applicad

Sorcerer

Incorporating:
Roof Wizard (metal roofing)
Roof Magician (tile roofing)

Quick Start Guide

Estimating Tutorial for Tile, Shingle, Shake and Metal Roofing

(English Units)

Document Issue 5.9 – 19 November 2012

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Quick Start Guide – Sorcerer/Roof Wizard (metal roofing)

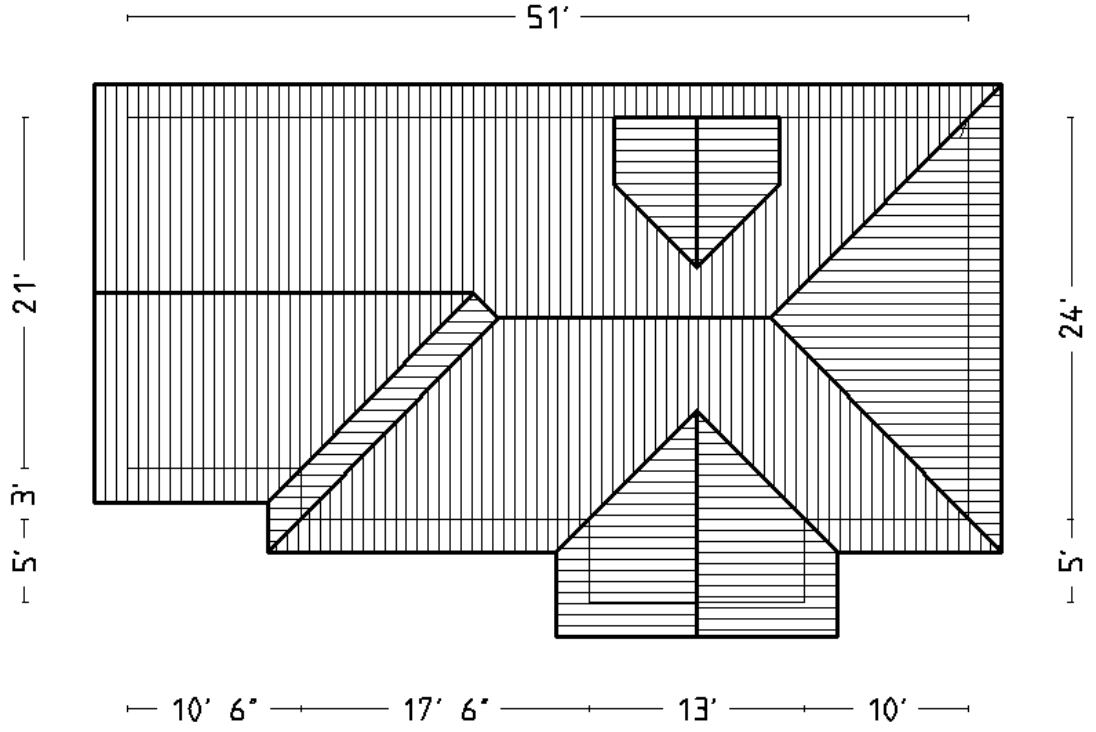
Introduction

Using this manual

This tutorial is designed to explain, step by step, the process of quoting an individual job from start to finish in Sorcerer (using the metal roofing component). This is only intended as an introductory tutorial and is not designed to show the software's full capabilities. For information regarding the full capabilities of the software, including advanced modeling functions and setup of material and labor rates, please consult the AppliCad Complete User Guide. Small differences in product types listed in the examples are to be expected, especially if you are learning on an established installation. Concentrate on the steps more than the precise material selection.

Job Description

The roof will be a simple hip and gable roof like the one below.



Material Description

We have decided that the materials we will be using are as described below. We have not used these materials before so we must enter them into our database.

Use the **Def-Materials > Metal Panels** menu option to select the appropriate material type and enter the required information as outlined below.

Once entered, they are then available for future use.

Roof

Type	Description	Size	Cost
Metal	Pederson Aluminium, Standing seam, G-90	18” x 24g	$2.00

Use the **Def-Materials > Flashing** menu option to select the appropriate material type and enter the required information as outlined below.

Once entered, they are then available for future use.

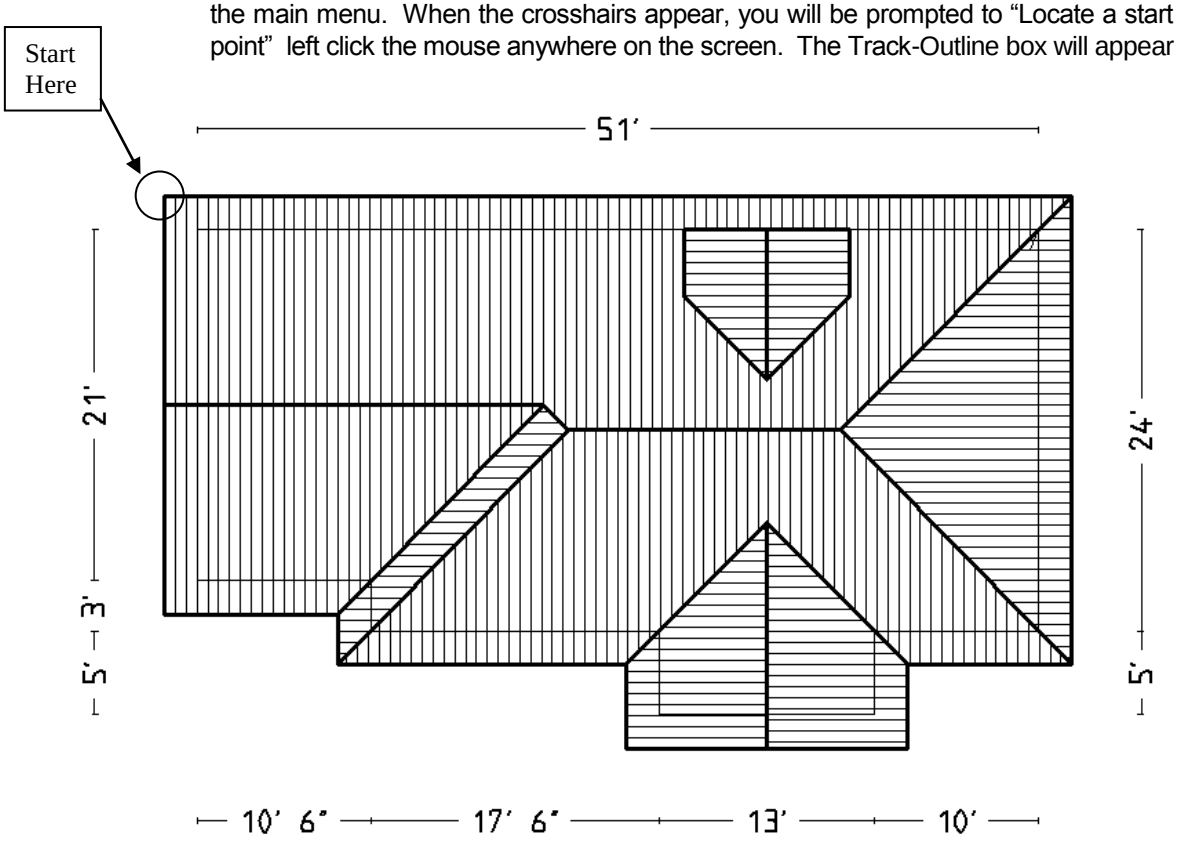
Flashing

Type	Description	Size	Cost
Ridge	BLUESCOPE – Ridge Capping	Max. 15’	$2.00 per foot
Valley	BLUESCOPE – Valley, Galv.	Into 10’ Pieces	$1.00 per length
Fascia	BLUESCOPE – Metal Fascia	Max. 10’	$1.00 per foot
Gutter	BLUESCOPE – O Gee Gutter	Max. 10’	$1.00 per foot
Barge (Rake)	BLUESCOPE – Rake Flashing	Max. 15’	$2.00 per foot

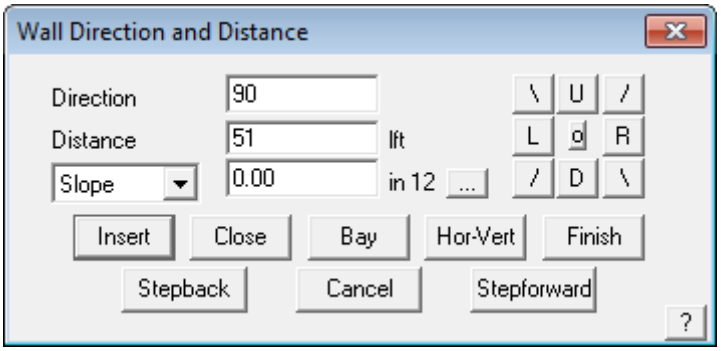
Generating and Modifying the Roof

Define the Roof Outline

To draw the following roof usethe command **Construct-Roof > Track-Outline** from the main menu. When the crosshairs appear, you will be prompted to "Locate a start point" left click the mouse anywhere on the screen. The Track-Outline box will appear



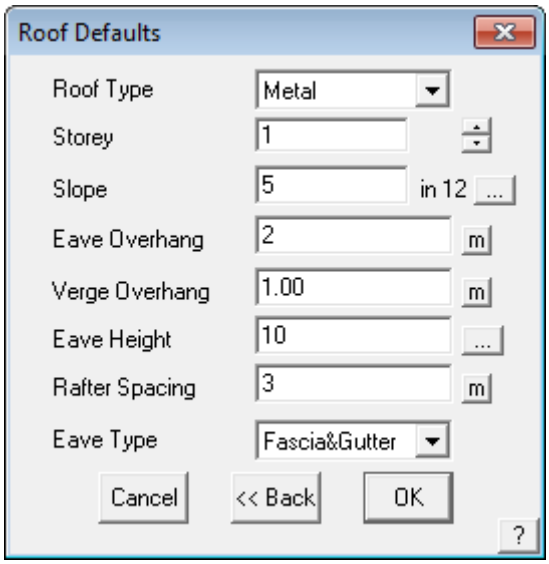
The **Track-Outline** outline generator dialog looks like the illustration below, and allows you to input the perimeter dimensions and direction by clicking the direction buttons. You may also simply type **r51**, then press **Insert**, for a line created to the right, 51 feet long.



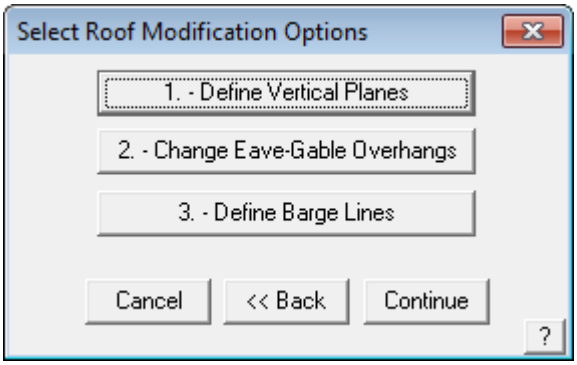
So start where shown and go to the right 51, down 24, left 10, down 5, left 13, up 5, left 17'6", up 3. Once you have done the up 3 line, simply select **Close** and **Close Square.** The system will automatically compute the correct geometry to close the perimeter and draw the remaining outline. Check that the last two dimensions are correct. If they are not correct, then the information is incorrect or you made a mistake in setting the perimeter dimensions. In the event of a mistake, select **Stepback** until

you delete the wrong line and re-insert it.

If they are then you may proceed to the next step. At this stage the lines are construction lines only and don't really exist, until we select F**inish** on the dialog box. This will bring up the Roof Defaults box as below.



Set the defaults as above and click **OK**. You will then be presented with a box asking if there are any Gable ends on the job.



As there are, select **Define Vertical Planes**. Crosshairs will appear and, at the bottom of the screen, you will be prompted to "**Locate the walls for the Gable Ends**". Click on the two wall lines that are going to have gable ends on them and Right click the mouse once. Another dialog may appear saying "**2 entities located, use these entities?**". If the selected walls are correct then click **Yes**.

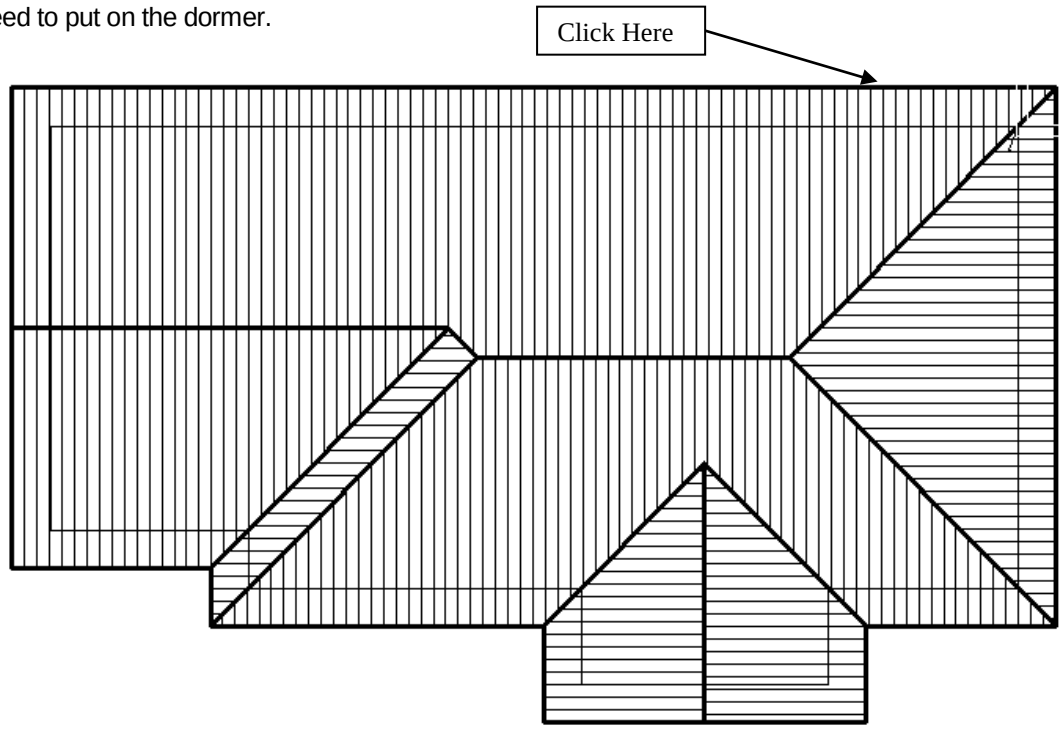
We also do not need to change eave or verge overhangs, so ignore this button too.

In this case we don't want to, so ignore the Define Barge Lines button. But there are barge lines on the gable ends? True, but they have been automatically put on when we selected them as gable ends earlier. Our roof will now be drawn up.

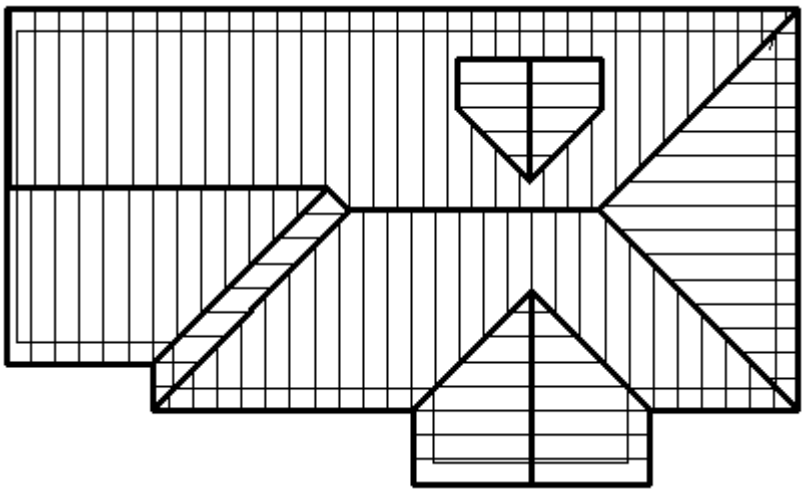
Once complete with cross-hatching to represent our roof surface, you are ready to modify the roof geometry to get the plan on the first page.

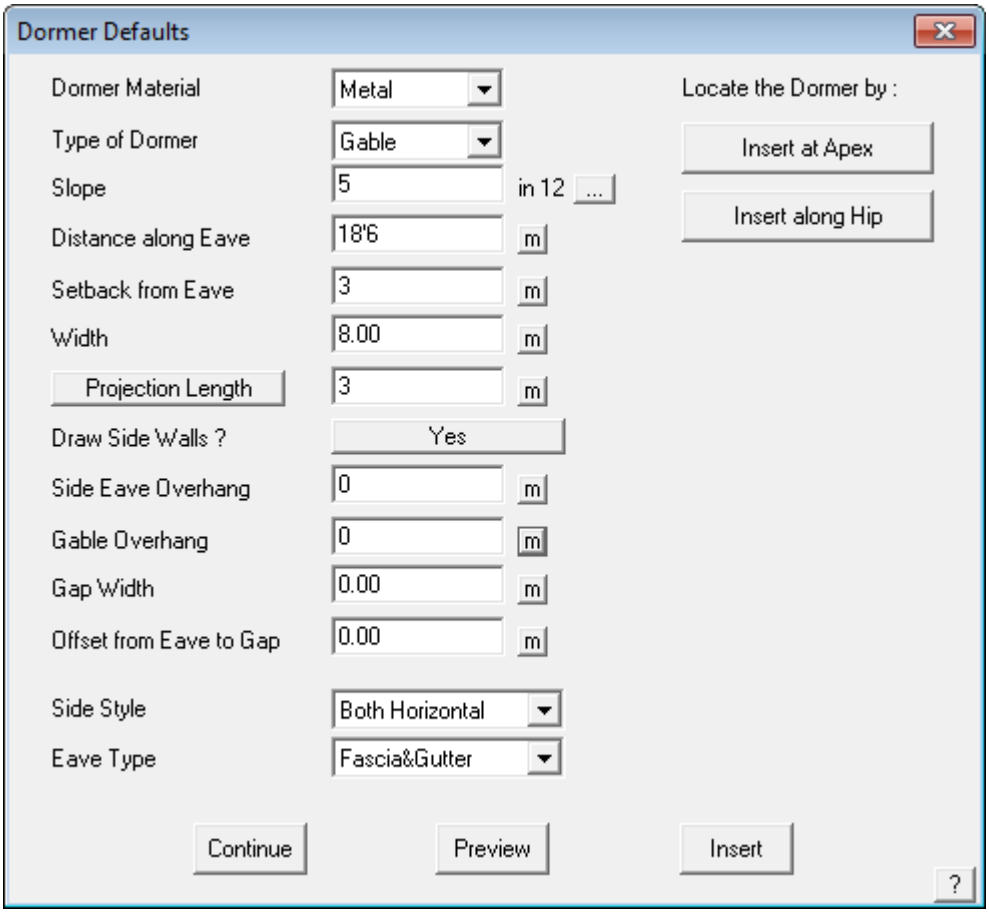
Modify the Roof

The next step is to make the modifications shown for the roof, in this case we only need to put on the dormer.



To do this, go to **Mod-Roof > Dormer**. If you cannot see the Mod-Roof command, right click the mouse button to exit back to the main menu. Crosshairs will appear and you will be prompted to "**Locate eave line**". Select the eave line where shown and the dialog box on the following page will appear. You will also notice a white dot on the right hand corner, this represents our Reference point where all our dimensions are taken from.





Fill in the fields as above and click **Preview**. A white outline of our dormer will appear on the roof. If you can't see it, click and hold the mouse at the top part of the above dialog box, and drag it out of the way. This can be done with any dialog box. If the dormer is in the correct position, click Insert. If not check what fields are incorrect, change them, and click **Preview** again.

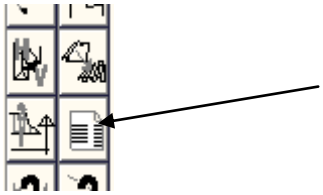
To exit out of this command, click **Continue** and then right click the mouse. Our roof outline is now completed.

Quantities

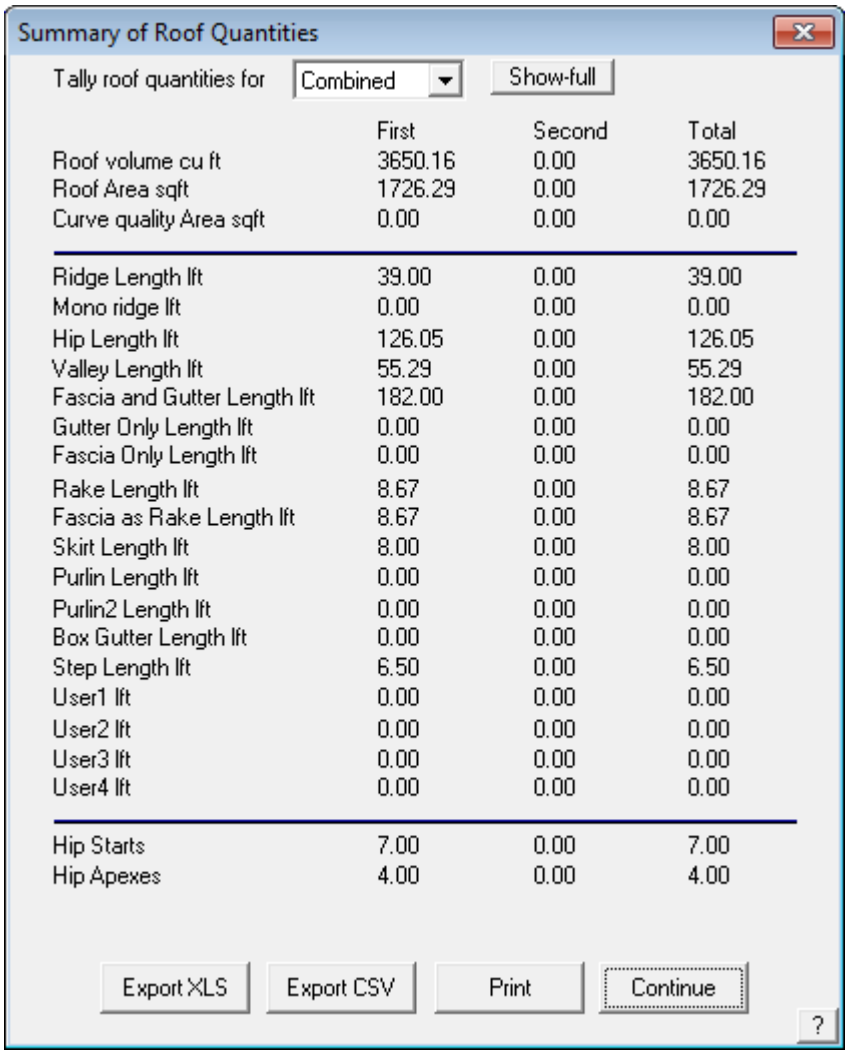
You can now achieve area quantities from what you have modeled already. This is done by going to **Tools > Tally-Quantities**. If you cannot see the Tools command, right click the mouse to exit back to the main menu.

You can also select the Tools Icon -

Then select the Tally-Quantities button –

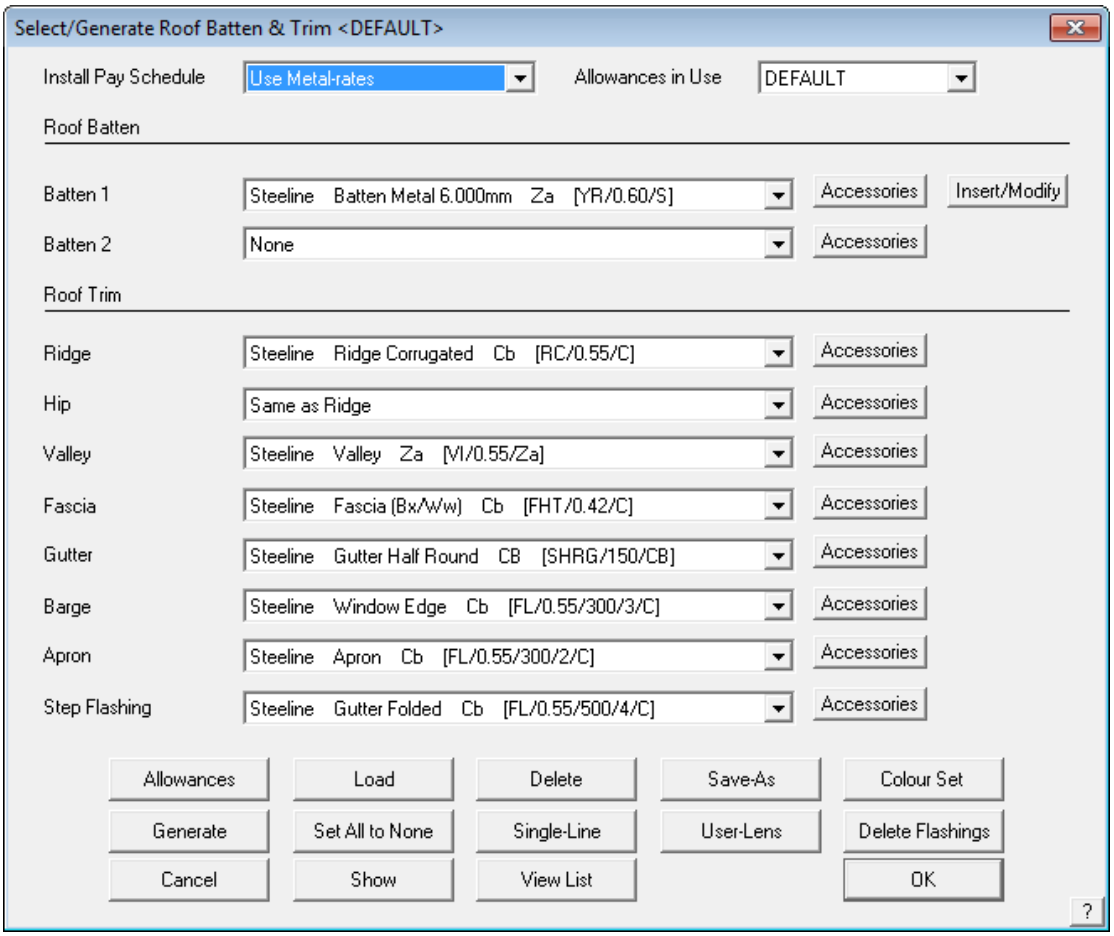


The totals are displayed – these are **not** material quantities – it is the summary of the areas and lengths of your roof model.

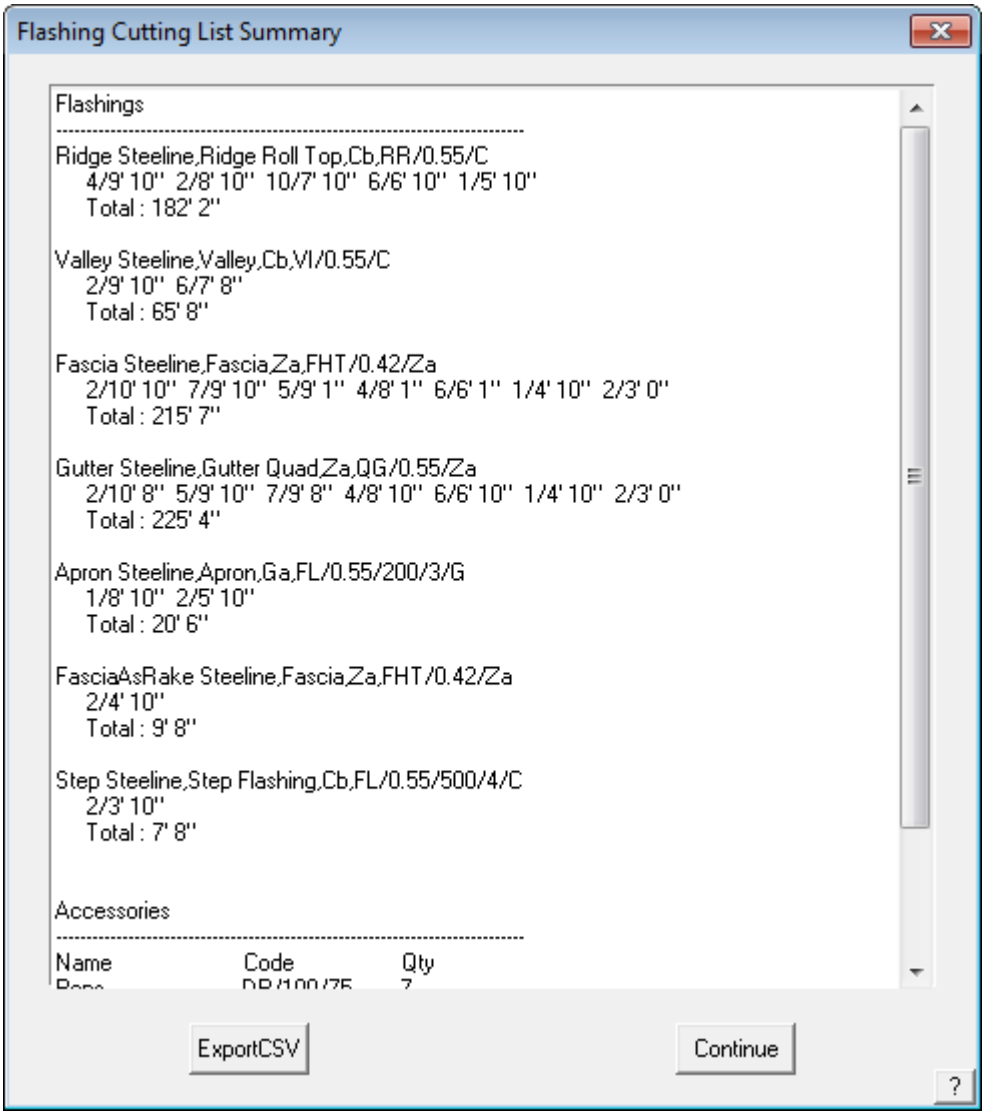


Generate the Flashing Lists

To generate your flashing cutting list, select **Cover > Flashings** from the main menu. Set the flashings appropriate to the task. Depending on whether you have fresh install or a well established install, the list of flashing options will vary. Select what is best suited to your job for the purpose of this training exercise.



As previously mentioned, we could modify our allowances by selecting the Allowances button, but, for the purposes of this exercise we will leave them as they are. To generate the Flashing List, simply click the **Generate** button. A cutting list of our flashings will then appear.

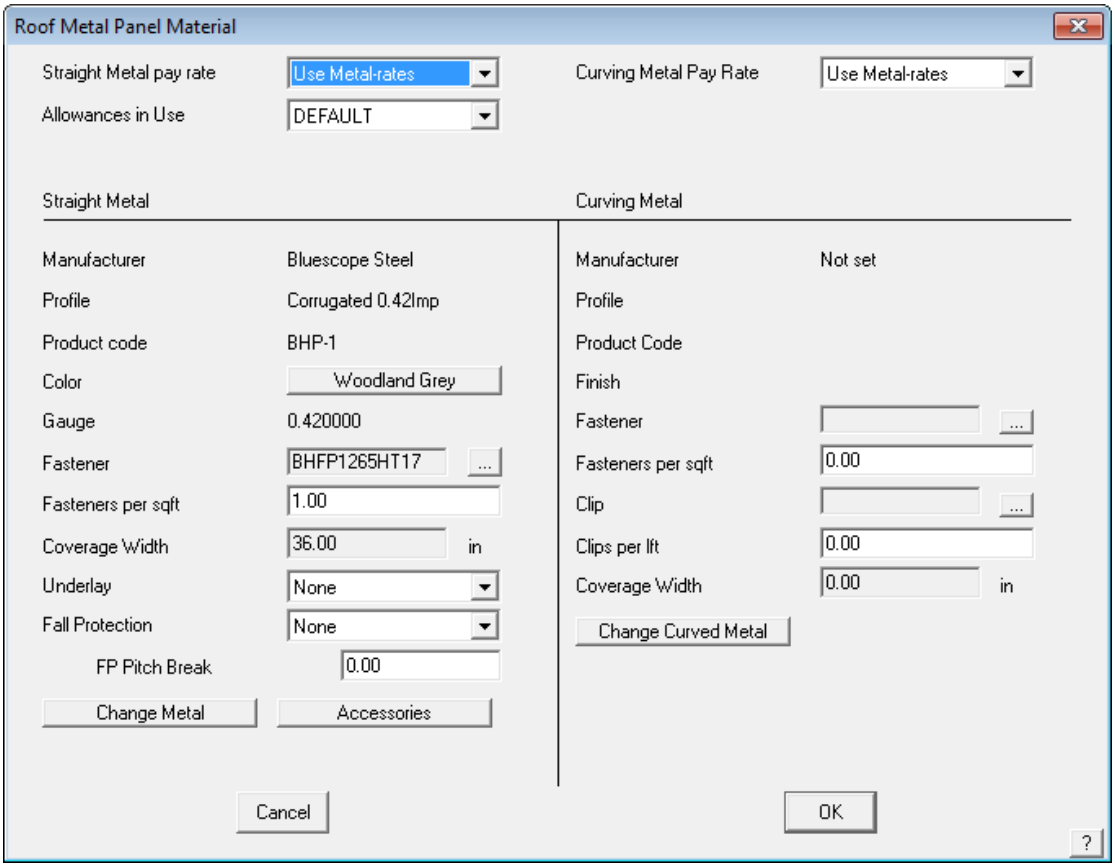


You may notice that some flashings are quantified to the actual lengths, wheras others are reported as Stock Lengths. This is determined by how you setup up your flashing. Consult the Setup Guide for more information

Click **Continue**, to exit the cutting list box, and then **OK** to exit the Flashing material box.

Estimating the Metal

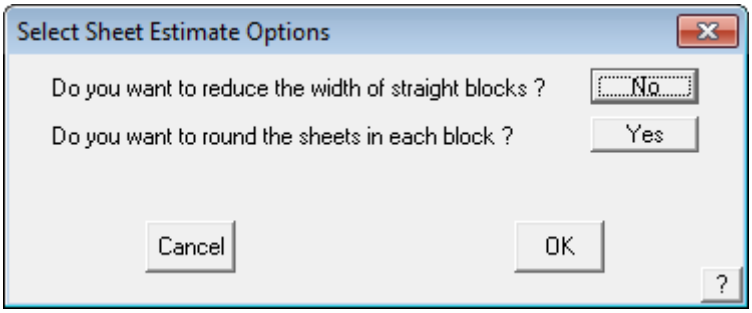
To estimate the Metal panels, we first need to select what we are going to put on the roof. Go to **Cover > Select Metal**. A dialog box will appear showing what material is available. Depending on whether you have fresh installation or a well established installation, the list of cover options will vary. Select what is best suited to your job for the purpose of this training exercise. Select the appropriate one and click **OK**. The following dialog box will then appear:



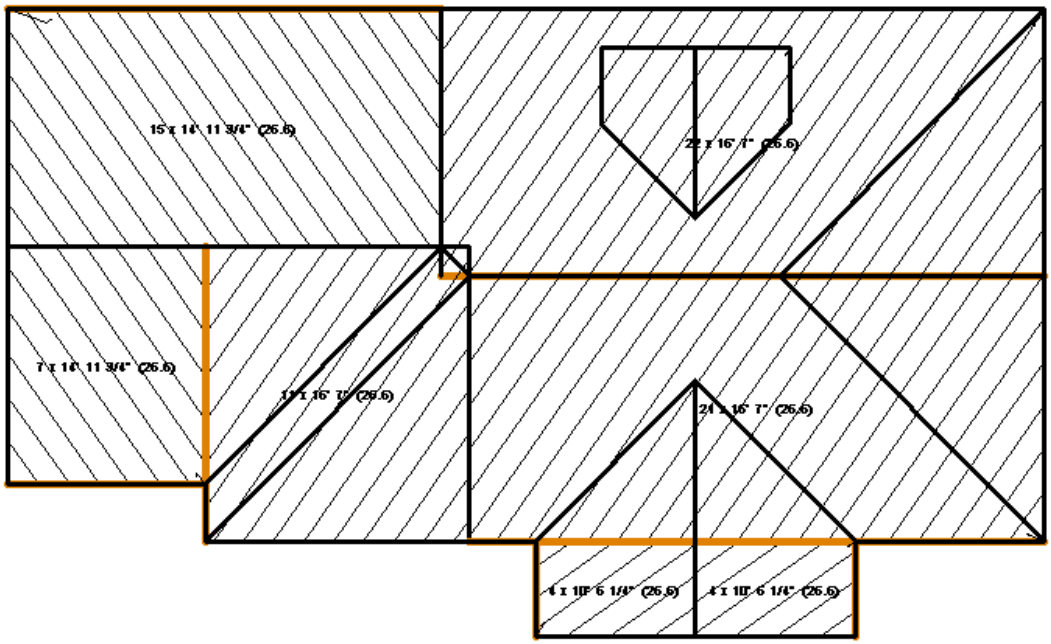
From this dialog we can change the material, select the pay rate, apply sarking and fall protection. For this tutorial we will leave this as it is. To exit, click **OK**.

Now we need to estimate our metal. To do this, right click the mouse to exit back to the main menu and go to **Estimate > Auto-Block**. The following dialog box will appear.

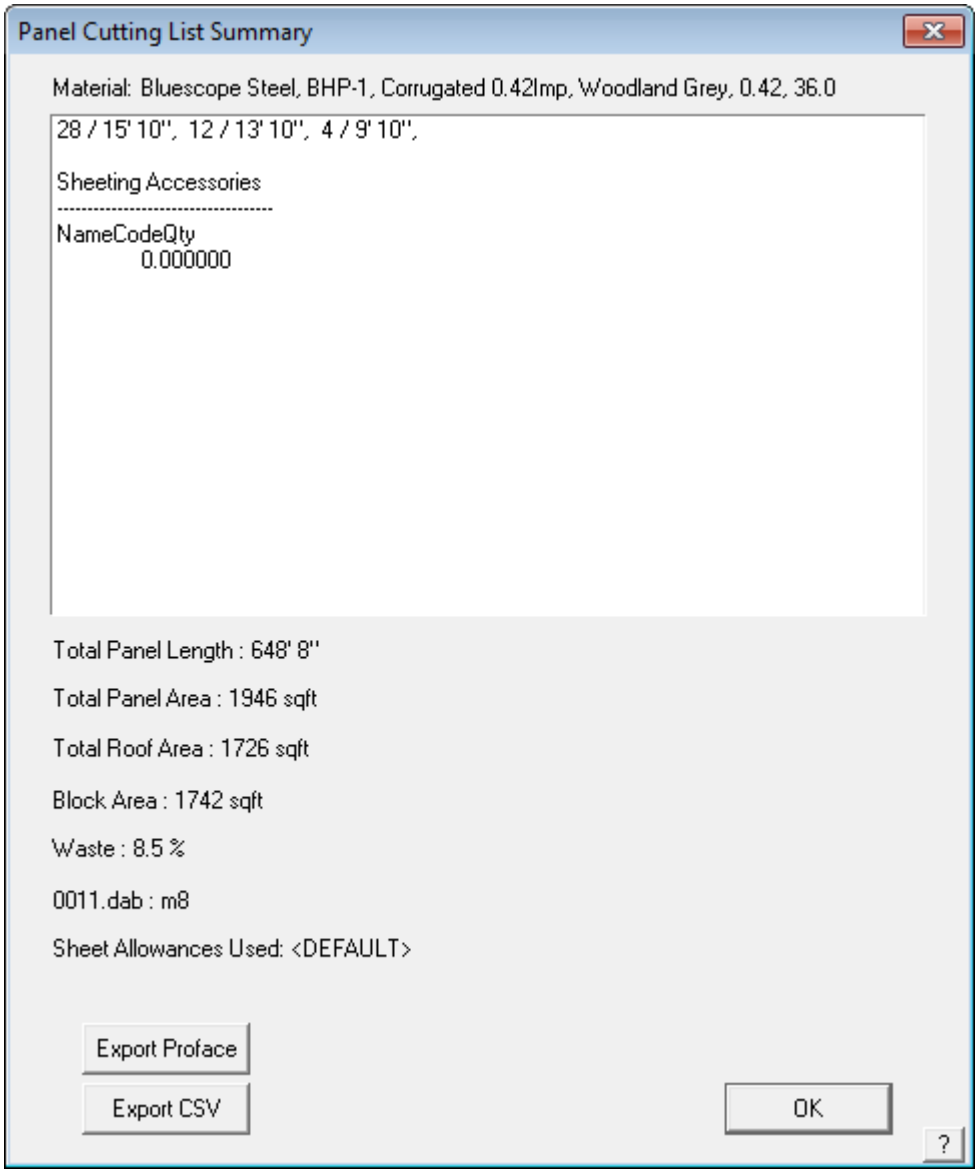
Note: *This method of estimating best suits wider panels that are typically through fastened such as 5V crimp or corrugated panels where offcut material or waste can can be re-used else where on the roof. That is the offcut is 'flipped' on the hip end. Consult the Learning Guide for more detailed descriptions of other methods more suited to profiles such as standing seam.*



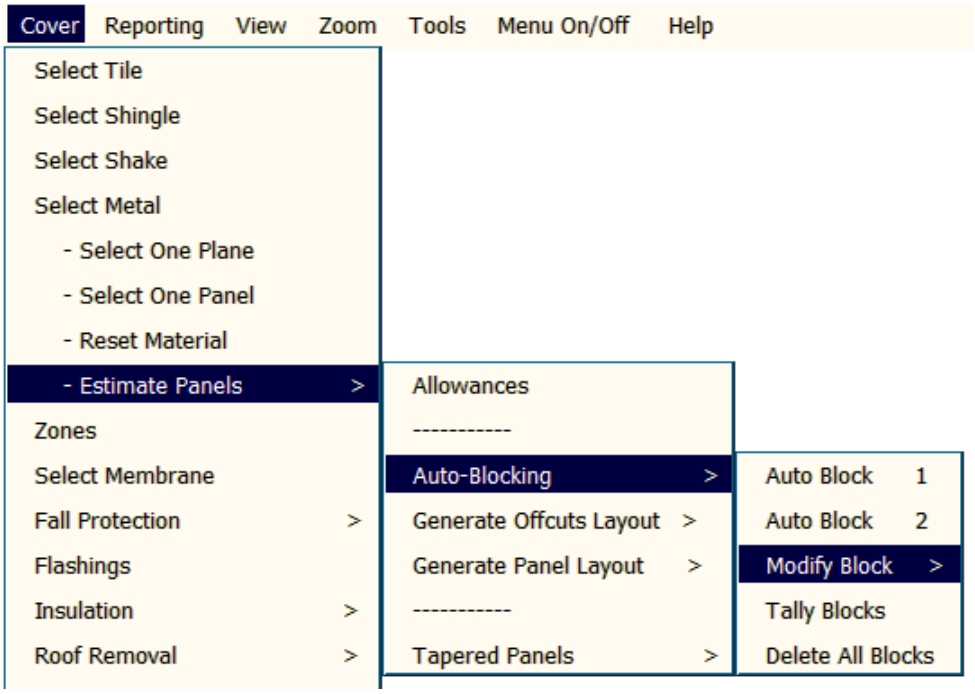
Click **OK**. The software will then estimate the material by laying blocks which simulate the panels.



When this is done we need to go to **Tally-Blocks** to get our cutting list. You will be prompted "Do you really want to nest the Sheets?" Click Yes, and our cutting list will appear. It should look similar to the dialog on the following page.



If you are not happy with the results, you can modify the Blocks by using **Cover > Estimate > Modify-Block > Extend-Edge**, to manipulate the block more effectivly as desired. You will then need to 're-tally' the blocks to generate the new cutting list.



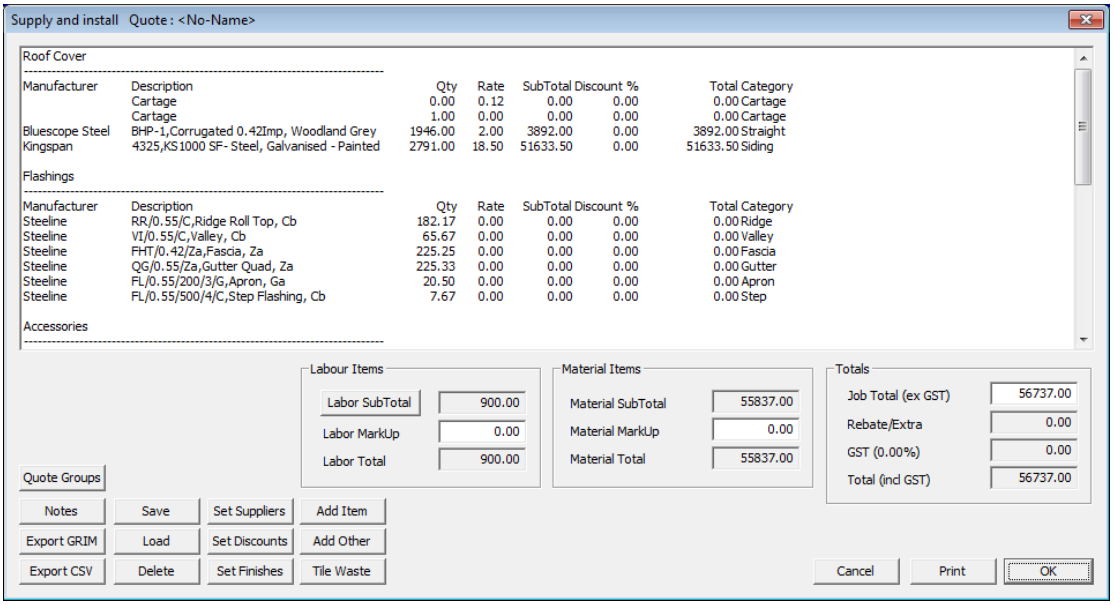
Click **Continue** to exit the cutting list dialog.

Please note that this is not the only method for estimating the sheets. The blocking method is a process that presumes that the offcut material can be re-used elsewhere on the roof. If this does not apply to the material you normally use, for example standing seam, then this does not apply – use Generate Panels instead. Please consult the Complete User Guide for more information.

Detailed Costing and Reports

Costing

From the main menu, select **Reporting > Supply and Install**. This creates a multi page report, as required, summarizing all the materials and labour for the job being quoted.



Printing the Reports

Select the Print button from the Supply and Install dialog. The program will ask you to select a database and model to write, give the file a database name (usually the builder) and a model name (usually the address). After the database has been saved, select the reports you wish to print.

Printing the Drawings

Select Drawings from the main menu, then select from the list which drawings to print.

Quick Start Guide – Sorcerer/Roof Magician (tile roofing)

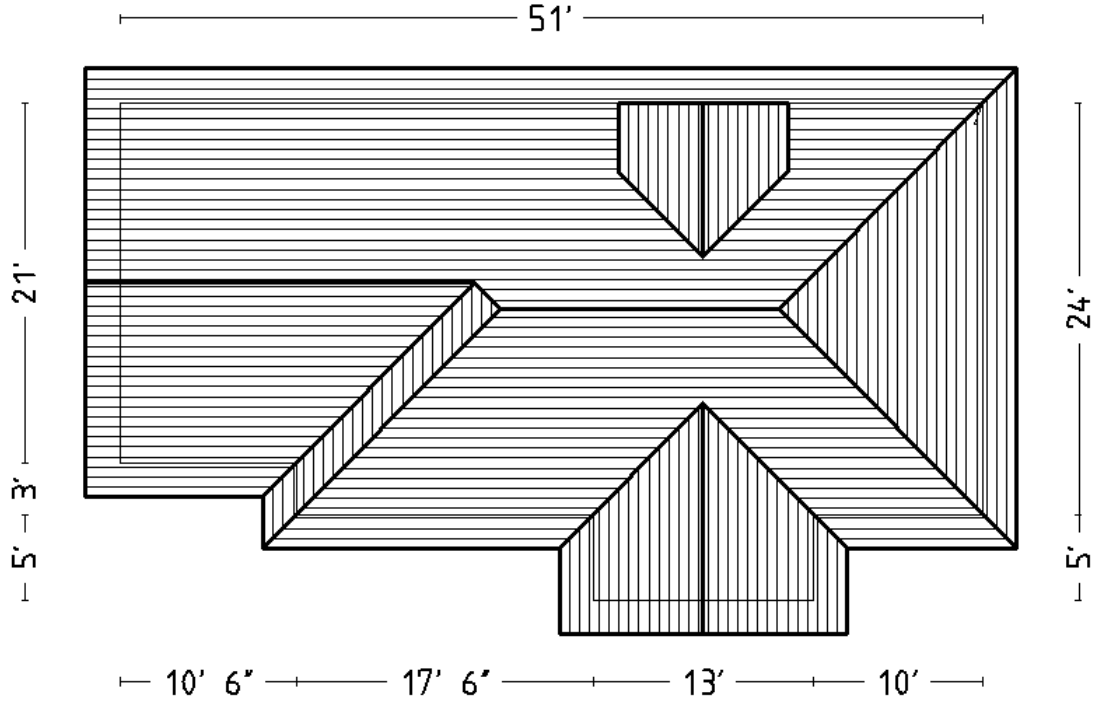
Introduction

Using this manual

This tutorial is designed to explain, step by step, the process of quoting an individual job from start to finish in Sorcerer/Roof Magician (using the tile roofing component). This is only intended as an introductory tutorial and is not designed to show the software's full capabilities. For information regarding the full capabilities of the software, including advanced modeling functions and setup of material and labor rates, please consult the Setup Guide, Learning Guide and Reference Guide.

Job Description

The roof will be a simple hip and gable roof like the one below.



Material Description

We have decided that the materials we will be using are as described below. We have not used these materials before so we must enter them into our database.

Use the Materials menu option to select the appropriate material type and enter the required information as outlined below.

Once entered they are then available for future use.

Roof

Type	Description	Size	Cost
Tile	Pioneer Swiss Terra.	14” x 12”	$1.50

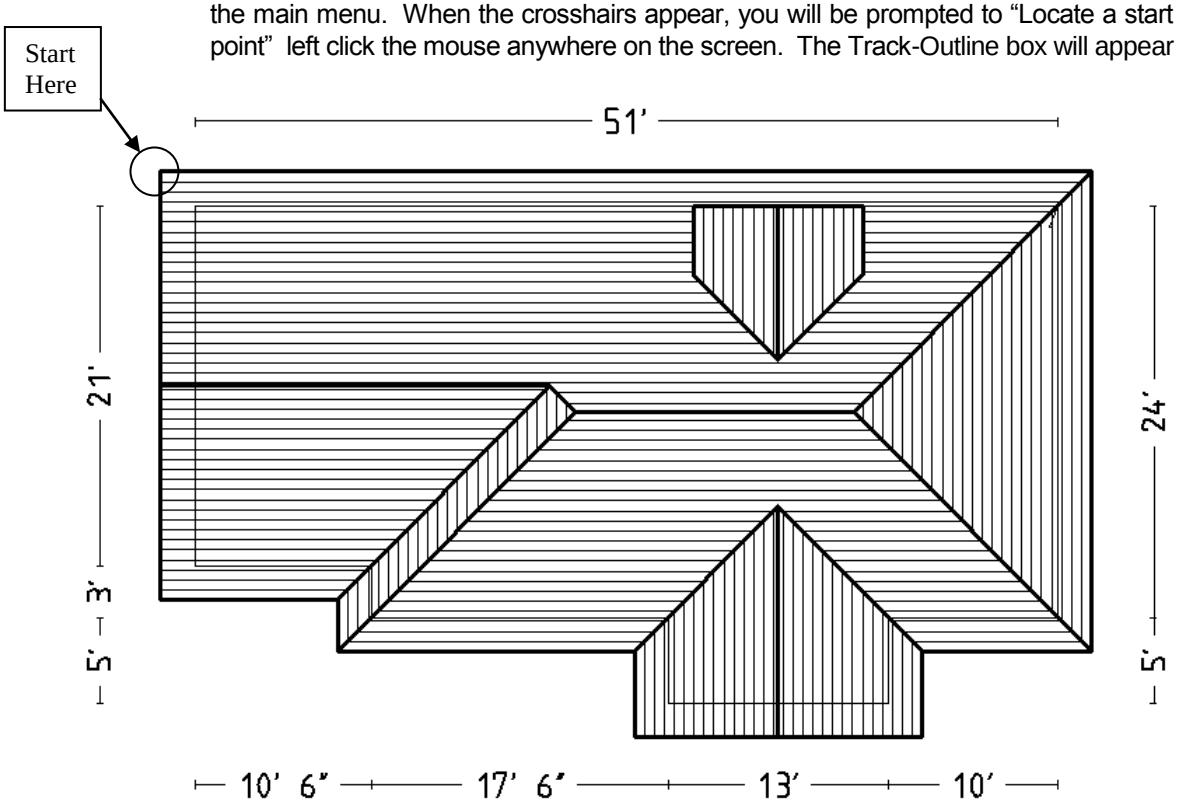
Flashing

Type	Description	Size	Cost
Valley	BLUESCOPE – Valley, Galv.	Into 10’ Pieces	$1.00 per length
Fascia	BLUESCOPE – Metal Fascia	Max. 10’	$1.00 per foot
Gutter	BLUESCOPE – O Gee Gutter	Max. 10’	$1.00 per foot
Barge (Rake)	BLUESCOPE – Rake Flashing	Max. 15’	$2.00 per foot

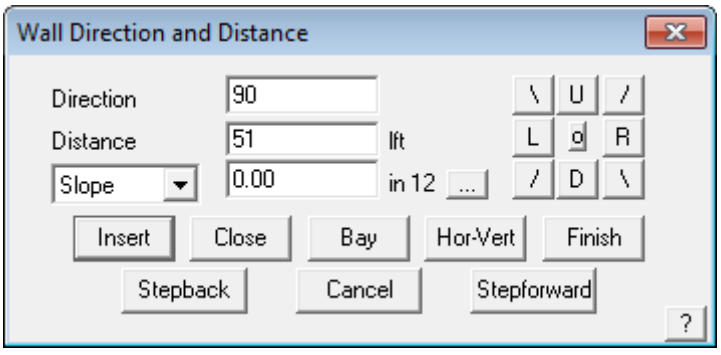
Generating and Modifying the Roof

Define the Roof Outline

To draw the following roof usethe command **Construct-Roof > Track-Outline** from the main menu. When the crosshairs appear, you will be prompted to "Locate a start point" left click the mouse anywhere on the screen. The Track-Outline box will appear

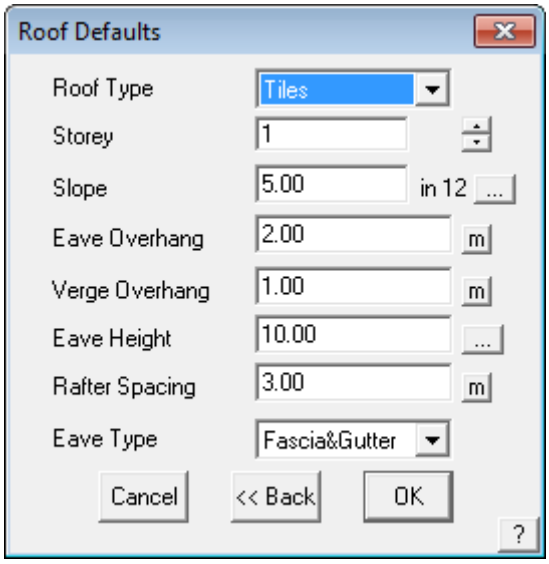


The **Track-Outline** outline generator dialog looks like the illustration below, and allows The **Track-Outline** outline generator dialog looks like the illustration below, and allows you to input the perimeter dimensions and direction by clicking the direction buttons. You may also simply type **r51**, then press **Insert**, for a line created to the right, 51 feet long.

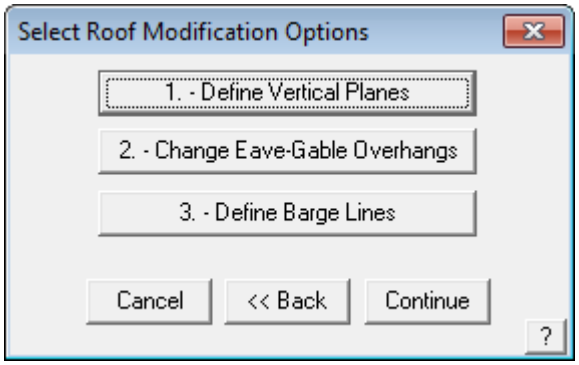


So start where shown and go to the right 51, down 24, left 10, down 5, left 13, up 5, left 17'6", up 3. Once you have done the up 3 line, simply select **Close** and **Close Square.** The system will automatically compute the correct geometry to close the perimeter and draw the remaining outline. Check that the last two dimensions are correct. If they are not correct, then the information is incorrect or you made a mistake in setting the perimeter dimensions. In the event of a mistake, select **Stepback** until you delete the wrong line and re-insert it.

If they are then you may proceed to the next step. At this stage the lines are construction lines only and don't really exist, until we select F**inish** on the dialog box. This will bring up the Roof Defaults box as below.



Set the defaults as above and click **OK**. You will then be presented with a box asking if there are any Gable ends on the job.



As there are, select **Define Vertical Planes**. Crosshairs will appear and, at the bottom of the screen, you will be prompted to "**Locate the walls for the Gable Ends**". Click on the two wall lines that are going to have gable ends on them and Right click the mouse once. Another dialog may appear saying "**2 entities located, use these entities?**". If the selected walls are correct then click **Yes**.

We also do not need to change eave or verge overhangs, so ignore this button too.

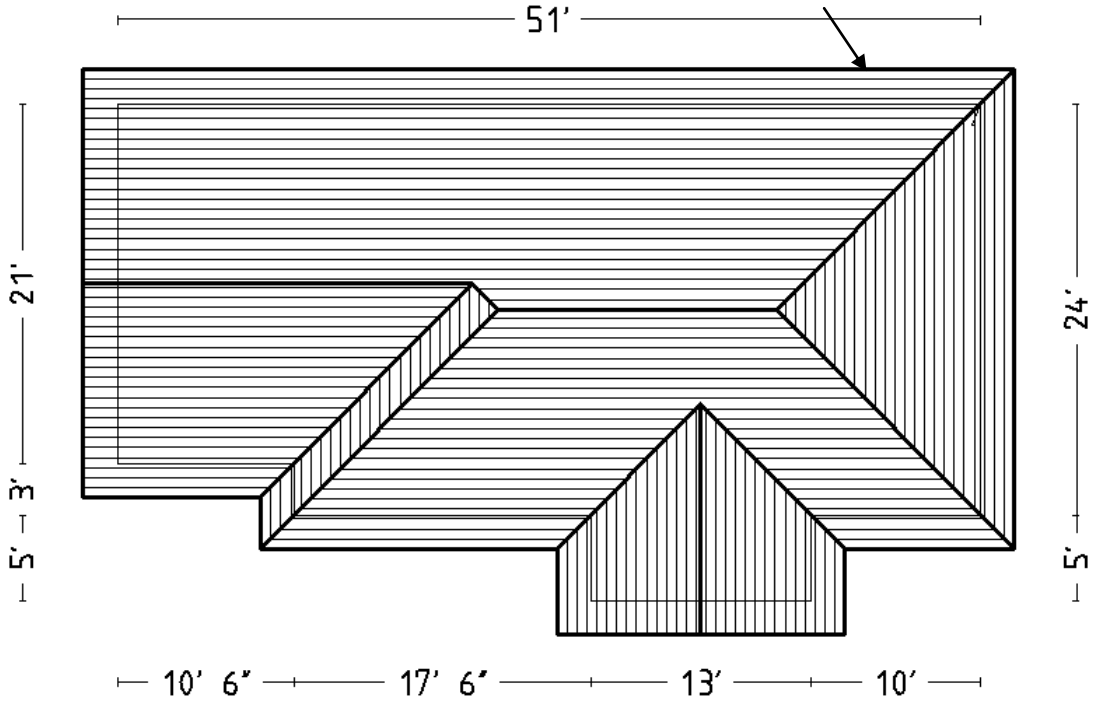
In this case we don't want to, so ignore the Define Barge Lines button. But there are barge lines on the gable ends? True, but they have been automatically put on when we selected them as gable ends earlier. Our roof will now be drawn up.

Once complete with cross-hatching to represent our roof surface, you are ready to modify the roof geometry to get the plan on the first page.

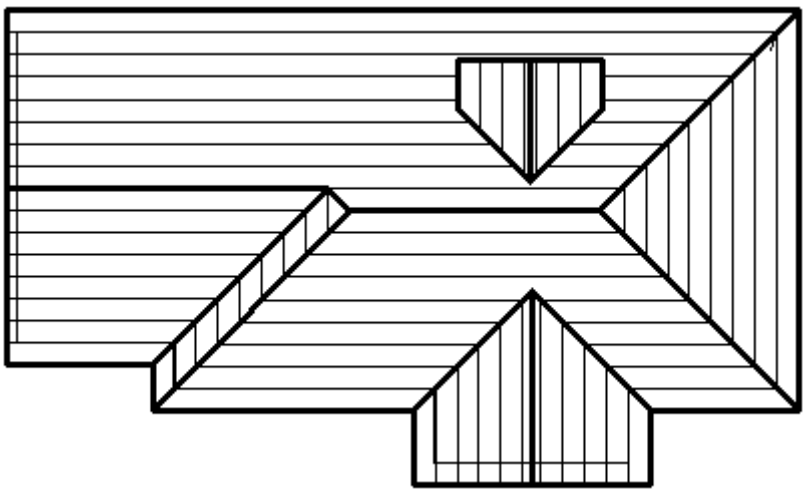
Modify the Roof

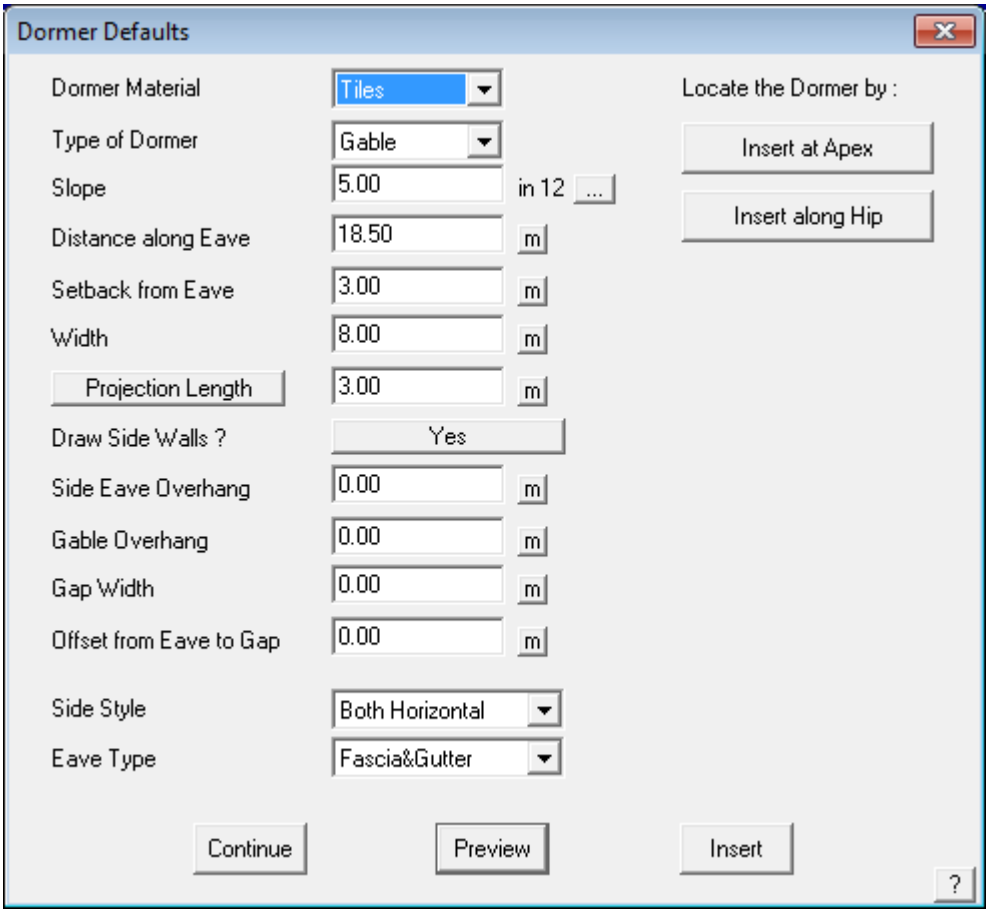
The next step is to make the modifications shown for the roof, in this case we only need to put on the dormer.

Click Here



To do this, go to **Mod-Roof > Dormer**. If you cannot see the Mod-Roof command, right click the mouse button to exit back to the main menu. Crosshairs will appear and you will be prompted to "**Locate eave line**". Select the eave line where shown and the following dialog box will appear. You will also notice a white dot on the right hand corner, this represents our Reference point where all our dimensions are taken from.





Fill in the fields as above and click **Preview**. A white outline of our dormer will appear on the roof. If you can't see it, click and hold the mouse at the top part of the above dialog box, and drag it out of the way. This can be done with any dialog box. If the dormer is in the correct position, click Insert. If not check what fields are incorrect, change them, and click **Preview** again.

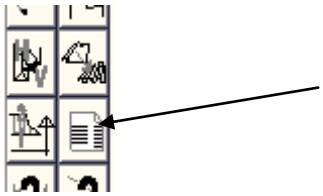
To exit out of this command, click **Continue** and then right click the mouse. Our roof outline is now completed.

Quantities

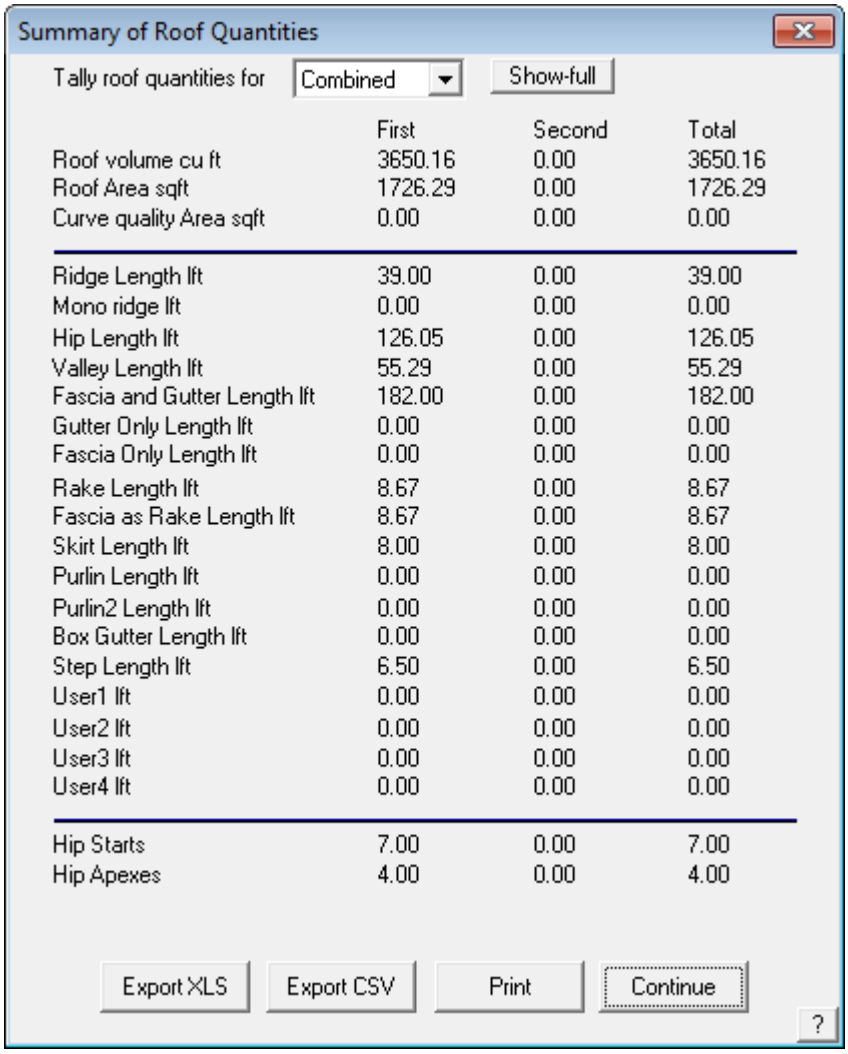
You can now achieve area quantities from what you have modeled already. This is done by going to **Tools > Tally-Quantities**. If you cannot see the Utilities command, right click the mouse to exit back to the main menu.

You can also select the Tools Icon -

Then select the Tally-Quantities button –

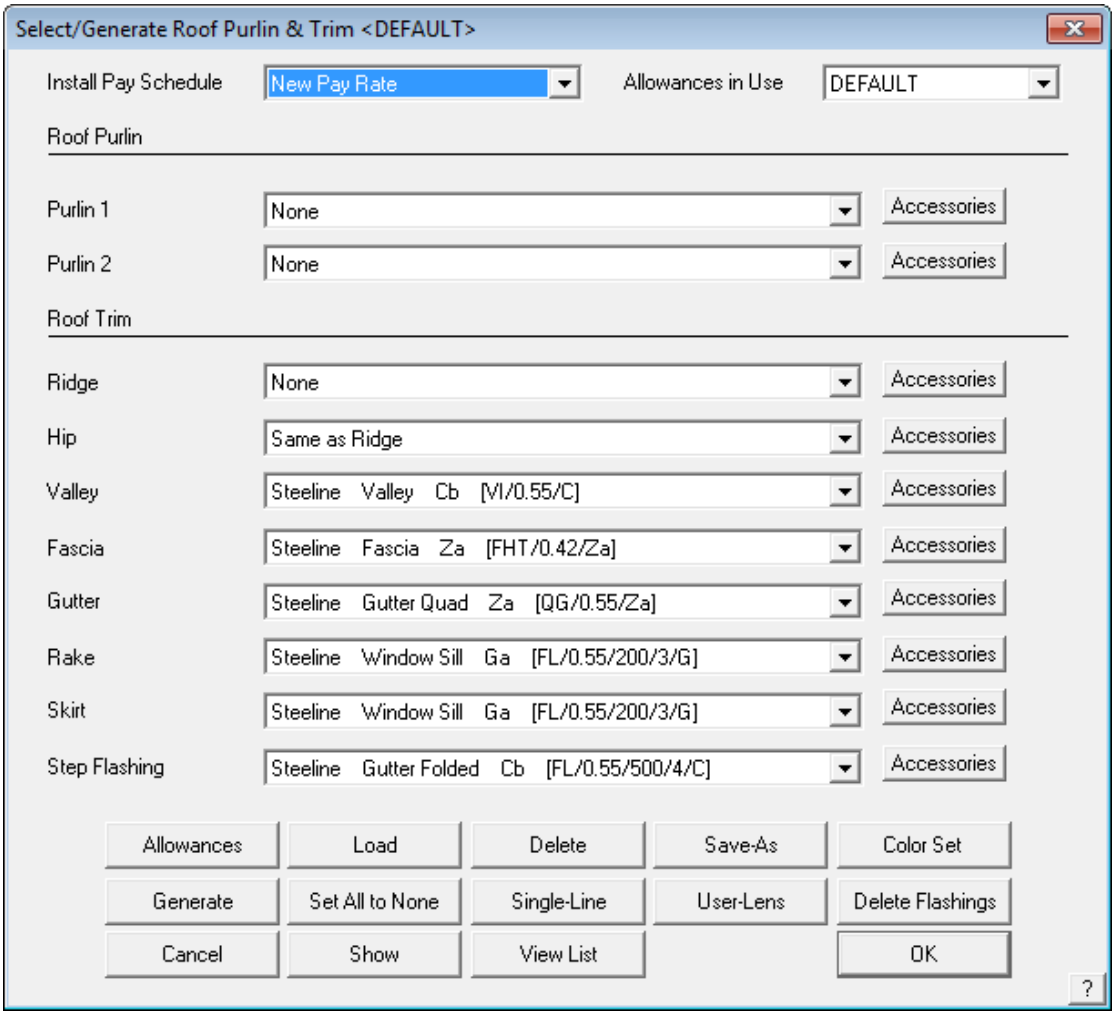


The totals are displayed – these are **not** material quantities – it is the summary of the areas and lengths of your roof model.

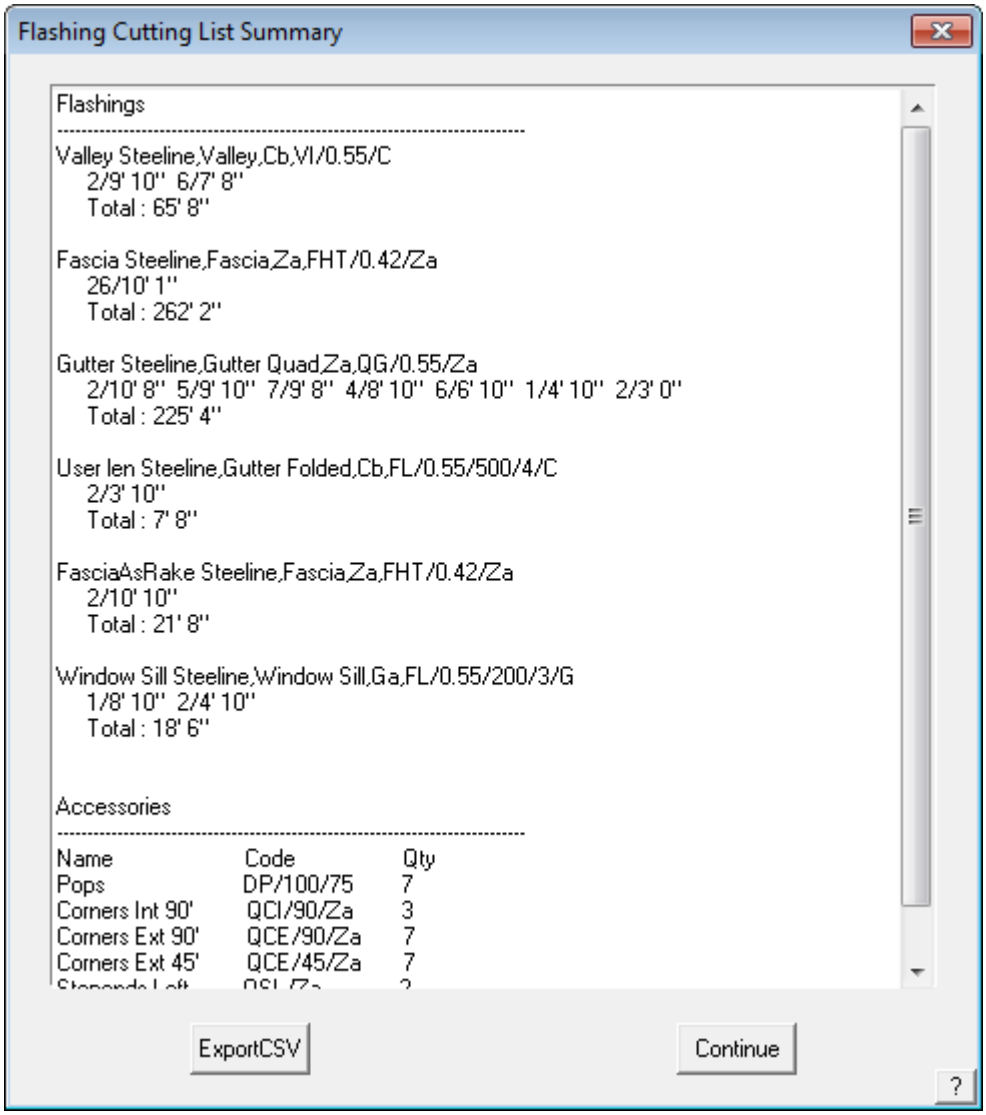


Generate the Flashing Lists

To generate your flashing cutting list, if required, select **Cover > Flashings** from the main menu. Set the flashings to be the same as below.



As previously mentioned, we could modify our allowances by selecting the Allowances button, but, for the purposes of this exercise we will leave them as they are. To generate the Flashing List, simply click the **Generate** button. A cutting list of our flashings will then appear.

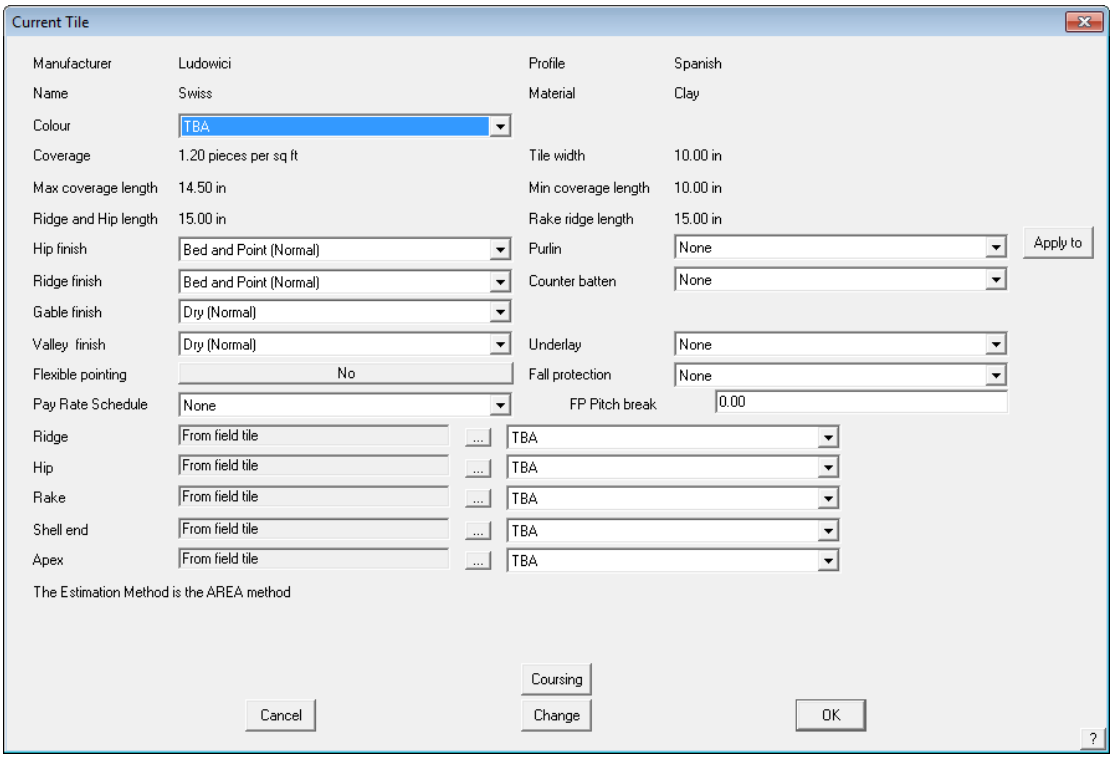


You may notice that some flashings are quantified to the actual lengths, wheras others are reported as Stock Lengths. This is determined by how you setup up your flashing. Consult the Setup Guide for more information on setting up flashings

Click **Continue**, to exit the cutting list box, and then **OK** to exit the Flashing material box.

Estimating the Tiles

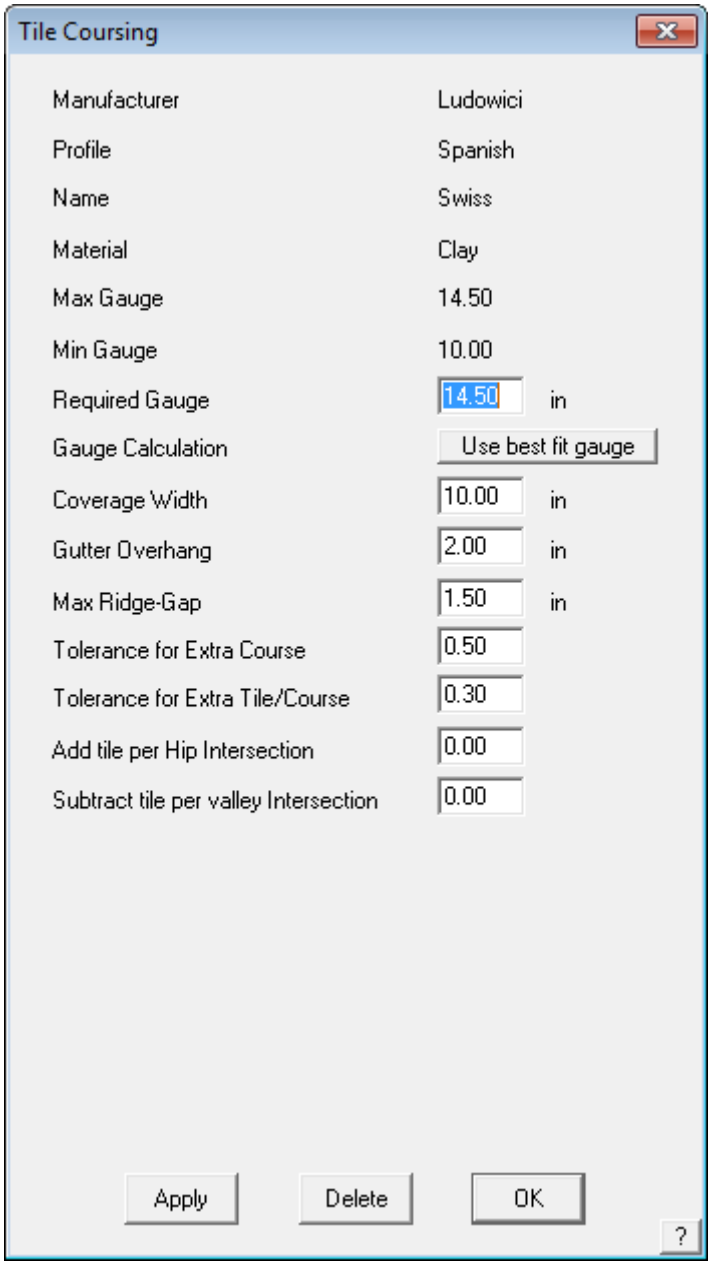
To estimate the Tiles, we first need to select what we are going to put on the roof. Go to **Cover > Select Tile**. A dialog box will appear showing available materials. Select the appropriate one and click **OK**. The following dialog box will then appear.



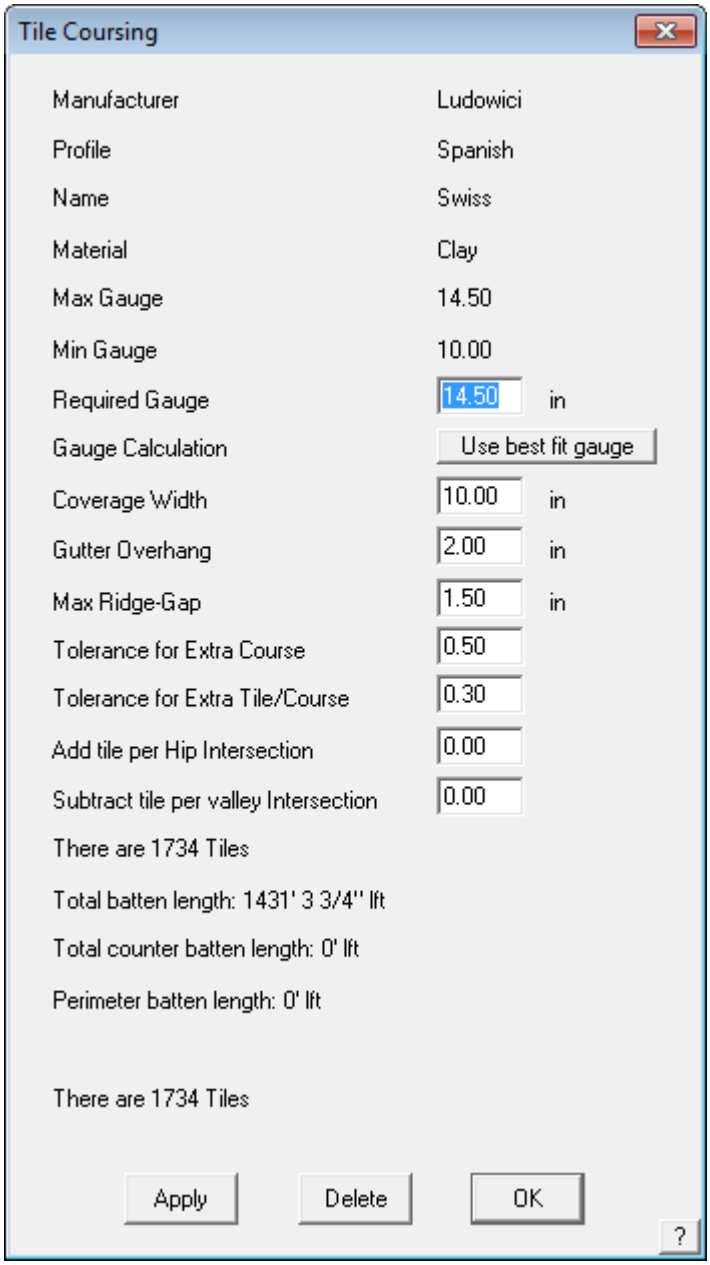
From this dialog we can change the material, select the pay rate, apply sarking, battens and fall protection. For this tutorial we will leave this as it is. To exit, click **OK**.

Now we need to estimate our tiles. To do this click **Coursing**. The dialog box on the following page will appear.

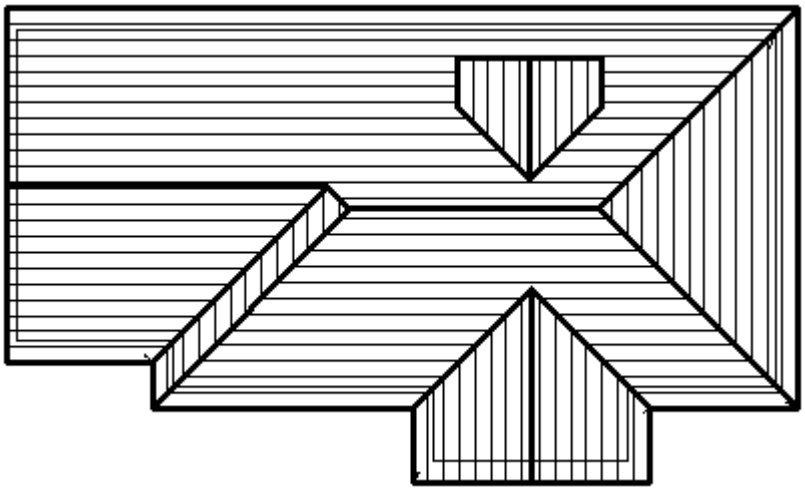
Note: *The appearance of this dialog on your screen may be different to that shown above. AppliCad has two tile data structures – Tiles and Tiles+. The database structure in use is determined by the operator and set under* ***Tool > Preferences****. The options displayed above are for the Tiles database. For more details on the options for estimating tiles refer to the Setup Guide.*



Click **Apply**. The software will then estimate the material by laying coursing which simulate the tiles, and the amount of tiles and battens required will appear on the dialog box as follows.



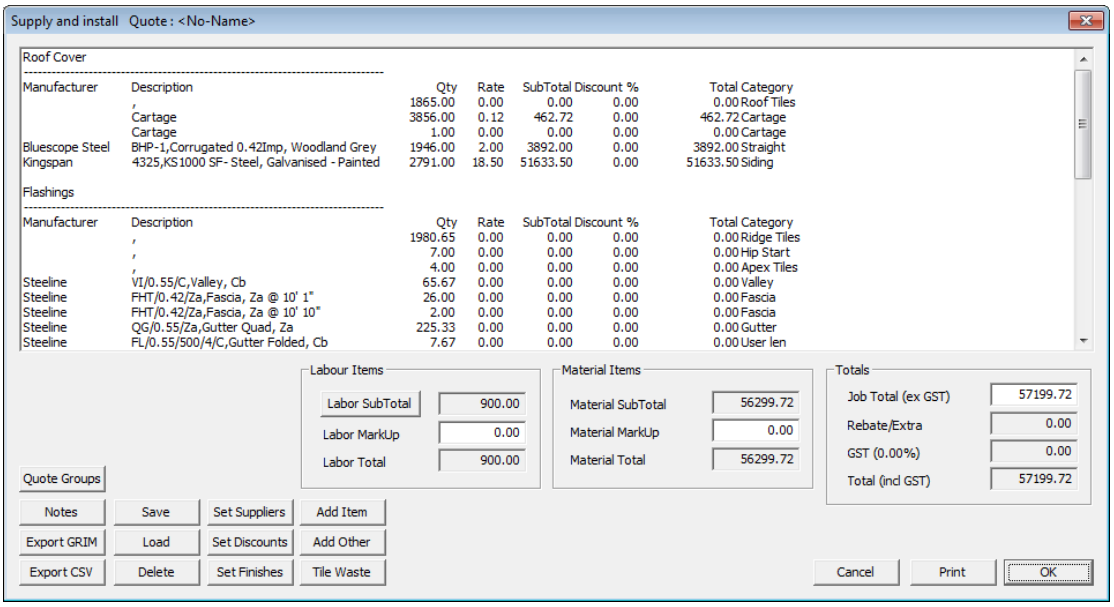
When this is done click OK., and then OK again the exit the tile dialog box



Detailed Costing and Reports

Costing

From the main menu, select **Reporting > Supply and Install**. This creates a multi page report, as required, summarizing all the materials and labour for the job being quoted.



Printing the Reports

Select the Print button from the Supply and Install dialog. The program will ask you to select a database and model to write, give the file a database name (usually the builder) and a model name (usually the address). After the database has been saved, select the reports you wish to print.

Printing the Drawings

Select Drawings from the main menu, then select from the list which drawings to print.