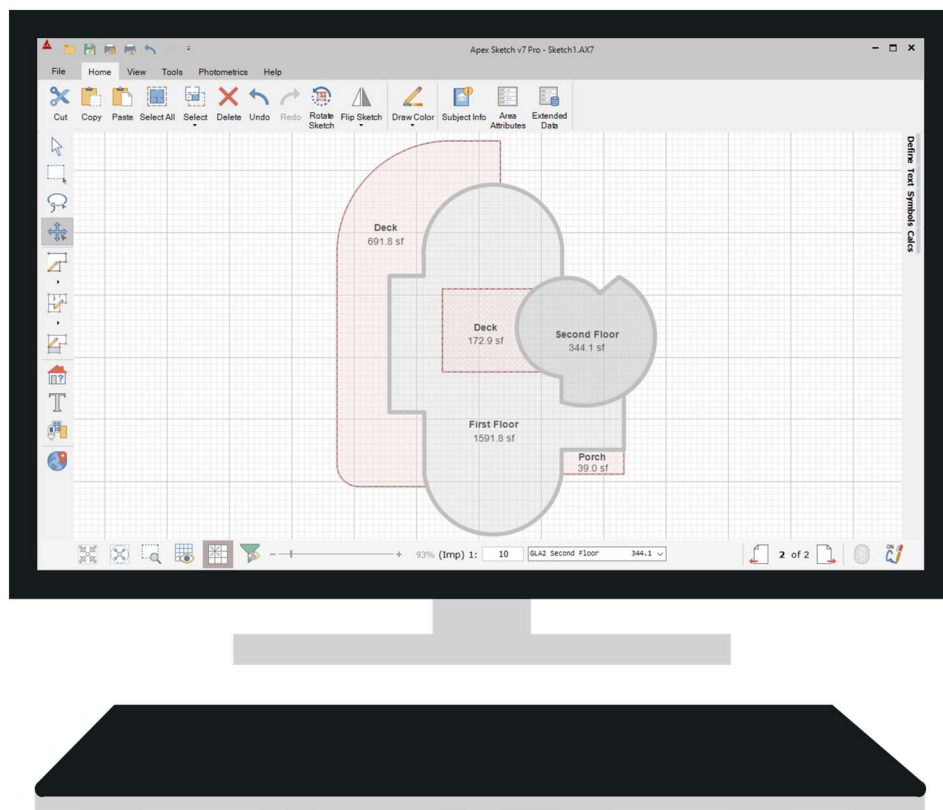


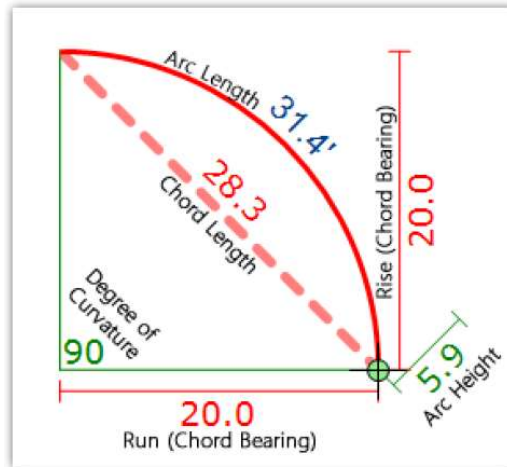
Apex Sketch v7

Drawing Curves



Apex Sketch Version 7 – Drawing Curves

Apex makes drawing curves a breeze, in this example, we'll cover everything you need to gather to draw them accurately. Before we begin it's important to understand all the components that make up the curve with regard to Apex.



Elements of a Curve

Degree of Curvature (Arc Angle) - Also known as Degree of Curvature takes into account "how much of the circle" in degrees does this arc measure to. You won't need to draw circles to discern the curvature. You measure other key elements (Arc Length, Chord Length, Arc Height) to achieve that.



Chord Length - Chord Length is the straight measurement between the endpoints of the curve. The Chord length is essential in determining the Arc Angle when using the Curve Solver as without it you won't have enough data to build the curve accurately.

Arc Length - This is the most common element of the curve that you'd measure in the field since most of your perimeter measurements are taken from the outside of the property. You'll find that most of the time, the curves you encounter are simply rounded corners (90°) that are fairly easy to measure. However, there may be times when the Arc Length is extremely difficult to obtain, and you must rely on other measurements to help you construct the curve properly.











Arc Height - Arc Height is the distance from the center of the Chord to the Apex of the Arc. This measurement is crucial in determining the Arc Angle if you have the Chord Length but are unable to measure the Arc Length.

Drawing Curve Methods

To draw curves in Apex Sketch v7 with Keyboard & Mouse, you can choose from the following methods:

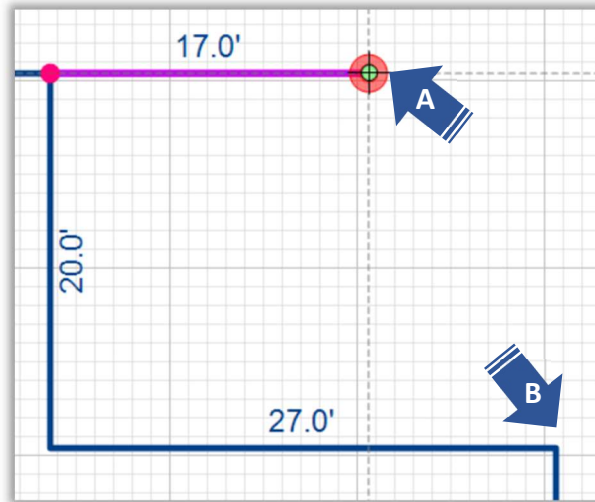
Action/Key Press	Function	D (Degree)	H (Height)
Mouse Wheel Forward	Bow Curve Left	15°	1 unit
Mouse Wheel Backward	Bow Curve Right	15°	1 unit
 (Ten Key)	Bow Curve Left	15°	1 unit
 (Ten Key)	Bow Curve Right	15°	1 unit

Curve Modifiers (Shift & Ctrl)

Key Press	Function	D (Degree)	H (Height)
 + Mouse Wheel	Bow Curve	5°	.1 unit
 +  or 	Bow Curve	5°	.1 unit
  + Mouse Wheel	Bow Curve	1°	N/A
  +  or 	Bow Curve	1°	.1 unit

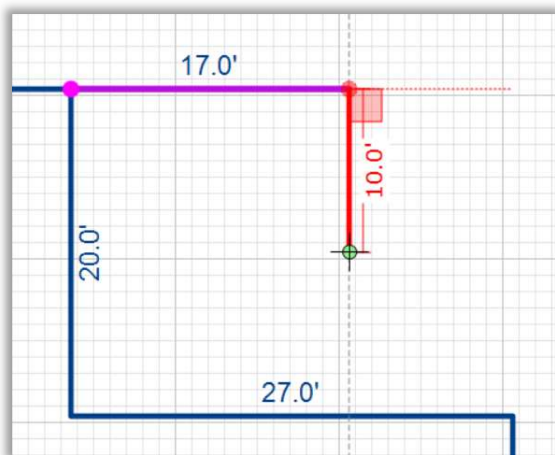
Drawing the Curve

The curve for our sketch is a rounded corner (90°) whose first point is already established at the end of the 17' line (A) in the illustration below. We've also measured our second point to be 10 feet up from the end point of the 27' line (B).



Note: Many users find using reference points to be handy by making note of where the curve begins and ends. This helps you place the Chord easily and from there apply essential measurements of Arc Height, Arc Angle or Arc Length.

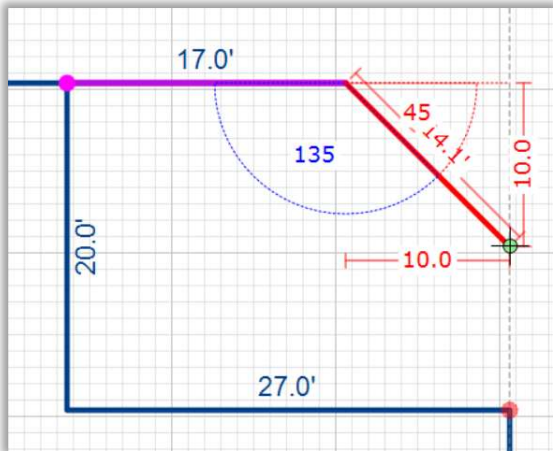
To draw this curve in Apex, do the following:



10 feet down, Don't press ENTER

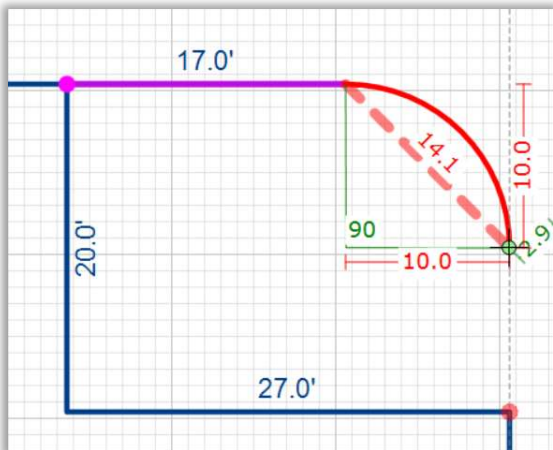
-
-

Drawing the Curve (continued)



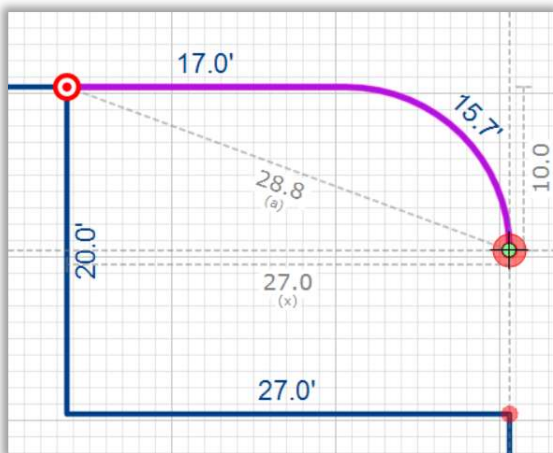
10 feet right, Don't press ENTER

-



(Ten Key) 6 times. Until Degree of Curvature is 90°.

-



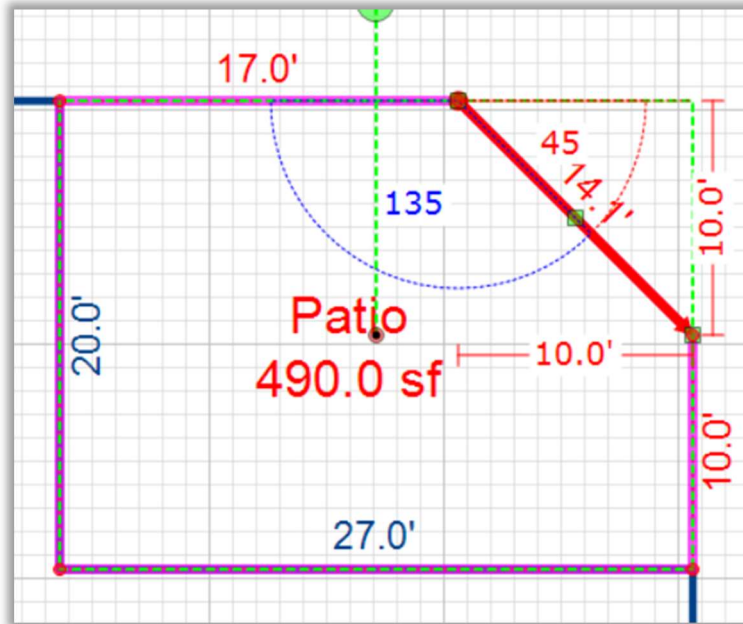
Press ENTER to anchor the curve.

-

Note: The curve could have also been positioned after changing the degree or arc height as well. Additionally, using what you've already learned, you could have bowed the curve with your mouse, placed it near the end point of the 17' line (B) and pressed J to jump to the point, then 10 up to position your curve properly.

Curving an existing wall

Apex Sketch v7 also allows you to quickly curve an existing wall. To get started ensure you have the [Select tool](#) enabled in the Drawing toolbar. To curve a wall simply click on the wall you would like to curve. The line will become highlighted in red.



With the line you want to curve selected, click and drag the green box in the center of the line. This will start curving the line. Once you are happy with the curve let go of the left button on your mouse.

