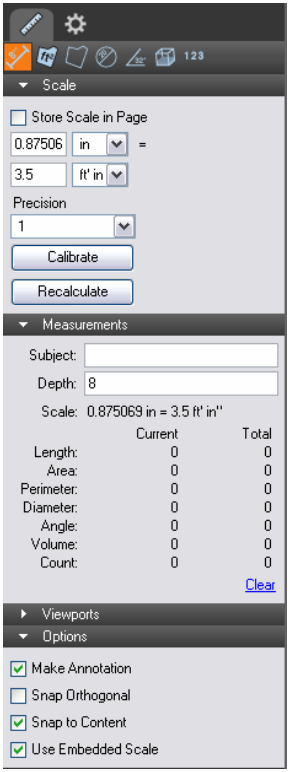
Revu Tutorial: Measurements

Bluebeam PDF Revu includes a Measurements tool that is perfect for getting takeoffs from a PDF electronically.

To begin using the Measurements Tool click the  icon in the toolbar or use the keyboard shortcut **Alt-M**. After clicking on this icon, the Measurement panel will automatically open, revealing collapsible windows with various options.



There are three basic steps for using the Measurements tool:

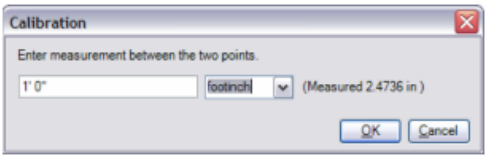
Step 1 – Calibrate the Measurement Tool
Step 2 - **Select Measurement Type**
Step 3 –**Measure the PDF**

Calibrate

Calibrate sets the scale of the PDF. If the scale of the PDF is already known, enter the scale in the boxes provided. You can even use decimal values (1/8" = 0.125, ½" = 0.5, etc.). The unit drop down list determines the units in which the measurements will be reported. **Precision** determines the exactness of the data and ranges from .0001 to 1.

If you do not know the scale of the drawing, click the Calibrate button. You will be prompted to click two points on the PDF of a known length.

After clicking the two points, the Calibration dialog will appear. Enter the known length that this measurement represents, then click OK. Your PDF is now calibrated.



Subsequent measurements made after calibrating will be based on the scale defined by the calibration. Check the box next to “Store Scale in Page” if you want to save this calibration when you open this drawing in the future.

Note: If you change the scale, click the Recalculate button to reset all the measurements to the new scale.

Select the Measurement Type

Click one of the icons at the top of the Measurements panel to the select the measurement type. Revu allows you to measure Length, Area, Perimeter, Diameter, Angle, and Volume.

Measure the PDF

With the mouse, click the points on the PDF to measure:

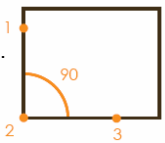
Length. Click the starting and ending point to measure length.

Area. If the area is rectangular you can click all four corners to measure the area or you can click and drag a rectangle to measure. If the area is not a rectangle, you can click all the points of the area, then double click the last point to display the measurement.

Perimeter. Perimeter works the same way as area.

Diameter. Click and drag the circle to the correct size. Release the mouse button to display the measurement.

Angle. Three mouse clicks are needed to calculate an angle. See the example to the right, the numbers show the clicks of your mouse.



Volume. Volume works the same way as area. Simply enter the depth to calculate the volume for the selected area.

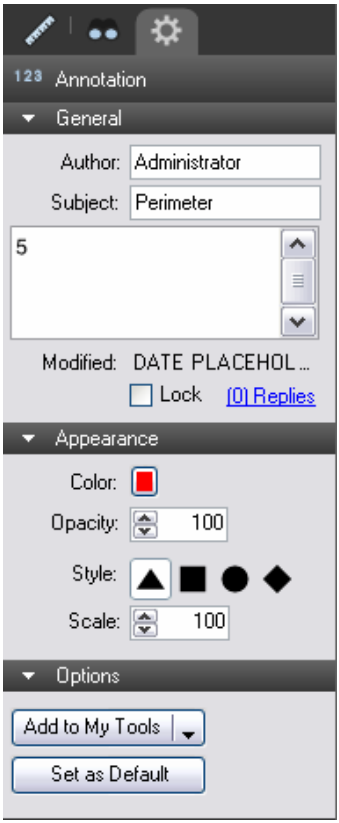
Counter

The Measurements tool also includes a counter that allows you to select a symbol to represent items within the drawing that you count. These symbols are then represented in the Markup list as a single line item, with a grand total.

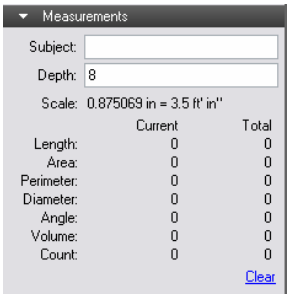
To begin counting, select the Counter icon 123 at the top of the panel. Using the Measurement Properties panel, select the shape, color and scale of your symbol. Give the Symbol a unique name, if you prefer. Then click locations on the PDF that you want to count.

If you get interrupted and need to come back to your count, simply right click on one of the symbols and select *Resume Count*.

Within the Markups list, you can access these symbols and even change their properties, if necessary. This will then update all the selected symbols on the PDF at one time. (See the Markups Tab tutorial for more information about using the Markups list).



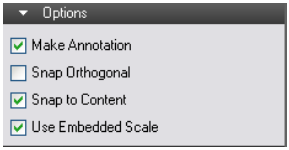
Keeping Track of your Measurements



Giving your measurement a title within the Subject box allows you to customize your measurements and keep track of them within the Markup list.

Notice that the Measurements table will update to show the *Current* measurement and the *Total* measured for each specific type. You can also do a quick sum of specific measurements by multi-selecting them on the PDF.

Options



The Options area of the Measurement panel allows you to turn certain usability options on and off.

By default, the **Make Annotations** box is checked. This option tells Revu to display annotations/markups for each measurement you make. The table shown below lists the measurement type and the corresponding annotation that you will see in the Markups list for each measurement.

Measurement Type	Converted Annotation
Length	Leader Line (Measurement Displayed)
Area	Polyline
Perimeter	Polyline
Diameter	Circle
Angle	Polyline
Volume	Polyline
Count	Shapes

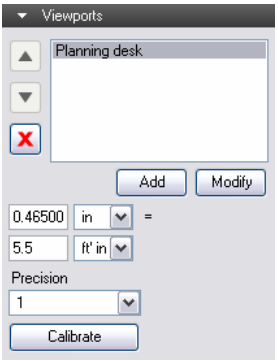
If you uncheck the Make Annotations box, you will not see any markups on the PDF after making a measurement.

Snap Orthogonal will snap the measurement line in 45° increments when taking a measurement.

Snap to Content will snap the measurement to line up with underlying content (lines in a PDF drawing for example) to give you the most accurate measurement.

Use Embedded Scale will read the scale embedded within the PDF document and use that scale for all measurements.

Viewports

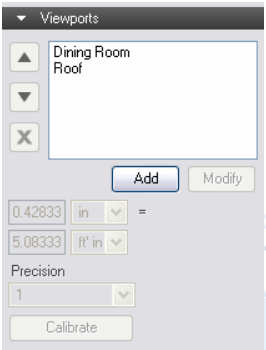


Viewports allow you to designate areas within the PDF drawing that are set to a different scale.

To begin, click the Add button within the Viewports window. You will be prompted to select the region within the drawing that should use the new scale. With your mouse, click and drag a rectangle to designate the region.

Next, select a name for your Viewport.

Then, click Calibrate to set the scale for the Viewport.



You may add as many Viewports within a single drawing. Each Viewport added will be displayed by name in the Viewports list.