit Architecture](#)" **84 part video tutorial training course**

. The course is 100% free with no catches or exclusions. You don't even need to sign-up. Just enjoy the course and drop me line if you found it useful. The [full course itinerary can be viewed here](#)

In this article we are going to look at the Revit Architecture tool "**Openings: By Face**". We will see where the tool is located, how it is used (with a quick step-by-step example) and then finally talk about some situations in which you may need to use this tool.



The "Openings: By Face" tool can be found on the "**Home**" menus, in the "**Openings**" tab....



Now before we go any further I think it is worth pointing out now that the “**Openings: By Face**” tool can only be used on a select number of element types. And these are...

**-Roofs**

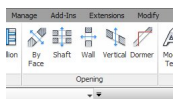
**-Floors**

**-Ceilings**

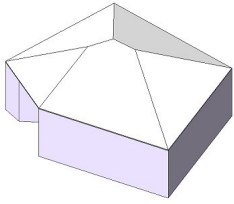
**-Beams**

**-Columns**

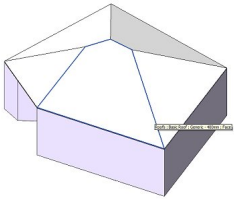
If you need to make an opening in another type of element, you will have to use one of the other Opening tools, all of which we cover in separate articles.



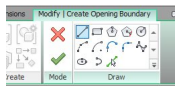
OK. Let's just dive in and use the tool to make an opening in a roof. Here is a quirky little building I have modelled, just for the sake of this example.....



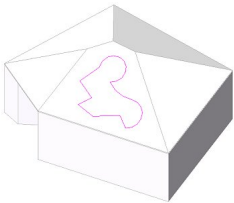
Let's go ahead and stick an Opening in to one of the roof planes. First of all I select the tool itself. Upon doing this Revit now needs me to specify the face that I want to form the opening in. I do this simply by hovering over the boundary edge of the roof plane. In the image below you will see the boundary is highlighted as I hover over it....



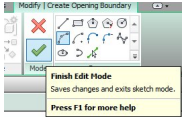
If this is the face I want, I go ahead and select it. Upon doing so, I am now in "**Sketch Mode**" where I can simply draft out the boundary of my opening. You will notice the menu bar has changed accordingly- presenting me with all the tools I need to sketch the perimeter of my opening.....



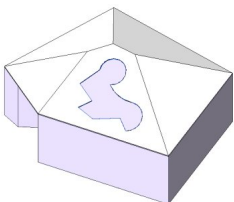
As my building is quirky, I am going to create an equally quirky Opening! This also demonstrates that you can create any opening shape you require. Here is the completed sketch of the opening boundary.....



With my boundary sketch complete, I can now simply tell Revit that I am ready for it to produce the Opening. I do this by clicking on the “green tick” (the standard method of completing the “Sketch Mode” part of element creation)...



And sure enough, our Opening is instantly created.....



And so the “Opening By Face” tool is as easy as that. Just a few things to note about this tool. The Openings you form are elements in their own right. You can verify this yourself by just hovering your cursor over the boundary of the opening- you will see it highlights, ready for

selection. If you select the opening and delete it- the roof (or whatever element you formed the opening in) is repaired. Also: Openings do not contain their own Phase parameters- they take on the Phase of the element they are created in.

So when would you use this tool? The obvious answer is every time you need to create an opening! But it is particularly useful for cutting elements where you need service runs to pass through- through the web of structural beams is a good example.