

How to measure plans drawn to a scale



Contents

Introduction	2
How to measure plans	3
Common Problems	5

Introduction

Planning applications include a lot of plans showing different parts of a proposed development; the most common of these being floor and elevation plans. They should be drawn to a recognised scale and submitted as a .pdf file. Having plans drawn to scale means anyone can assess the size and scale of a proposal provided they have the right tools to do so. We use the adobe measuring tool to work out the actual size of a development. You may need Adobe Acrobat Pro to do this however this is not the only measuring tool available. Remember to access adobe tools you will need to download the plan and save it to your computer. You won't be able to measure by simply viewing the plan in your web browser.

How to measure plans

1. At the top of the document and above any tool bars should be three options: Home, Tools and the name of the document you are viewing. Click on tools and then the measure option.



2. The measuring tool bar should now display and you will need to select measuring tool.



- 3. Check the scale of the plan you are viewing. This may be different for different plans or across the same plan that shows more than one part of a scheme e.g. a location plan is also provided with elevation plans.
- 4. Once you know the scale, right click anywhere on the document and select 'Change Scale Ratio and Precision' to bring up the scale ratio box.

С	hange Scale R <u>a</u> tio and Precision	
Change Scale	Ratio and Precision	
Scale Ratio:	1 in ~ = 1 in	~
Precision:	0.01 ~	
	OK Ca	ncel

The scale values in place are set by default and this will always occur when you first open the scale ratio box.

5. Use the table below to input the correct scale ratio depending on the scale of the plan. You will typically find the scale either underneath the drawing or as part of the information about the plan.

1:20	Set the scale to 1cm = 0.2m
1:50	Set the scale to 1cm = 0.5m
1:100	Set the scale to 1cm = 1m
1:200	Set the scale to 1cm = 2m
1:500	Set the scale to 1cm = 5m
1:1000	Set the scale to 1cm = 10m
1:1250	Set the scale to 1cm = 12.5m

6. With the correct scale, you can now measure on the plan. There are a different ways to measure depending on what you wish to find out.

•\$	Distance Measuring Tool – This tool will measure the distance between two points ideal for measuring the distance of walls or the distance from an elevation to the boundary. Left click on the point you want the measurement to start and left click on the end point. The distance measured will be indicated in between the arrows and in the distance tool box.
4	Perimeter Measuring Tool – This tool will measure the distance of multiple distances i.e. a perimeter. Left click on the point you want the measurement to start and left click on other points you wish to mark. Double left click to finish the last measurement. The distance measures will be indicated in the perimeter tool box.
	If you wish to measure an angle, click on the start point, then draw a line towards where you wish to measure the angle. Then click once. Draw a second line away from this point and double click to end the measurement. The angle between the two lines will be demonstrated in the 'Measurement Info Window'.
1	Area Measuring Tool – This will measure the area of a house or garden. To use the tool left click on the point you wish to start the measurement from then left click on each further point you wish to measure before left clicking on the point from which you started measuring. The area of the garden or house will be calculated in the area tool box.

7. At any point when you are measuring, you can cancel a measurement by right clicking on the plan and selecting cancel measurement.

Cancel Measurement

8. Although you don't need to use them to measure, the snap tools allow you to snap directly to a line that is drawn on the plan. They toggle on and off by clicking on each snap type.



Common Problems

Disabling Measurement Markup - Usually, this is enabled to start with and results in the measurement being marked on the plan. If measurements are not displaying then right click anywhere on the plan and click 'Disable measurement markup'.

Orthographic measurements - If 'Orthographic Measurements' are turned on, your measurement will only takeplace at 45 degree intervals (i.e only upwards-downwards or left-right). To turn this off, right click on the plan and select 'Turn Ortho Off'. You can do this in reverse to re-enable.

Measurements are clearly wrong - Sometimes, even when the PDF itself appears to be the correct size and you are measuring at the correct scale, the measurement is clearly wrong. This can be caused by the PDF having in built scales and units which were set up by the creator of the PDF and these can override your own scales and units. To rectify, right click on the plan click 'preferences – then click 'measuring (2D) on the left hand side of the box. Ensure that the box beside 'Use Scale and Units from Document (when present) is unchecked – then click ok.