



## **Estimating Tutorial for Creating Fixtures**

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# Sorcerer, Roof Wizard and Roof Maestro

## Fixtures Tutorial

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# Roof Wizard

## Fixtures Tutorial

### Introduction

This tutorial is designed to give you an overview of the process of defining a fixture, then using that fixture on a roof, and costing the material and labour for the fixture on your quotation. A moderate level of experience in the use of our software is assumed.

### Job Description

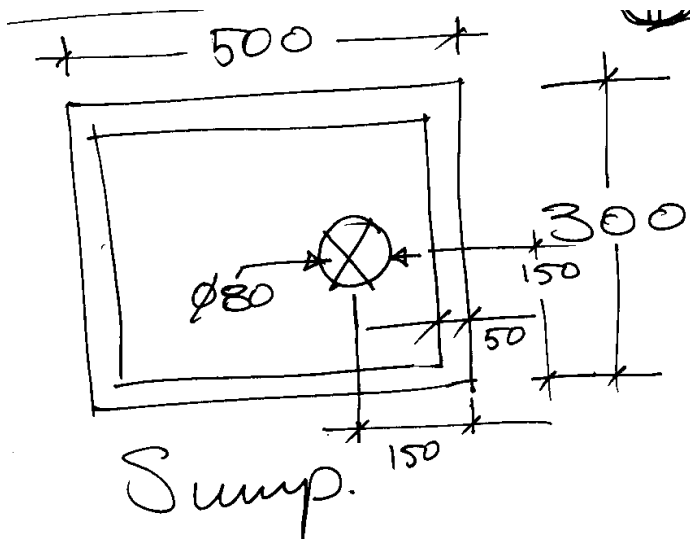
For the purposes of the exercise we will draw and define a sump as a fixture. While you are doing this, have in your mind that the same process may be used to create and use any complex component that may be used on a roof such as skylights, access covers, A/C plant etc. It is not compulsory that you do it this way for every job or every component, you could also use “**Add Line Item**” as well. The advantage of using “**Fixture**” is that the roof plan will show the representation of the part on the roof plan as well as appearing as a line item on your parts list, where as Add Line Item simply adds the part to your material list.

The process is this:

- Draw a representation of the part
- Save the drawing in the database **Fixture.DAB**
- From the main menu, Materials | Fixture and define the none graphical details of the part
- Use the part on your roof plan – Cover | Fixture

### Draw the Part

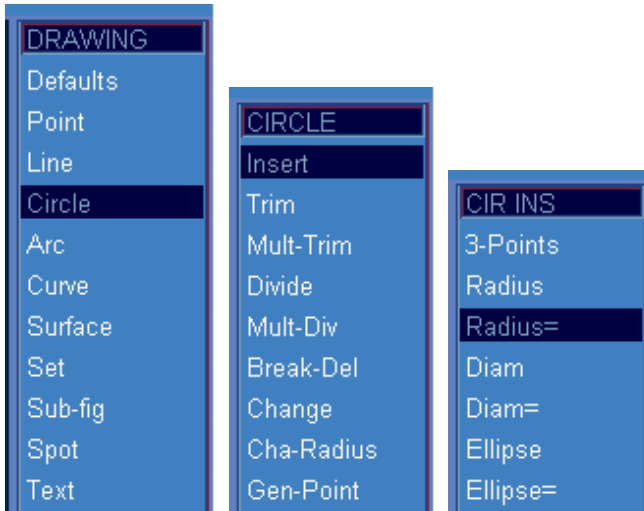
First start with a sketch of your part, know exactly how much detail you need on the roof plan. You can have as much or as little detail as you wish.



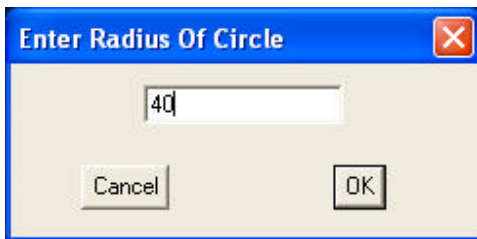
Now decide where the centre of your part will be – this is the “handle” that determines where the part will be positioned on your roof plan. For this exercise we will use the centre of the down-pipe hole.

We will use standard drawing tools to create the representation.

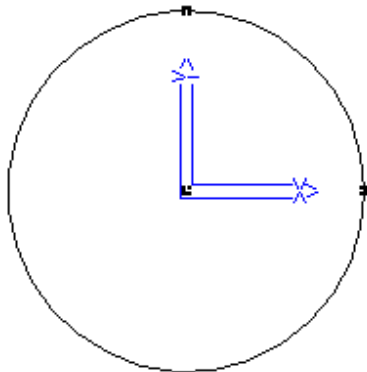
First we draw the circle for the drain hole, use the command – **CAD | CIRCLE | INSERT | RADIUS=**



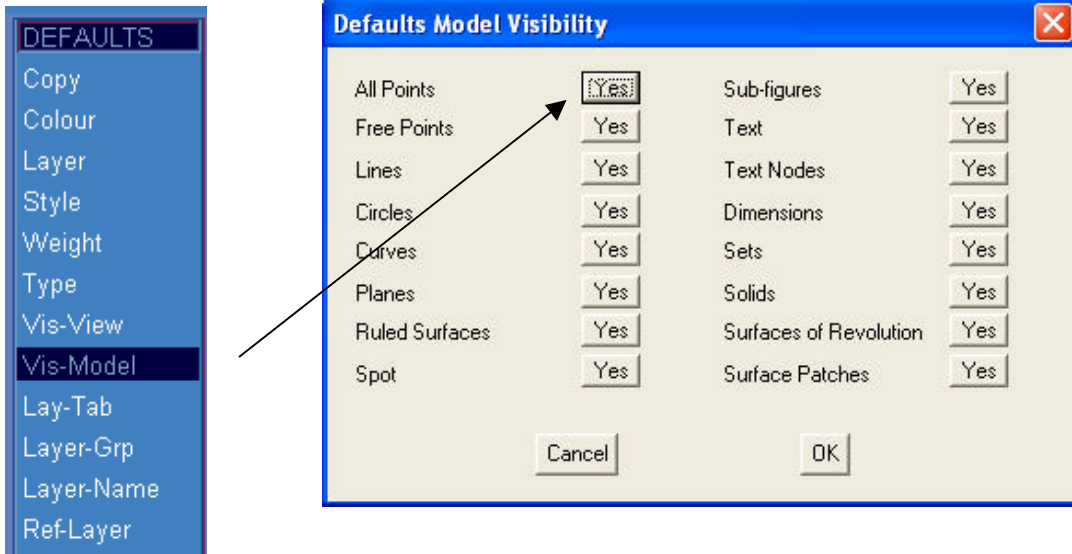
and then specify radius of the circle



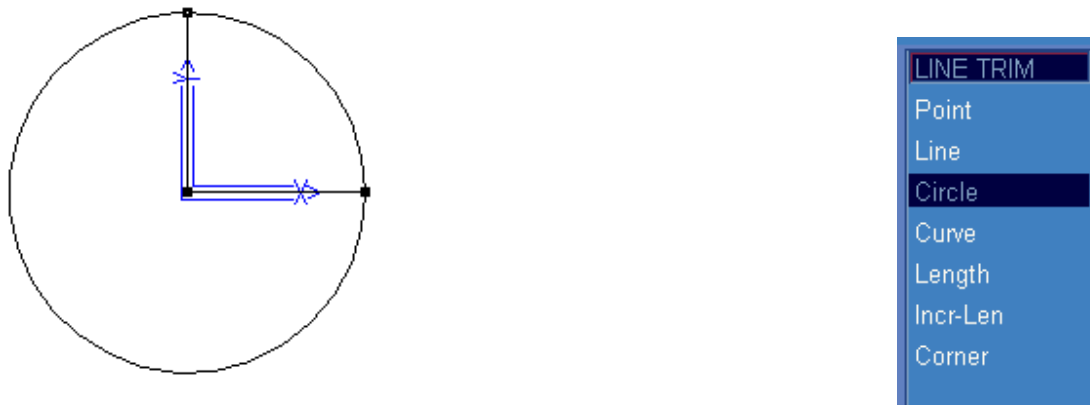
Now place the circle at the centre of the screen by typing the exact coordinates of the centre ie 0,0



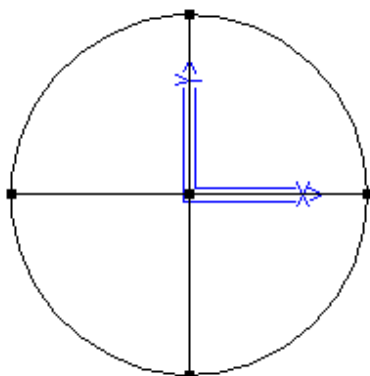
To view the construction points turn them on using **CAD | DEFAULTS | Vis-Model** and say **Yes** to All Points and Free Points.



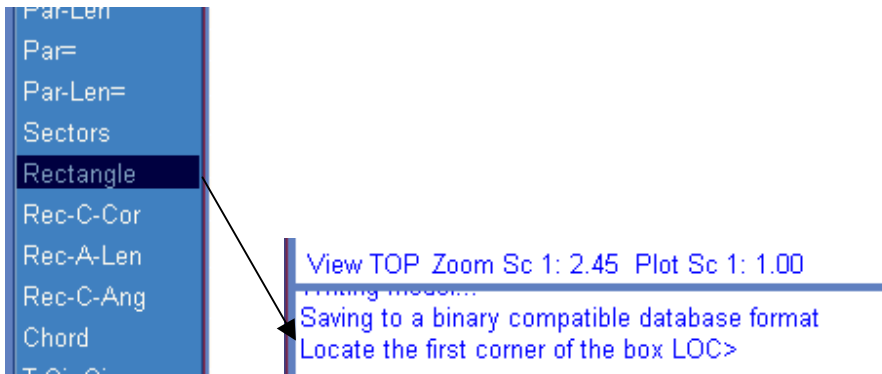
Now draw the lines that represent the centre of the drain hole – **CAD | Line | Insert | Free** and select the start points for the lines by snapping with the centre mouse button to the construction points of the circle. You should now have this:-



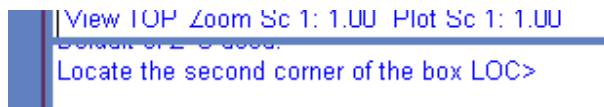
Now trim the lines to the circle – **CAD | Line | Trim | Circle** , selecting the line near the end you will move and you get this:-



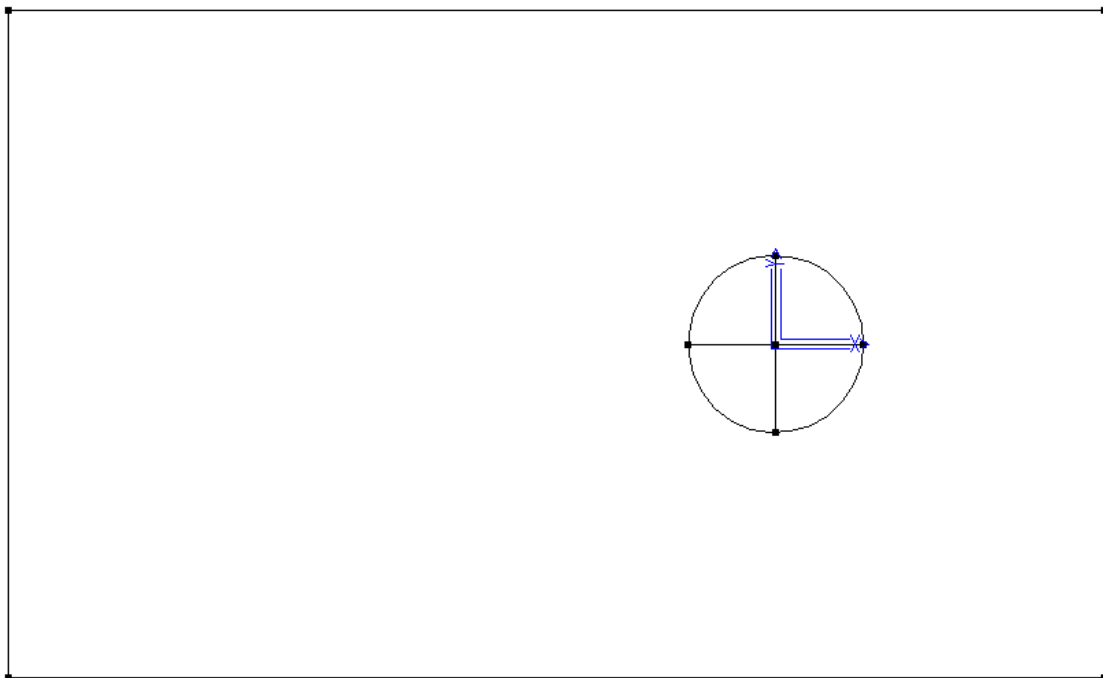
Now we add the two boxes that define the rest of our sump. Select **CAD | Line | Insert | Rectangle**



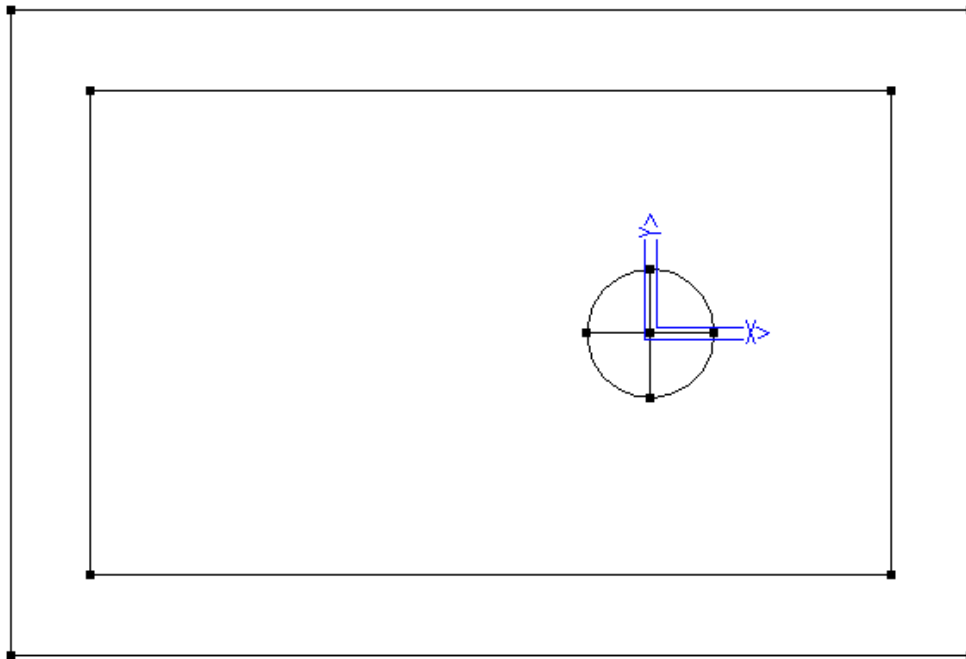
You will be prompted for the start point of the box – type 150, -150 in the prompt area at the bottom of the screen - (as in 150 mm in **X** and 150 mm in negative **Y** (down the screen)).



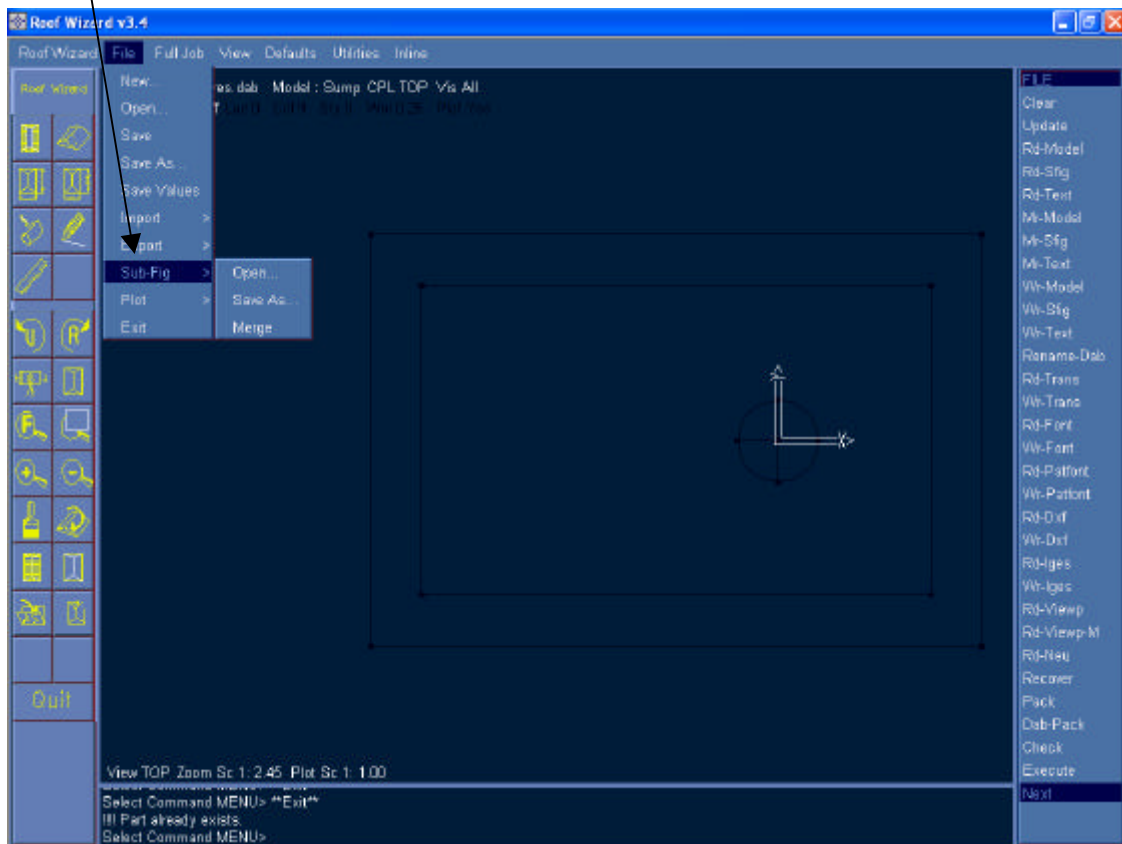
Now you are prompted for the second corner of the box – type -350, 150 in the prompt area of the screen (as in negative 350 mm in **X** and 150 mm in **Y** (up the screen)).

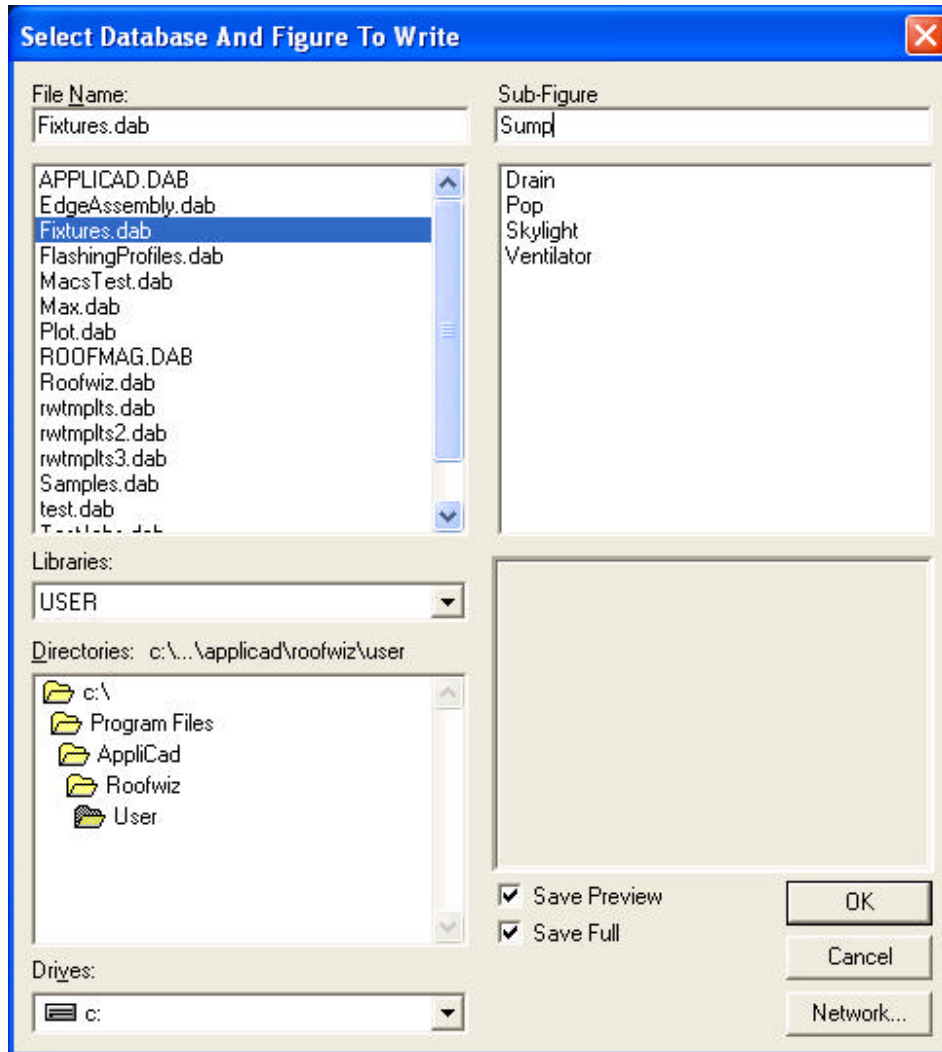


Now referring to our sketch, we need to add the second box. Using **CAD | Line | Insert | Rectangle** – start point at 200, -200 and second point at -400, 200 and you should have the following on screen.



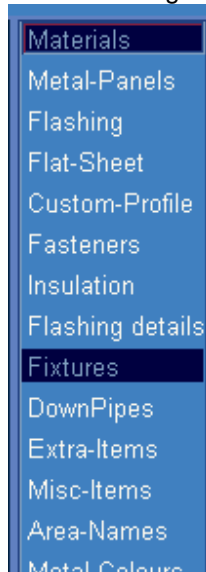
This is our completed Sump. We can continue to add further embellishments, but for the purposes of our roof plan, this is sufficient. Now we must save it to the Fixtures database as a Sub Figure so that we can use it for our material definition and for quoting. From the pulldown menu, select **File | Sub-Fig | Save As** and select the database called Fixtures.DAB. The Sub-Fig name will be Sump100. Then select OK.





## Creating the Fixture Item

Now that the figure has been saved, from the main menu select - **Material | Fixtures**





**Define Fixture (record 0 of 0)**

Name of fixture: Sump

Manufacturer: Sumps Inc.

Product code: SMP100

Flashing 1: FBHT42CTL-- Length: 2500.00

Flashing 2: OG60-- Length: 3000

Database name of fixture: Fixtures.dab

Figure name of fixture: Sump100

Insertion method: Get a location and orientation point

Cost: 129.00

Cost to install: 65.00

Buttons: Add flashing, Select, Add, Cancel, Ok

Add the information as required in each part of the dialogue box, in particular, select our figure from the list. Notice also that you can add any number of flashing items that may be used to trim off the fixture.

**Select the figure name from Fixtures.dab**

Drain

Pop

Skylight

Sump100

Ventilator

Sump100

Buttons: Cancel, OK

Note that any accessory items such as clips and brackets that may form part of the accessory list of the flashing will already be taken account of when you subsequently use the fixture. This is a very powerful feature of the software and careful thought needs to be given to each and every part definition. To select a flashing or trim, they must have been defined already, just as the accessory has to have been defined already to use it with your trim!

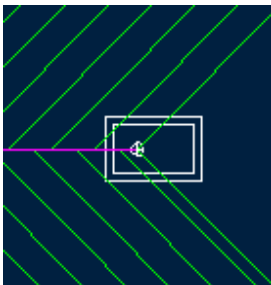
Once all the information is input, select **Add**. You will know it's been added because new buttons will appear for deleting and updating the information should you ever need to do this. Now select OK and your done!

### Using the Fixture Item

Now you use it.

Draw you roof plan using **Gen-Roof | Track Plane**, then under **Cover | Fixtures** select Sump100.

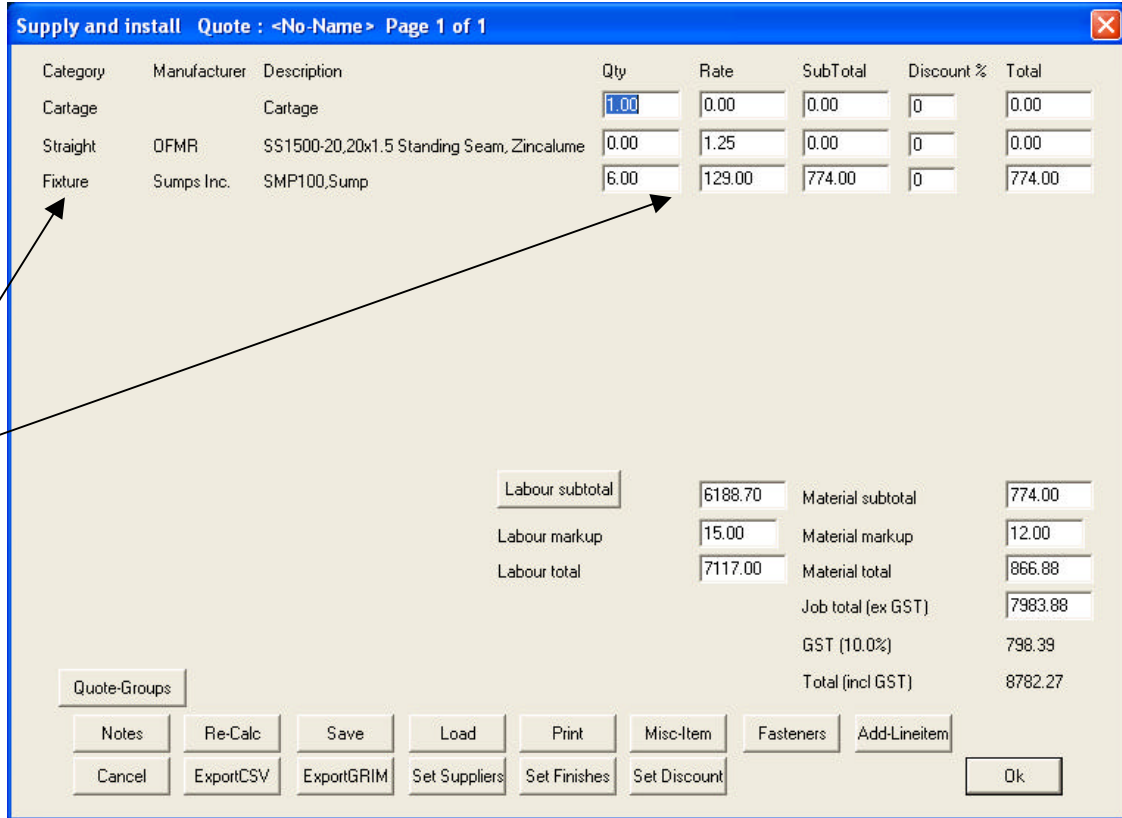
And place it on the roof. You may use middle button snap to align it to exact locations on the roof.



(You may not install it quite like this, but then I am not a roof plumber!) You add as many of these as required and go to **Costing**.

## Costing

Using the **Costing | Supply-Install**, command from the main menu, you can see the materials listed.



Any values may be over written if the operator wishes to change an individual line item. If a change is made to a line item, select **Re-Calc** so that the change is carried through to the Job Total. Additional miscellaneous items may also be added at this time. The take-off may be saved for later retrieval or printed as a quotation.

Typically though, you would add various edge treatments around parapet walls or other roof hardware. To do this we need to define flashings and associated edge detail drawings so that they may be used on our job.

That's about it for this process. Now you must practice this on other jobs and build your material database as you go. In no time at all, you will be pushing these take-offs out at a startling rate. In a flash you improve the accuracy of your take-off, you improve the quality of the presentation and you are providing the warehouse with a more detailed picking list. All this in a fraction of the time it used to take.

Have fun and please feel free to forward any comments or criticism directly to the Customer Service Manager at AppliCad Australia.

End.