

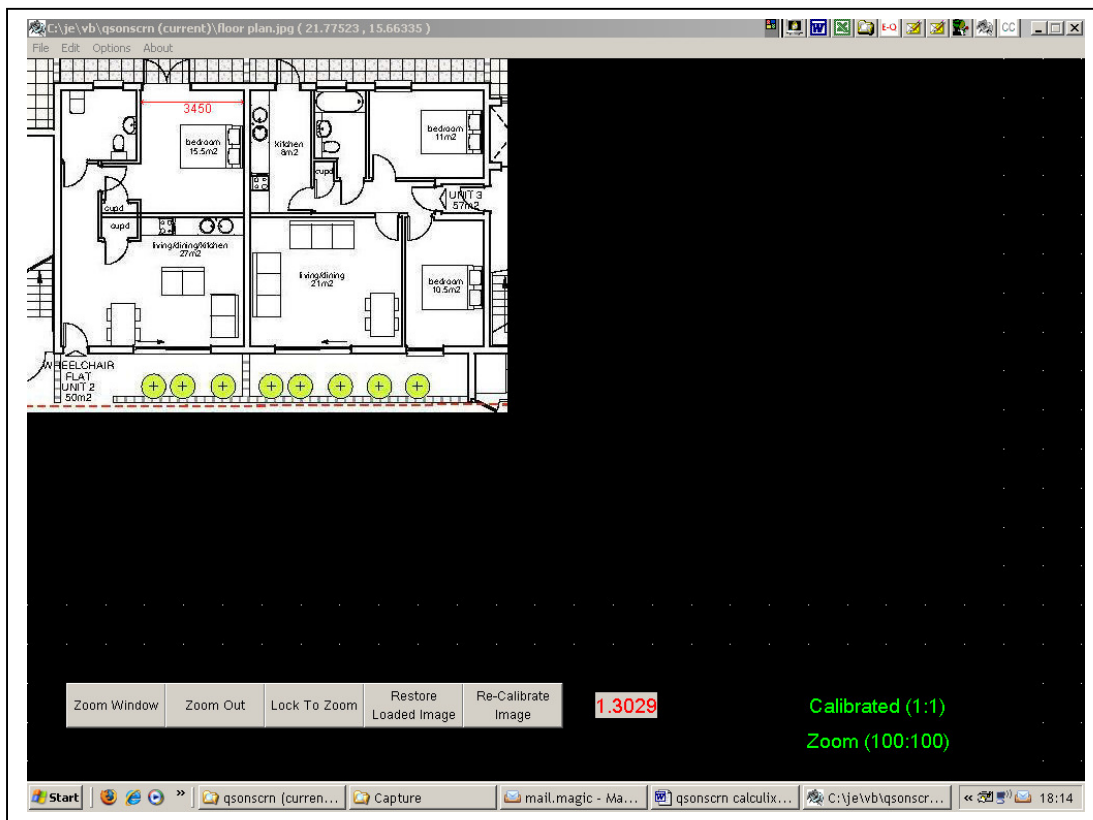
QSONscreen Measurement Utility

(Note: Minimum screen resolution for use with this program is 1024 x 768. If you attempt to use the program at a lower resolution, the display will not fit on the screen. Higher resolutions will adjust automatically.)

Using QSONscreen, you can calculate simple or complex areas and lengths from screen images of your drawings by tracing around the outline with a mouse in the same way as you would use a digitiser or an old style planimeter with hard copy drawings.

General instructions on how to use the software are included in a separate document which can be found on the E-Quantities website (<http://www.e-quantities.com/download/qsonscrn.pdf>) and it is assumed you have already familiarised yourself with the general operation of the program by following that document. It is also assumed you are reasonably familiar with the operation of Calculix. This document describes specifically how the QSONscreen software links directly to “Calculix” Quantity Surveying Software which can also be downloaded and used, free of charge, from the E-Quantities website (<http://www.e-quantities.com>)

Calculix Mode



To illustrate Calculix mode, load the image “floor plan.jpg” then zoom in and calibrate it using the 3.45m length shown in one of the bedrooms.

Calculix Mode can be selected from the Options menu at any time prior to outlining the perimeter of a room..

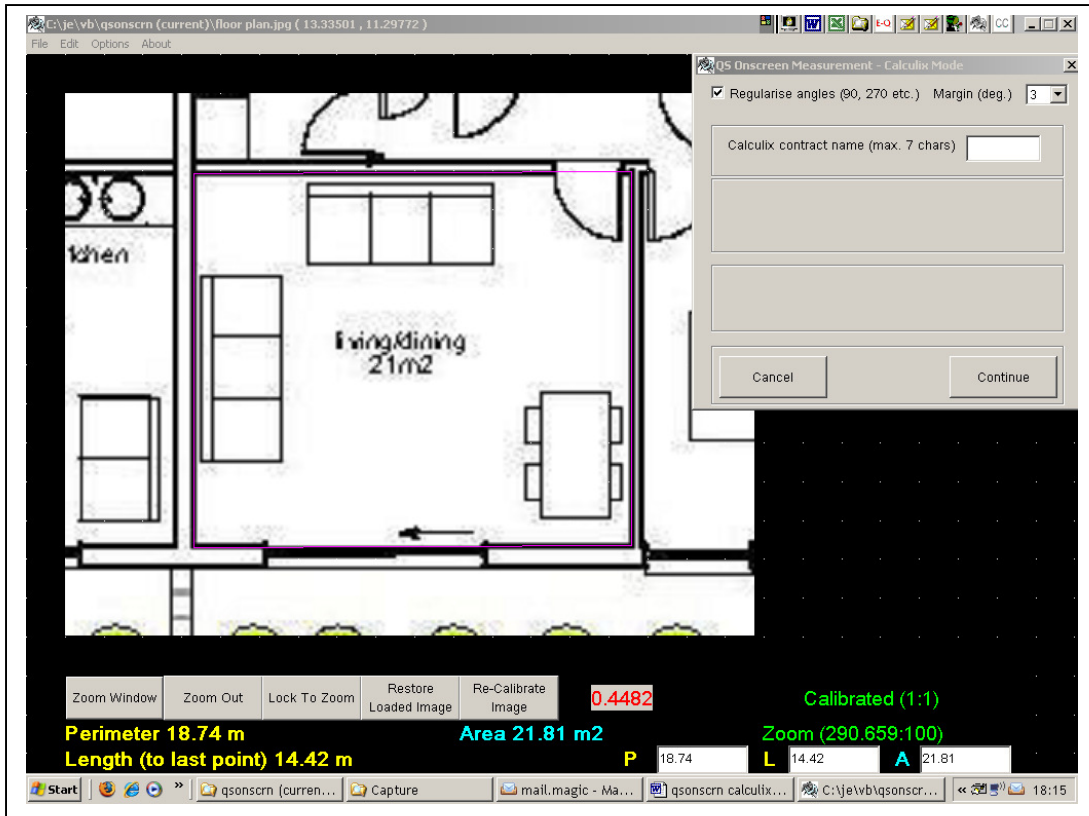
There are a few additional conventions to follow when exporting to Calculix.

- Rooms must be outlined Clockwise (otherwise an error message will be generated)
- Click only on internal or external corners of rooms or (usually 180°) changes in wall construction.
- The total number of walls in a room must not exceed 16 (otherwise an error message will be generated).

These conventions are to required to ensure compatibility with Calculix room data worksheets.

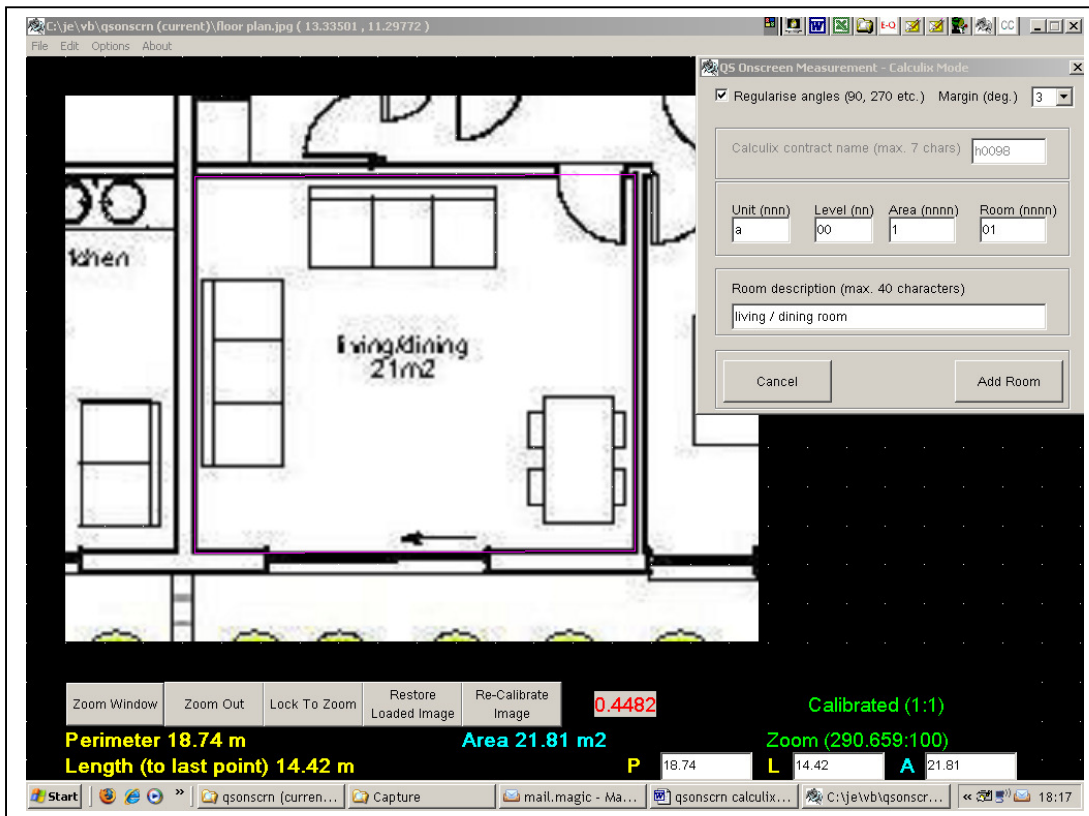
Remember, if a room is plain rectangular you can press F3 after outlining the first two walls and the room will automatically close off.

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Once the perimeter of the first room has been outlined, a pop-up box will ask for the name of a Calculix contract in which to “store” the room data. At this stage, the data is stored locally on your computer in the QSOscreen program directory (folder).

If a file with that name already exists, you will get a message to that effect and any data added will be appended onto the existing file. If no such file exists you will get a message that a new room data file will be created.



After naming the project a second box will appear for you to enter the Calculix room number and description.

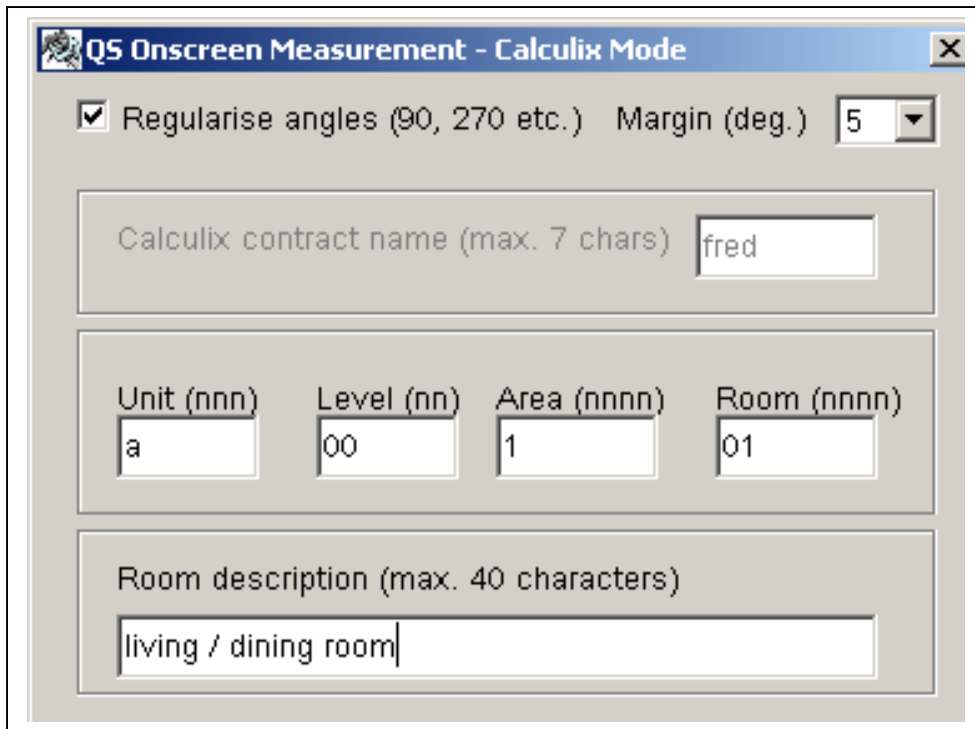
When you have entered this information click on “Add Room” (shortcut key “End”) and then press F2 (New) to remove the outline and move onto the next room.

If you subsequently enter a room with the same number as one entered earlier, you will overwrite the earlier room with the new information.

So if you make a mistake, and enter a room with the

wrong information, you can simply overwrite it with the correct information. If you inadvertently enter a room with the same number as one entered earlier and don’t wish to overwrite it, no worry! QSOscreen will ask you to confirm any overwrites before completion so you have the option to cancel back without losing room information. A popup with details of rooms already entered will appear to assist you. This list can be accessed at any time using windows Notepad. It is in the QSOscreen program directory (folder) in file jobname(r).txt. If you do not wish to enter a particular room, click on cancel at any time instead of clicking on add room. Use the Options menu to enter or exit from Calculix Mode.

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The screenshot shows a dialog box titled "QSOscreen Measurement - Calculix Mode". It contains the following elements:

- A checked checkbox labeled "Regularise angles (90, 270 etc.)" and a "Margin (deg.)" dropdown menu set to "5".
- A text field for "Calculix contract name (max. 7 chars)" containing the text "fred".
- Four text fields for room attributes: "Unit (nnn)" with "a", "Level (nn)" with "00", "Area (nnnn)" with "1", and "Room (nnnn)" with "01".
- A text field for "Room description (max. 40 characters)" containing "living / dining room".

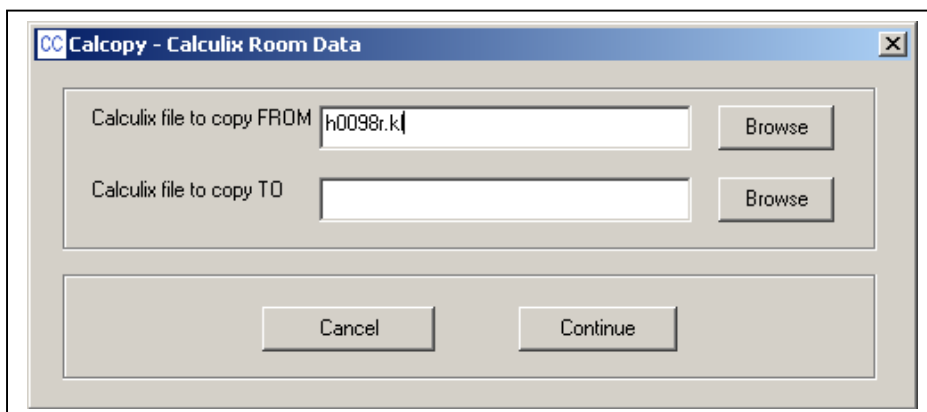
When outlining rooms onscreen, most angles between walls will be 90 degrees or multiples of 90. Less common but still fairly regular are multiples of 45 degrees (eg 135 or 225). Digitised angles like those generated by QSOscreen will be measured to small fractions of a degree and rounded up or down to the nearest degree to suit the limitations of Calculix.

If you know that the rooms you are entering are generally regular you can check the box at the top of the pop-up to regularise the angles within a given margin.

In the above example, if any generated room angles fall within a range of +/- 5 of a regular one, then the computer will make minor adjustment to the room angles and lengths accordingly to make them regular.

A digitised rectangular room might have two angles of 91° and two of 89° caused by slight misalignment when clicking on the room outline. With the "Regularise Angles" checkbox checked, these will be converted to four 90° angles with the room lengths adjusted to match.

When you have finished entering the last room, you need to transfer the data to your Calculix Computer using the "CalCopy" program provided. This is accessible from the QSOscreen section of your computer's programs menu.



The screenshot shows a dialog box titled "Calcopy - Calculix Room Data". It contains the following elements:

- Two text fields for file paths: "Calculix file to copy FROM" (containing "h0098r.k") and "Calculix file to copy TO". Each field has a "Browse" button to its right.
- At the bottom, there are "Cancel" and "Continue" buttons.

Browse to the location of the room data file you created (to copy from) and also to the Calculix file you want to copy to.

Before you run CalCopy, you will need to map a network drive to your Calculix computer unless you are running the Windows version of Calculix on the same computer as you are running QSOscreen.

When you have located both files, click on "Continue" and you will get a message when the process is complete.

Go into Calculix and verify that the room data has been successfully transferred then you can delete the local room data source file you created in the QSOscreen program application directory.

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*New in version 3.5 – Alongside the creation of calculix room data files, the program will now also create a comma separated variable file (.csv) of the area, perimeter and all the individual wall lengths for each room which can then be easily imported into excel as the basis for a finishes schedule or the like. The file will be created in the QSOscreen program directory.

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