

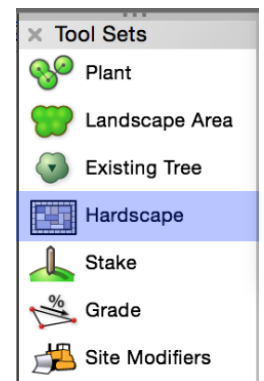
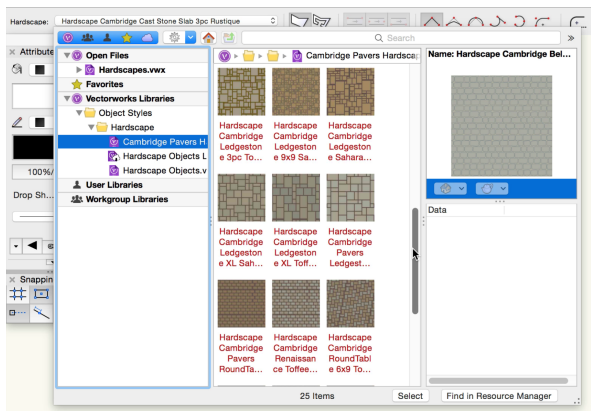
SITE DESIGN

CREATING HARDSCAPES

In this chapter, we will discuss how to create various types of Hardscape objects. Using both the Hardscape tool, its modes, as well as the Create Objects from Shapes command.



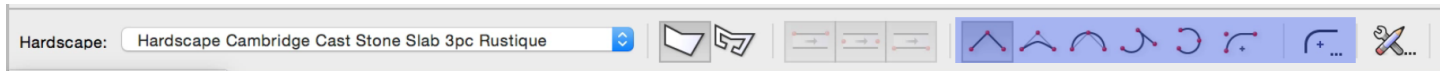
We'll begin by using the Hardscape tool directly, to create a Hardscape object. The Hardscape tool is located in the Site Planning Tool Set. This tool has multiple modes in the Tool Bar.



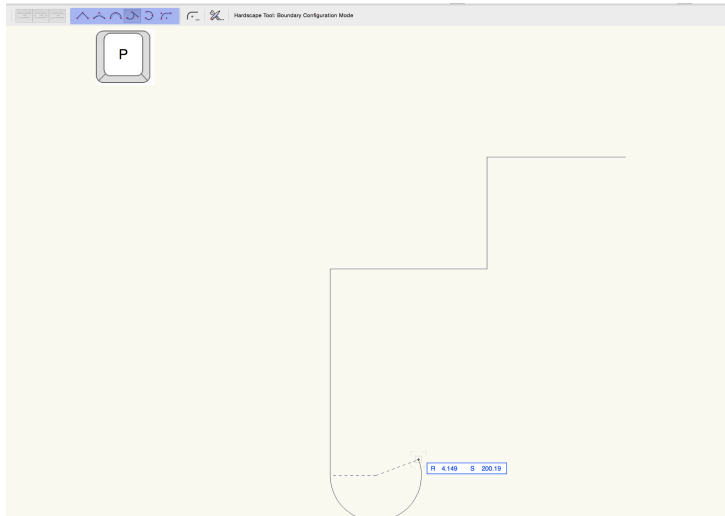
First, there is an option to choose a predefined Hardscape Style. Using the Resource Selector, a Hardscape Style resource can be selected from either one of the Vectorworks Library files or a custom library file. We'll cover this option in more detail, in another chapter.



Next up in the Tool Bar, we have two different configuration modes. Hardscapes can be drawn using a Boundary or Pathway Configuration. The Boundary Configuration mode defines an area for the Hardscape. Using these polyline modes, both corner and various curved vertices can be created. If you are not familiar with the polyline tool and its modes, stop here and go through the Freeform Modeling guide. This mode is great for creating non-linear hardscapes, such as plazas, courtyards, patios, and pool decks.

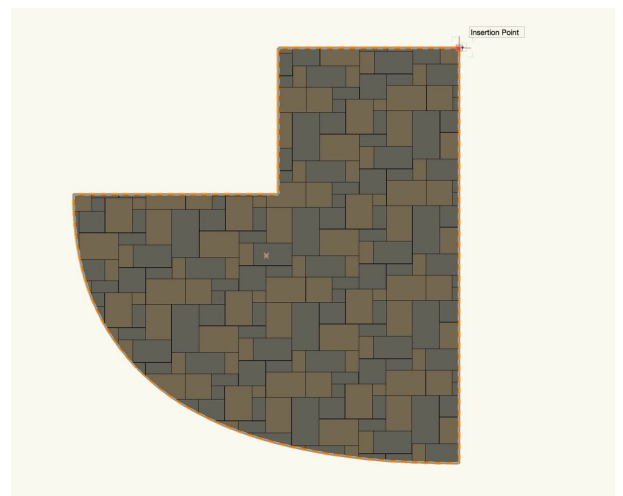


Let's quickly review how this mode works, The Boundary Configuration mode follows all of the same rules as the Polyline tool. This uses a continuous clicking behavior.



Click once to start the first segment. Click again to end the segment and begin the next. Continue clicking to create additional segments. Changing vertex modes in the Tool Bar, will create different curved vertices. You can also use the P key on your keyboard to quickly switch between vertex modes.

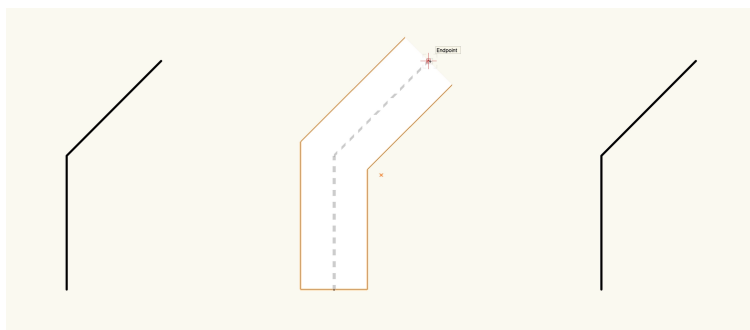
To complete the boundary, either click once back at the starting point, to create a closed shape or double click to create an open shape.



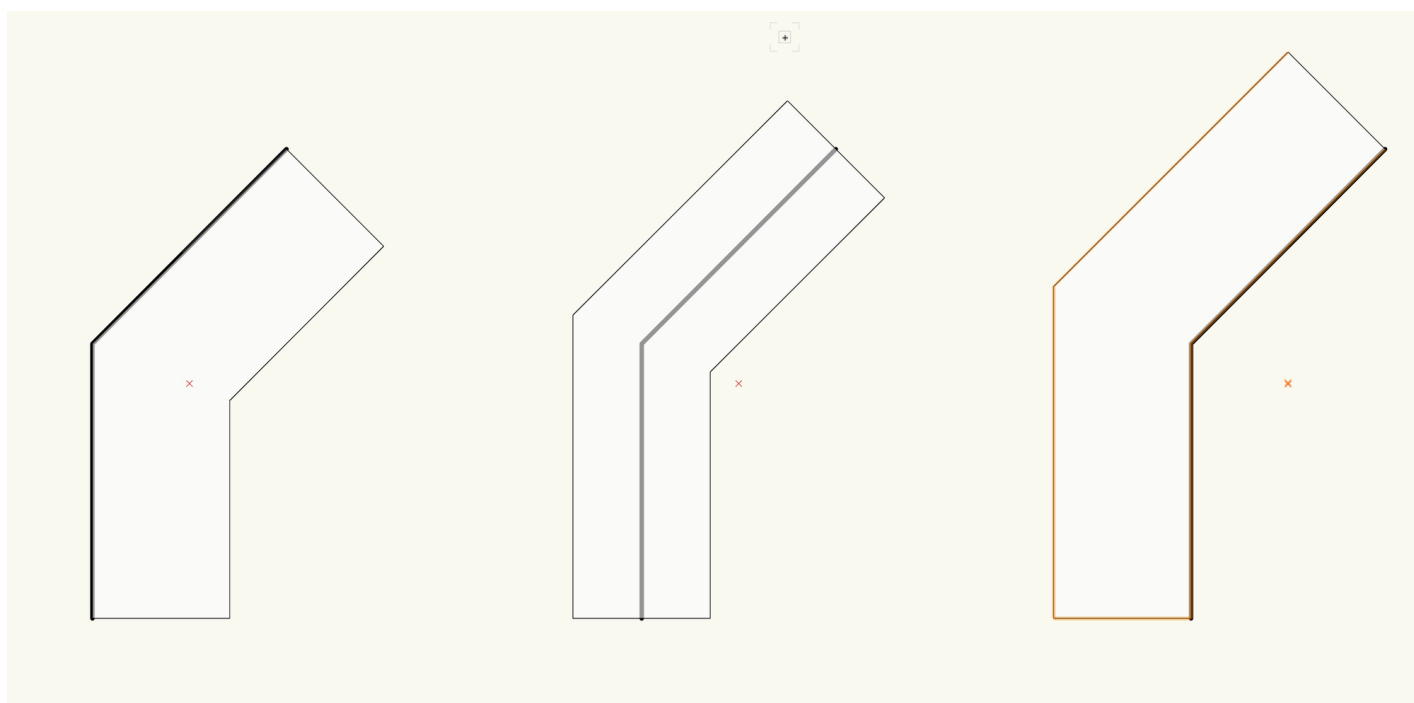
The Pathway configuration mode creates a Hardscape pathway based off a polyline path. This is great for paved walkways, sidewalks, bike trails, and garden paths. The Pathway configuration uses the next three Pathway Edge modes in addition to the polyline vertex modes.



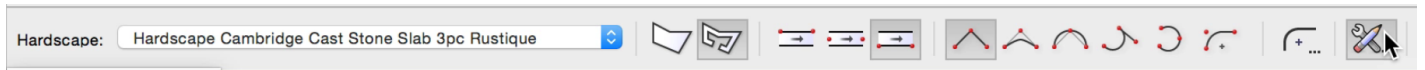
The Pathway Edge modes allow the path to define the left, center, or right edge of the pathway. Using the Pathway Center Edge mode will align the drawn path to the center of the Pathway Hardscape.



The Pathway Left Edge mode, aligns the drawn path to the left edge of the Hardscape and the Pathway Right Edge mode, aligns the path with the right edge of the Hardscape.

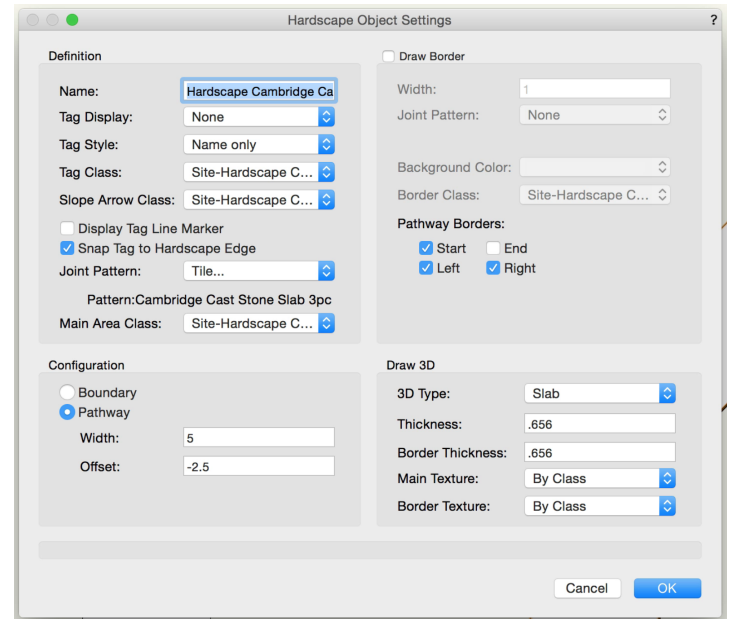


These alignment modes make it easy to align a pathway Hardscape with other landscape and architectural elements, such as buildings, other hardscapes, roads, or planting areas.



The last option in the Tool Bar for the Hardscape tool is the Hardscape Tool Preferences. Again, this wrench and pencil icon is the universal icon in Vectorworks for preferences or settings.

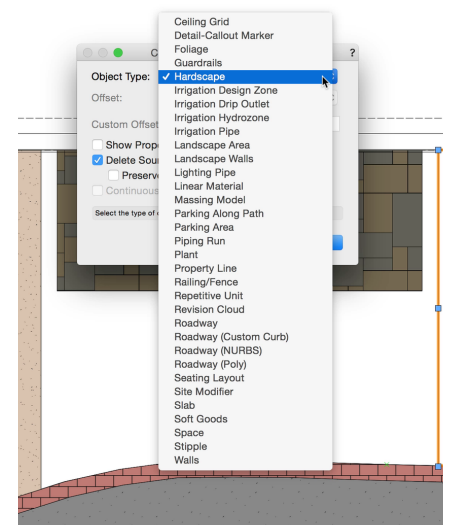
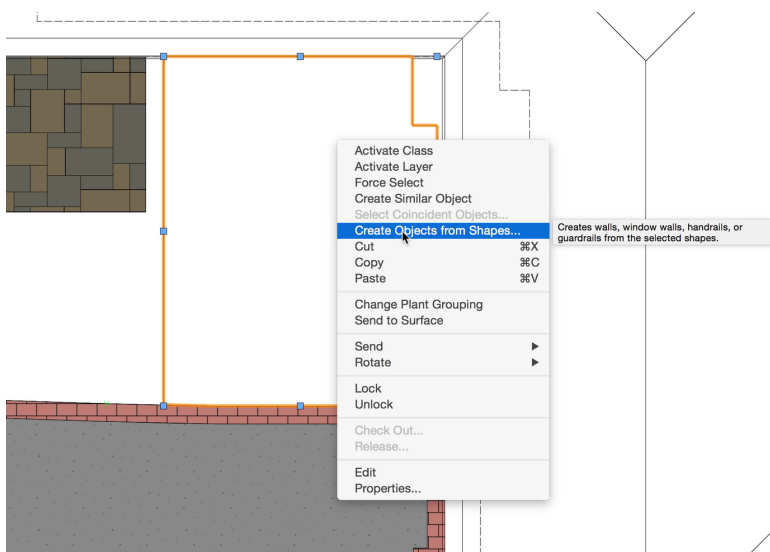
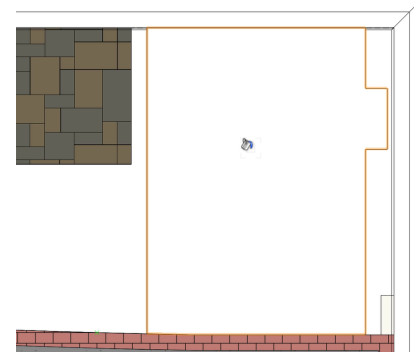
We are going to cover all of the settings for Hardscapes in the next chapter, clicking on the Hardscape Tool Preferences button, will allow these settings to be configured before creating a Hardscape.



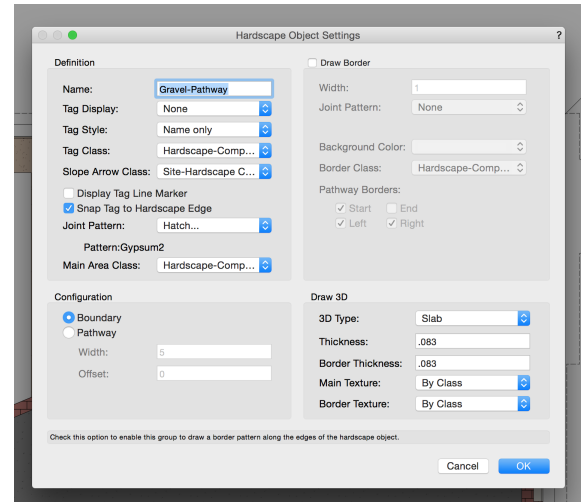
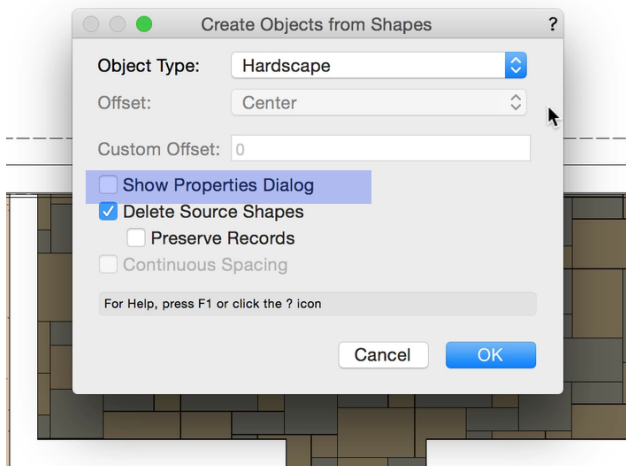
In addition to using these various modes to directly draw a Hardscape, it is also possible to convert existing geometry into a Hardscape. This can be very useful, as it's fairly common to have existing geometry that can be used for a Hardscape or it may be faster to generate the needed shape using a combination of tools.

For example, using the Inner Boundary mode of the Polygon tool we can quickly create a shape for a Hardscape in this area.

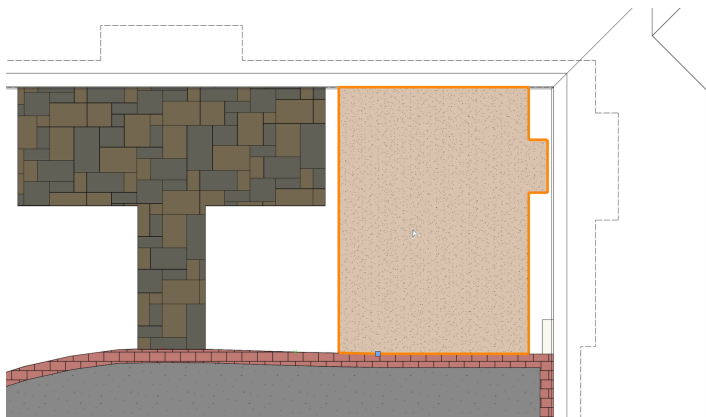
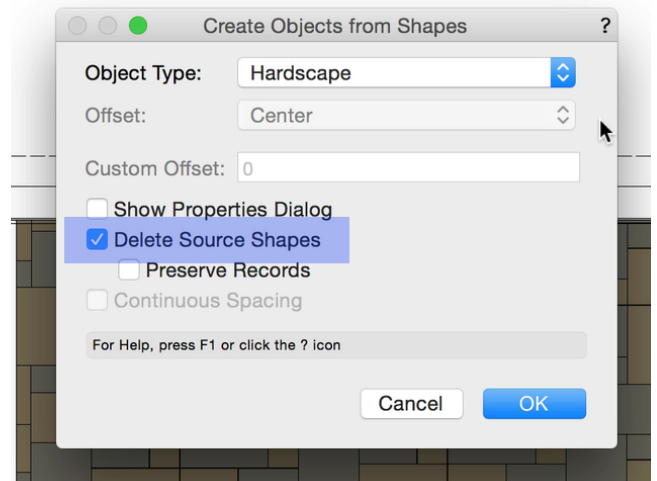
Then just right click on this object and choose Create Objects from Shapes. Create Objects from Shapes is a powerful command. Using this command we can create many different types of objects, including Hardscapes.



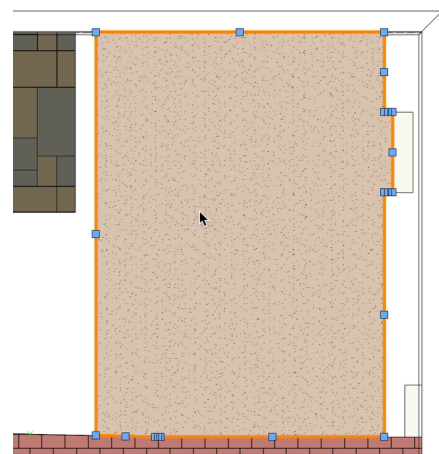
After choosing Hardscape we have a few options. Checking the Show Properties Dialog option, will bring up the Hardscape Settings dialog. Allowing the Hardscape to be configured during creation.



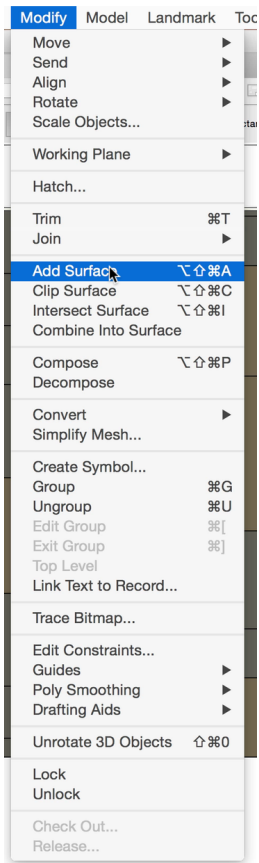
The Delete Source Shapes option will delete the base object after the Hardscape is created. After clicking OK, a Hardscape object is generated from the object.



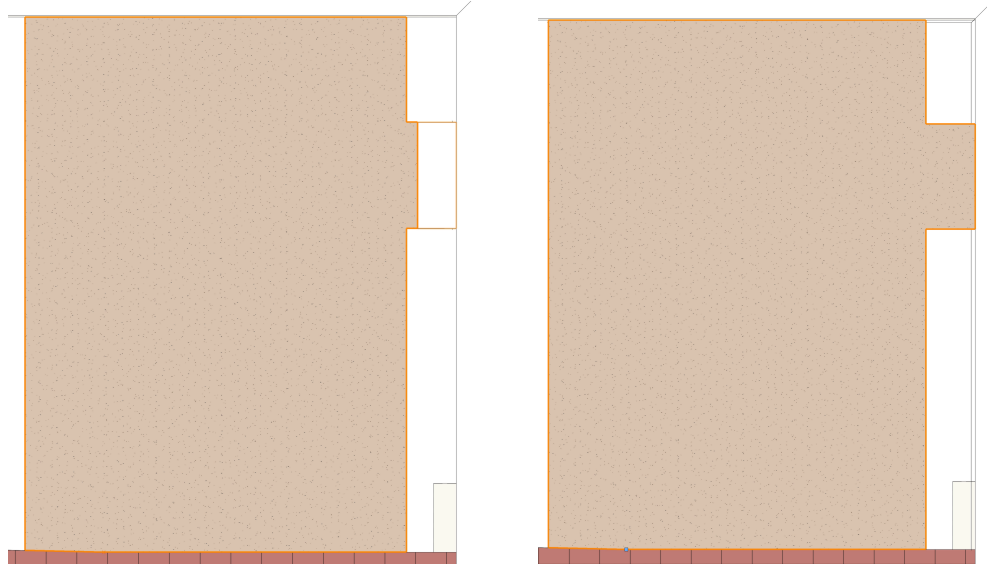
Using this command to convert existing geometry into a Hardscape, gives us the ability to use many other tools and commands to create the needed shapes more efficiently.



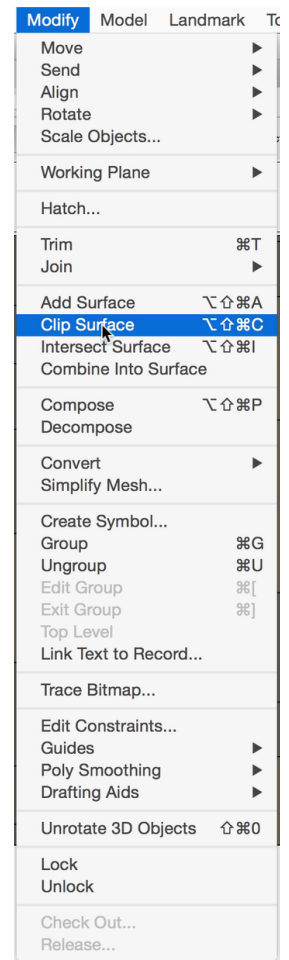
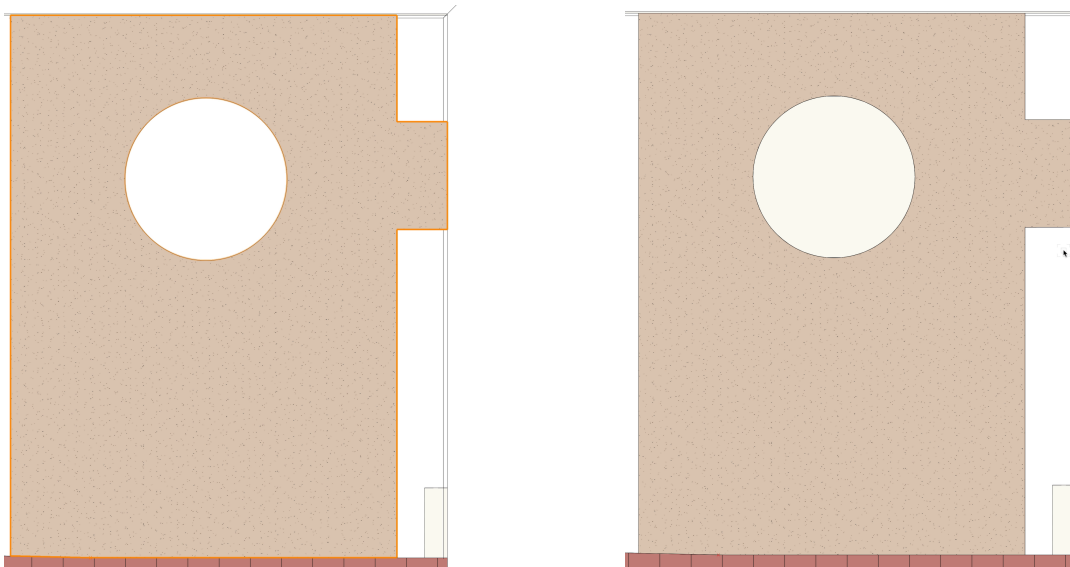
Once we have a Hardscape, we still have the ability to edit the path or boundary. Just by double clicking on the Hardscape, the Reshape tool is activated and the boundary or path can be edited.



In addition to reshaping the path or boundary, the Add and Clip Surface commands can also be used on Hardscape objects. We can add an addition on the side of this Hardscape by simply drawing a rectangle that overlaps the Hardscape, then selecting both objects, and running the Add Surface command found in the Modify menu.



We can also cut a hole in this Hardscape, to make a cutout for a tree. In this case, we will draw a circle over top of the Hardscape, select both the circle and the Hardscape object and run the Clip Surface command found in the Modify menu.



Now, that we know how to use the different modes of the Hardscape tool to create different types of Hardscape objects, in the next chapter we can explore all of the settings and options for our Hardscape objects.