appli-cad
Australia

Roof Magician

Advanced Software for Roof Modeling and Estimating

Tutorial for defining Tiles, Shingles and Shakes

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Introduction

Using this manual

> This tutorial is designed to explain, step by step, the process of defining, modifying and selecting a tile, shingle, slate or shake.

> While not essential, it is recommended that the basic Learning Guide for Sorcerer or Roof Magician has been completed prior to attempting to work through this tutorial. An understanding of the process is helpful, as is a basic understanding of the construction of a roof.

> This manual will be helpful if you forget how to define or select materials.

> **Please Note:** The process for modifying tiles, shingles and shakes is the same (except for starter courses not available for tiles.)
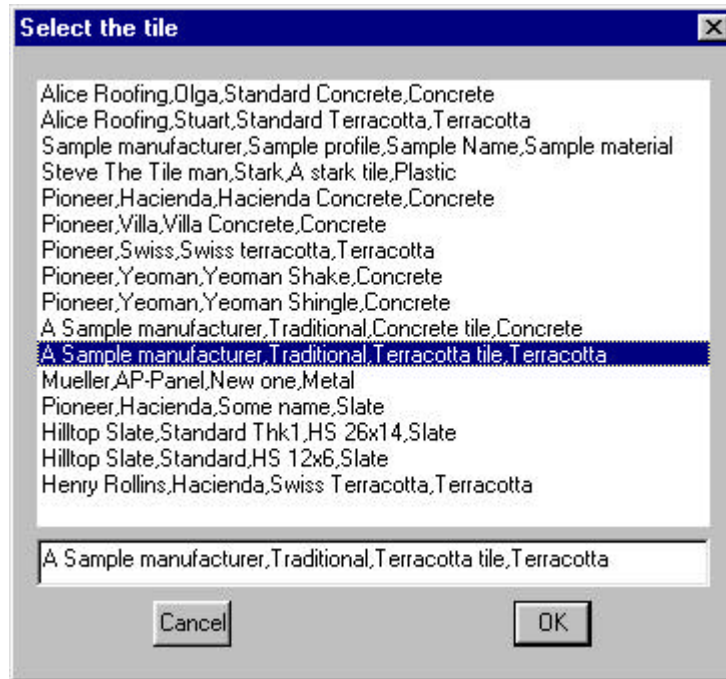
Defining Materials

Modifying a tile

The first step when defining materials is to select **Coverage | Define Materials | Tiles** from the main menu. The dialog box below is displayed.

With this dialog box now open you have the choice to either update an old tile definition (such as cost), or add a completely new tile. To modify an old tile, click on **Select.** This will bring up the tile select dialogue box.

As shown in the above dialog box you select the appropriate tile and then select **Ok**. This will take you back to the previous dialog box but this time with the details of the tile selected displayed in the fields.

As shown above the dimensions of the tiles are now filled out.

The **Roof tile coverage area** is how many tiles will fit in a square metre/foot.
Max roof tile coverage length is the maximum length of the tile.
Min roof tile coverage length is the minimum length of the tile.
Roof tile coverage width is the width of the tile.
Ridge and hip tile length is the length of the tiles that cover the ridges and hips.
Barge ridge tile length is the length of the tiles that cover barge line.

The final five fields allow you to set item for **tile, ridge, shell end, apex** and **barge ridge**. If you need to modify the selected tile, make the modifications and then select **Update**. This will now update the tile details into the tile database.

Note: This process is the same for slate, shingles, shakes or metal 'tile' panels

Adding a new tile

If you want to add a completely new tile, type in the details in the appropriate fields and select **Add**. This will add the new tile to the tile database. With the new or modified tile in the tile database click **Ok** to exit. The following dialog box will then appear telling you the tile database has been updated.
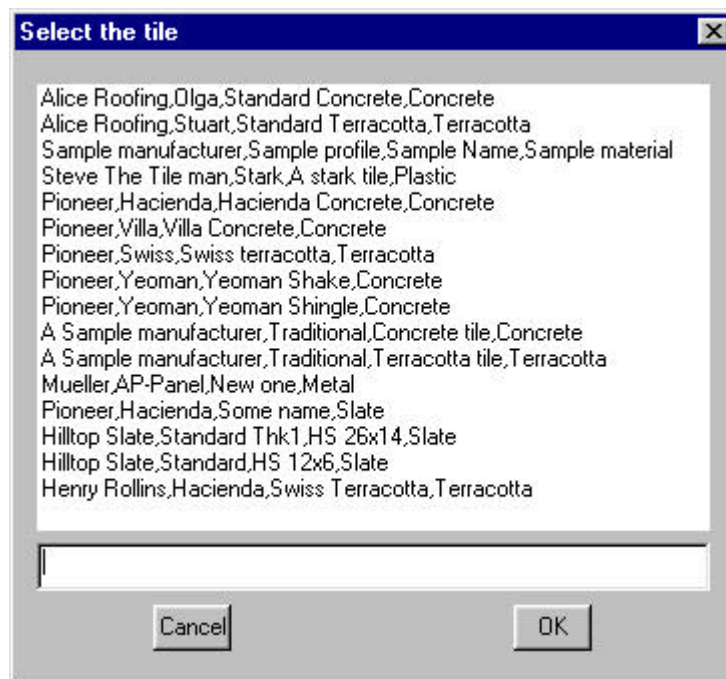

You may select an existing tile, modify its details and save as a new tile using **Add**, instead of **Update**. In this way you can add an entire product line in just a few minutes work. You only have to do this once to input the products that you use, or to change details, e.g. if your supplier drops their price for you.

Covering Roof

Selecting Tile

With the appropriate tile now in the database. You can now select the tile that you want to cover the roof. To do this you go to **Coverage** and from there select **Select-Tiles**. This will give you the following dialog box.

From this dialog box select the tile that you want to cover your roof with, and then click on **Ok**. From here the following dialog box will appear.

This dialog box continues the details of the product you have selected. So now you can change the way the tiles are joined at **hips, ridges, gables and valleys**, by clicking on the down arrows at the end of each field. You can also change the size of the **batten** that is used, by also clicking on the down arrow at the end of the field. To choose a color for your tile, click on the selection box at the end of the field. To change whether or not you have **Flexible pointing**, click on **No** and it will change to **Yes**. Finally, to change the **Pay rate schedule**, click on the selection box at the end the field.

If you have selected the wrong tile you can change it from this dialog by selecting **Change**.

Pay Rate Schedule

To change the pay rate schedule select **Costing2 | Tile-Pay** and the following dialog box will appear.

Installer pay rates (rec = 0 of 3)					
Name					
Storey	1	◁ ▷			
Pitch intervals	30.0	35.0	40.0	45.0	90.0
Roof / sqm	0.00	0.00	0.00	0.00	0.00
Normal hip / m	0.00	0.00	0.00	0.00	0.00
Sealed hip / m	0.00	0.00	0.00	0.00	0.00
Butt hip / m	0.00	0.00	0.00	0.00	0.00
Normal valley / m	0.00	0.00	0.00	0.00	0.00
Bed and point valley / m	0.00	0.00	0.00	0.00	0.00
Sealed valley / m	0.00	0.00	0.00	0.00	0.00
Normal ridge / m	0.00	0.00	0.00	0.00	0.00
Sealed ridge / m	0.00	0.00	0.00	0.00	0.00
Butt ridge / m	0.00	0.00	0.00	0.00	0.00
Normal gable / m	0.00	0.00	0.00	0.00	0.00
Bed and point gable / m	0.00	0.00	0.00	0.00	0.00
Seal gable / m	0.00	0.00	0.00	0.00	0.00
Barge ridge / m	0.00	0.00	0.00	0.00	0.00
Sarking / sqm	0.00	0.00	0.00	0.00	0.00
Apron / m	0.00	0.00	0.00	0.00	0.00

Select   Delete   Add

Cancel   Intervals   Ok

From here you can set up your pay rates by either selecting a previous set of rates by choosing **Select**. This will bring up the following dialog box.

Select a labour rate set   ✕

Set 1
Newset4
New England Area

Set 1

Cancel   OK

From this dialog box you can choose a previously saved pay rate list. When you have cosen your list click **Ok** to exit. This will take you back to the pay rate list with the fields filled in.

Installer pay rates (rec = 2 of 3)

	10.0	35.0	60.0
Name	Newset4		
Storey	1		
Pitch intervals	10.0	35.0	60.0
Roof / sqm	1.00	2.00	6.00
Normal hip / m	2.00	4.00	7.00
Sealed hip / m	3.00	6.00	8.00
Butt hip / m	4.00	8.00	4.00
Normal valley / m	5.00	10.00	5.00
Bed and point valley / m	6.00	12.00	6.00
Sealed valley / m	7.00	14.00	3.00
Normal ridge / m	8.00	15.00	9.00
Sealed ridge / m	9.00	18.00	8.00
Butt ridge / m	10.00	22.00	7.00
Normal gable / m	11.00	11.00	9.00
Bed and point gable / m	12.00	19.00	3.00
Seal gable / m	13.00	15.00	2.00
Barge ridge / m	14.00	10.00	1.00
Sarking / sqm	15.00	1.00	5.00
Apron / m	16.00	5.00	6.00

Select   Delete   Add
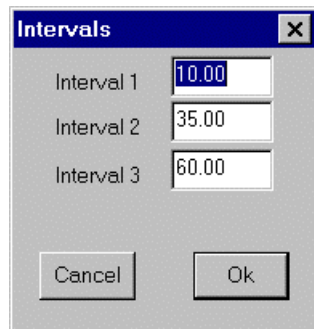Update
Cancel   Intervals   Ok

From here you can change the existing rates by clicking in the fields that you want to change and then clicking **Update**. This will update the existing file. To change the **Pitch Intervals**, select **Intervals.** This will bring up the following dialog box.

How many intervals do you want? (Max is 10)

3

Cancel   OK

This dialog box asks you how many intervals you want on your pay rate, up to a maximum of 10 intervals. With the required amount of intervals entered click **Ok**. This will now bring up the following dialog box.
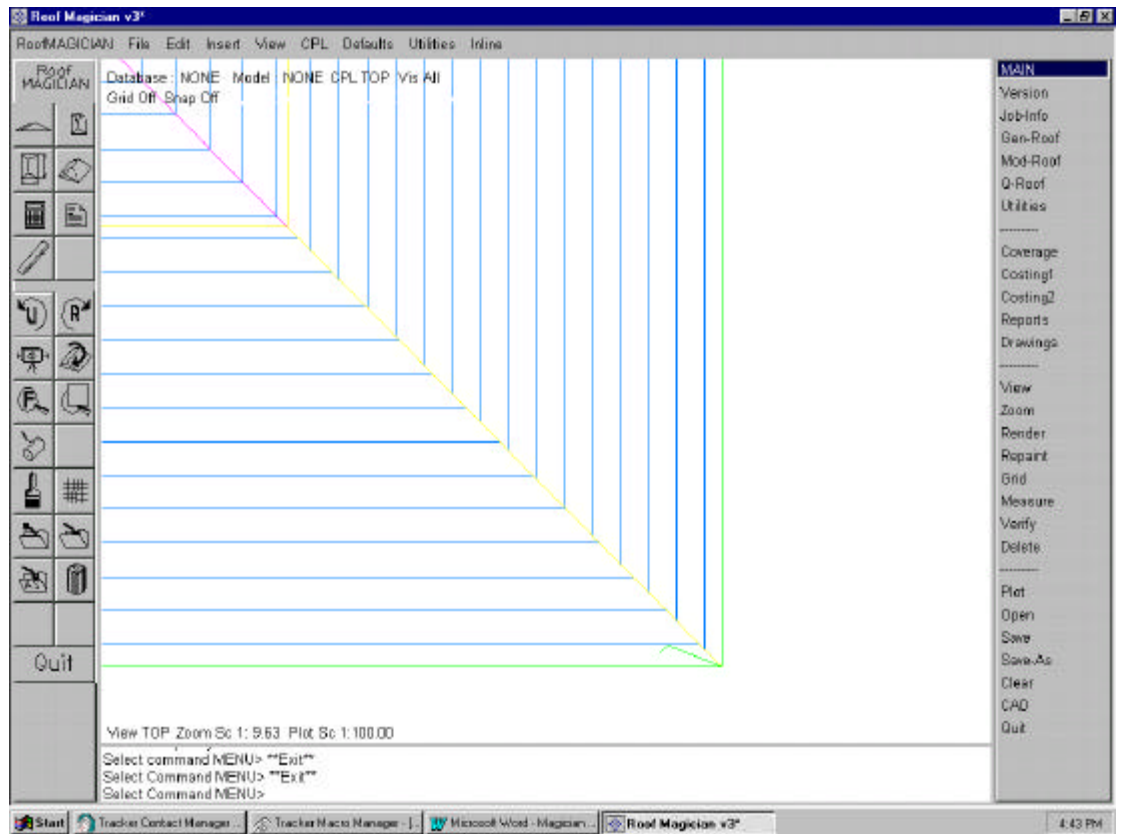
From this dialog box you can enter the interval pitches that you want, by clicking in the appropriate field and then typing in the interval that you want. Click on **Ok**, when you have finished entering your fields.

If you want to add a new set of rates, type in the approriate figures in the corrisponding fields, and then name the list of rates. To save all the new rates click **Add**. If you would like to delete a pay rate, select the rate that you would like to delete and then select **Delete**.
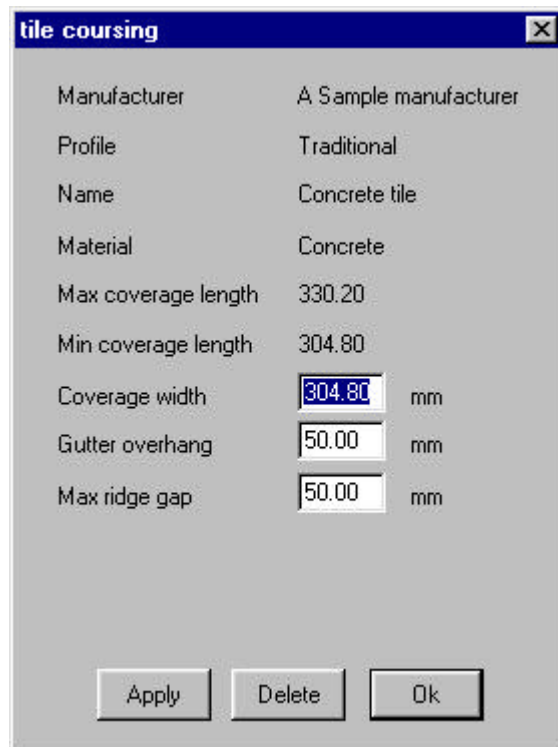
Coursing

The base method of estimating your cover material is by estimating area i.e. total square meters/feet of tiles. Coursing is a more accurate and more efficient way of estimating how many tiles are going to be needed. If you wish to estimate by course, select the coursing button to draw up the course lines. In effect this simulates the laying of the tile.
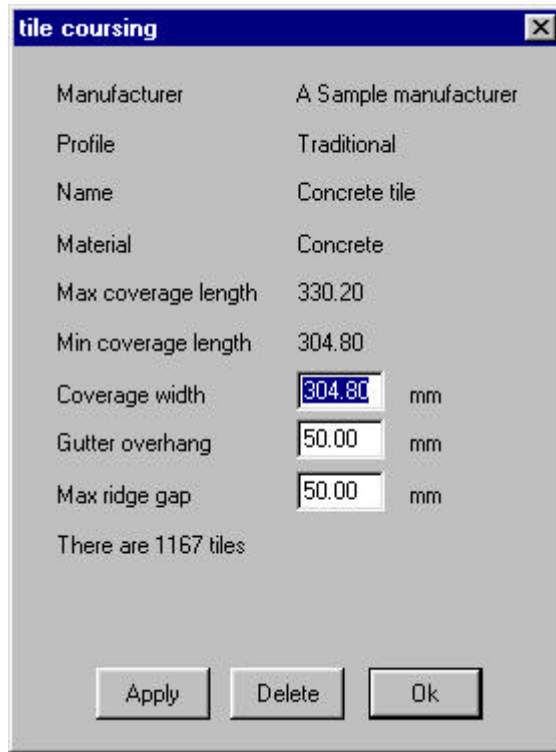
Note: For tiles of fixed exposure, the course spacing (which is equivalent to the batten spacing) is also fixed. For tile that may slip the exposure, the course spacing is adjusted so that now material is cut at the ridge. Fixed exposure will have the same figures in max and min tile length.

The above picture shows the difference between fixed tiles and slip tiles. The left side
of the roof shows an even spacing of tiles until it gets to the ridge and then a single
row of cut tiles is inserted. On the right side of the house, slip tiles are used. As you
can see the tile spacing is even troughout.

Select the **Apply** button to apply the course lines. Following this calculation the software will calculate exactly how many tiles are going to be needed to complete the job.

Click **Ok** from this box. Click **Ok** from the Select tile dialogue box and you have finished selecting the tile for the job.