applicad

Sorcerer

Also suitable for Roof Magician, Roof Wizard, Roof Maestro and Roof Master.*

Advanced Software for Roof Modeling and Estimating

Using the software for the first time

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Table of Contents

Introduction

<u>Please read the following</u>

Using this manual

This tutorial is designed to explain, step by step, how to use the software for the first time.

N.B. You do not have to setup all of your manufacturers and materials up-front. You can enter them in as required if you wish, (and this is recommended) as then it is not such a laborious task.

This manual will be helpful if you don't know how to, or forget, how to setup the basics of the software.

To use the main menu on the right hand side of the screen, left click the mouse on the command that you want use. When you want to exit the menu, or exit most functions in the software, press the right button and the function will exit. In some instances you will have to right click multiple times to get back to main menu, depending on how many menus deep you are.

* Please note that if you have Roof Wizard, Roof Magician, Roof Maestro or Roof Master software, there may be some differences in certain dialog boxes that may not apply to you. There will also be some sections of this tutorial that will not affect you, because they are specific to a particular product.

How To Setup Your Software.

Checking Configuration

The software requires several minimum requirements to run effectively. These are:

CPU: 486DX
RAM: 16 MegaBytes
3 button mouse (supplied with software)
Windows 95, Windows 98 or Windows NT
20 Megabytes free hard disk space

Installation of Software

To install your software, insert the CD into the CD-ROM drive, if the CD does not auto-run, click on the **Start Menu**, followed by **Programs**, followed by **Windows Explorer**, open the CD-ROM drive (normally D: drive) and double click SETUP.

A folder called APPLICAD is created in the PROGRAM FILES folder and your software is installed.

Installation of Acrobat Reader

After the software is installed you will be asked if you want to install Acrobat Reader. If you already have Acrobat Reader on your computer or don't want to install it click **No**. If you do want to install it click Yes and the software will be installed. Acrobat Reader is used for the online documentation, installed in the:

Program Files\Applicad\<Software>\Manual folder. <Software> being Sorcerer, Wizard, Magician or Maestro.

Installation of Hardlock

When the software has been installed you will be asked if you want to install your HARDLOCK drivers. Select **YES** to this and your hardlock drivers will be installed. If you do not install the hardlock drivers the software will not run.

Before you run the software you must place the hardlock dongle, (a small black device), into the printer port (the printer can then be plugged into the back of the hardlock dongle) or else the software will not run. The hardlock is a security device that prevents the software from being copied illegally or used without your permission.

Following the hardlock driver installation you will be asked if you would like to view the Readme file. If you click **No**, the installation procedure is complete.

The readme file details latest news about the release of software. It is recommended that you read it, even if you're an expert already!

Running the Software

After you have installed your software and drivers you can run the program. This is done by "double clicking" on the software icon on your desktop.

Preferences

When the program is first opened, select the **Utilities | Preferences** command from the menu on the right hand side and change the options to suit your needs.

Input Pitch As: How the pitch angle of the roof is entered. (Degrees or Slope).
Units: The units of measurement to be used. (Feet and inches or millimeters).
Terminology: Changes to American roof terms and spelling.

When this is done select **Ok**. These preferences will now be saved. You will not have to change them every time that you open the software, once set, you can forget about them, unless you wish to convert a metric job to feet and inches or vice-versa.
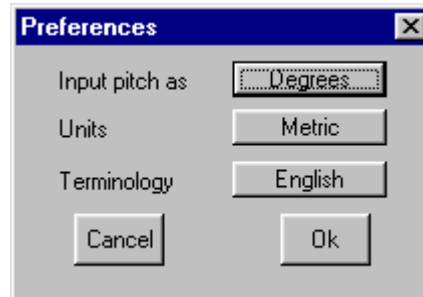
Defining Job Information

Objective: To setup default details for form printing

Company Details

The next step is to define the details of your company in the software, so that the reports print with **your** details on them. To define your company details select **Job-Info | Company** from the right hand side menu. This will bring up the following dialog box.

From here you can type in the details of your company. When the details have been filled in click **Ok** and your company details will be saved permanently.

Name   The name of your company
Address   The address of your company

Phone	The phone number of your company
Fax	The fax number of you company (if applicable)
Note 1	For additional information if required
Note 2	For additional information if required

Job-details

The next step is to define the details for the job. **This must be completed for each job that you do.**

To define the details for the job, select **Job-info | Job-Details** and the following dialog box will appear.

Here you can enter the appropriate details.
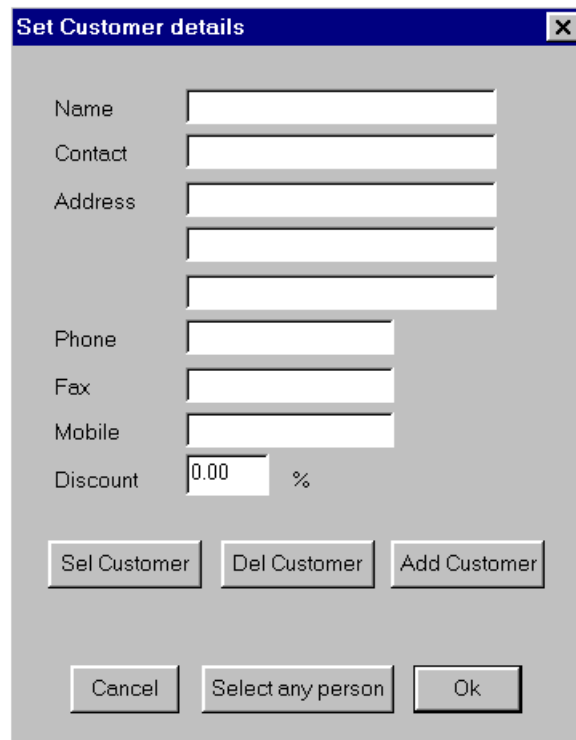
Job No	The job number for the job
Quote No	The quote or bid number.
Order no	The order number.
Delivery area	A drop down list of up to 10 items describing different delivery areas you may have. You may change the actual area names by going to **Define-Materials	Area Names** (explained later).
Site address	The site address, up to 3 lines
Start date	The date to start the job
Pickup date	The date the material is picked up
Delivery date	The date the material is to be delivered to site.
Terms	The payment terms
Framing	Toggles from Timber to Steel
Map reference	A street directory map grid reference for the job site.

When you click **Ok**, the values are saved for this job.

The values you enter will be automatically inserted onto the reports and drawings you create for the job. If you don't fill out those fields, then the information won't be printed, so it needs to be filled in for each job, either at the start or sometime during the job.

Customer, Installer, Builder, Salesman and Distributor

These commands let you set the particular person against each of these roles. To choose a role, select **Job-Info** followed by the appropriate role. When you select the particular role, the **Select customer details** dialog box is displayed.

Here you can set or select the person you want. In this case, we are looking at the Customer role, but the same goes for all roles.

Name   The name of the person or company

Contact   The contact name
Address   The up to 3 line address
Phone   The phone number
Fax   The fax number
Mobile   The mobile phone number
Discount   The discount used for this customer. This is only present for the
                 Customer. This is the default value used when you do a job costing.

You can enter values as you wish and click **Ok** to save that person.

When all of the fields have been filled in click on **Add-Customer** and your new customer will be added to the customer database. If you would like to choose an existing customer click on **Sel-Customer** and a dialog box similar to the following will appear, showing you all of the existing customers in the customer database.
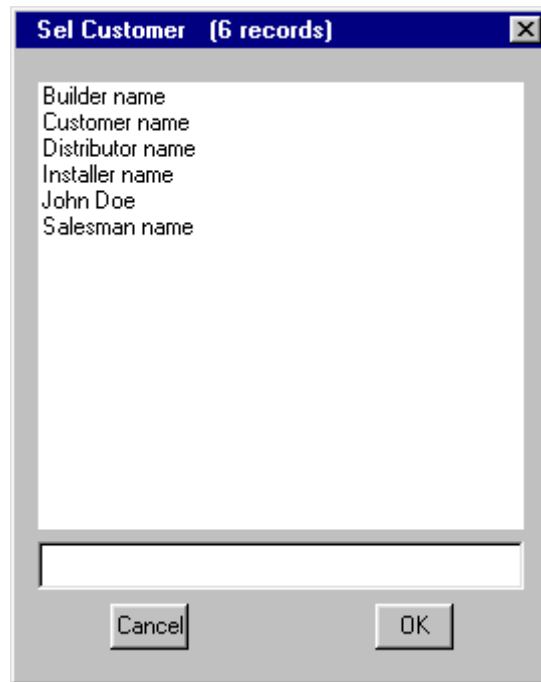
To select an existing customer, click on a name and then click **Ok**. This will now bring up that particular customer's details in the select customer details dialog box. With this all now done click **Ok** and these customer details will be put on the quotation form.

You can also modify the customer's details and click **Update** to save the changes.

This process is identical for the Installer, Builder, Salesman and Distributor databases.
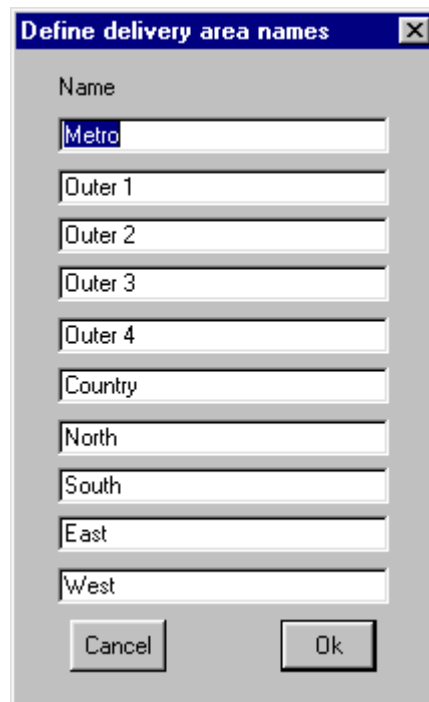
Defining Area Names, Tiles and Metal Colors and Fasteners

Objective: To define Area Names, Material colors and Fasteners for your jobs

Defining Area Names

The next step is to set up the delivery area names, and the tile and/or metal colors available. To setup area names, select **Cover | Define-Materials | Area-Names** from the right hand side menu, and then type in the names for all of your delivery areas.

If you don't wish to use a delivery name, just leave the field blank.

With all of your delivery area typed in select **Ok**, and your area names will be saved permanently.

Defining Tile and Metal Colors

To insert your tile and/or metal colors select **Cover | Define-Materials | Tile-Colors** and the following dialog box will appear.

The colors are manufacturer specific. Therefore you must select a manufacturer

before you select a color. To select a manufacturer click on the button at the end of the field, and your previously entered manufacturers will appear.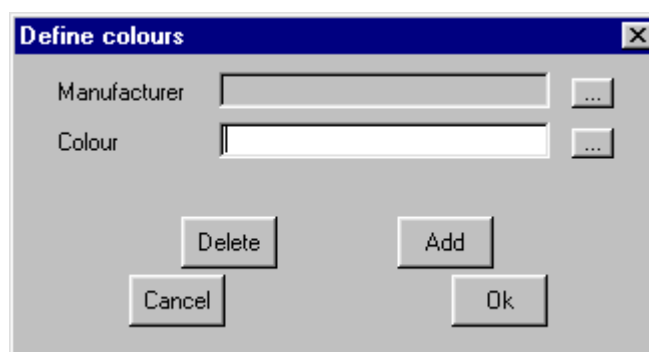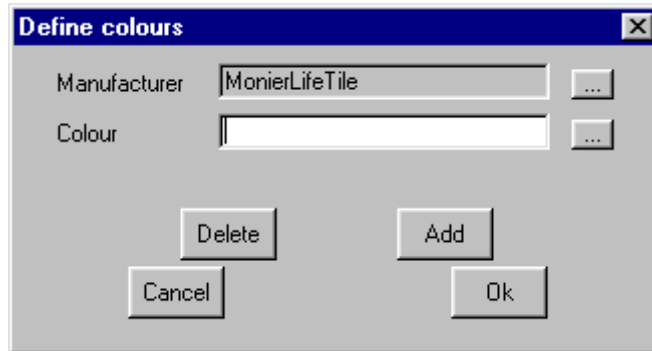 Select the manufacturer you want to choose the color for and click **Ok**. The define colors dialog box will now look similar to the following.

To add a manufacturer you must go to **Cover | Define Materials | Tiles** and enter your manufacturer there. Look under Defining Tiles, Shingles or Shakes on page 13.

From here you can see what colors have already been assigned to that manufacturer by clicking on the button at the end of the field. Delete old colors or add new ones. To add a new color type in the new color you want to add and then select **Add**. Your new color will now be added to that manufacturer. If you would like to delete a color, select the color you would like to delete and then click on **Delete**.

The process for defining metal colors is identical, except they are not manufacturer specific.

Defining Fasteners

To define the fasteners that you use on your roofs select **Cover | Define-Materials | Fasteners**. This will bring up the following dialog box.
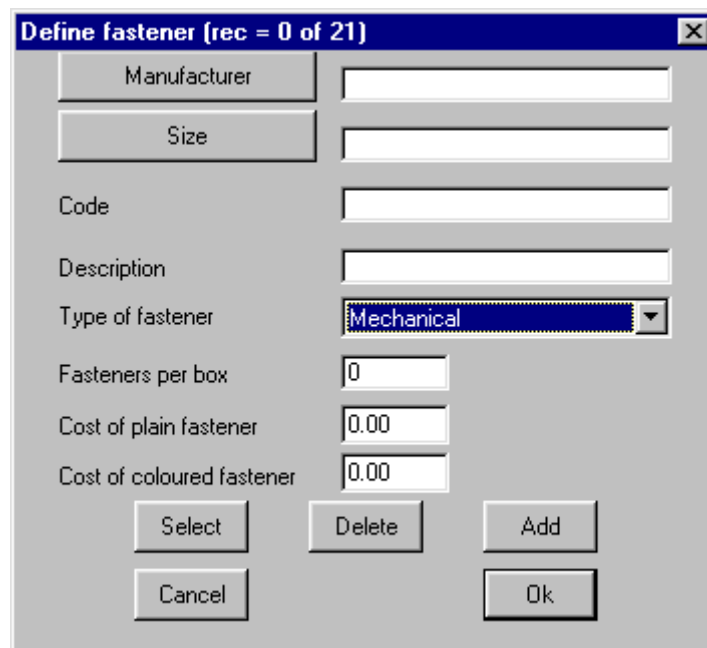
From here you can enter in the type of fastener/s you want to use.

Manufacturer	Manufacturer's name
Size	Actual size of the fastener
Code	Manufacturer's code for fastener
Description	Description of fastener
Type of Fastener	Type of fastener, mechanical, liquid or roll
Fasteners per box	How many fasteners per box (if applicable)
Cost of Plain Fastener	Cost of non-colored fastener
Cost of Colored Fastener	Cost of a colored fastener

When you have entered all of the information about the fastener, be sure to click **Add** otherwise the fastener won't be saved to the database. When you are finished entering your fasteners, select **Ok** to exit.

Defining Profiles

Objective: To define a metal panel that you can use for your jobs.

Before you put a material on a roof you must first tell the software what materials are available to it.

Defining a Profile

The first step when defining panels is to select **Cover | Define Materials | Metal Panels** from the main menu. The dialog box below is displayed.

With this dialog box now open you have the choice to either update an existing panel definition (such as cost), or add a completely new profile. To add a new panel, fill in the fields with the appropriate information.

The **Fasteners per foot** is how many fasteners will be inserted every square foot.
Coverage width is the width of each panel.
Thickness is the thickness or gauge of the panel.
Cost is how much the selected material will cost per square foot.
Min order length is the minimum length that can be supplied.
Max order length is the maximum length that can be supplied.

With all of the appropriate information now inputted, select **Add** and you new panel will be added to the database. With the new panel now in the database click **Ok** to exit.

To modify an existing panel, click on **Select**. This will bring up the **Select New Roof Material** dialog box.
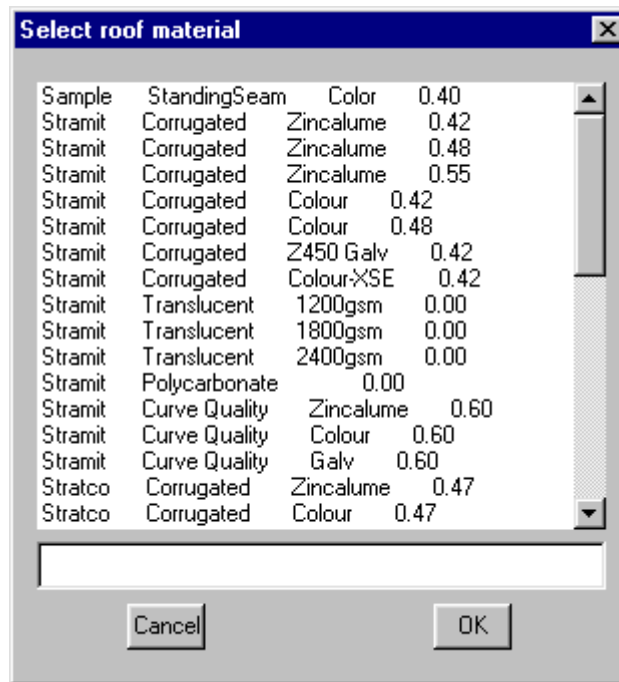
As shown in the previous dialog box you can select the panel you want to modify and then click **Ok**. This will take you back to previous dialog box but this time with the details of the selected panel displayed in the fields.

If you need to modify the selected material, make the modifications and then click **Update**. This will now update the materials details into the materials database.

You may select an existing panel, modify its details and save as a new panel 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.

Remember, you are NOT selecting a panel for the job by clicking **Select**, but a panel to modify the attributes of.

Deleting a Panel

To delete a panel, select the panel you want to delete and press **Delete**. This will permanently delete that panel from the database.

Defining a New Tile, Shingle or Shake

Objective: To define a new Tile, Shingle, Slate or Shake that you can use for your roofing jobs.

Defining a tile

As these roofing materials have a similar physical form, the definition of them is similar. We have grouped them generically as TILES. However, where a difference does exist, eg Shingles are supplied in bundles, that option is available. And should be set.

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

With this dialog box now open you have the option to modify an old tile, or add a completely new tile.

The **Roof tile coverage area** is how many peices will cover a square 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.
Rake ridge tile length is the length of the tiles that cover the gable rake.

The final five fields allow you to set item cost for **tile, ridge, shell end, apex** and **rake ridge**

To add a new tile, simply fill in the appropriate fields and click **Add**. This will save your new tile to the tile database.

To modify an old tile, click on **Select.** This will bring up the tile select dialog box.
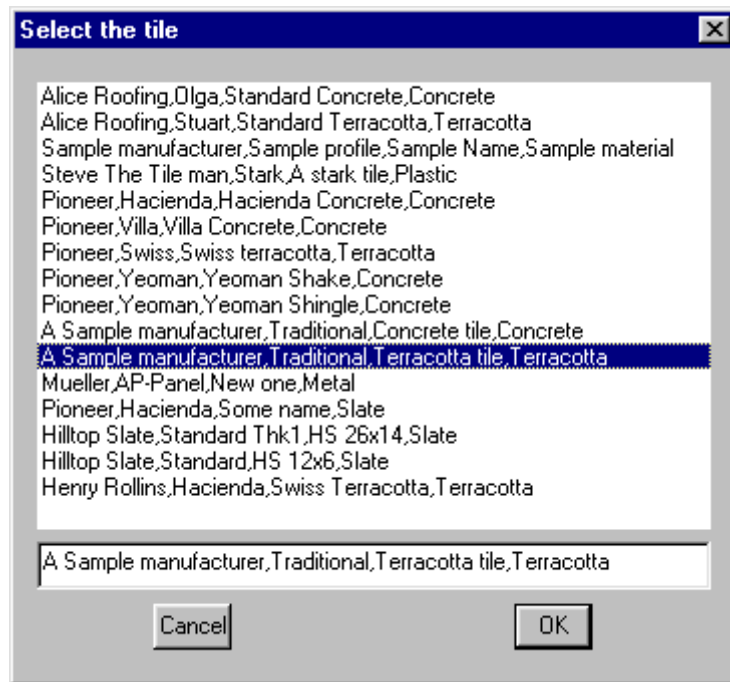
As shown in the above dialog box, you select the appropriate tile and then select **Ok**.
This will take you back to the previous dialog box but this time with the details of the
selected tile displayed in the fields.

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

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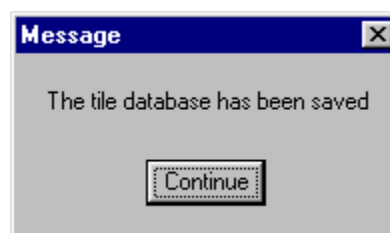
You may select an existing tile, modify its details and save as a new tile using **Add**,
instead of **Update**. In this way you can add an entire product line in just a few minutes
work. You only have to do this once to input the products that you use, or to change
details, e.g. if your supplier drops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

Remember, you are NOT selecting a tile for the job by clicking **Select**, but a tile to
modify the attributes of.

Deleting A Tile

To delete a tile, select the tile you would like to delete and then click on **Delete**. This
will permanently delete the selected product from the database.

Defining BUR

Objective: To define a BUR or Single-Ply that you can use for your jobs.

A flat roof is usually covered with a group of materials laid as a series of individual MEMBRANES according to a specified system. First we define these membranes, then later select them in sequence, to create a roof SYSTEM, eg (UL) 4GIG system.

To define BUR or Single Ply Roofing, select **Cover | Define-Materials | Membrane**. This will bring up a dialog box similar to the following.

The first step is to determine wheather or not the membrane that we are defining is a BUR material, or a Single Ply material. If the membrane is BUR, and the quantities are taken off by nett area, we fill in the Supplier, Name, Code, Description and Unit Type fields, with the appropriate information. To change the Unit Type field, select the down arrow at the end of the field. With the general fields filled out we move onto the BUR specific fields. These are under the Area Method for BUR section and include:

Large Size in SqFt followed by **cost**	The size of a large roll in square feet
Small Size in SqFt followed by **cost**	The size of a small roll in square feet
Labor Rate per SqFt	The labor rate per square foot

If the membrane is Single Ply material that is laid as perimeter rolls and field rolls, we must fill out the general fields as for BUR, but then fill in the specific fields under the Layout Method for Single-Ply section which are:

Perimeter Sheet Width	The sheet width of the perimeter sheet
Length (1) followed by cost	The length of a large sheet
Length (2) followed by cost	The length of a small sheet
Field Sheet Width	The sheet width of the field sheet
Length (1) followed by cost	The length of a large sheet
Length (2) followed by cost	The length of a small sheet

For single ply, the software will take a further step of laying out the rolls, calculating the number of fasteners etc according to the way the material is laid.

With the appropriate fields now filled out for the appropraite method of covering, select **Add** and the new BUR or Single-Ply will be saved in the materials database. If however you have just updated an existing membrane, select **Update** and the updated information will be saved.

Remember, you are NOT selecting a membrane for the job by clicking **Select**, but a profile to modify the attributes of. If you were to now use the materials just defined on a flat roof job, you now go to **Cover|Membrane** and select the membranes required for this specific roof system. If you plan to re-use this system as it is a standard profile, then select **Create System** from the dialog box and save it as a new system for later use.

Refer to the tutorial "Completing a BUR Job" under separate cover, for more details.

Deleting A Membrane

To delete a tile, select the membrane you would like to delete and then click on **Delete**. This will permanently delete the selected membrane from the database.

Defining Flashings, Allowances, Custom Flashings and Edge Assembly

Objective: To define Flashing, Allowances, Custom Flashing and Edge Assemblies that you can use to trim your jobs.

Defining a New Flashing

The first step when defining a flashing is to select **Cover | Define Materials | Flashing** from the main menu. The following dialog box is displayed.

Define flashing (rec = 0 of 72)

Type of flashing	Ridge
Manufacturer	
Finish	
Fastener code	
Description	
Product code	
Fasteners per lft	0.00
Maximum length	0.00
Costing method	per length
Cost per unit	0.00
Estimation method	Split each run up to the maximum length

Select   Delete   Add

Cancel   Accessories   Stock-Lengths   Ok

With this dialog box now open you have the choice to either update an old flashing definition (such as cost), or add a completely new flashing.

Flashing is grouped generically by type eg Ridge. This grouping is pretty loose and is designed to help apply the right allowances and accessories automatically.

If you want to add a completely new flashing, type in the details in the appropriate fields and select **Add**. This will add the new flashing to the flashing database. With the new or modified flashing in the flashing database click **Ok** to exit.

Define flashing (rec = 23 of 72)

Type of flashing	Apron
Manufacturer	Sample supplier
Finish	Colour
Fastener code	ST12x50
Description	Apron Std
Product code	StdAp24--
Fasteners per lft	3.00
Maximum length	2400.00
Costing method	per foot
Cost per unit	32.43
Estimation method	Split each run up to the maximum length

Select   Delete   Add

Update

Cancel   Accessories   Stock-Lengths   Ok

The Fasteners per lft	How many fasteners will be inserted every linear foot.
Maximum length	The maximum length that the flashing is supplied to by the manufacturer. (Only needed if your estimation method is by max length).
Costing Method	How the flashing are costed, either per foot, or per length.
Cost Per Unit	How much the selected material cost per costing method.
Estimation Method	How you want to calculate how you want the flashing lengths to be measured. (Shown in the following dialog box).

As you can see in the above dialog box there are 5 different ways of estimating the flashing.

Split each run up to the maximum length:	This means that each run is split up into any length up to and including the maximum length.
Split each run into maximum length pieces:	This means that each run of flashing is cut up into maximum length pieces.
Split total run length into maximum length pieces:	This means to take the total flashing length around the roof, and calculate the number of maximum length runs that it will need.
Split each run into stock length pieces:	This will split each individual run only into the stock length pieces defined in the "Stock Lengths" section (select button at bottom of dialog).
Split total run length into stock length pieces:	This will add up all runs around the whole job (each different flashing type separately) and divide it into the stock length pieces.

Selecting **Stock Lengths** will bring up the following dialog box.
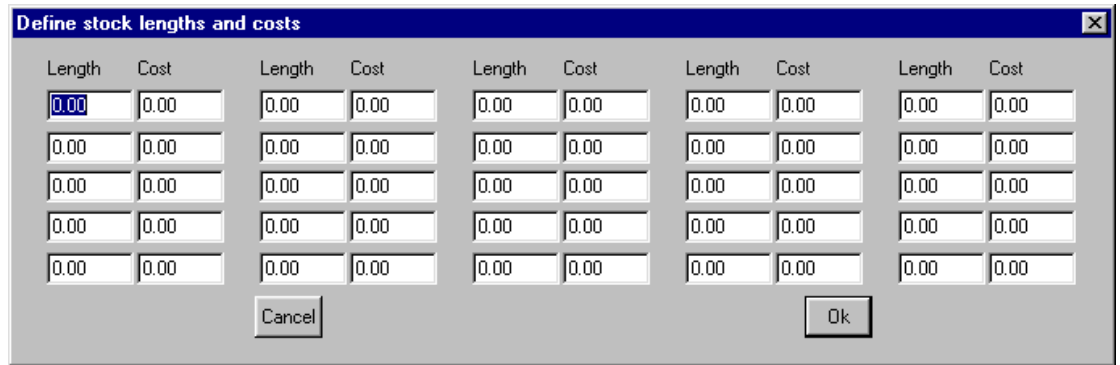
This is the dialog box that you use to set your stock lengths. To enter a stock length, click on a length field and type in the appropriate length, and then double click on the corresponding Cost field and enter the cost of that length.

Accessories

Clicking on the **Accessories** button will bring up the following dialog box.
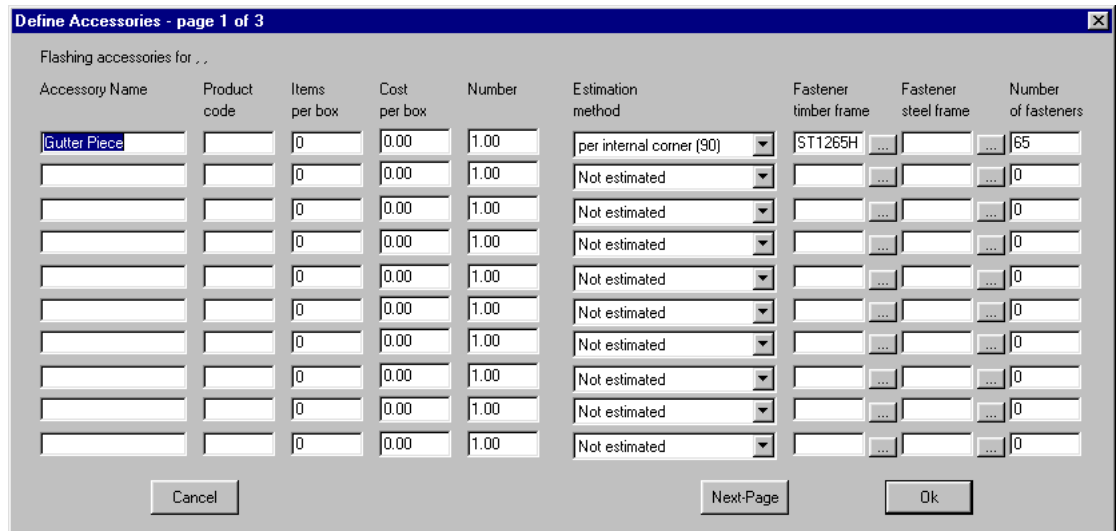
From here you can enter all of your accessories that you use for a specific flashing.

Accessory Name	Name of accessory
Product Code	Code number of product
Items Per Box	Number of items per box
Cost per Box	Cost of each box
Number	Number relating to the estimation method used. E.g. feet, number per feet.
Estimation Method	The type of estimation method used for that accessory.
Fastener Timber Frame	Fastener used on timber framing
Fastener Steel Frame	Fastener used on steel framing
Number of Fasteners	How many fasteners the accessory requires

When you select the down arrow at the end of the **Estimation Method** field a drop down.
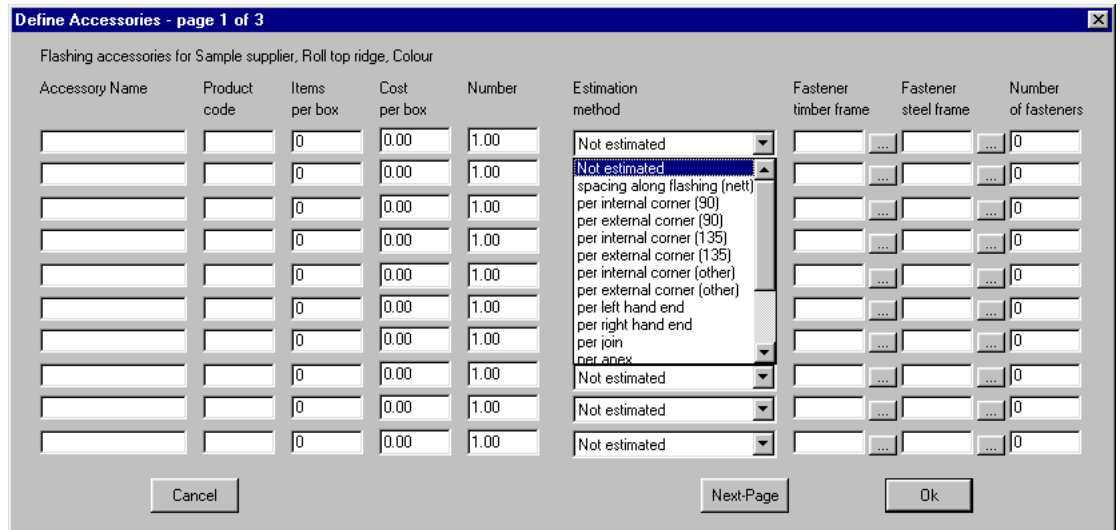
The estimation methods are:

Not Estimated	Accessory is not estimated
Spacing Along Flashing (Nett)	The spacing between each accessory, dictated by the **Number** field
Per Internal Corner(90)	Accessory will be placed on every 90º internal corner
Per External Corner(90)	Accessory will be placed on every 90º external corner
Per Internal Corner(135)	Accessory will be placed on every 135º internal corner
Per External Corner(135)	Accessory will be placed on every 135º external corner
Per Internal Corner(Other)	Accessory will be placed on every other internal corner
Per External Corner(Other)	Accessory will be placed on every other external corner
Per Left Hand End	Accessory will be placed on the end of a left hand end E.g. Gutter Stop
Per Right Hand End	Accessory will be placed at the end of a right hand end E.g. Gutter Stop
Per Join	An accessory will be placed at every join in the corresponding flashing
Per Apex	Accessory will be placed at every Apex join
Per Run	Accessory will be placed at the end of every run
Per Piece	Accessory will be placed at the end of every piece
Fastener Per Timber Frame	Timber fasteners
Fastener Per Steel Frame	Timber fasteners

With all of the fields filled out click on **Ok** and your accessories will be saved for that flashing.

Modifying your Flashing

To modify your flashing click on **Select**. This will bring up the Select a User Material dialog box.
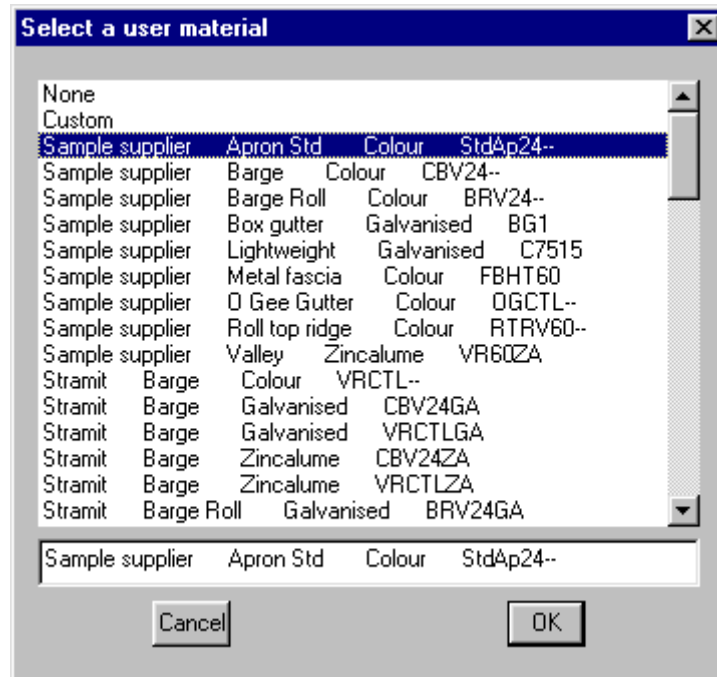
As shown in the above dialog box you select the appropriate material and then select **Ok**. This will take you back to the previous dialog box but this time with the details of the material selected displayed in the fields.   If you need to modify the selected flashing, make the modifications and then select **Update**. This will now update the materials details into the materials database.

You may select an existing flashing, modify its details and save as a new flashing 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.

Remember, you are NOT selecting a flashing for the job by clicking **Select**, but a flashing to modify the attributes of.

Deleting A Flashing

To delete a flashing, select the flashing you would like to delete and then click on **Delete**. This will permanently delete the selected flashing from the database.

Setting Your Allowances

With the appropriate flashing now in the database, you can now set the allowances for your flashing. To do this you go to **Cover** and from there select **Flashing**. This will give you a dialog similar to the one on the next page.
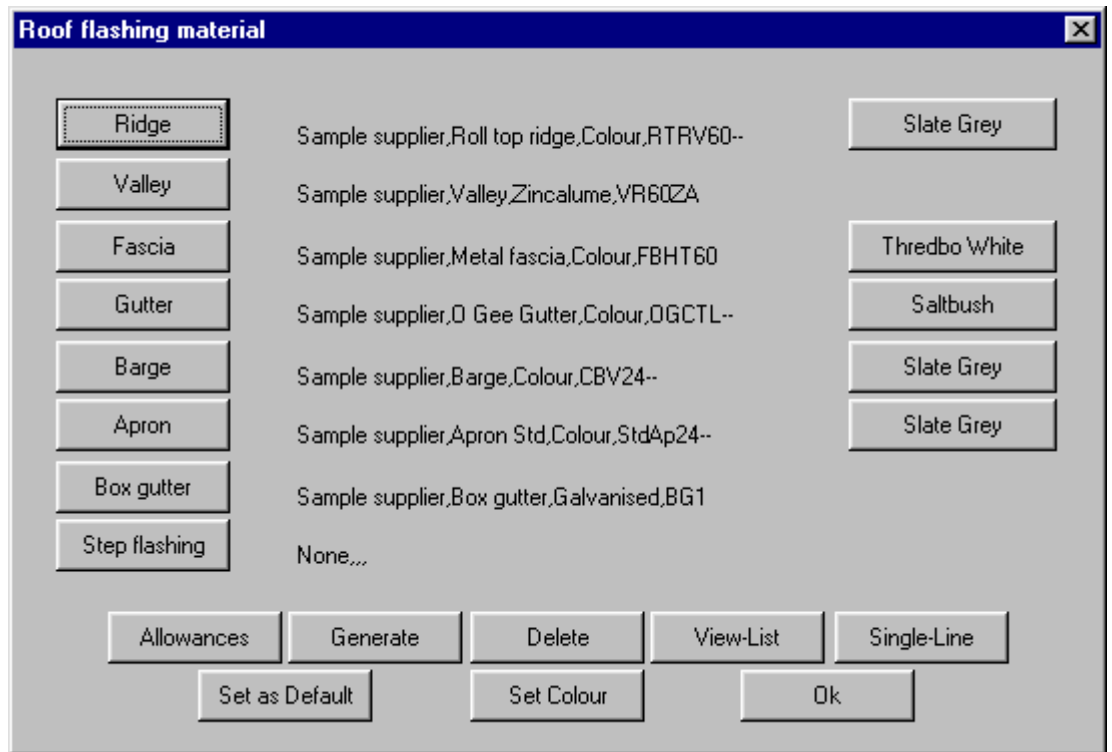
From this dialog box you can see all of your flashings, ridges, barges, etc, and what type of material has been placed on each one.

To set your allowances for your flashings bring up the **Define Flashing** dialog box. From there click on the **Allowances** button. This brings up the allowances dialog box.

From this dialog box you can change or add your Run Allowances, Lap Allowances, Internal corner Allowances and your External Corner Allowances, for your flashings.

|	
Run Allowance	The additional allowance on total run lengths
Lap Allowance	The overlap allowance on stock lengths
Internal Corner Allowance	The overlap allowance on internal corners
External Corner Allowance	The overlap allowance on external corners
Combine Similar Length Flashings	Means that if there are two pieces of flashing that are within the allowance that has been set e.g. 0.5 feet (6"). The software will combine them to make them all the same length. (By rounding up).
Minimum Run Length	This sets the minimum run length that you want to allow. Any run shorter than this will be combined with another flashing.
Round Off Flashing to Next	Rounds the flashing up to either the next 1" or 6".
Single-allow	Brings up the following dialog box, which allows you to change the allowance on a single flashing line, if you wish, eg ridge vent.

Enter the allowance you want to add to a run

50.00

Cancel   OK
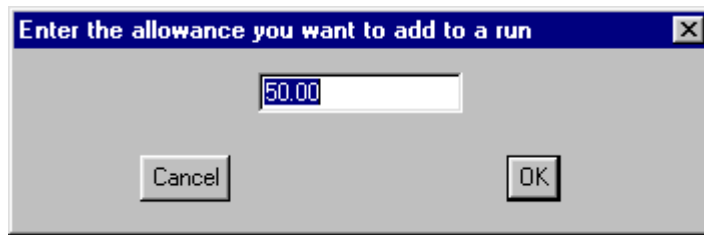
With your allowance set, click **Ok** and you will be asked to locate the flashing(s) that you wish to change and left click the mouse, then right click the mouse when selected, and it will ask you if this is the entity(s) that you would like to change, if the entity(s) are correct, click **Yes**. This will change the line and then return you back to the allowances dialog box. Select **Ok** to return to the flashing dialog box. Your allowances are now set. To exit the Flashing dialog box simply click on **Ok**.

Defining Custom Flashing

A custom flashing is a flashing that you manufacture internally

To define a Custom Flashing select **Cover | Define-Materials | Custom-Flashing**. This will bring up a dialog box similar to the following.

Custom flashing rates (rec = 0 of 3)

Name		Stock sheet length	0.00	in
Description		Stock sheet width	0.00	in
Manufacturer				
Finish		Cost of flat sheet	$ 0.00	

| Bends | 0 | 1 | 2 | 3 | 4 | - | + |
| Stretch-Out | $ | $ | $ | $ | $ |

0.00	in	0.00	0.00	0.00	0.00	0.00
0.00	in	0.00	0.00	0.00	0.00	0.00
0.00	in	0.00	0.00	0.00	0.00	0.00
0.00	in	0.00	0.00	0.00	0.00	0.00
0.00	in	0.00	0.00	0.00	0.00	0.00

- +

Cancel   Select   Delete   Auto-Fill   Add   Ok
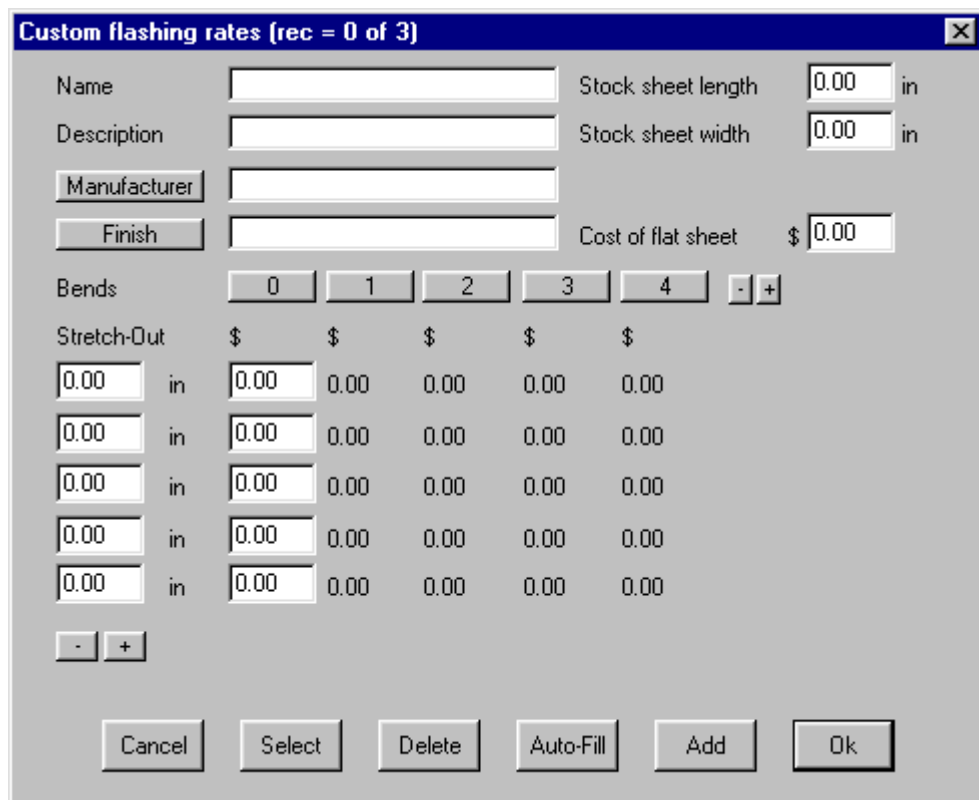
From here it is a similar process to entering normal flashing. Type in the name, Description, Manufacturer (select by clicking on the button), Finish (also selected by clicking on the button). Type in the Stock Sheet Length, Stock Sheet Width and Cost of Flat Stock Sheet.
With the general fields filled in you can now fill in the lower section, which includes the prices related to the number of bend or cut operations and the stretch-out. To add or remove the number of Stretch-Outs, click on the + or – symbols under the Stretch-Out column. To add or remove the amount of bend or cut operations, click on the + or – symbols at the end of the bends row.

With all of the information now filled out, you must save this new information to the database. To do this simply select **Add**, and your Custom Flashing will be saved. To exit click on **Ok**.

Define the Edge Essembly.

Using the flashing materials defined, we now define the edge assembly using **Cover | Define-Materials | Edge-Assembly** from the main menu.

If a graphic is to be used to illustrate the assembly detail, select this from the sub-figure (graphic) database where they are stored.
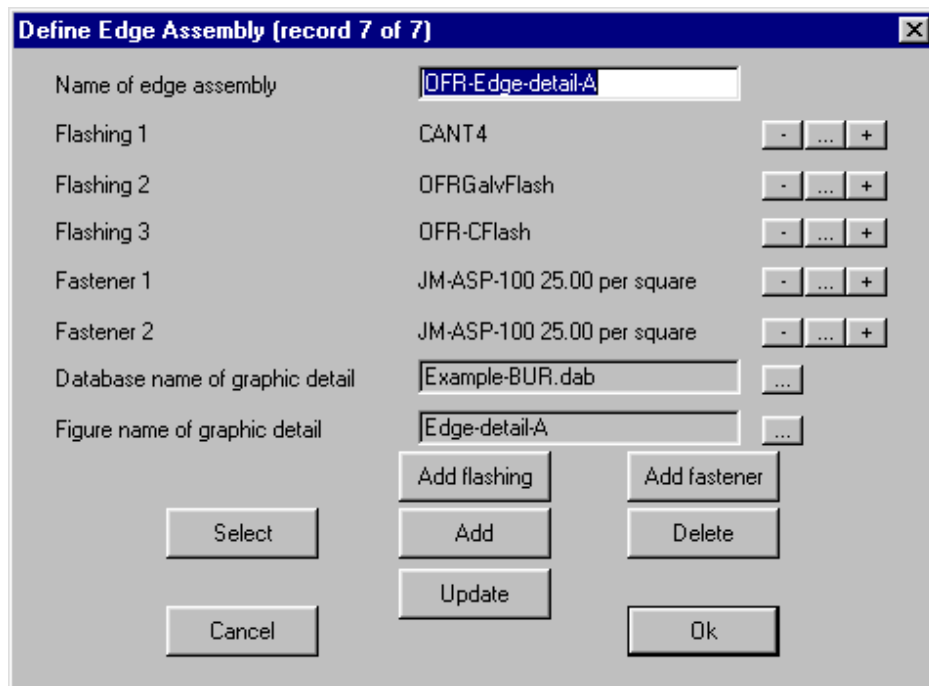
To build your Edge Assembly first name the assembly, then select either **Add Flashing** or **Add Fastener** this will bring up the flashing selection dialog box.
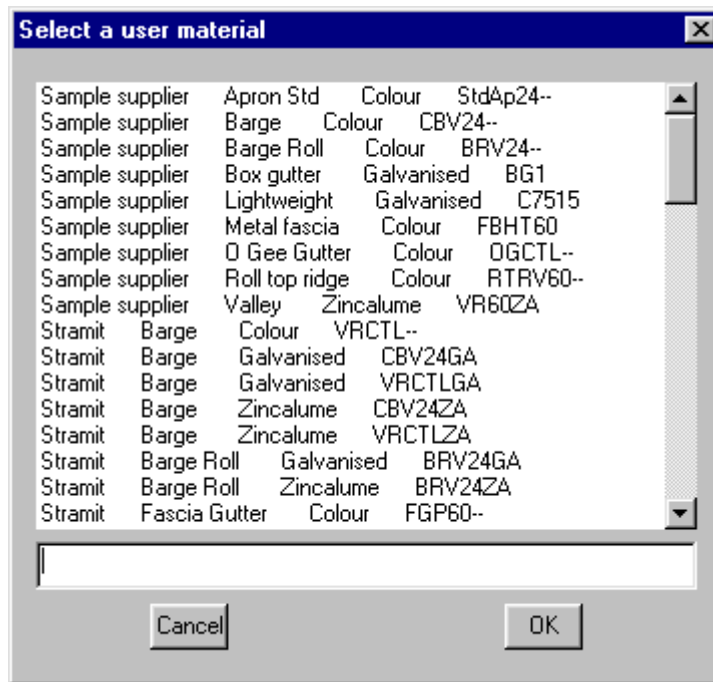
Select the first flashing that you want for you edge assembly followed by **Ok**. Your first flashing for your edge assembly has now been inputted. Continue to add the appropriate flashing and fasteners to create your edge assembly, using the same procedure just used. When you are happy with your edge assembly select **Add** and the edge assembly will be saved.

Instead of clicking on **Add Flashing** every time to add a new flashing, you may choose to click on the **+** button at the end of the flashing field. To delete a flashing or fastener you can use the **–** button at the end of the field. If you want to change a flashing you can click on the selection box at the end of the field. This method also works for the fasteners.

Supplied with the system is a range of sample details imported from details supplied by the material manufacturers. These may and should be added to as required. Use the **File | Import | DXF** command from the pull-down menu, and when prompted, indicate what database file you want the detail stored to. Most material manufacturers supply detail drawings on CD and some even have them available for download from their Internet site.

You do not need to draw up the assembly detail, as they may be "captured" this way. However, you could if you wish, draw them from scratch, using the CAD commands.

This is the subject of another tutorial called "Importing CAD Data".

Insulation

To define your insulation, select **Cover | Define Materials | Insulation** from the main menu**.** Fill out the blank fields on the dialog box displayed as shown below.   Once complete select the **Add** button to save the insulation to the insulation database.

Supplier	Name of supplier
Name	Name of insulation
Code	Code number of insulation
Description	Description of Insulation
Large Roll Size	Size of large roll
Small Roll	Size of small roll
Cost of Large Roll	Cost per large roll
Cost of Small Roll	Cost per small roll

If we make a mistake or the details from the material manufacturer change, then **Select** the material to change from the list, make the change and select **Update** from the dialog box. The record that defines this material in our database is updated for future use.

Fixtures

This command lets you define a new fixture or edit an existing one. You would use this command to draw and quantify such objects as skylights, ventilators, drains, down-pipe pops etc. for the job, indeed any roof penetration. To open this option select **Cover | Define Materials | Fixtures** and the following dialog box will appear.

Name of fixture	This is the name you define for this fixture. You will use this name later when selecting fixtures.
Manufacturer	The name of the fixture manufacturer
Product code	The code of this fixture.
Flashing	The code of the first flashing associated with this fixture.
Length	The length of this flashing required for this fixture.

Flashing and length fields are created as each flashing is selected. You might have three flashing types to finish and make water proof, a skylight. The costing for the flashing is set when the flashing that you select, is defined. See previous section above.

Database name of fixture	This is the name of the database (*.dab file) containing the subfigure of the graphic detail (the next field). When you click this field, you can select the database you want. The default database name is *Fixtures.dab*.
Figure name of fixture	This is the name of the subfigure to be inserted when you select this fixture. When you click this field, the list of subfigures in the given database name are displayed. From this list, you select the one you want. (How to draw these will be included in an advanced learning guide.)
Insertion method	This is one of <u>Get a location and orientation point</u> (such as a rectangular skylight), <u>Get a location point only</u> (such as a round drain), <u>Insert along a line entity</u> (such as a pop)
Cost	The supply cost of this fixture.
Cost to install	The cost to install this fixture. Will be included in labor costing.
Add-Flashing	This allows you to add a flashing to the list of flashings which you want associated with this fixture

Delete-Flashing	This allows you to remove a flashing form the flashing list.
Select	This allows you to select an existing fixture.
Add	This allows you to add a new fixture.
Delete	This allows you to delete an existing fixture.
Update	This allows you to update an existing fixture.

To save your definitions you must click **Ok**, The definitions are saved in *Fixtures.dab* regardless of where the subfigures reside.

Downpipes

This command lets you define a downpipes (also known as down spouts) and their accessories.

When you select this command, the Define Downpipe dialog box is displayed.

Manufacturer	The manufacturer of this downpipe.
Finish	The finish of this downpipe.
Size	The size of this downpipe.
Style	The style of this downpipe as either Round or Rectangular.
Thickness	The thickness or guage of the material of this downpipe.
Length	You can specify 2 standard lengths for the downpipe pieces as

	well as the product codes and costs for each length.
Pop etc	You can specify the product code and cost for the pop, straps, offset, shoe and elbow associated with this downpipe. For the strap, you can specify the spacing between straps so that the number of straps can be estimated. Depending on what you want to supply, you can report or not report any of the accessories.
Add	This allows you to add a downpipe
Delete	This allows you to delete the selected downpipe.
Select	This allows you to select an existing downpipe.
Update	This allows you to update a selected downpipe.
Ok	Closes the dialog and saves the changes you have made.
Cancel	Closes the dialog without saving the changes you have made.

Extra-Items

This command lets you define a series of labour and material extras that will be automatically added to **each** of your quotes (under **Costing Supply-Only** and **Costing Supply-Install**). These are items that you always include as part of a job quote or bid. When you click this command, the following dialog box is displayed.

Here you simply enter the line item name, default quantity, cost per item and whether the item is a labor item or a material item. Labor items will be displayed in the labor sub-total, and material items will be displayed in the quotation page.

When you click ok, the details are saved in a file called *extras.dat*.

Misc-Items

This command lets you define a series of material items which you can select from using **Costing | Supply | Misc-Items**. You would use this for items that you would want to add to <u>some</u> jobs. When you click the command, the following dialog box is displayed.

Here you enter the manufacturer, description, quantity and cost.

When you click ok, the details are saved in a file called *misc.dat*.

Costing

Objective: To set all of your labor rates for each area of labor costs and to cost a job.

Tile-Rates

N.B. For tile roofs only

This command displays the Roof Costing-Rates dialog box allowing you to set or change various quote rates and job cost rates associated with the estimate.

The items are below and on the following page.

Hip cover length	This value determines the number of hip tiles required. It is independent of the tile you selected. Note that it is not used if you have supplied a hip tile length when you defined the tile using **Cover Define-Materials**
Sarking roll size	This value determines the number of rolls of sarking
Cartage per 100 tiles	This value determines the total delivery cost.
Sarking quote rate	This is the rate to quote sarking
Fall protection quote	This is the rate to quote fall protection
Default no of units	This is the default number of housing units for this job
Purlin 50x25 quote	This is the rate to quote 50x25 purlins
Purlin 50x38 quote	This is the rate to quote 50x38 purlins
Purlin 50x50 quote	This is the rate to quote 50x50 purlins
Purlin 75x50 quote	This is the rate to quote 75x50 purlins

Purlin User quote	This is the rate to quote the user defined purlin
Ridge cover length	This value determines the number of ridge tiles required. It is independent of the tile you selected. Note that it is not used if you have supplied a ridge tile length when you defined the tile using **Coverage Define**.
Purlin length	This is the length of purlins per sqft of roof. It is used if you perform the estimate using the area method.
Underlay cost rate	This is the cost of the underlay
Fall protection cost	This is the cost of the fall protection
2nd storey excess	An extra value for second storey work
Installers percentage	The extra percentage to apply to the installers pay
Purlin 50x25 quote	This is the cost of 50x25 purlins
Purlin 50x38 quote	This is the cost of 50x38 purlins
Purlin 50x50 quote	This is the cost of 50x50 purlins
Purlin 75x50 quote	This is the cost of 75x50 purlins
Purlin User quote	This is the cost of the user defined purlin
Waste per course	The number of tiles you want to add per course if using the coursing method
Waste per area	The number of tiles you want to add per unit area if using the area estimation method
Sales Tax %	The amount of sales tax you want to add

Tile-Pay

N.B. For tile pay only

This command lets you define tiler pay schedules based on storey, line-item and pitch.

Name	This is the name by which you select this pay rate in future
Storey	This is the storey to which these values relate. You can have up to 10 stories for the one pay rate
Slope in 12	These values reflect those you set with the Intervals button at the bottom of the dialog box. For each pitch interval value, you get a column of numbers associated with a line item. To edit a line item, highlight that column by clicking the pitch interval label.
Roof / sqft	This is the installer rate to lay tiles on the roof.
….	The rest of the line items relate to hip, valley, gable and barge finishes you select under **Cover Select-tile**.
Select	This allows you to select an existing pay rate schedule
Delete	This allows you to delete an existing pay rate schedule
Add	This allows you to add a new pay rate schedule
Update	This allows you to update an existing pay rate schedule

Clicking on the **Intervals** button will allow you to change the slope intervals.

Metal-Rates

This command displays the <u>Roofing Labor rates</u> dialog that allows you to set installation rates for different categories of roofing items. To bring up this dialog box select **Costing | Metal Rates**. This brings up the following table that describes the rates.

Straight roofing per sqft	The rate to install straight sheeting on the roof (or verandah)		
Insulation per sqft	The rate to lay the insulation		
Ridges/hips per ft	The rate to install the ridges and hips		
Valley per ft	The rate to install valley flashing		
Fascia only per ft	The rate to install fascia flashing only		
Gutter only per ft	The rate to install gutter only		
Fascia rake per ft	The rate to install fascia on a rake		
Fascia and gutter per ft	The rate to install fascia and gutter together		
Rake per ft	The rate to install rake flashing		
Skirt per ft	The rate to install skirt flashing		
Underlay per ft	The rate to install underlay		
Each Downpipe	The amount to install each downpipe		
Each chimney	The rate to cater for each chimney		
Labor markup %	The percentage the total labor cost will be marked up in the final costing		
Box gutter per ft	The rate to install box gutter		
Curved roofing per sqft	The rate to install the curved sheeting on the roof (or verandah) Each curved sheet. The amount to add for each curved sheet		
Per curved skirt	The amount to add for each curved skirt (bullnose		

	verandahs)
Per curved rake	The amount to add for each curved rake (bullnose verandahs)
Per curved hip	The amount to add for each curved hip (bullnose verandahs)
Per curved valley	The amount to add for each curved valley (bullnose verandahs)
Curved skirt per ft	The rate to install curved skirt(bullnose verandah)
Curved rake per ft	The rate to install curved rake (bullnose verandah)
Curved hip per ft	The rate to install curved hip (bullnose verandah)
Curved valley per ft	The rate to install curved valley (bullnose verandah)
Roof removal per sqft	The rate for roof removal
Gutter removal per ft	The rate for gutter removal
Material markup %	The rate to markup the material costs for the final quote

After you make a change and click **Ok**, the changes are saved in *rates.bin* for use in all future jobs.

If you click **Pitch Allowances**, the Pitch Allowance dialog box is displayed.

Here, you set the pitch ranges as well as the rate to apply for planes in that range. When you click **Set Range**, you can change the number of ranges. The maximum number of ranges you can have is 10. These values are used in the labor charge calculation under **Costing Supply+Install**. Each plane in the model is tested for its pitch and area, and based on the pitch, the above table is inquired on to derive a pitch allowance. The individual pitch allowances are added together to derive the total pitch allowance.

Nett-Rates

This command displays the <u>Roofing costing rates for nett cost dialog</u> which allows you to set the rates for the **Costing Nett-Only** command.

When you click ok, the rates you defined are saved for use by the **Costing Nett-Only** command.

Modifying the Templates

Objective: To customize the existing report templates to suit your individual needs.

This section is only necessary if you find that the existing reports are not sufficient for your needs, that is if you need to add further information to a report or change the layout of a report.

Finding the Templates

The first step when modifying your reports is to find them. First open the software. From here open **File** from the drop down menus at the top of the screen. Drag down to the **Sub-Fig** command. This will open another drop down menu, from here drag to the **Open** command and the following dialog box will appear.

N.B: This method of finding the templates is for Sorcerer, Wizard and Maestro only. **The method for finding the Magician templates is found on page: 45**
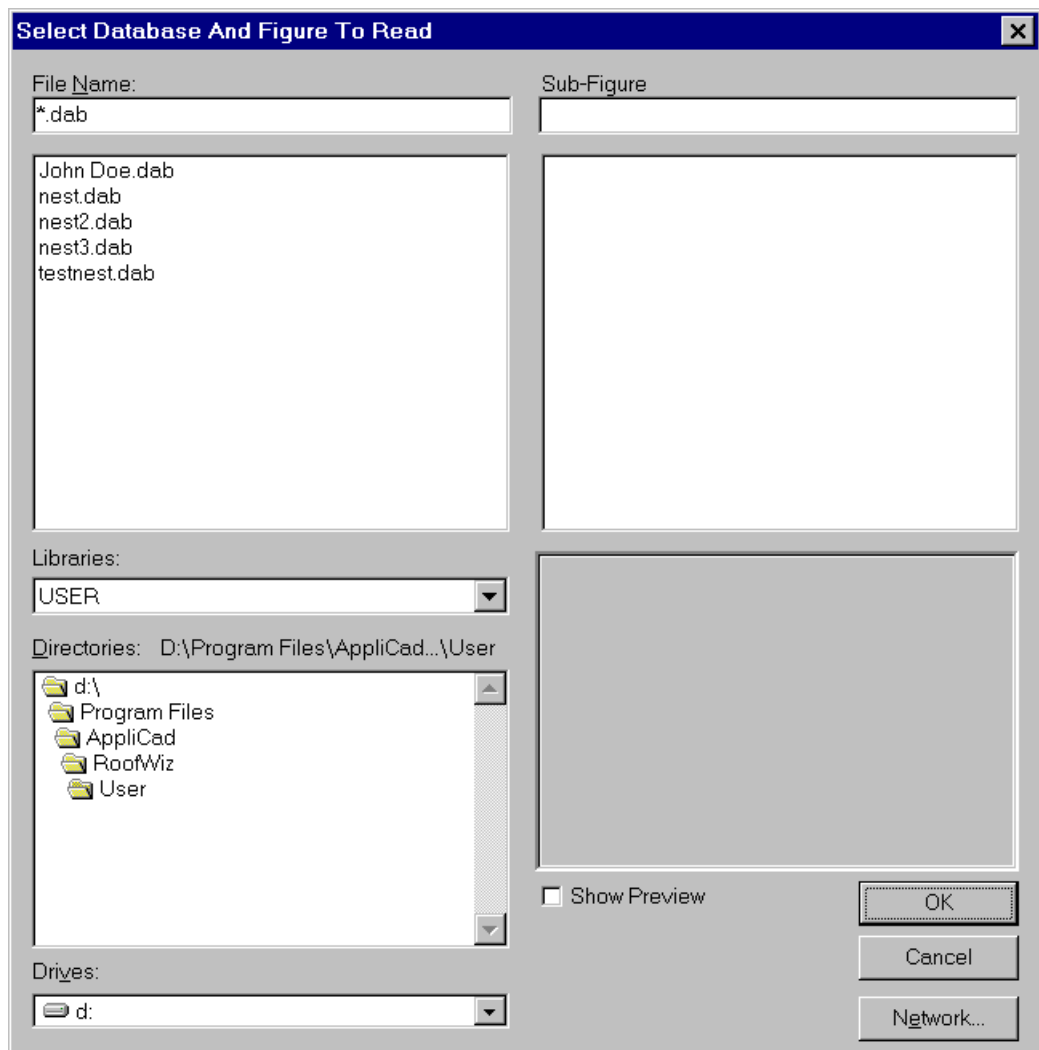
With this dialog box now open, double click on the **RoofWiz** folder, followed by **Programs**. The dialog box should look similar to the one on the following page.
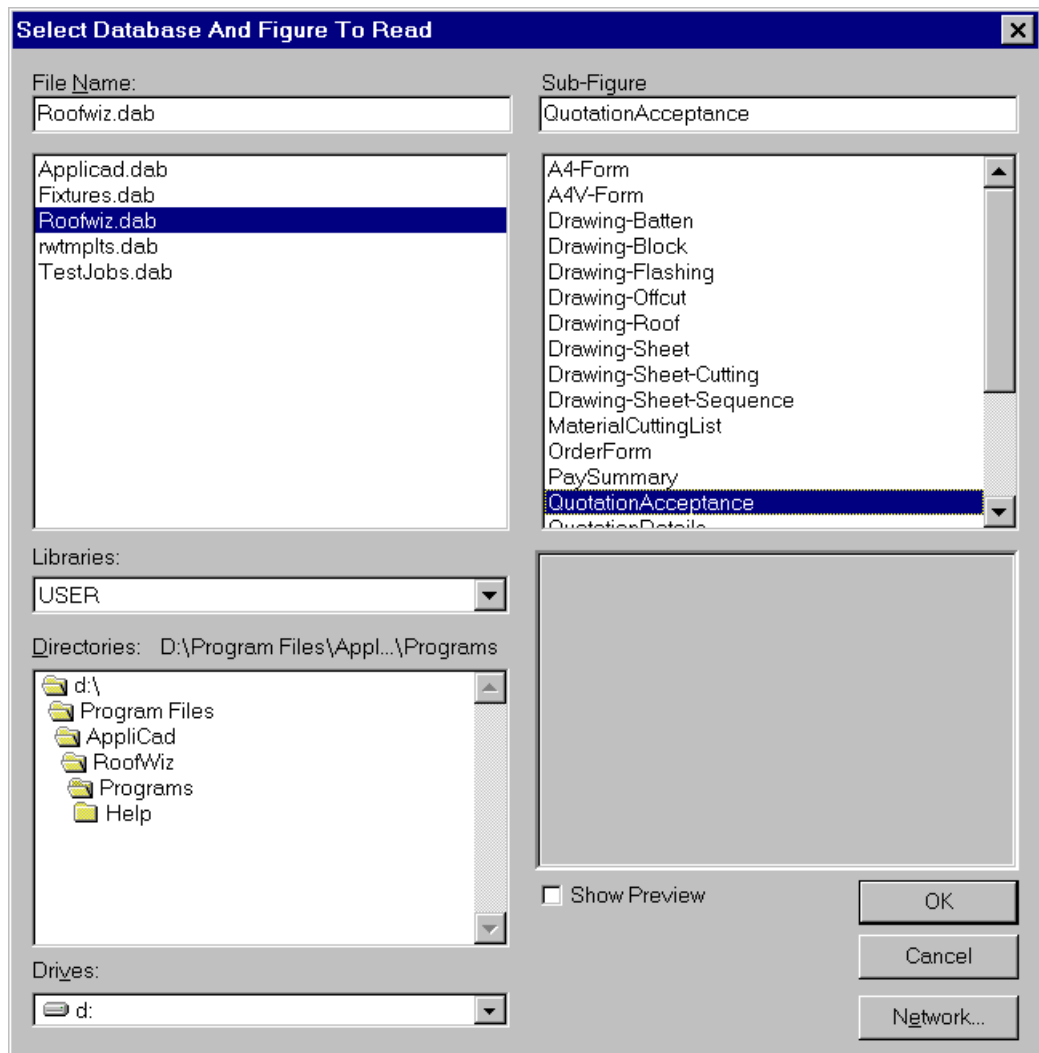
By selecting the file **Roofwiz.DAB**, the 20 templates that are used for your quotation letters are shown on the right hand side. From here select the template you would like to modify(we will use QuotationAcceptance for this tutorial) and click **Ok**.

The template will now be opened in the main screen, similar to the picture on the following page.

The templates are:

1: A4-Form
2: A4V-Form
3: Drawing Batten
4: Drawing Block
5: Drawing Flashing
6: Drawing Offcut
7: Drawing Roof
8: Drawing Sheet
8: Drawing Sheet Cutting
9: Drawing Sheet Sequence
10: MaterialCuttingList
11: Order Form
12: PaySummary
13: QuotationAcceptance
14: QuotaionDetails

15: QuotationForm
16: QuotationLetter
17: UserForms 1-4
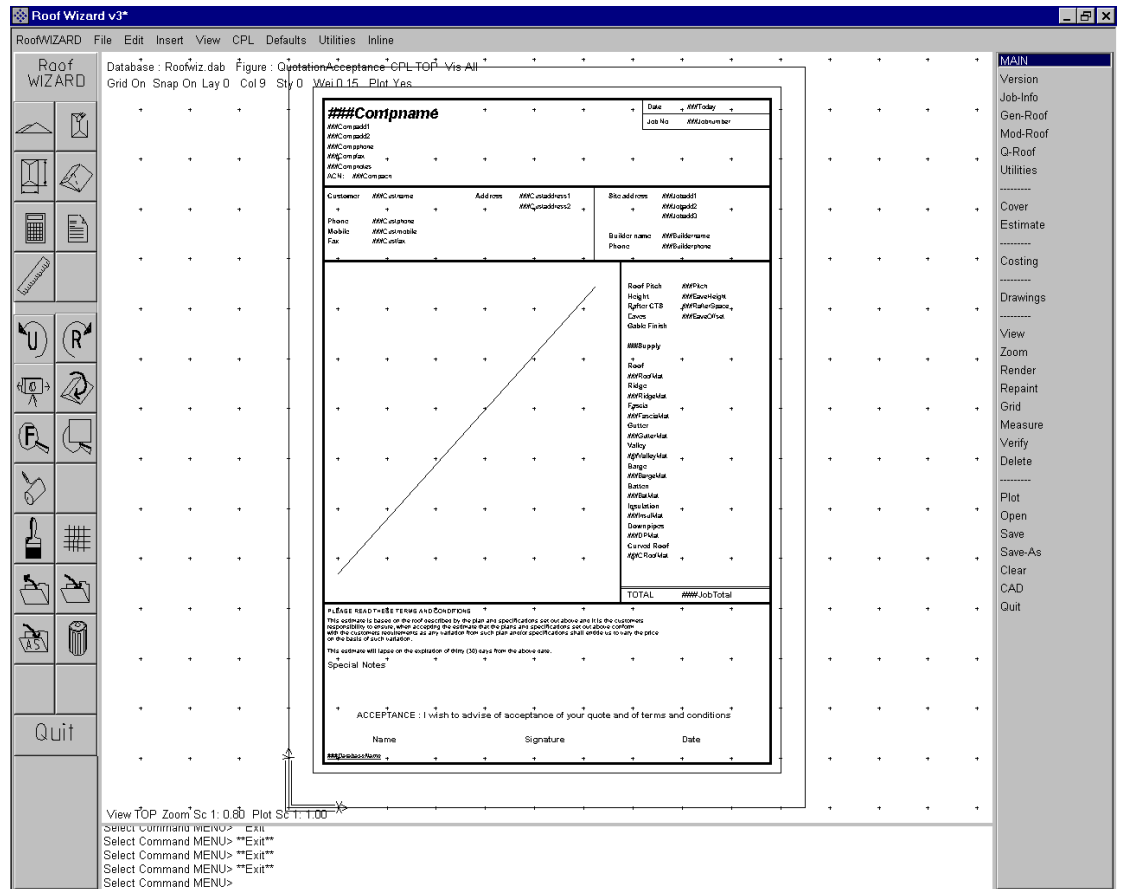
From here we can start to modify our template.

Finding the Magician Templates

To open the Roof Magician templates first open Roof Magician. From here open **File** from the drop down menus at the top of the screen. Drag down to the **Open** command and the following dialog box will appear.
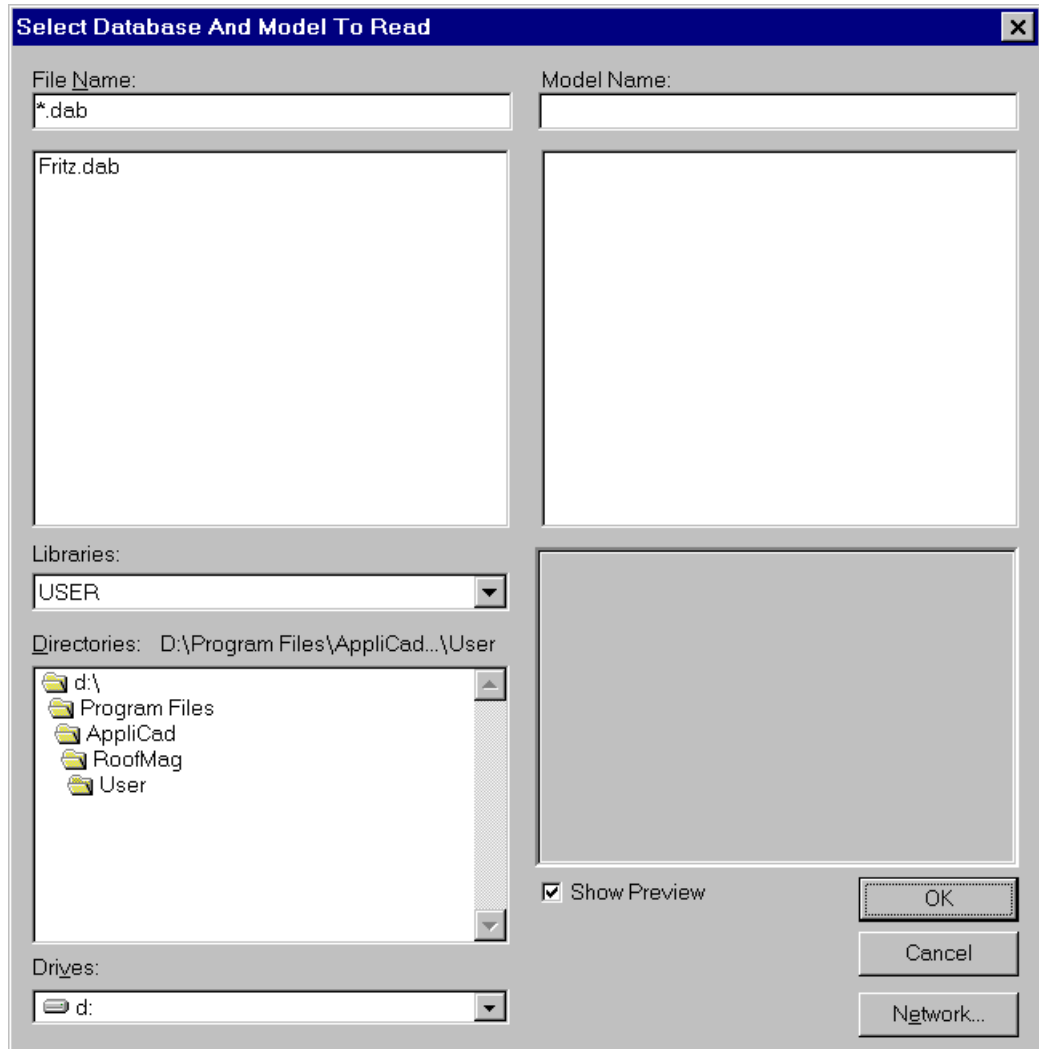
With this dialog box now open, double click on the **RoofMag** folder, followed by **Programs**. The dialog box should look similar to the one on the following page.
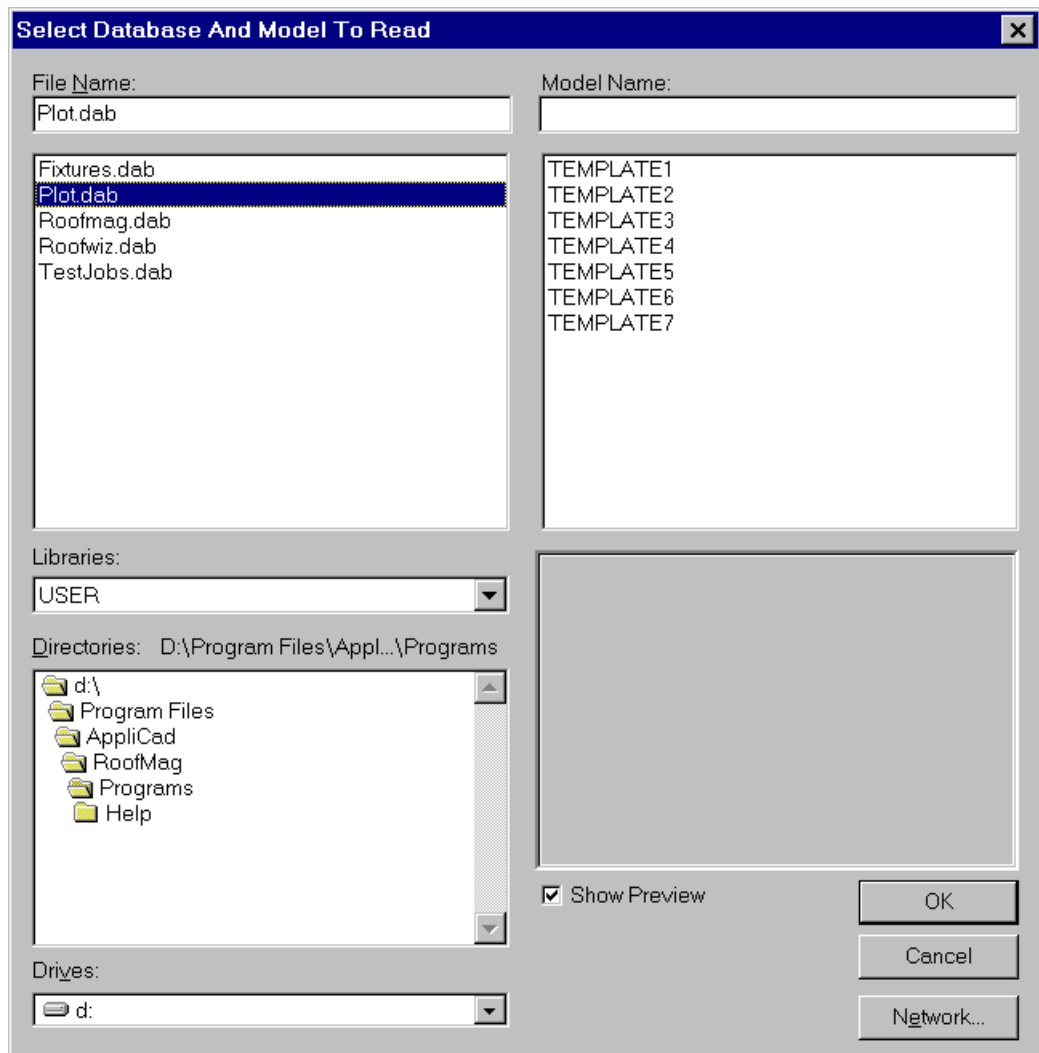
By selecting the file **Plot.DAB**, the 7 templates that are used for your quotation letters are shown on the right hand side. From here select the template you would like to modify(we will use template 1 for this tutorial) and click **Ok**.

The template will now be opened in the main screen, similar to the picture on the following page.

The templates are:

1: Acceptance Letter
2: Customer Quote
3: Distributors Copy
4: Office Copy
5: Sales Copy
6: Tile Copy
7: Tile Summary

For this tutorial we will use Template 1, which is the Acceptance Letter.

Modifying the Text

The first step we have to take in modifying the text is to select the **Utilities** menu which looks like this.
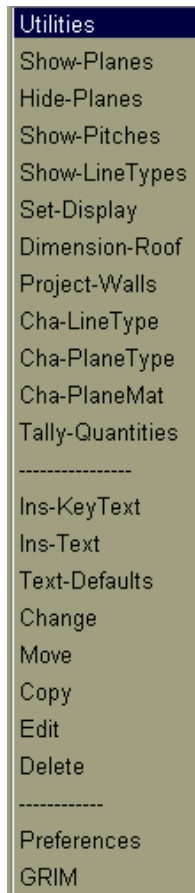
From this **Utilities** menu we will only be using 8 commands. These are:
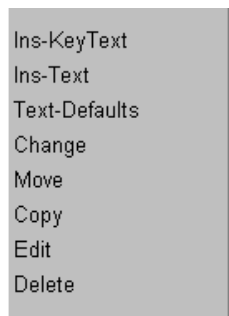
The first of these commands that we come across is **Ins-KeyText**. This will bring up the following dialog box.
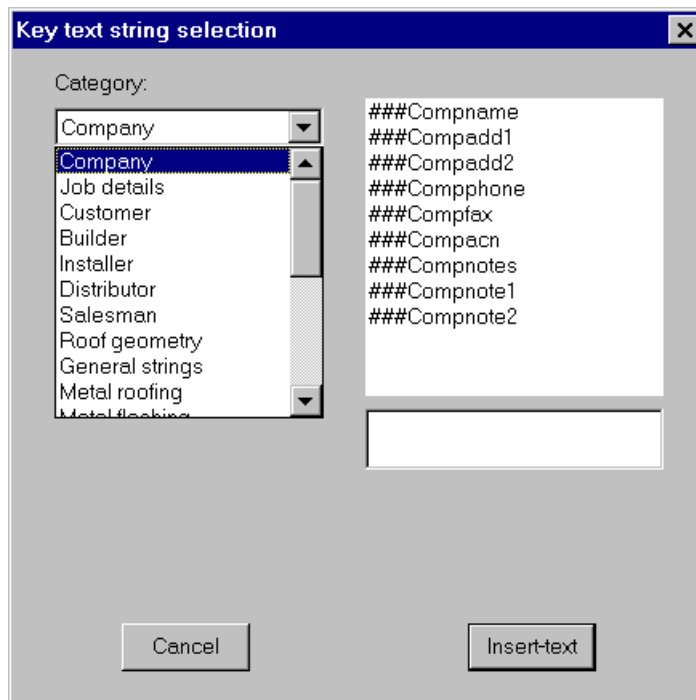
From this box you can insert a text field that is linked to the appropriate database. Therefore if you put in the **###Compname** field, when you print up your reports, the Key Text String (KTS) will be replaced by the company name for the quote. To show the fields on the left of this dialog box, click on the down arrow at the end of the field.

From here you can select category, and the KTS from that category will appear on the right hand side of the dialog box. To insert the KTS, click on the KTS that you want to insert and then click on **Insert-text**. You will then be asked where you want the text to be placed. Move the pointer to where you want the text to go and left click the mouse. The KTS will now appear on your screen.

A list of all of the Key Text String's is found in the Reference Guide on page:

Sorcerer:	131
Wizard:	115
Magician:	76
Maestro:	107
Master:	Not Applicable

The next item on our **Utilities** menu is **Ins-Text**. Click this command and the following dialog box will appear.
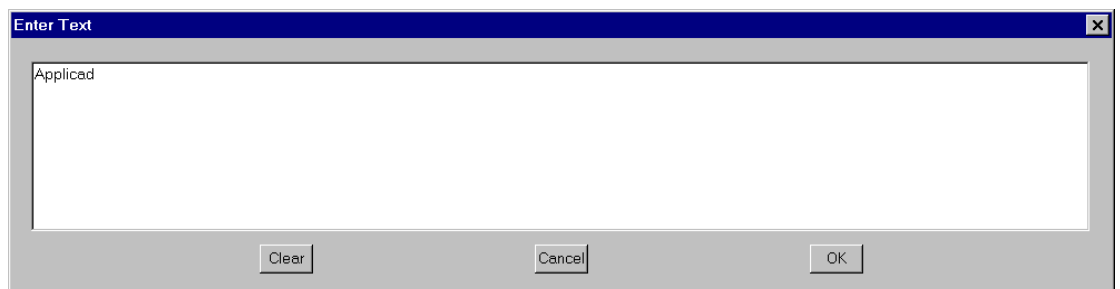
From this dialog box you can insert your own text. Type in the text that you want to put on the template and then click **Ok**. You will then be asked where you want to put your text. Move the cursor to where you want your text to go and left click the mouse.

Press the right mouse button to exit the placement stage, and you will be brought back the previous dialog box. If you would like to add in more text simply repeat the process previously explained. If you would like to exit simply click on **Cancel**.

The next item on our **Utilities** menu is **Text-Defaults**. Clicking on this command will bring up the following dialog box.

```
True Type Font Text Defaults                                              ✕

                    Colour          Layer
                    ┌──┐ ┌──┐       ┌──┐ ┌──┐
                    │1 │ │  │       │1 │ │..│
                    └──┘ └──┘       └──┘ └──┘

  Font              ┌──────────┐ ┌──┐    Haloed          ┌──────── No ────────┐
                    │Arial     │ │..│
  X offset          ┌──────────┐         Y offset        ┌────────────────────┐
                    │0.00      │                         │0.00                │
  Height            ┌──────────┐         Width           ┌────────────────────┐
                    │3.50      │                         │3.50                │
  Italic            ┌──── No ──────┐     Bold            ┌Default          ▼┐
  Horizontal justification ┌Left    ▼┐   Vertical justification ┌Centre    ▼┐
  Boxed             ┌None        ▼┐       Underline       ┌──────── No ────────┐
                                          Plot size       ┌────── Original ─────┐
                                          Fixed circle diameter ┌──────────────┐
                                                                │0.00          │
  Plotting          ┌──────── Yes ────────┐


          ┌──────┐          ┌──────────────┐          ┌────┐
          │ Copy │          │ Caddsman Font│          │ OK │
          └──────┘          └──────────────┘          └────┘
```
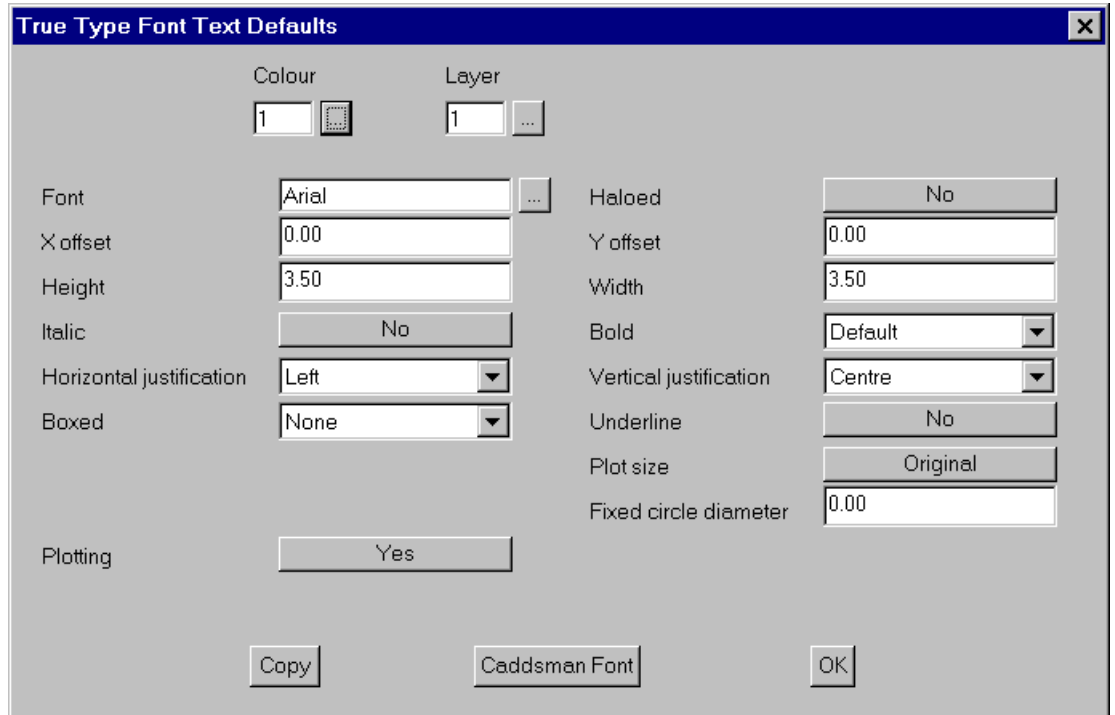
In this dialog box we have a number of choices setting the presentation of the text. Bear in mind that any changes that are made in this dialog box will stay as the default for any new text that you may put in. For this tutorial we are only going to go through the basic functions of this dialog box, these are **Colour**, **Font**, **Height**, **Italic**, **Boxed**, **Horizontal Justification**, **Bold** and **Underline**.

The first of these commands that we will use is the color function. Click on the selection box after the colour field, and a colour palette will appear, select the colour that you want and then click **Ok**.
The next field we will change is that Font field. To change this click on the selection box at the end of the font field. This will bring up the following dialog box.
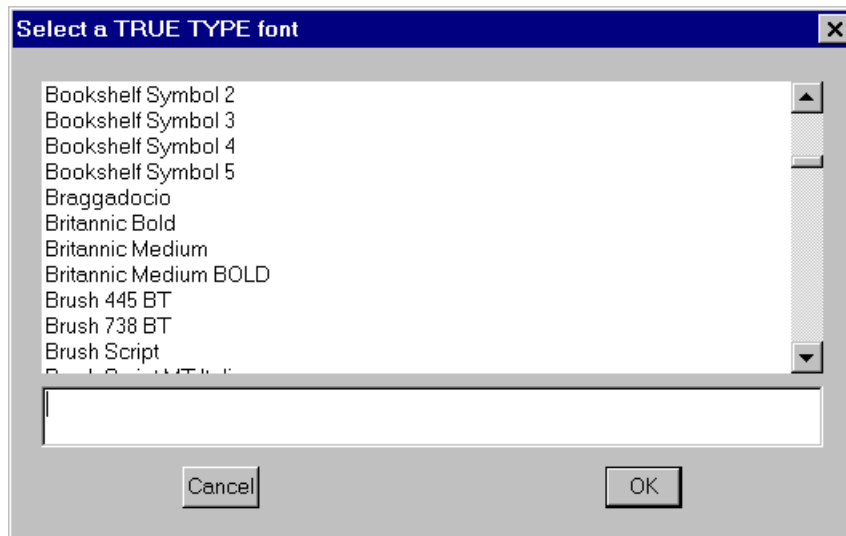
From here select the font that you want and click **Ok**.
We will ignore the **x Offset** field, and move on to the height field. This field is where we set the height of the text, the larger the number the larger the size of the text. To change this field, click on it and type in the size that you want.
The next field we come across is **Italic**. Changing this to yes will put the text in Italic. To change this click on the box to change it from **Yes** or **No**.
The next field we come across is the **Horizontal Justification** field. This command is used to describe where the text will be written from. E.g. the text will write normally. The text will write from left to right across the screen. Or, stay centered on a particular point. To edit this field click on the arrow at the end of the field. This will open up a drop down menu with 3 choices in it **Left**, **Center** and **Right**. Move the highlight down to the choice that you want and click on it. The menu will close and the choice you made will be left in the field.

The next field is **Boxed**. This field uses a drop down menu, in which you can put a border around the text if you want to. If you do not want to put a border around the text leave this on **None**.
We will skip the next three fields which are **Haloed**, **Y Offset** and **Width**, and move onto **Bold**. This field also uses a drop down menu setup, in which you can alter the boldness of the text if you want to.
Underline, is the next field we come across. Selecting **Yes** in this field will put an underline on the text. If you don't want this, leave this on **No**.
The remaining fields we will ignore.
To save these fields as your default click on **Ok**, and the settings will be saved.

The next command that we come across is **Change**. Clicking on this will bring up a dialog box similar to that of the **Text-Defaults** dialog box. The main difference with this command is that it will only change the text for the text that you select. Make the changes in the appropriate fields and then click **Ok**. You will then be asked which text you would like to change. Select the text and right click the mouse. The following dialog box will then appear
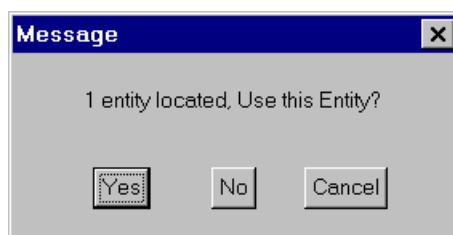
If you have chosen the correct text then click on **Yes**. If you have not then click on **No**, and reselect the correct text.

The next command that we come across is **Move**. Click on this command, and you will be asked to select which text you would like to move. Select your text, and move the cursor to where you want the text to be moved, you can snap to a point. When your text has been moved to the correct location right click the mouse. If you don't want to move any more text right click the mouse again.

The next command that we come across is **Copy**. Click on this command, and you will be asked to select which text you would like to copy. Select your text, and move the cursor to where you want the text to be copied to. When you have finished copying your text, right click the mouse. If you don't want to copy any more text right click the mouse again.

The Next command that we come across is **Edit**. Click on this field and you will be asked to select which the text that you want to edit. When the text has been selected the following dialog will appear.
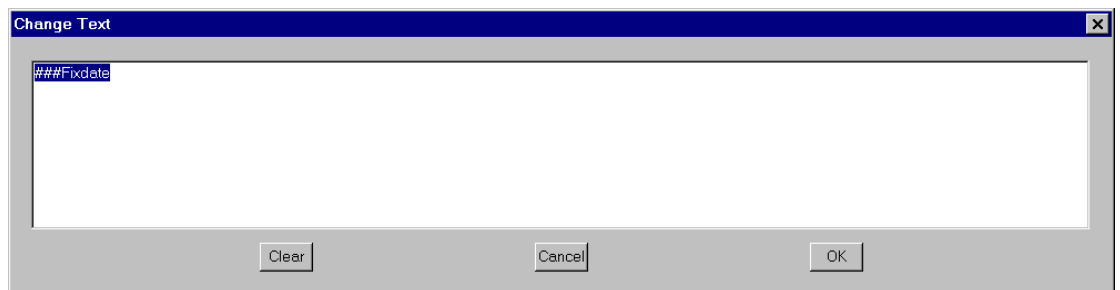
From here type in what you would like the text to be, and click **Ok**. This will change the text to what you have written. If you have chosen the wrong text, or want to exit click on **Cancel**.

The final command is **Delete**. Use this command to delete any unwanted text. Simply select **Delete** and you will be asked to select what text you would like to delete. Select the appropriate text(s), and then right click the mouse. The following dialog box will appear
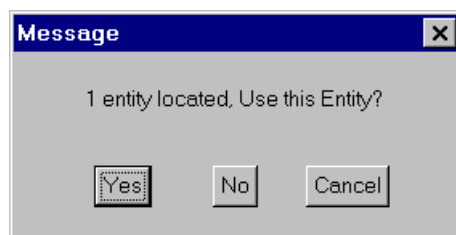
If you have selected the correct text then click **Yes**, and the text will be deleted. If you have chosen the wrong text click **No**.

That completes the section on how to edit the text on your templates.

Modifying the Layout

LINE
Insert
Chamfer
Key
Key=
Trim
Trim-ent
Mult-trim
Divide
Mult-div
Break-del
Change
Defaults
Gen-Point
Move
Stretch
Copy
Delete
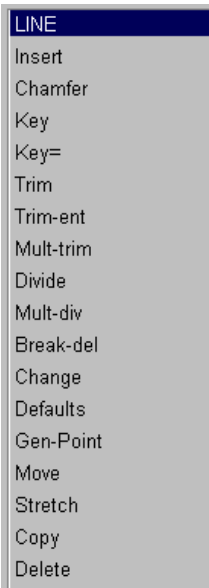
If you want to edit the layout of the template select **CAD** from the main menu followed by **Line**. This will bring up the following menu.

From this menu we will only need to use 6 commands. These commands are **Insert**, **Trim**, **Change**, **Defaults**, **Move** and **Delete**. The first of these commands that we will use is **Insert**. This command will bring up the following menu.

LINE INS
Free
Free-Len
Stream
Multi
Hor
Hor-Len
Hor-Int
Ver
Ver-Len
Ver-Int
Angle
Angle-Len
Angle-Int
Constrain
Copy-Par
Copy-Par=
Par
Par-Len
Par=
Par-Len=
Sectors
Rectangle
Rec-C-Cor
Rec-A-Len
Rec-C-Ang
Chord
T-Cir-Cir
T-Cir-Lin
T-Cir-Pnt
T-Cur-Pnt
P-Cir-Pnt
P-Cir-Pt=
P-Lin-Lin
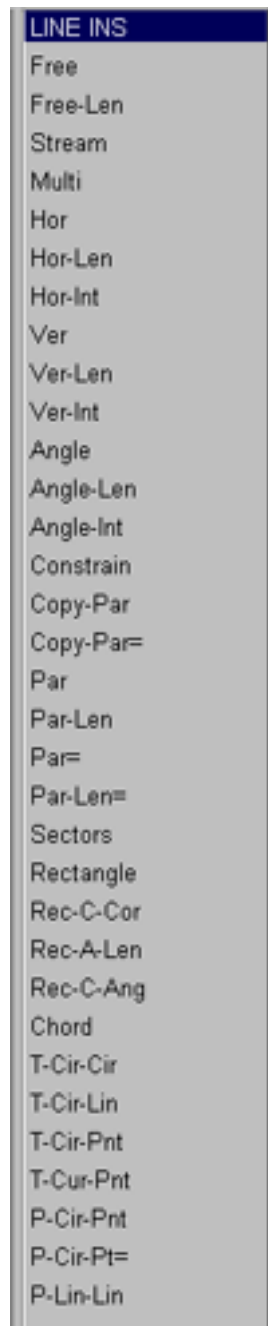
From this menu we will yet again only use a few commands. These commands are **Free**, **Free-Len**, **Hor**, **Hor-Len**, **Ver**, **Ver-Len** and **Constrain**.

By selecting **Free** you can draw in a line using the cursor anywhere on the screen, with no set length or angle. When you have drawn your line right click the mouse to exit this command.

The next command is **Hor**. This command will allow you to draw a horizontal line anywhere on the screen, with no set length. To draw in you line move your cursor to where you want your line to start and left click the mouse. Then move your cursor to where you want your line to end, the angle of the line doesn't need to be perfect as the program will draw a perfect horizontal line. As before, right click the mouse to exit this command.

The next command is **Ver**. This command works exactly the same as the **Hor** command but will insert a vertical line instead.

The next command is **Constrain**. This command will allow you to draw in lines of any length, but you can set a constraint on the angles,(i.e. 45°).

The final three commands, **Free-Len**, **Hor-Len** and **Ver-Len**, will follow the same ideals as their previous commands but you will be asked to specify a length as well. This completes the insert menu options.
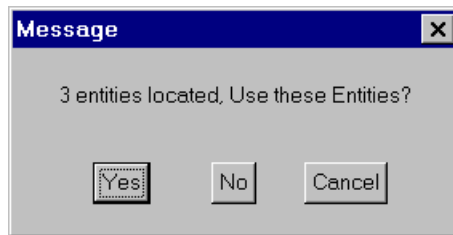
The next menu option that we come across in the **Cad | Line** menu is **Trim**. Selecting this option will bring up the following menu.

```
LINE TRIM
Point
Line
Circle
Curve
Length
Incr-Len
Corner
```
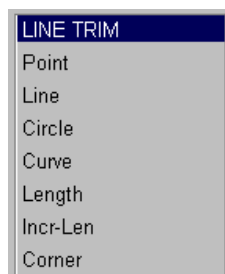
From this menu we will only be using the one command, which is **Line**. This command will now allow you to trim a selected line to a point intersecting another line. In other words you can trim two lines to make a perfect corner. To do this first select the line that you would like to trim, making sure that you select closer to the end that you would like to be trimmed otherwise the line will be trimmed from the wrong end causing generally an extremely short line. When you have selected the line, select the line that you would like the first line to be trimmed to, and your line will then be trimmed to the second line. To exit this command simply right click the mouse.

The next menu option that we come across in the **Cad | Line** menu is **Move**. Using this command you can move an entire line to anywhere on the screen After selecting this command you will be asked to select the line that you would like to move. Select the line that you would like to move, taking note of where on the line you selected as it will take the end closest to where you selected as the reference point as to where you place the line. When the line has been selected, move the cursor to where you want the line to start and left click the mouse. You can continue moving this line if you wish by continually pressing the left mouse button. If you are happy as to where the line is you cancel the placing of the line by right clicking the mouse. If you don't want to move any m ore line you have to right click the mouse again, because the software will be asking you to select the next line that you would like to move.

The next menu option that we come across in the **Cad | Line** menu is **Delete**. This command is used for deleting line(s). Simply select this command and you will be asked which line(s) you would like to delete. Select the line(s) that you would like to delete, and right click the mouse. This will bring up a similar dialog box to the following.

Message ✕

3 entities located, Use these Entities?

Yes   No   Cancel

If the selected lines are correct, select **Yes**, and you line(s) will be deleted. If they are not select **No**. and reselect the correct lines.

The next menu option that we come across in the **Cad | Line** menu is **Change**. This will bring up the following dialog box.

Line Change ✕

Colour	Layer	Style	Weight
1 □ ▢	1 □ ...	0 □ ...	0.00 □ ...

Start terminator type	None ▼	□
Start terminator length	5.00	□
Start terminator height	2.00	□
Start terminator size	Plot-Scale	□
Start terminator trim	No	□
Start terminator weight	Alternate	□
Alt Start terminator weight	0.35	□ ...
End terminator type	None ▼	□
End terminator length	5.00	□
End terminator height	2.00	□
End terminator size	Plot-Scale	□
End terminator trim	No	□
End terminator weight	Alternate	□
Alt End terminator weight	0.35	□ ...
Haloed	No	□
Plotting	Yes	□

Copy   OK

From this dialog box you can change the style, color and thickness of a line. To change the color of the line click on the selection box at the end of the colour field. This will bring up the following dialog box.
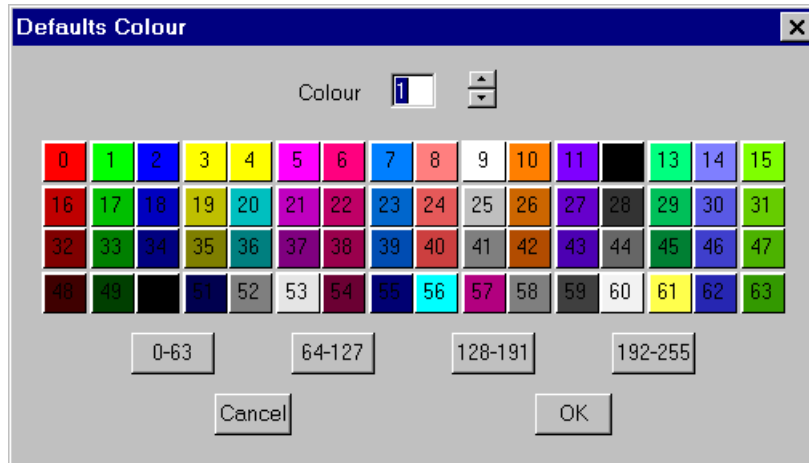
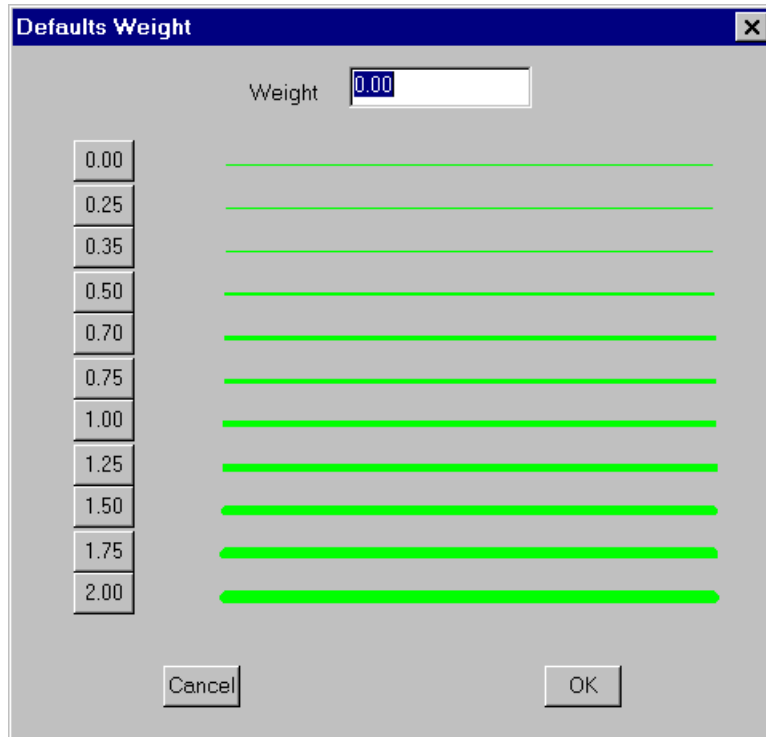From this dialog box you can select the colour of the line that you want. To do this simply select the cour that you want from the pallete, or type in the corresponding number. When you have chosen the correct colour click on **Ok**, and you will return to the main dialog box.

The next command we will use from the main dialog box is **Style**. This will change the style of the line. Click on the selection box at the end of the Style field and the following dialog box will appear.
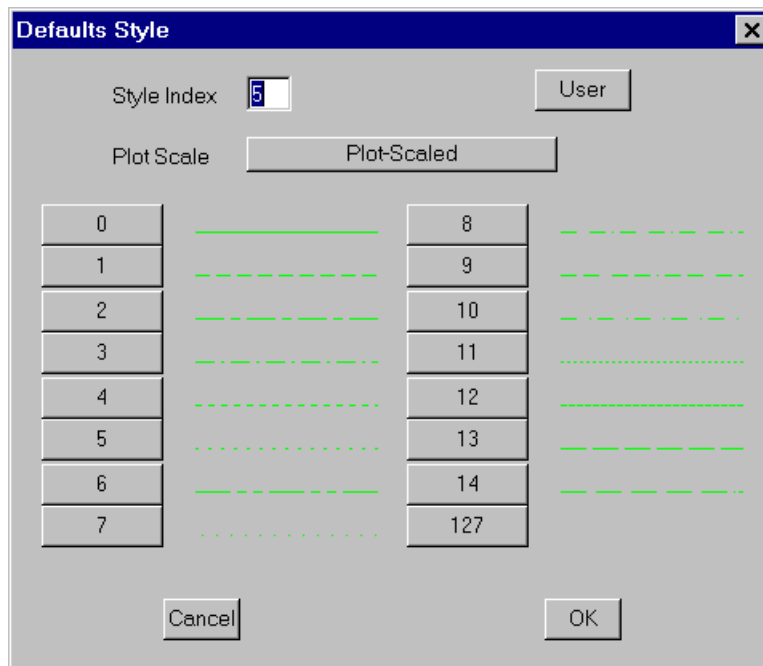
From here you can see all the types of line that you can use. To choose a line simply click on the number next to the appropriate line or type in the number. When the correct line has been chosen, click on **Ok**, to return back to the main dialog box.

The final command that we will use on the main dialog box is **Weight**. The command is used to change the width of the line. Clicking on the **Weight** selection box, will bring up the following dialog box.

Defaults Weight

Weight [0.00]

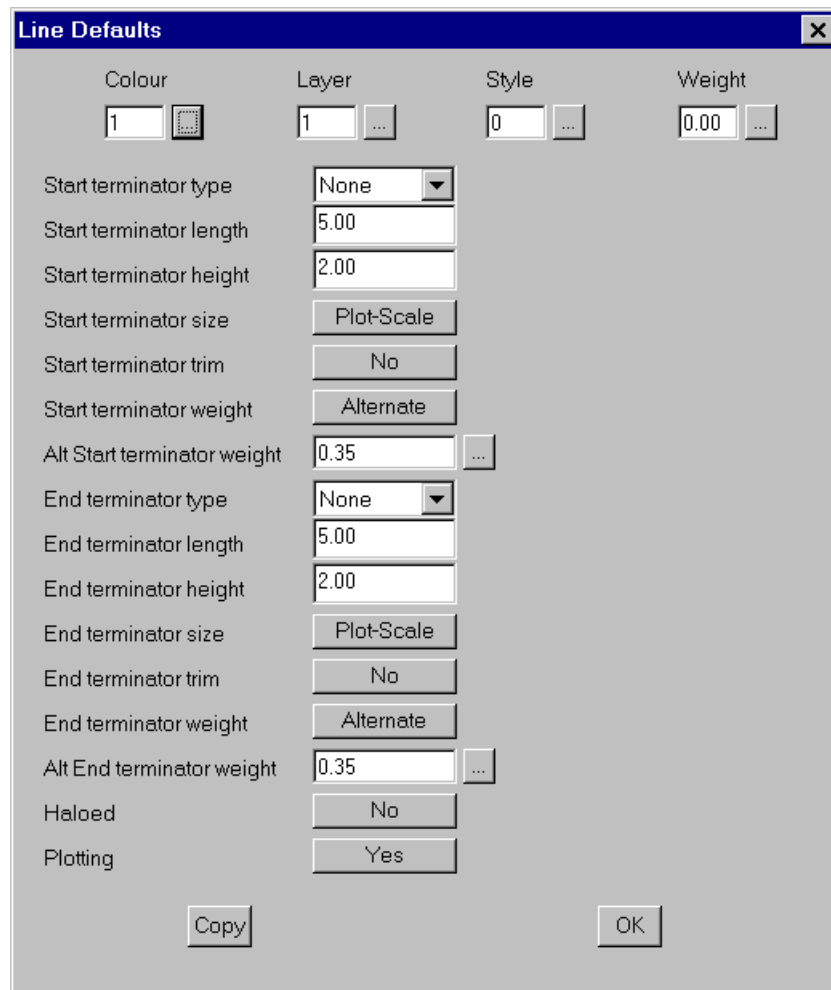|	
0.00	
0.25	
0.35	
0.50	
0.70	
0.75	
1.00	
1.25	
1.50	
1.75	
2.00	

Cancel   OK

To change the thickness of a line, click on the number corresponding to the appropriate thickness, or type in the number. When the appropriate thickness has been chosen click on **Ok**, and you will be returned to the main dialog box. Now that all of your specifications have been entered, click on **Ok** and you will be asked to select the line(s) that you would like to change to the specifications that you have just set. One the appropriate line(s) have been selected, right click the mouse and the following dialog box will appear.

Message

1 entity located, Use this Entity?

[Yes]   No   Cancel
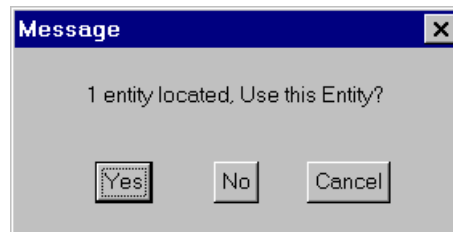
If the line(s) that you have selected are correct click on **Ok**, and the line will be changed. If the lines are not the lines you wish to change, click on **No**, and reselect the line(s) that you would like to change.

The final command that we will look at in the **Cad | Line** menu is **Defaults**. Clicking on this will bring up the following dialog box.

Line Defaults

Colour	Layer	Style	Weight
1 ▢	1 ...	0 ...	0.00 ...

Start terminator type	None ▼
Start terminator length	5.00
Start terminator height	2.00
Start terminator size	Plot-Scale
Start terminator trim	No
Start terminator weight	Alternate
Alt Start terminator weight	0.35 ...
End terminator type	None ▼
End terminator length	5.00
End terminator height	2.00
End terminator size	Plot-Scale
End terminator trim	No
End terminator weight	Alternate
Alt End terminator weight	0.35 ...
Haloed	No
Plotting	Yes

Copy   OK

This dialog box is identical to the one under **Change**, but the only difference is that any changes you make in this dialog box will be saved as your defaults. Meaning that every time that you open the **Change** dialog box whatever the figures that you entered into this box will be the figures that will be in the **Change** dialog box. ♦

Thank you

This now completes this manual. You should now be able to define all of the materials you need to use on your jobs, including flashing, edge assemblies, fixtures, down pipes and extra items. You should also be able to set up all of your costing and pay rates. And finally you should be able to modify the existing templates to suit your individual needs.

If you can't do these yet or have problems keep this manual close by as a quick reference guide to help you set up the software to work effectively and efficiently.

Also work through the Learning Guide to familiarize yourself with how to draw up the roof shapes and estimate the total job.

Be sure to also read through the Reference Guide, it gives a more detailed description of everything covered in this manual and in the Learning Guide.