Number:24Objective:How to Digitise Digital PhotosCommands used:Qroof |Image On / Image OffPurpose:To speed up data capture using digital photography

The software has a command that allows the use of bitmap images, such as those available from your digital camera, to be inserted into the drawing space, and digitised over the top. This command is found under Qroof from the main menu – at the bottom of the list is Image On and Image Off.

Throw away your digitiser or don't bother even buying one! Get the convenience and portability of digital photography working for you instead. The other advantage is that you can go in and out of the job without losing your object datum like you do with a digitiser, like each time the 'phone rings!

Method:

1. Take your picture:

Hang your plans from a convenient wall in your office, or lay them on the floor. The wall is better, then you can ensure that you are as square on to the plan as possible, thus reducing parallax errors (skewed plans).



Information in this note is applicable to Applicad's Steep Roof Products: Sorcerer, Roof Magician, Roof Wizard and Roof Master.

Take the picture at the largest possible resolution, as this will improve the overall accuracy of the finished result.

You might be visiting your local General Contractor and he has a whole bunch of jobs for you to quote on. Take photographs of them all and do the work when you get back to the office.

2. Save the pictures

Now connect your camera to your PC and save the pictures to your ...\AppliCad\Wizard\User folder.

3. Set your approximate scale

Start up your AppliCad program and set the approximate scale Start your roof program and set the approximate scale by selecting Zoom from the main menu. For most residential work, select a zoom scale of about 100. We refine the actual scale more precisely a bit later.

If your wish, you may also set the Grid to be on and set a grid spacing of about 50mm or 100mm (2" or 4") – what ever best suits the scale of the drawing and the accuracy you wish to achieve.

4. Select your plan

Now select Qroof | Image On and select the picture you have just downloaded from the camera.



Notice that the cursor is looking for a lower left and upper right extent of the picture – select screen locations that virtually fill the computer screen. You should see the full extent of the plan as you photographed it.

5. Start digitising

Select Gen-Roof | Dig Outline to digitise around the perimeter of the eave line.



The first dialogue box that appears prompts the operator for digitiser constraints. This is designed to help you with straight lines and parallel eave lines.

Digitizing constrain values 🛛 🔀		
Constrain the angles to	45.00	
Constrain the lengths to	50	
Cancel	Ok	

Now simply snap to the corners of the eave as carefully as you can. Notice that the line is drawn in and the length is displayed. The length may vary from that indicated on the plan, but have a neat way to fix that in a few more steps.

When you get to the second last line, select right mouse button to cancel, and the select close square, just like normal.

Close Straight	
Close Square	
Close Extend	2
Don"t Close	

The you get prompted for a re-scale factor.



This is where you get the chance to adjust, quite accurately, the actual roof dimensions from the approximate roof dimensions you have achieved by digitising the outline. Look at the plan, and take the longest overall eave line length on the plan, say 23860mm and divide this by the length displayed on the digitised outline, say 9700 in our example. This results in the exact scale factor to adjust the whole roof by.

Enter the scale factor to apply to this outline		
	23860/18900	
Cancel	OK	

Hit OK, and the outline is done!

Then the regular roof defaults dialogue will be presented. The most important thing to remember here is that since you are digitising the eave line, the eave overhang and the verge overhang will be zero.

Roof defaults	
Roof type	Metal
Storey	1 🗄
Pitch	25.00
Eave offset	0.00
Verge overhang	0.00
Eave height	2400.00
Rafter spacing	609.60
Eave type	Fascia&Gutter 💌
Cancel	Ok

Once everything is right here, select OK, answer the usual questions of Gable, Overhang and Rake lines and that's it.

How cool is that?



If you have any problems, please drop the crew at AppliCad (Australia, USA, UK) and line.

Cheers

<u>End</u>