ESTIMATORXPRESS® ROOFING TRADE EDITION

OVERVIEW

This tutorial is intended to supplement the **EstimatorXpress® Getting Started Guide** for **EstimatorXpress® Total Toolkit** in order to focus in with more detail on some of the **Workbooks** you will find in the **Roofing Trade Edition**. We suggest you read both documents to have a full understanding of the process of estimating and project managing using **EstimatorXpress®** before commencing with pricing up your own work.

ESTIMATING A ROOF USING SEPARATE WORKBOOKS

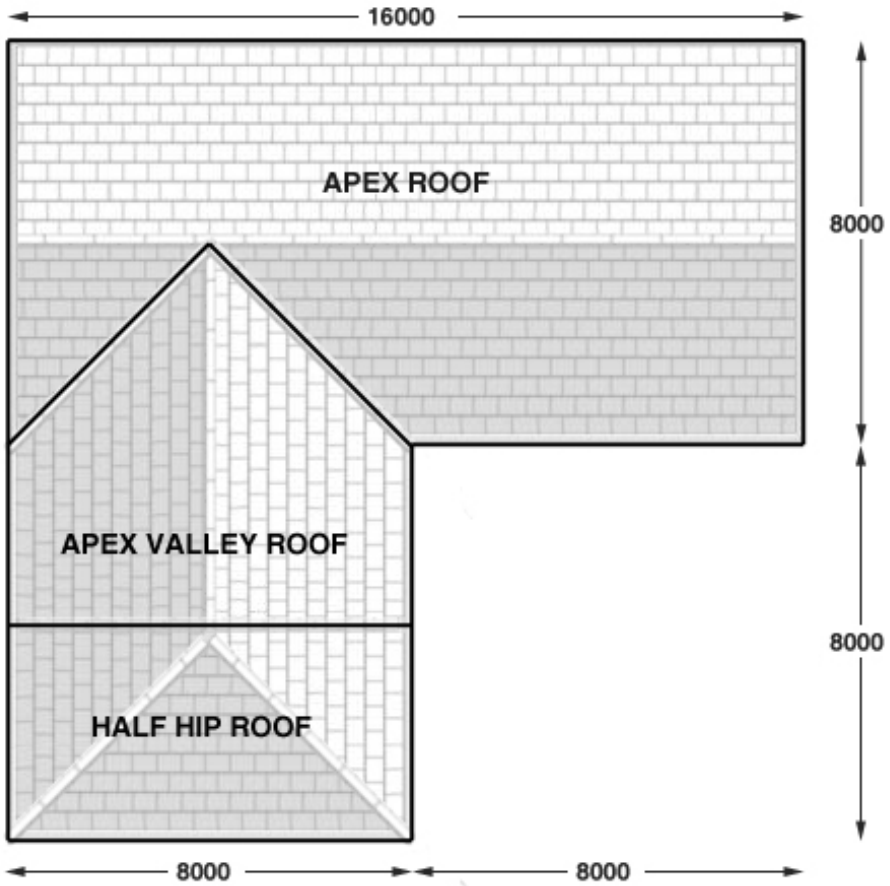
Complex roofs can be estimated in 2 different ways.

The first is to use the standard shaped roof **Workbooks** to estimate each part of the roof separately. The advantage of this option, if you are using a cut roof, is that you will be able to produce cutting lists for all of your timbers by using these **Workbooks**. The disadvantage is that there will be a few areas that you will be over-estimating for products where the roofs are joining but the calculators are not aware that it needs to cut out on resources because of this.

The alternative is to use the **Universal Roof Workbooks** to estimate the roof in one go. The advantage of this method is that you only need to go into one **Workbook** to price up the entire roof. The disadvantage of this method is that you will need to do more work in manually taking off length and areas of the roof to input into the wizard.

This tutorial will talk you through both methods of pricing a roof, starting with using separate **Workbooks**.

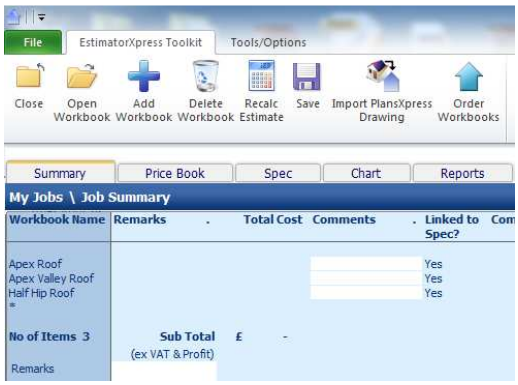
The **Apex Roof Workbook** will estimate the main roof on the building shown below. We will then run through the **Apex Valley Roof Workbook** to estimate the roof teeing into the main roof (up to the point where the hip end begins) and the **Half Hip Roof Workbook** to estimate for the hip end.



The roof **Workbooks** are **Specification** linked **Workbooks** (see page 18 of the **EstimatorXpress® Getting Started Guide** for an explanation of Specification linked Workbooks). To estimate the roof, simply enter your dimensions into the Dimensions Wizards and **EstimatorXpress®** will schedule all the **Materials, Labour** and **Plant** required and cost it for you too.

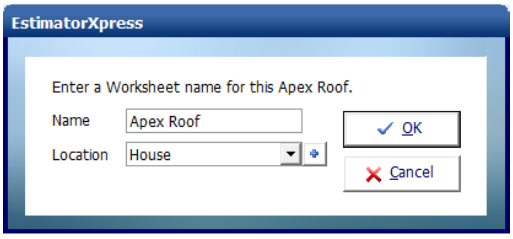
The **Apex Roof Workbook** will schedule the carcassing timber, roof tiling, felt undercloak and lead work, fascias and guttering, decorating, plastering and insulation required.

[1] To begin, create a new estimate containing the **Apex Roof**, **Apex Valley Roof** and **Half Hip Roof Workbooks**. See page 41 of the **EstimatorXpress® Getting Started Guide** for a detailed explanation of creating a new estimate.



[2] Having created an estimate to start estimating the roof click on **Apex Roof** in the Job Summary.

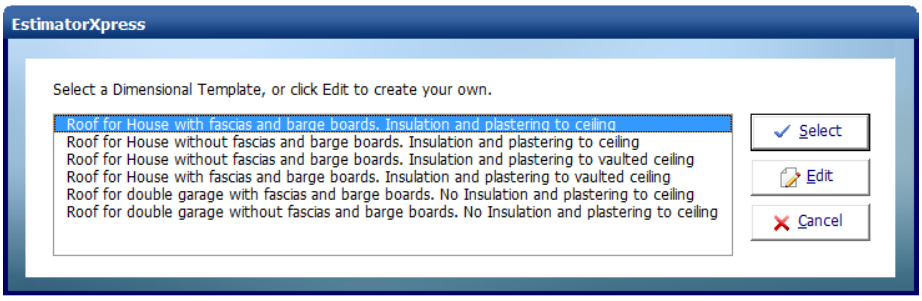
[3] Click the **Open Workbook** button



You are then transferred to **Summary of Apex Roof Workbook** and a dialog box will automatically pop up asking you to give a name and location for the roof.

[4] Enter any name you think is sensible and then select **House** for location. Click **OK.**

EstimatorXpress® then transfers you into the **Dimensions** screen of the **Apex Roof Worksheet**.

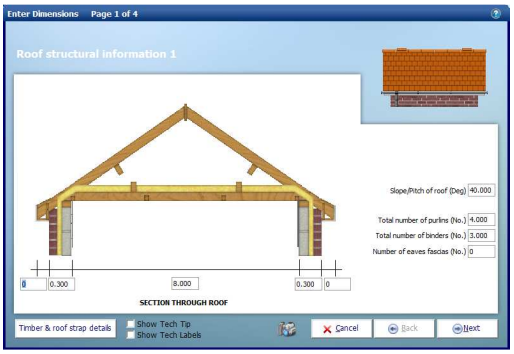


Another dialog box will automatically pop up asking you to select a template.

[5] Choose the **Roof for House with fascias and barge boards. Insulation and plastering to ceiling** template**.**

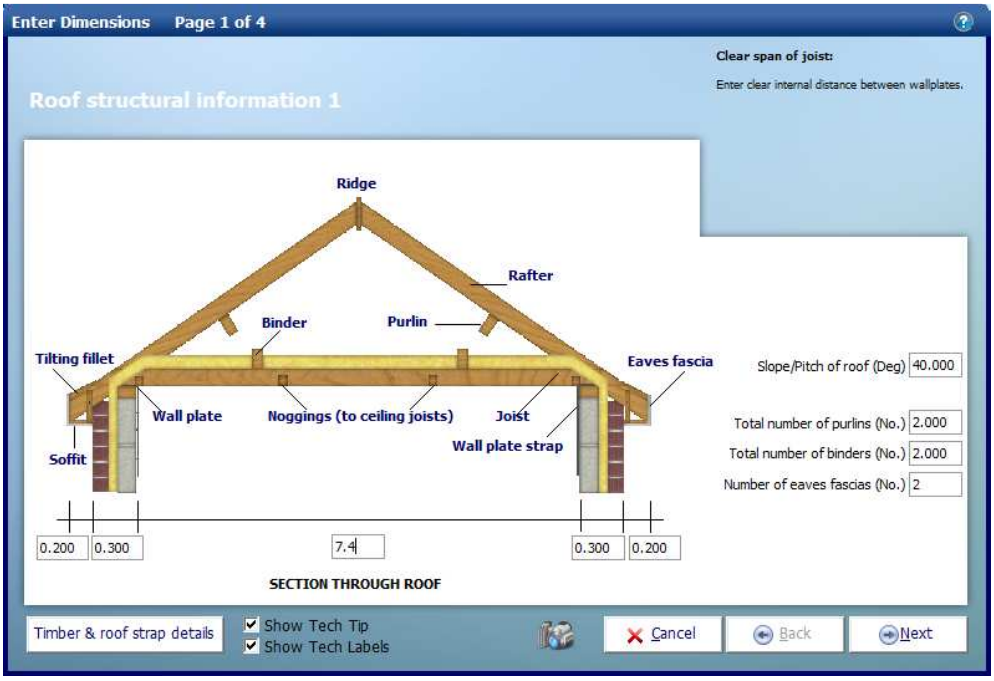
These templates have already been set up for you to speed up the estimating process.

Click **Select.**



The **Dimensions Wizard** will automatically open up a dialog box containing drawings to assist you in entering and confirming dimensions for the **Apex Roof.**

TIP: Before you enter any dimensions, you may find it useful to switch on **Tech Tips** by ticking the **Show Tech Tips** check box in order to display useful information about each dimension in the top right of the screen, and also to switch on **Tech Labels** by ticking the **Show Tech Labels** check box. You can turn them on and off at any time by ticking and unticking the check boxes.



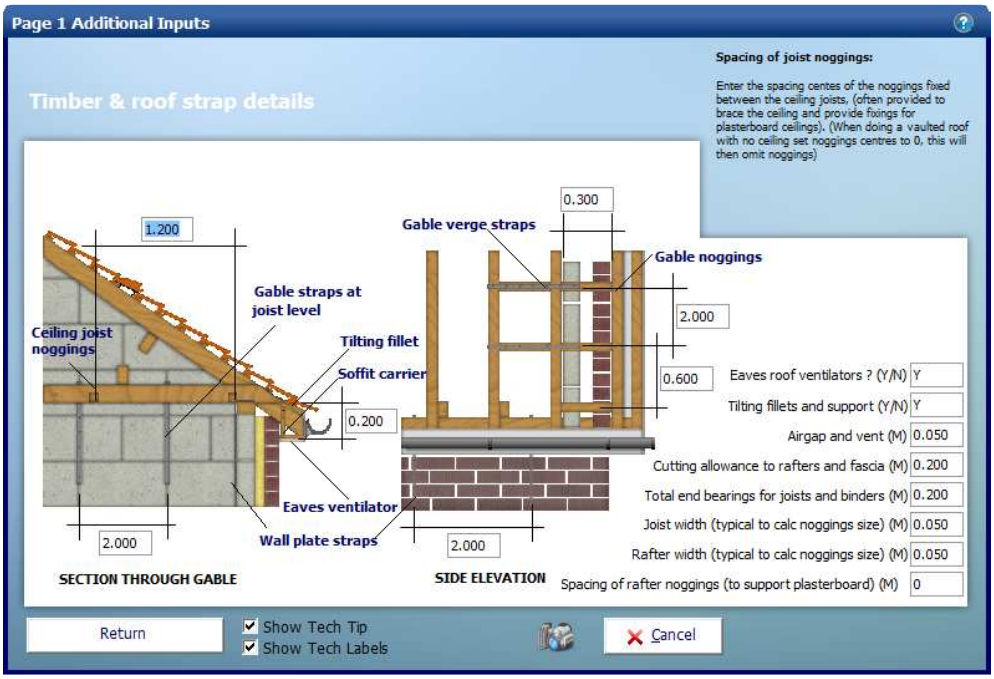
As per the plan of the roof at the start of the tutorial, we will enter the figures shown above to dimension the main section of roof. You can hit the **Enter** key or the **Tab** key after entering a number to skip to the next box. For each box you should see an appropriate Tech Tip in the top right of the window.

[6] Set the **Clear span of joists** to 7.4.

[7] Set the **Total number of purlins** to 2.

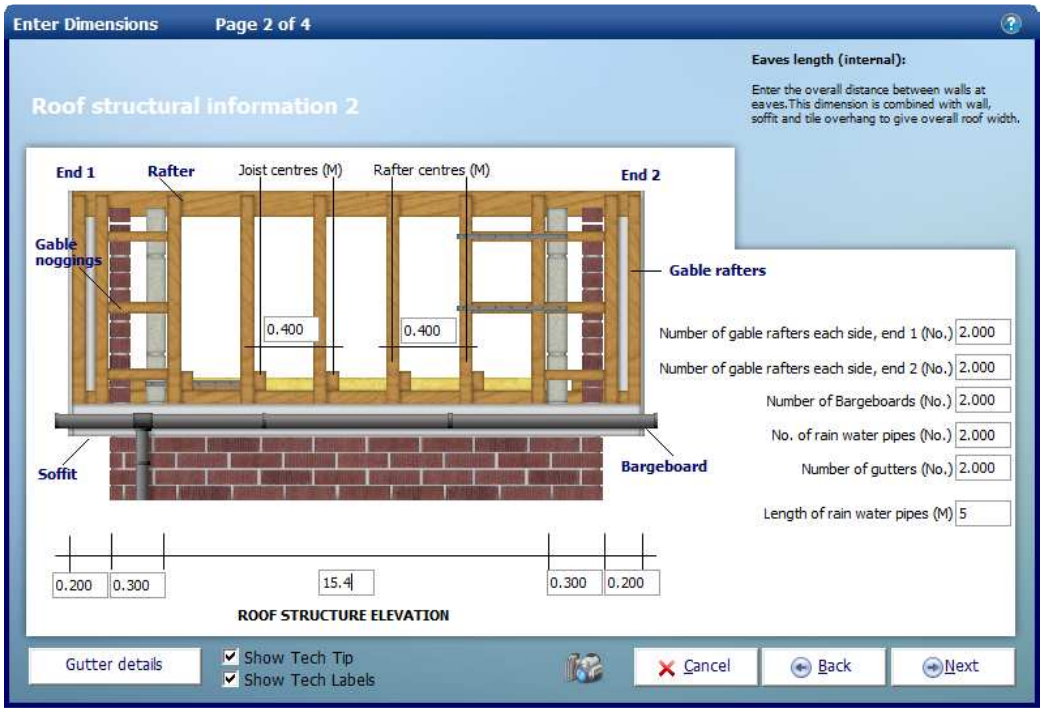
[8] Set the **Total number of binders** to 2

[9] Before you click **Next,** click on the button in the bottom left hand corner of the dialog called **Timber & roof strap details.**



Most of these items are fairly standard and will not need changing very often; on this screen we have just changed Spacing of rafter noggins (to support plasterboard) from 1.2 to 0 as we are not plastering the rafters and do not require additional noggins with rafters set at 0.400m widths. Click **Return** to return to **Roof Structural Information 1.**

[10] Click **Next** to continue.

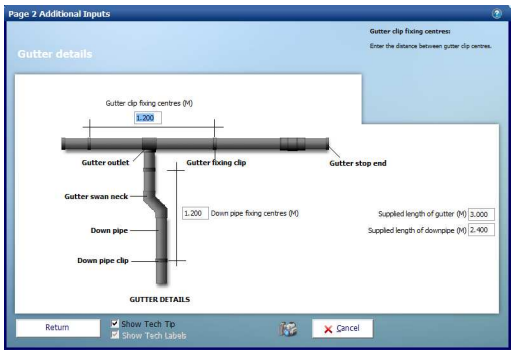


As before you may find that certain dimensions are fairly standard and do not need to be changed. Change the other boxes to match the dimensions shown above. Remember if you are in doubt as to what dimension the box refers to you should be able to see the **Tech Tip** in the top right corner of the window.

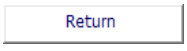
[11] Set the **Eaves length (internal)** to 15.4.

[12] Set the **Length of rain water pipes** to 5.

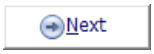
[13] Click **Gutter details**.



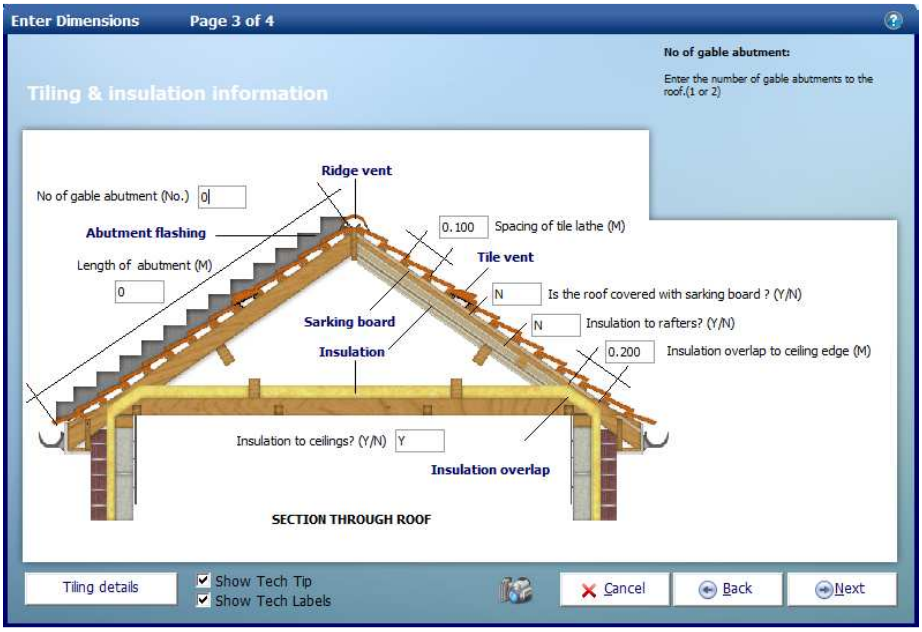
This Additional Inputs screen lets you change the gutter details if needed.



[14] Leave the figures as they are and click **Return** to return to Roof Structural Information 2.

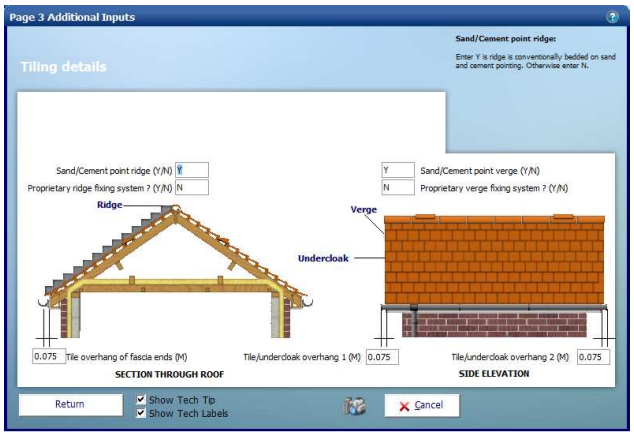


[15] Then click **Next** to continue to page 3 of 4.

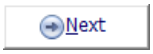


Page 3 of 4 of the **Apex Roof** Dimensions Wizard deals with **Tiling & insulation information**. Again we are going to use the default values. This page also covers abutments. The roof we are estimating does not join another building, but if it did this is where we would enter the length and number of gable abutments to allow for the lead work to join to the wall.

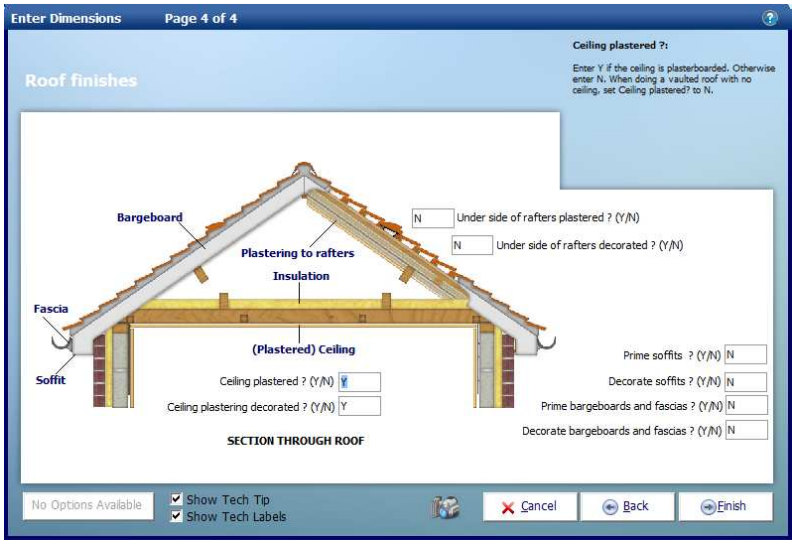
Page 3 also has an Additional Inputs screen for **Tiling details**. Not every **Dimension Wizard** page has Additional Inputs but if it does you will always find the button in the bottom left of the page. It's worth remembering this when going through **Dimensions Wizards** in other **Workbooks**.



[16] Once you have had a look at this screen click **Return** to go back to Page 3.



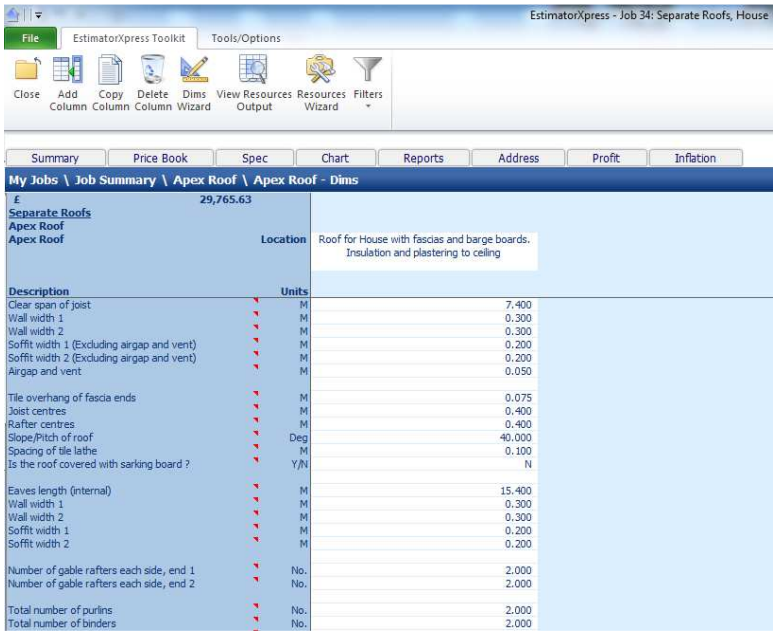
[17] Click **Next** to go to Page 4.



Page 4 of 4 concerns Roof finishes. This page is where you can enter details of plastering and decorating associated with the roof.

[18] Once more we are going to leave the default values and then click **Finish** to close the **Dimensions Wizard**.

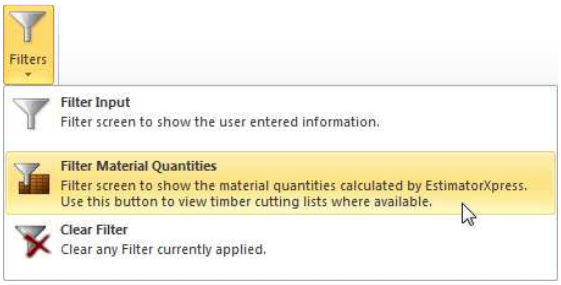
You will then be returned to the **Worksheet** where you will be able to see the dimensions you've just entered and the total cost for the **Worksheet** at the top left of the sheet.



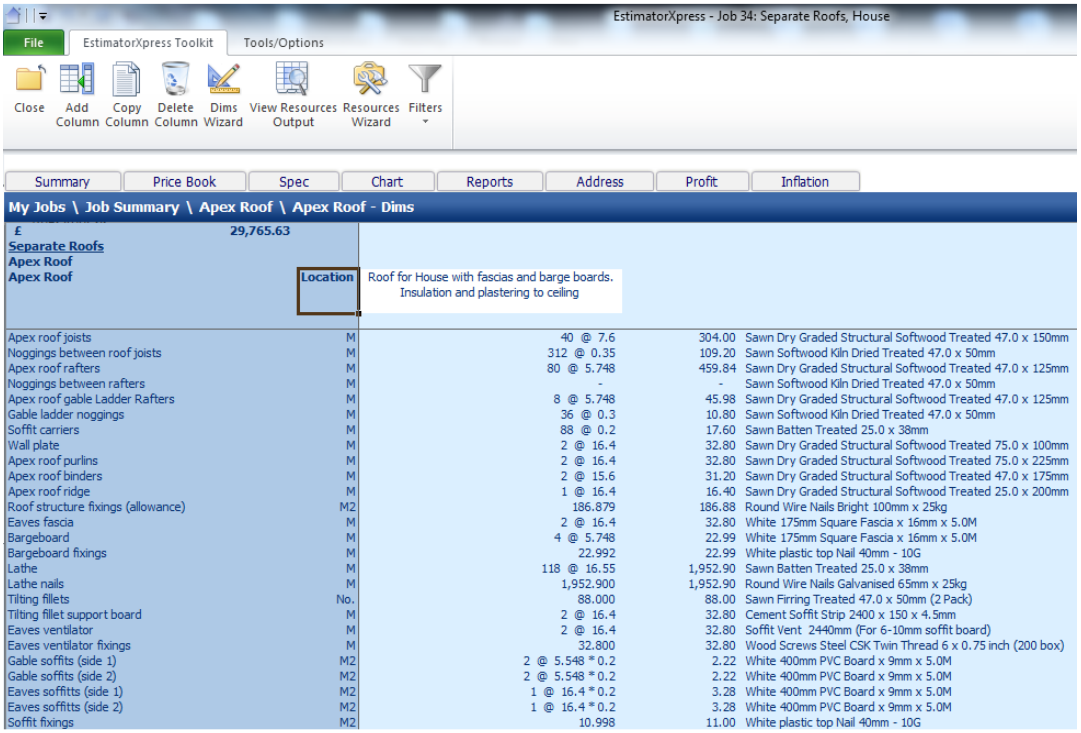
If you make a mistake entering your dimensions simply click on the column showing the dimensions, then click **Dims Wizard** on the top menu to go through the **Dimensions Wizard** again.

Alternatively you can click any cell with a white background and type a new value in directly.

As well as calculating the cost of the roof, the **Worksheet** also calculates the materials required. You can display a full breakdown of the material requirements including a cutting list for the roof timbers.

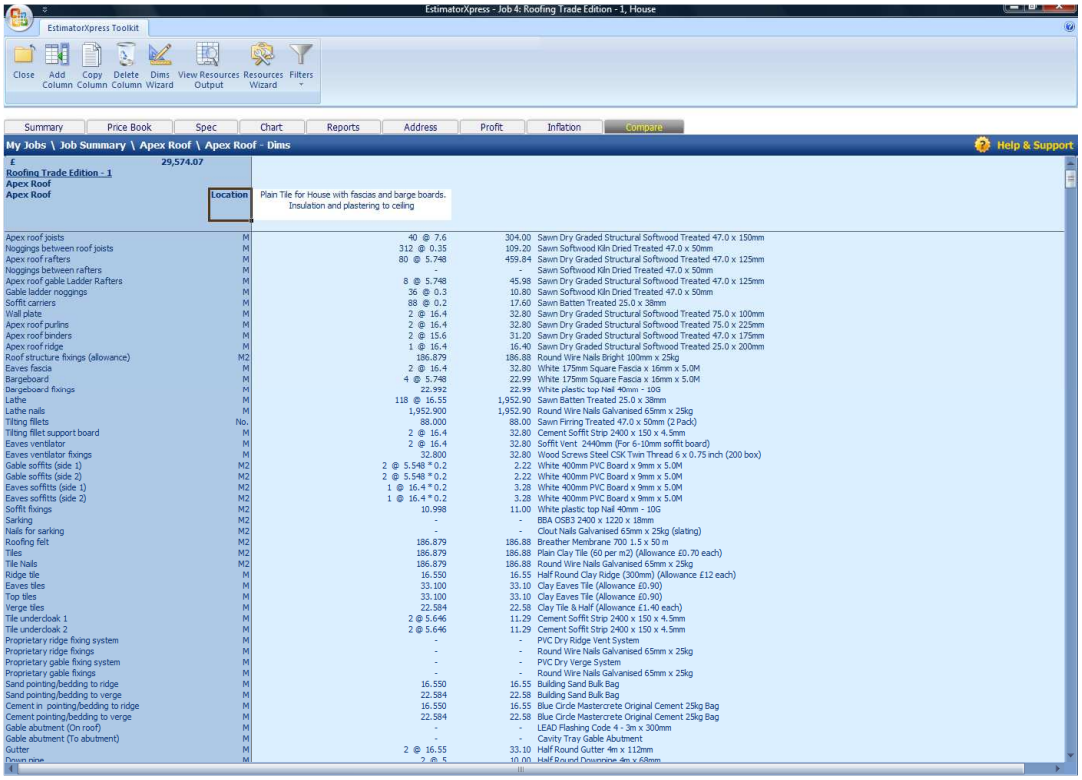


[19] Click on **Filters** and then **Filter Material Quantities.**



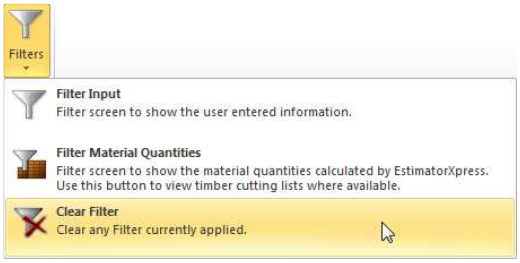
Apex roof joists	M	40 @ 7.6	304.00	Sawn Dry Graded Structural Softwood Treated 47.0 x 150mm
Noggings between roof joists	M	312 @ 0.35	109.20	Sawn Softwood Kiln Dried Treated 47.0 x 50mm
Apex roof rafters	M	80 @ 5.748	459.84	Sawn Dry Graded Structural Softwood Treated 47.0 x 125mm
Noggings between rafters	M	-	-	Sawn Softwood Kiln Dried Treated 47.0 x 50mm
Apex roof gable Ladder Rafters	M	8 @ 5.748	45.98	Sawn Dry Graded Structural Softwood Treated 47.0 x 125mm
Gable ladder noggings	M	36 @ 0.3	10.80	Sawn Softwood Kiln Dried Treated 47.0 x 50mm
Soffit carriers	M	88 @ 0.2	17.60	Sawn Batten Treated 25.0 x 38mm
Wall plate	M	2 @ 16.4	32.80	Sawn Dry Graded Structural Softwood Treated 75.0 x 100mm
Apex roof purlins	M	2 @ 16.4	32.80	Sawn Dry Graded Structural Softwood Treated 75.0 x 225mm
Apex roof binders	M	2 @ 15.6	31.20	Sawn Dry Graded Structural Softwood Treated 47.0 x 175mm
Apex roof ridge	M	1 @ 16.4	16.40	Sawn Dry Graded Structural Softwood Treated 25.0 x 200mm
Roof structure fixings (allowance)	M2	186.879	186.88	Round Wire Nails Bright 100mm x 25kg
Eaves fascia	M	2 @ 16.4	32.80	White 175mm Square Fascia x 16mm x 5.0M
Bargeboard	M	4 @ 5.748	22.99	White 175mm Square Fascia x 16mm x 5.0M
Bargeboard fixings	M	22.992	22.99	White plastic top Nail 40mm - 10G
Lathe	M	118 @ 16.55	1,952.90	Sawn Batten Treated 25.0 x 38mm
Lathe nails	M	1,952.900	1,952.90	Round Wire Nails Galvanised 65mm x 25kg
Tilting fillets	No.	88.000	88.00	Sawn Firring Treated 47.0 x 50mm (2 Pack)
Tilting fillet support board	M	2 @ 16.4	32.80	Cement Soffit Strip 2400 x 150 x 4.5mm
Eaves ventilator	M	2 @ 16.4	32.80	Soffit Vent 2440mm (For 6-10mm soffit board)
Eaves ventilator fixings	M	32.800	32.80	Wood Screws Steel CSK Twin Thread 6 x 0.75 inch (200 box)
Gable soffits (side 1)	M2	2 @ 5.548 * 0.2	2.22	White 400mm PVC Board x 9mm x 5.0M
Gable soffits (side 2)	M2	2 @ 5.548 * 0.2	2.22	White 400mm PVC Board x 9mm x 5.0M
Eaves soffitts (side 1)	M2	1 @ 16.4 * 0.2	3.28	White 400mm PVC Board x 9mm x 5.0M
Eaves soffitts (side 2)	M2	1 @ 16.4 * 0.2	3.28	White 400mm PVC Board x 9mm x 5.0M
Soffit fixings	M2	10.998	11.00	White plastic top Nail 40mm - 10G

Your **Worksheet** should then look like this.



Apex roof joists	M	40 @ 7.6	304.00	Sawn Dry Graded Structural Softwood Treated 47.0 x 150mm
Noggings between roof joists	M	312 @ 0.35	109.20	Sawn Softwood Kiln Dried Treated 47.0 x 50mm
Apex roof rafters	M	80 @ 5.748	459.84	Sawn Dry Graded Structural Softwood Treated 47.0 x 125mm
Noggings between rafters	M	-	-	Sawn Softwood Kiln Dried Treated 47.0 x 50mm
Apex roof gable Ladder Rafters	M	8 @ 5.748	45.98	Sawn Dry Graded Structural Softwood Treated 47.0 x 125mm
Gable ladder noggings	M	36 @ 0.3	10.80	Sawn Softwood Kiln Dried Treated 47.0 x 50mm
Soffit carriers	M	88 @ 0.2	17.60	Sawn Batten Treated 25.0 x 38mm
Wall plate	M	2 @ 16.4	32.80	Sawn Dry Graded Structural Softwood Treated 75.0 x 100mm
Apex roof purlins	M	2 @ 16.4	32.80	Sawn Dry Graded Structural Softwood Treated 75.0 x 225mm
Apex roof binders	M	2 @ 15.6	31.20	Sawn Dry Graded Structural Softwood Treated 47.0 x 175mm
Apex roof ridge	M	1 @ 16.4	16.40	Sawn Dry Graded Structural Softwood Treated 25.0 x 200mm
Roof structure fixings (allowance)	M2	186.879	186.88	Round Wire Nails Bright 100mm x 25kg
Eaves fascia	M	2 @ 16.4	32.80	White 175mm Square Fascia x 16mm x 5.0M
Bargeboard	M	4 @ 5.748	22.99	White 175mm Square Fascia x 16mm x 5.0M
Bargeboard fixings	M	22.992	22.99	White plastic top Nail 40mm - 10G
Lathe	M	118 @ 16.55	1,952.90	Sawn Batten Treated 25.0 x 38mm
Lathe nails	M	1,952.900	1,952.90	Round Wire Nails Galvanised 65mm x 25kg
Tilting fillets	No.	88.000	88.00	Sawn Firring Treated 47.0 x 50mm (2 Pack)
Tilting fillet support board	M	2 @ 16.4	32.80	Cement Soffit Strip 2400 x 150 x 4.5mm
Eaves ventilator	M	2 @ 16.4	32.80	Soffit Vent 2440mm (For 6-10mm soffit board)
Eaves ventilator fixings	M	32.800	32.80	Wood Screws Steel CSK Twin Thread 6 x 0.75 inch (200 box)
Gable soffits (side 1)	M2	2 @ 5.548 * 0.2	2.22	White 400mm PVC Board x 9mm x 5.0M
Gable soffits (side 2)	M2	2 @ 5.548 * 0.2	2.22	White 400mm PVC Board x 9mm x 5.0M
Eaves soffitts (side 1)	M2	1 @ 16.4 * 0.2	3.28	White 400mm PVC Board x 9mm x 5.0M
Eaves soffitts (side 2)	M2	1 @ 16.4 * 0.2	3.28	White 400mm PVC Board x 9mm x 5.0M
Soffit fixings	M2	10.998	11.00	White plastic top Nail 40mm - 10G
Sarking	M2	-	-	BBA OSB3 2400 x 1220 x 18mm
Nails for sarking	M2	-	-	Clout Nails Galvanised 65mm x 25kg (slating)
Roofing felt	M2	186.879	186.88	Breather Membrane 700 1.5 x 50 m
Tiles	M2	186.879	186.88	Plain Clay Tile (60 per m2) (Allowance £0.70 each)
Tile Nails	M2	186.879	186.88	Round Wire Nails Galvanised 65mm x 25kg
Ridge tile	M	16.550	16.55	Half Round Clay Ridge (300mm) (Allowance £12 each)
Eaves tiles	M	33.100	33.10	Clay Eaves Tile (Allowance £0.90)
Top tiles	M	33.100	33.10	Clay Eaves Tile (Allowance £0.90)
Verge tiles	M	22.584	22.58	Clay Tile & Half (Allowance £1.40 each)
Tile undercloak 1	M	2 @ 5.646	11.29	Cement Soffit Strip 2400 x 150 x 4.5mm
Tile undercloak 2	M	2 @ 5.646	11.29	Cement Soffit Strip 2400 x 150 x 4.5mm
Proprietary ridge fixing system	M	-	-	PVC Dry Ridge Vent System
Proprietary ridge fixings	M	-	-	Round Wire Nails Galvanised 65mm x 25kg
Proprietary gable fixing system	M	-	-	PVC Dry Verge System
Proprietary gable fixings	M	-	-	Round Wire Nails Galvanised 65mm x 25kg
Sand pointing/bedding to ridge	M	16.550	16.55	Building Sand Bulk Bag
Sand pointing/bedding to verge	M	22.584	22.58	Building Sand Bulk Bag
Cement in pointing/bedding to ridge	M	16.550	16.55	Blue Circle Mastercrete Original Cement 25kg Bag
Cement pointing/bedding to verge	M	22.584	22.58	Blue Circle Mastercrete Original Cement 25kg Bag
Gable abutment (On roof)	M	-	-	LEAD Flashing Code 4 - 3m x 300mm
Gable abutment (To abutment)	M	-	-	Cavity Tray Gable Abutment
Gutter	M	2 @ 16.55	33.10	Half Round Gutter 4m x 112mm
Down pipe	M	2 @ 5	10.00	Half Round Downpipe 4m x 68mm

As you can see **EstimatorXpress®** will list the number and length of each timber required such as joist, rafters, purlins and binders, as well as the total length required in metres.



[20] To return to the normal view of the **Worksheet** click **Filters** and then click **Clear Filter.**

We will now look at the output that **EstimatorXpress®** produces. **EstimatorXpress®** has produced a schedule of **Materials** and **Labour** required to construct the roof, including an allowance for wastage.

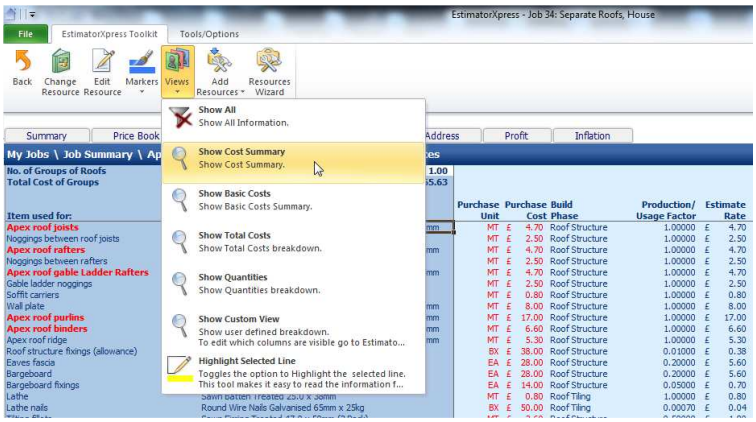
[21] Click the **View Resources Output** button.

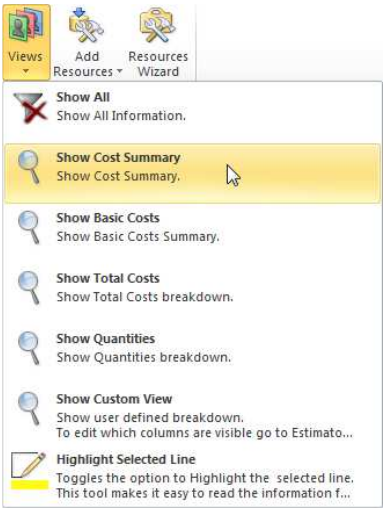
You are transferred to the **Apex Roof Resources Output** screen. You will see that **EstimatorXpress®** has calculated the order quantities and costs associated with all the **Material** and **Labour,** including an allowance for wastage, for the **Apex Valley Roof**. Scroll across the screen with the horizontal scroll bar to see all of the data. Below is a description of each column.

Column Name	Description
Item used for	The **item used for** simply describes what the item or task is. For example the **item used for** could be the 'Tiles' or 'Fix tiles, felt and laths' which you'll find used in all of the **EstimatorXpress®** roof **Workbooks**.
Description	This is the description of the resource currently selected for the task being carried out.
Purchase Unit	This information comes from the **Price Book** and describes in what unit we are purchasing the resource. For materials this could be things like each, bag, metre or Kg. For Labour this could be units such as hour, day or week.
Purchase Cost	This information comes from the **Price Book** and states the cost per unit of the selected resource.
Build Phase	The **Build Phase** that the resource is associated with. **Build Phases** are very important in **EstimatorXpress®** as they drive the **Bar Chart** detailing the program of works and the **Quote by Build Phase**. Creating your own **Build Phases** and associating a task with this **Build Phase** will automatically add a new bar into our **Bar Chart**, and a new section into our **Quote By Workbook**.
Production / Usage Factor	The **Usage Factor** describes how much of this resource we are using per **Unit** calculated in the **Worksheet**. For example how many tiles we need per square metre of roof face or how many square metres of felt, batten & tiles can be laid per hour.
Estimate Rate	The **Estimate Rate** is the cost per **Unit**. It is calculated by multiplying the **Purchase Cost** by the **Usage Factor**.
Unit	This is the usage unit of the resource e.g. the **Worksheet** has calculated the area of tiling so the **Estimate Rate** is a cost per square metre, and the **Unit** is set to M2.
Waste Factor	This information comes from the **Price Book** and states how much wastage is being allowed for when using the stated resource.
Type	This information comes from the **Price Book** and refers to the type of the resources. The **Type** is important to know so that you can find a **Resource** easily when searching the **Price Book**.
Resource	The **Resource** refers to the type of resource, for example **Labour**, **Material**, **Plant**, **Sundry** or **Subcontractor**.
Quantity Per Item	The **Quantity Per Item** displays the quantity required based upon the dimensions provided in the **Worksheet**. This is shown as the quantity of units, so in the case of tiles it is measured in metres squared, rather than number of tiles.
Total Quantity	The **Total Quantity** is the **Quantity Per Item** multiplied by the number of identical items set in the **Resources Output** screen. For example in the **Apex Roof Workbook Resources Output** screen you will see "No of Groups of Roofs" in the top left corner. If this is set to 2 we are estimating 2 identical roofs. The **Total Quantity** will then be twice as much as the **Quantity Per Item**.

Cost	The **Cost** of **Resource** required that has been calculated from the dimensions entered into the worksheet excluding an allowance for wastage.
Wastage Cost	The cost allowance made for wastage. This is calculated by multiplying the **Purchase Cost** by the **Wastage Factor**.
Total Cost	The **Total Cost** is the sum of the **Cost** and the **Wastage Cost**.
Quantity	The **Quantity** shows the quantity in terms of the **Purchase Unit** (without wastage). For example how many tiles rather than how many square metres of tiles.
Wastage	The Wastage shows the allowance for wastage in terms of the **Purchase Unit**. For example how many tiles have been allowed for wastage rather than how many square metres of tiles.
Total	**Total** is the sum of **Quantity** and **Wastage** for example the total number of tiles required including the allowance for wastage.
Units	The **Units** column is exactly the same as **Purchase Unit**, but it is shown on the very end column so that the **Total** column makes sense when you are reading the figures in it.

[22] Now use the **Views** drop-down menu to look at the output. Choose from **Show Cost Summary, Show Basic Costs, Show Total Costs, Show Quantities** and **Show All.**





If you press **Show Cost Summary** button from the **Views** drop-down menu, you will see a summary of Costs, Wastage Costs and Total Cost inc. Wastage for each **Resource.**

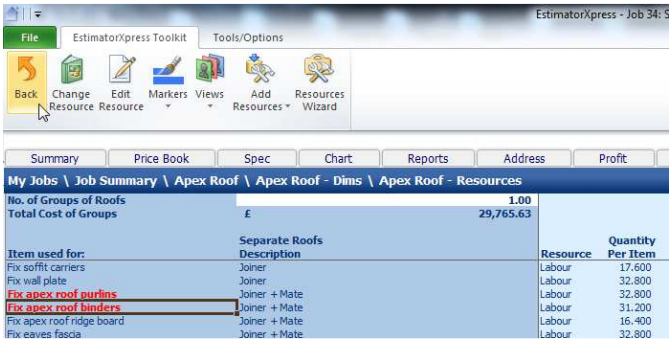
If you press **Show Basic Costs** button from the **Views** drop-down menu, you will see basic cost information including purchase unit, cost per purchase unit and no. of units required.

If you press **Show Total Costs** button from the **Views** drop-down menu, you will see extended cost information including estimated units required, total quantities including wastage allowance, and total cost of each resources.

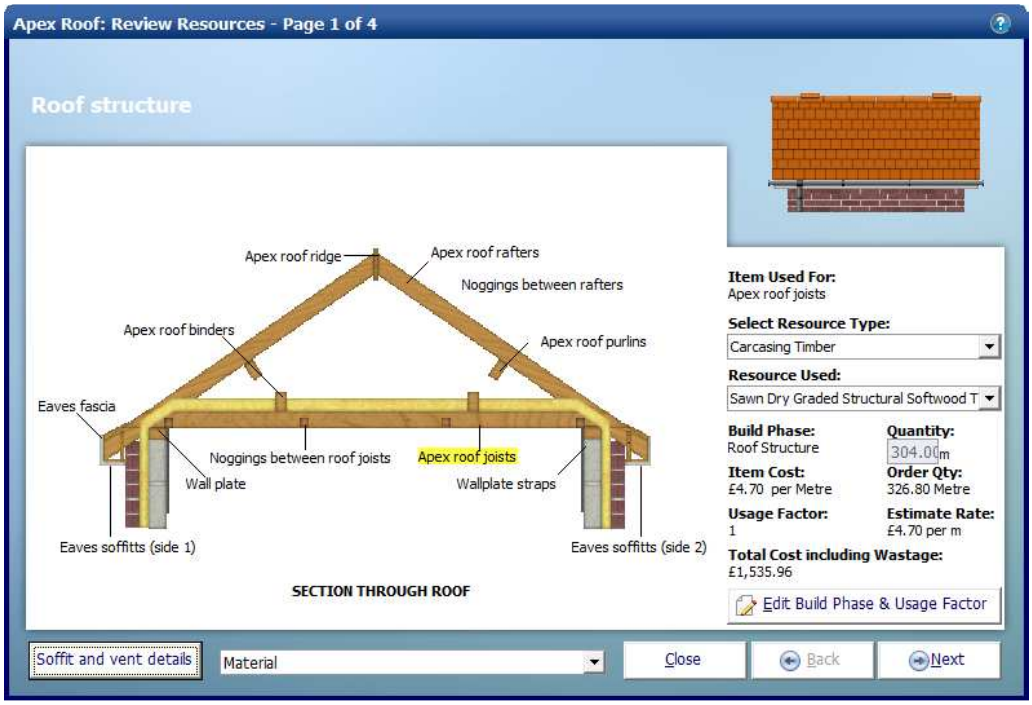
If you press **Show Quantities** button from the **Views** drop-down menu, this shows total quantities of materials required including wastage.

If you press **Show All,** this shows you all the **Resources Output** for the estimate relating to the **Apex Roof.**

[23] Assuming you are satisfied with the estimate output for your **Apex Roof**, return to the **Apex Roof Worksheet Dimensions** screen using the **Back** button.



[24] Click the **Resources Wizard** button on the top menu.



The **Resources Wizard** provides much of the same information as the **Resources Output** screen.

The **Item Used For** description is displayed as a label with a line indicating the item on the diagram that it refers to. In the screen above the **Item Used For** that can be seen highlighted in yellow has its details displaying on the right hand side.

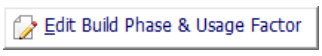
You can select a different **Item Used For** by clicking on the corresponding label.

The **Select Resource Type** drop down box allows you to filter the **Resource Used** drop down. So with the **Select Resource Type** set to *Carcasing Timber* the **Resource Used** drop down will only show carcasing timber materials.

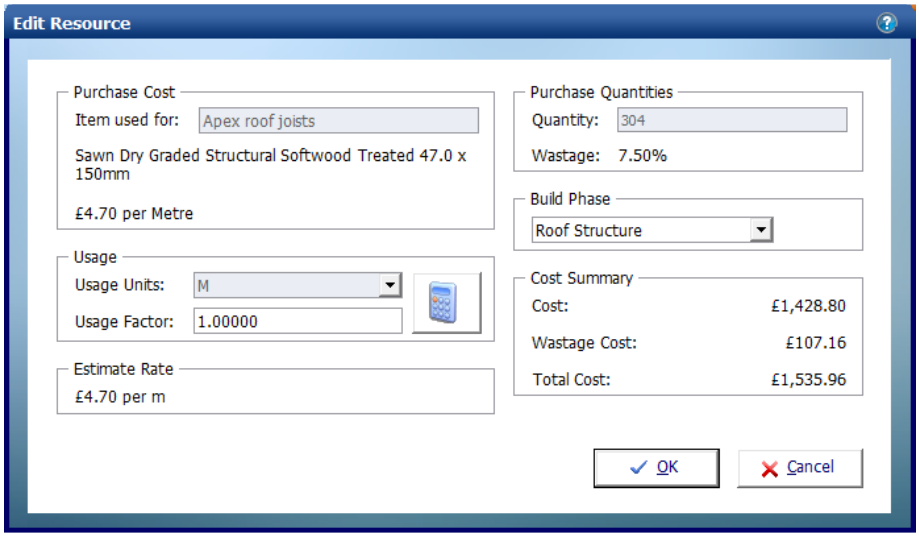
You can use the **Resource Used** drop down box to select a different material to be used for the **Item Used For** selected.

Information about the **Item Used For** is displayed below the **Resource Used** drop down box.

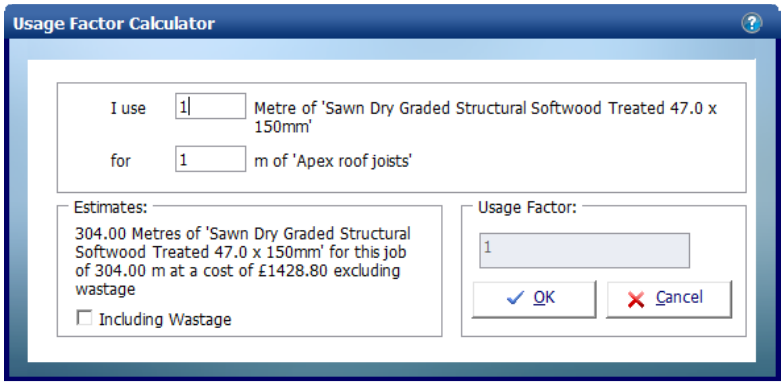
If you are changing the material of labour used, you will often need to change the usage factor.



[25] Click on the **Edit Build Phase & Usage Factor** button.



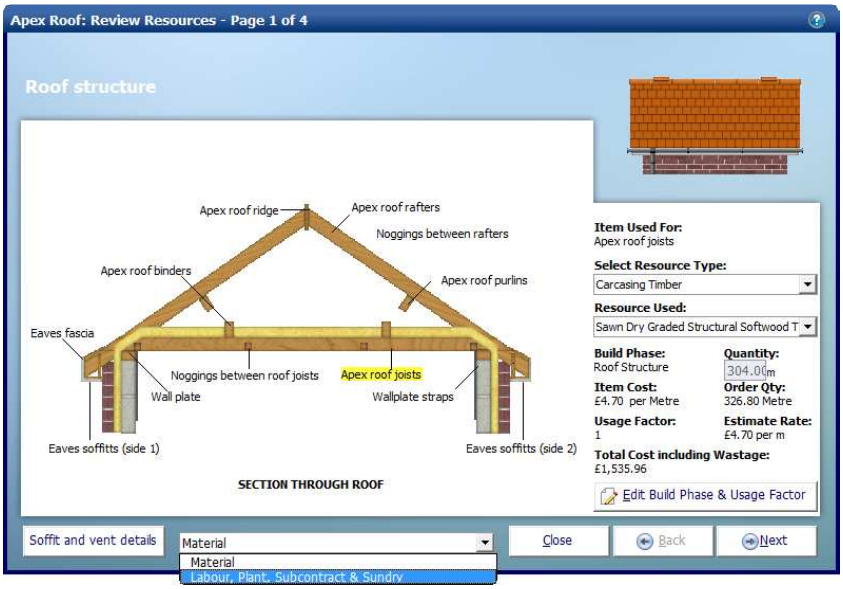
[26] If you click on the **Usage Factor Calculator** button another window will pop up allowing you to change how much of the specified material is used or how much time it takes to complete a task.



In this example **EstimatorXpress®** is calculating in metres and we are buying the timber by the metre so we have a usage factor of 1.

[27] Click **OK** to return to the **Edit Resource** dialog box.

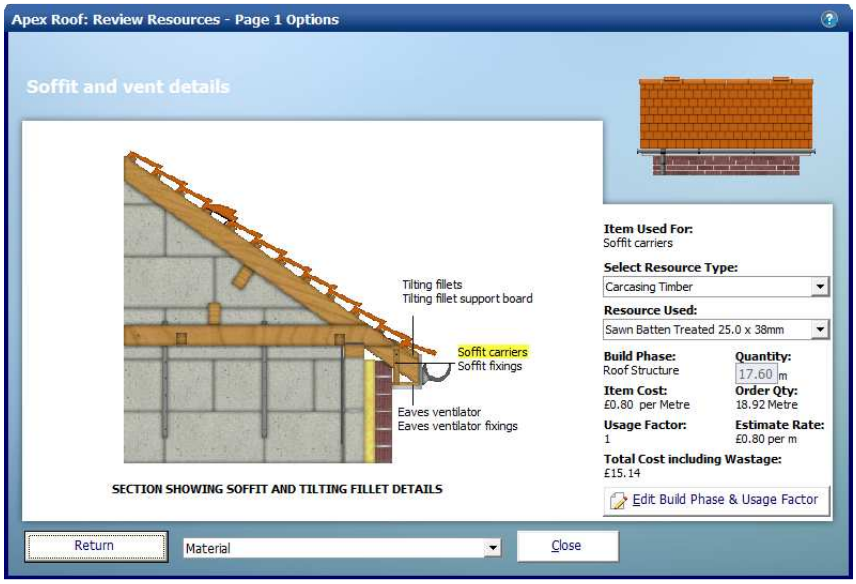
[28] Click **OK** to return to the **Resources Wizard.**



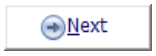
On each page you can switch between the **Material** resources and **Labour, Plant, Subcontract & Sundry** by using the **Resource Type Selection** drop down box at the bottom of the page.

As with the **Dimensions Wizard,** there are sometimes additional input screens you can access by clicking the button at the bottom left of the window.

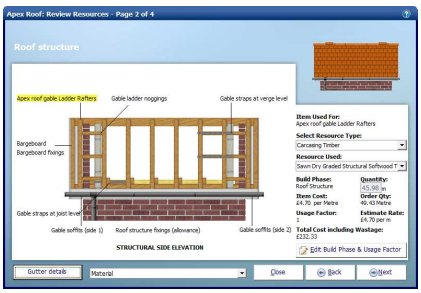
[29] Click on **Soffit and vent details.**

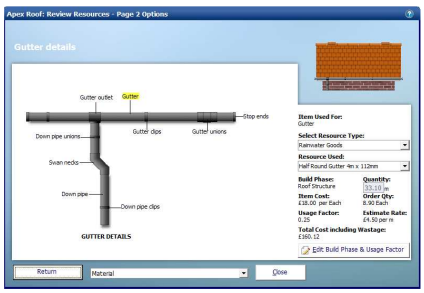


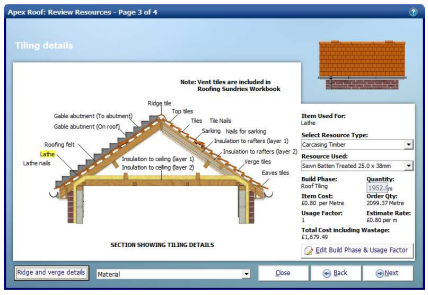
[30] Click **Return** to go back to Page 1.

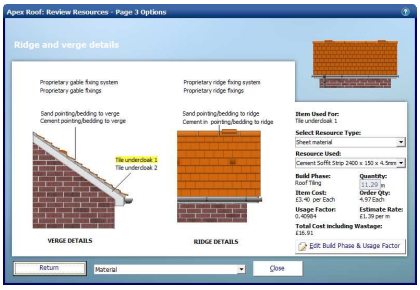


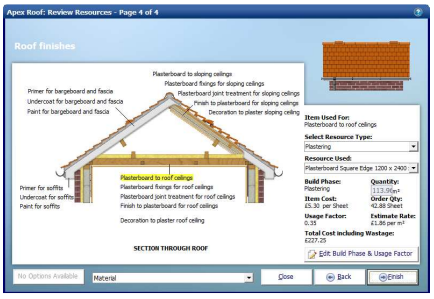
[31] Click **Next** to advance through each page reviewing the **Resources** specified. Don't forget to look at the optional pages to familiarise yourself with what is being allowed for.











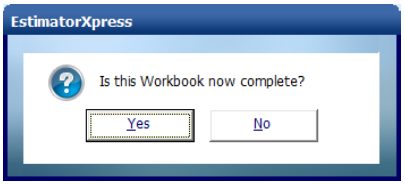
The page uses the same drop down boxes and buttons allowing you to change the **Resources** specified for each task**.**

[32] When you get to the last page click **Finish** to return to the **Worksheet Dimensions** page.

[33] Click **Close** to go back to the list of **Worksheets** in the **Apex Roof workbook**.

If you need to estimate multiple **Apex Roofs** you could click **Add Worksheet** to add another worksheet and repeat the whole process.

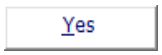
[34] Click **Close** again to go back to the **Job Summary** screen.



You will see this window pop up.

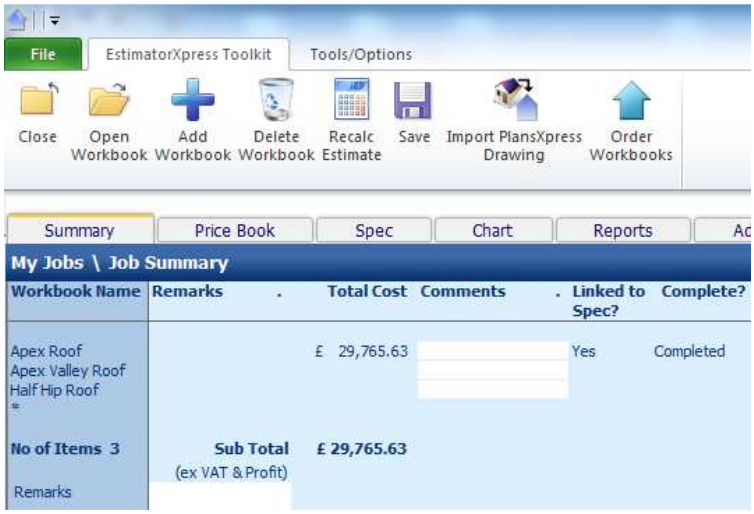
Clicking yes will mark the **Workbook** as being complete. This is to help you keep track of which **Workbooks** you have completed.

Even if you click yes you can still go back into the **Workbook** and make changes if required.



[35] Click Yes.

You are returned to the **Job Summary** and the price of the **Apex Roof Workbook** can be seen with the total cost of all your work estimated so far.



If you wish to stop and close this current Estimate:

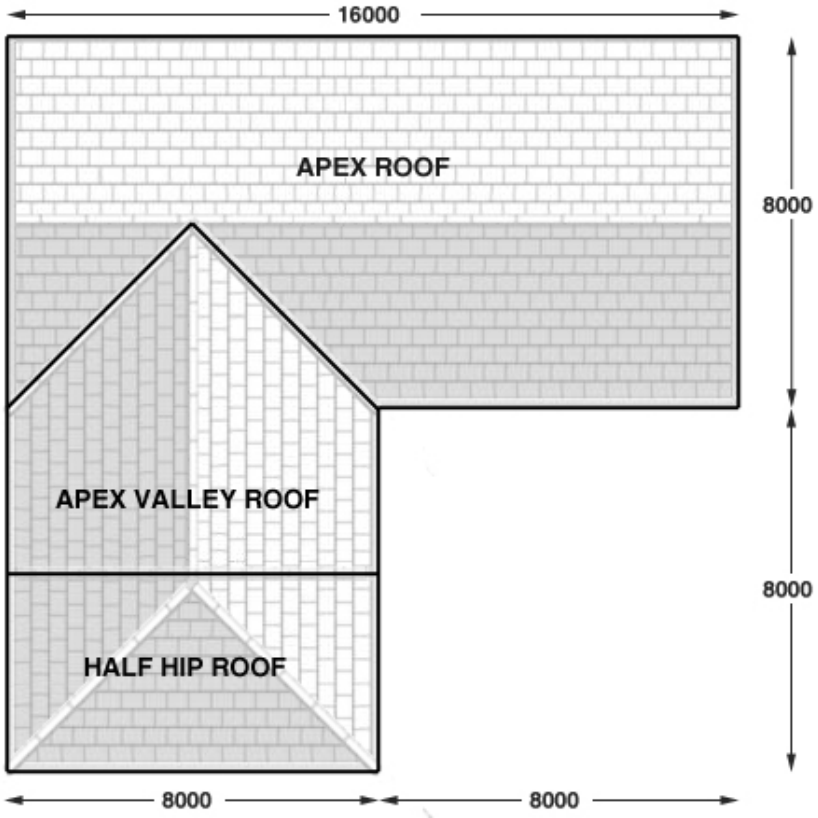
1. Press the **Close** button on the top left of the **Job Summary** screen.

2. You are transferred to the **My Jobs** screen. Close this screen also using the **Close** button.

3. You are now in the **Main Menu** Screen. To close **EstimatorXpress®** press the **Exit** button in the top right of screen.

ESTIMATING AN APEX VALLEY ROOF

The **Apex Valley Roof Workbook** is used to estimate the part of the roof show below that tees into the **Apex Roof** that we estimated in the previous tutorial.

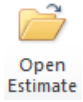


If you wish to start this tutorial having closed EstimatorXpress®:

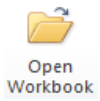
1. Press the **My Estimates** button at the top of the **Main Menu** screen.

2. This will transfer you to the **My Jobs** screen. Click on the estimate you created for the Apex Roof tutorial.

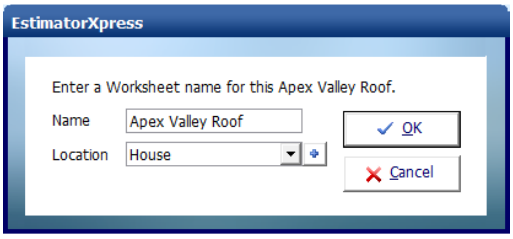
3. Press the **Open Estimate** button. You are now ready to start the next tutorial.



[1] To start estimating the roof click on **Apex Valley Roof** in the Job Summary.



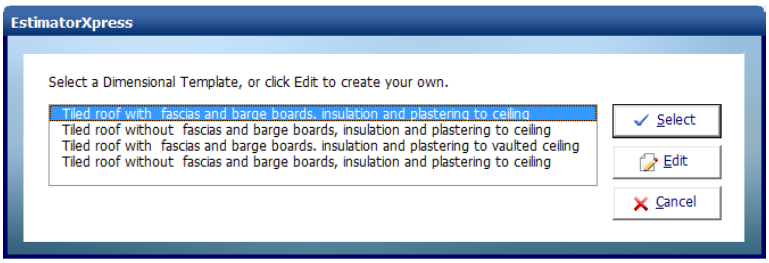
[2] Click the **Open Workbook** button.



You are then transferred to **Summary of Apex Valley Roof Workbook** and a dialog box will automatically pop up asking you to give a name and location for the roof.

[3] Enter any name you think is sensible and then select **House** for location. Click **OK.**

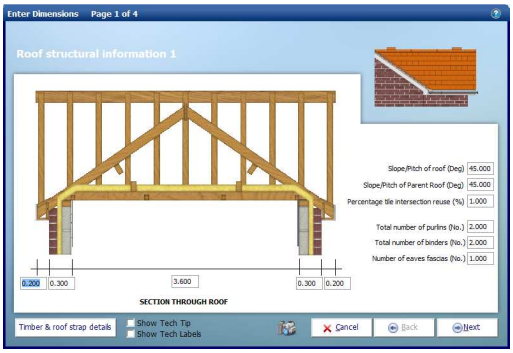
EstimatorXpress® then transfers you into the **Dimensions** screen of the **Apex Valley Roof Worksheet**.



Another dialog box will automatically pop up asking you to select a **Dimensional Template**.

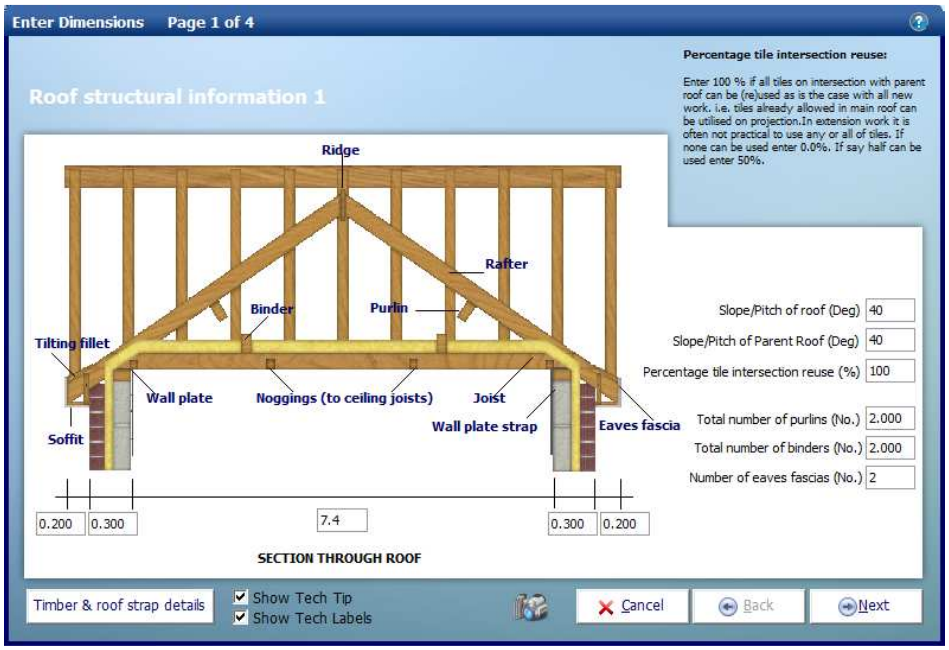
[4] Choose the **Tiled roof with fascias and barge boards, insulation and plastering to ceiling** template**.**

[5] Click **Select.**



The **Dimensions Wizard** will automatically open up a dialog box containing drawings to assist you in entering and confirming dimensions for the **Apex Valley Roof.**

TIP: Before you enter any dimensions, you may find it useful to switch on **Tech Tips** by ticking the **Show Tech Tips** check box in order to display useful information about each dimension in the top right of the screen, and also to switch on **Tech Labels** by ticking the **Show Tech Labels** check box. You can turn them on and off at any time by ticking and unticking the check boxes.



Enter the figures as shown above. You can hit the **Enter** or **Tab** key after entering a number to skip to the next box. For each box you should see an appropriate Tech Tip in the top right of the window.

[6] Set the **Clear span of joist** to 7.4.

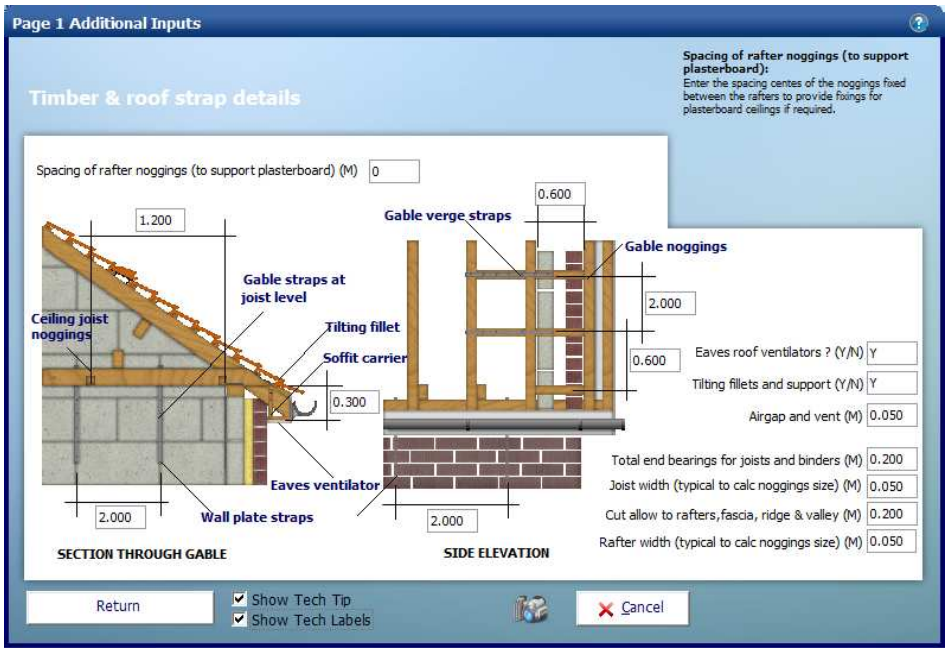
[7] Set the **Slope/pitch of roof** to 40.

[8] Set the **Slope/Pitch of Parent Roof** to 40.

[9] Set the **Number of eaves fascias** to 2.

Before you click **Next,** remember there is sometimes an additional input screen.

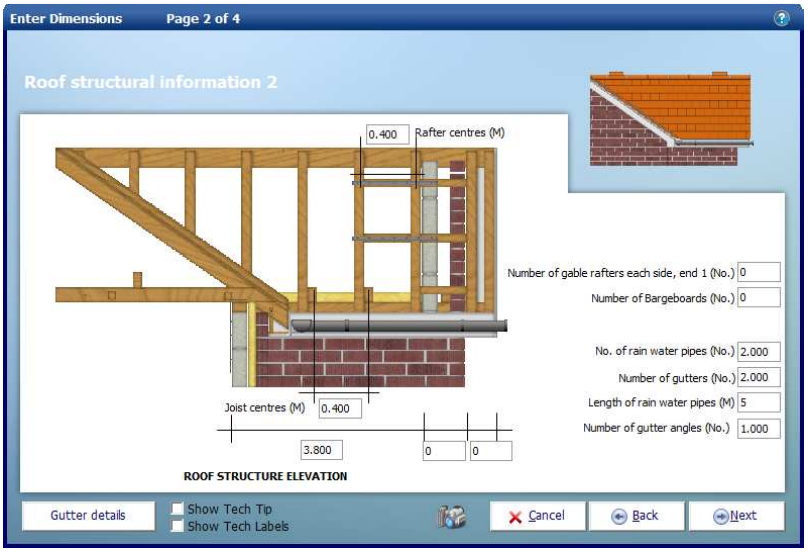
[10] Click the **Timber & roof strap details** button in the left hand corner of the window.



Most of these items are fairly standard and will not need changing very often; on this screen we have just changed Spacing of rafter noggins (to support plasterboard) from 1.2 to 0 as we are not plastering the rafters and do not require additional structural support from the noggings.

[11] Click **Return** to return to **Roof Structural Information 1.**

[12] Click **Next** to continue.



Although you will find a lot of the dimensions are fairly standard, we will be making a few changes because we are attaching a hip onto the end of the roof so don't require gable rafters, bargeboards or fascias at the gable end.

[13] Set the **Eaves length (internal)** to 3.8.

[14] Set the **Wall width** to 0.

[15] Set the **Soffit width** to 0.

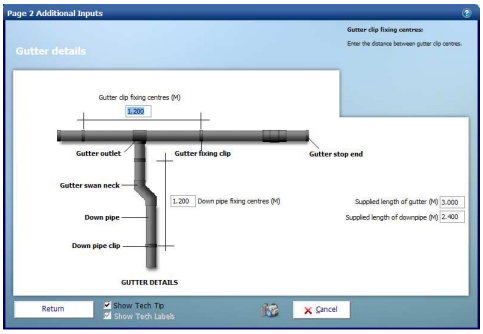
[16] Set the **Number of gable rafters each side, end 1** to 0.

[17] Set the **Number of Bargeboards** to 0.

[18] Set the **Length of rain water pipes** to 5.

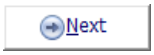
Note we've set the soffit width to zero as we are going to be place a half hip roof at the end.

[19] Click **Gutter details**.

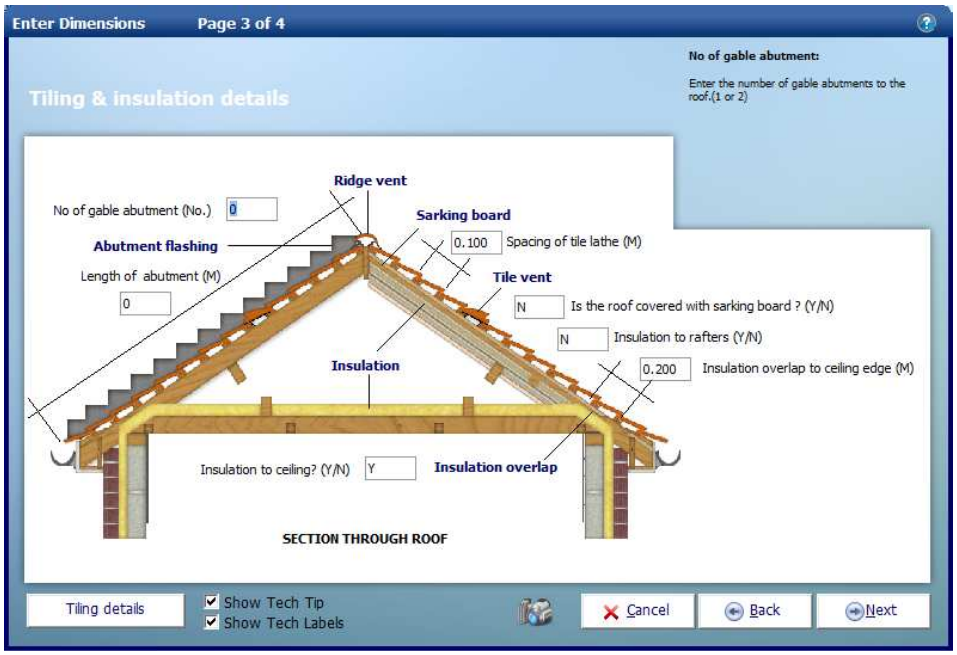


This Additional Inputs screen lets you change the gutter details if needed.

[20] Leave the figures as they are and click **Return** to return to Roof Structural Information 2.

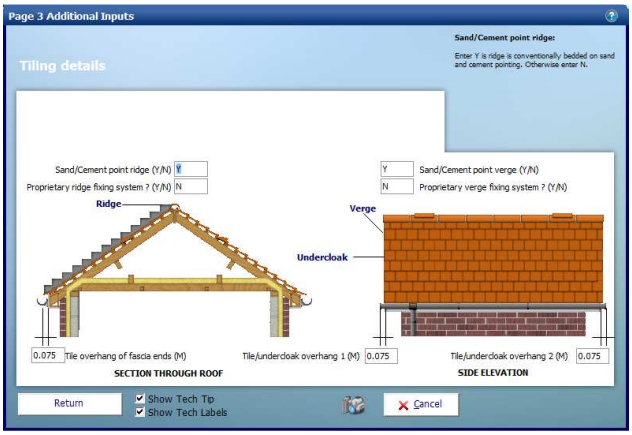


[21] Click **Next** to continue to page 3 of 4.



Page 3 of 4 of the **Apex Roof Dimensions Wizard** deals with **Tiling & insulation information**. Again we are going to use the default values. This page also deals with abutments to walls. The roof we are estimating does not abut to another building but if it did this is where we would enter the length and number of gable abutments.

Page 3 also has an Additional Inputs screen for **Tiling details**. Not every **Dimension Wizard** page has Additional Inputs but if it does you will always find the button in the bottom left of the page. It's worth remembering this when going through Dimensions Wizards in other **Workbooks**.

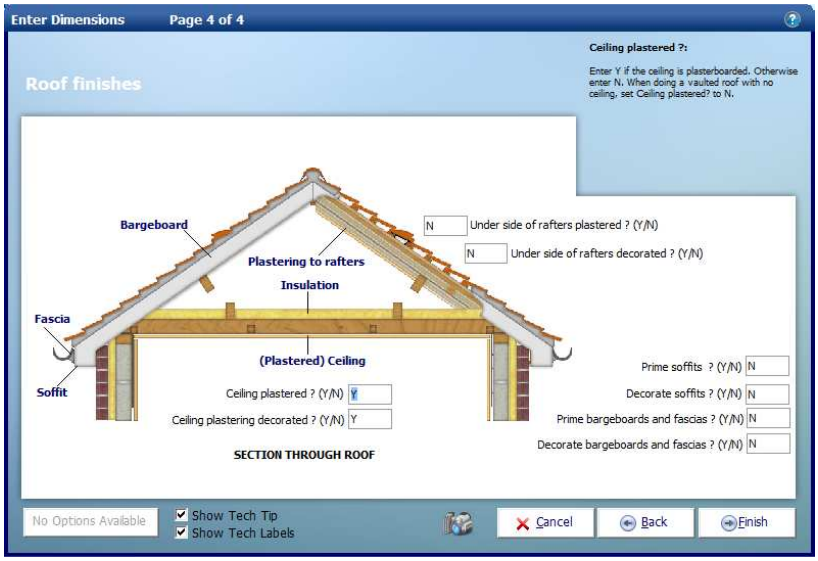


Return

[22] Once you have had a look at this screen click **Return** to go back to Page 3.

Next

[23] Click Next to go to Page 4.

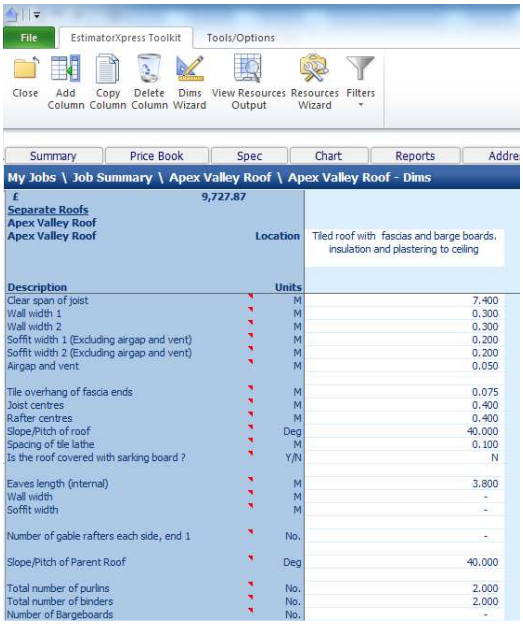


Page 4 of 4 is Roof finishes, this page is where you can enter details of plastering and decorating associated with the roof.

Finish

[24] Once more we are going to leave the default values and then click **Finish** to close the **Dimensions Wizard**.

You will then be returned to the **Worksheet** where you will be able to see the dimension you've just entered and the total for the **Worksheet** at the top left side of the sheet.

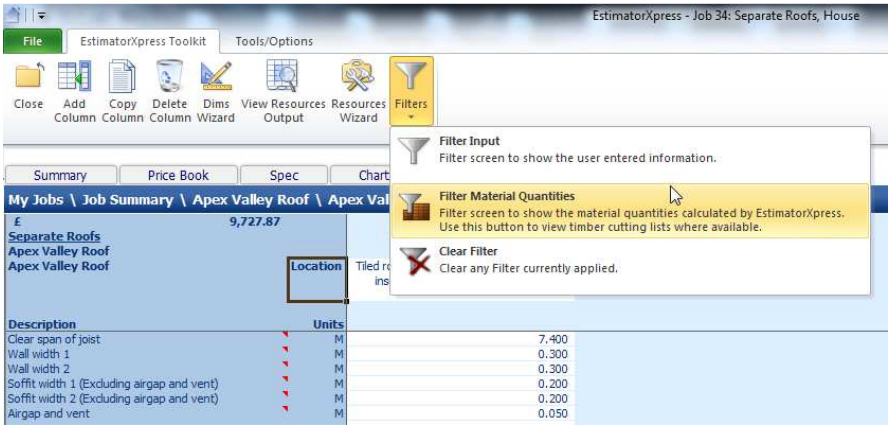


If you make a mistake entering your dimensions simply click on the column showing the dimensions then click **Dims Wizard** on the top menu to go through the **Dimensions Wizard** again.

Alternatively you can click any cell with a white background and type a new value in directly.

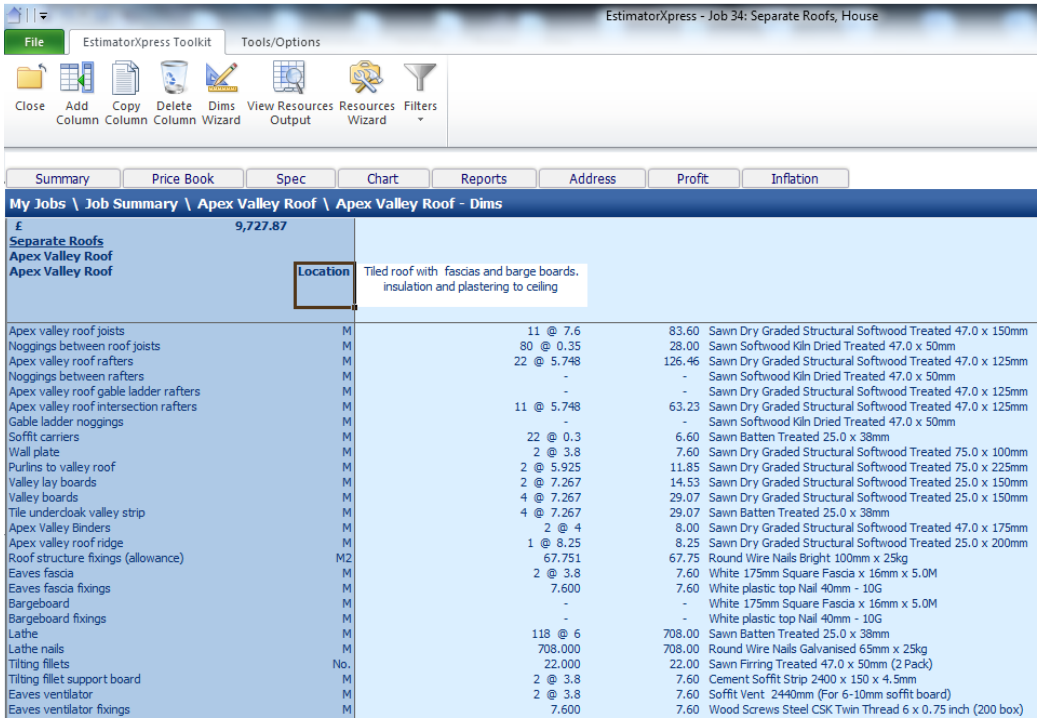
When you have finished entering the dimensions you will see the cost displayed at the top left corner of the worksheet.

As well as calculating the cost of the roof the **Worksheet** also calculates the materials required. You can display a full breakdown of the material requirements including a cutting list for the roof timbers.

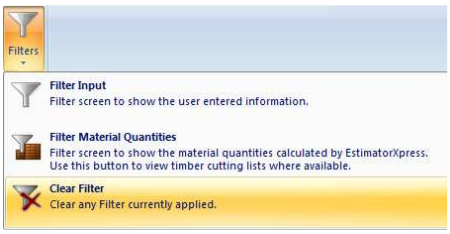


[25] Click on **Filters** and then **Filter Material Quantities.**

Your **Worksheet** should then look like this:



As you can see **EstimatorXpress®** will list the number and length of each timber required such as joist, rafters, purlins and binders, as well as the total length required in metres.

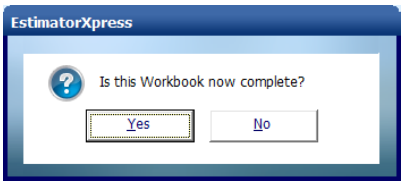


[26] To return to the normal view of the worksheet click **Filters** and then click **Clear Filter.**

[27] Click **Close** to go back to the list of **Worksheets** in the **Apex Valley Roof Workbook**.

If you need to estimate multiple apex roofs you could click **Add Worksheet** to add another **Worksheet** and repeat the whole process.

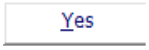
Click **Close** again to return to the **Job Summary** screen.



You will see this window pop up.

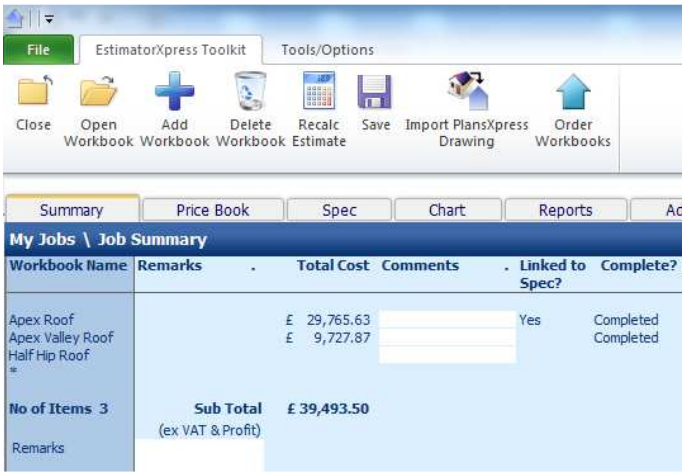
Clicking **Yes** will mark the **Workbook** as being complete. This is to help you keep track of which **Workbooks** you have completed.

Even if you click **Yes** you can still go back into the **Workbook** and make changes if required.



Click **Yes.**

You are returned to the **Job Summary** and the price of the **Apex Valley Roof Workbook** can be seen with the total cost of all your work estimated so far.

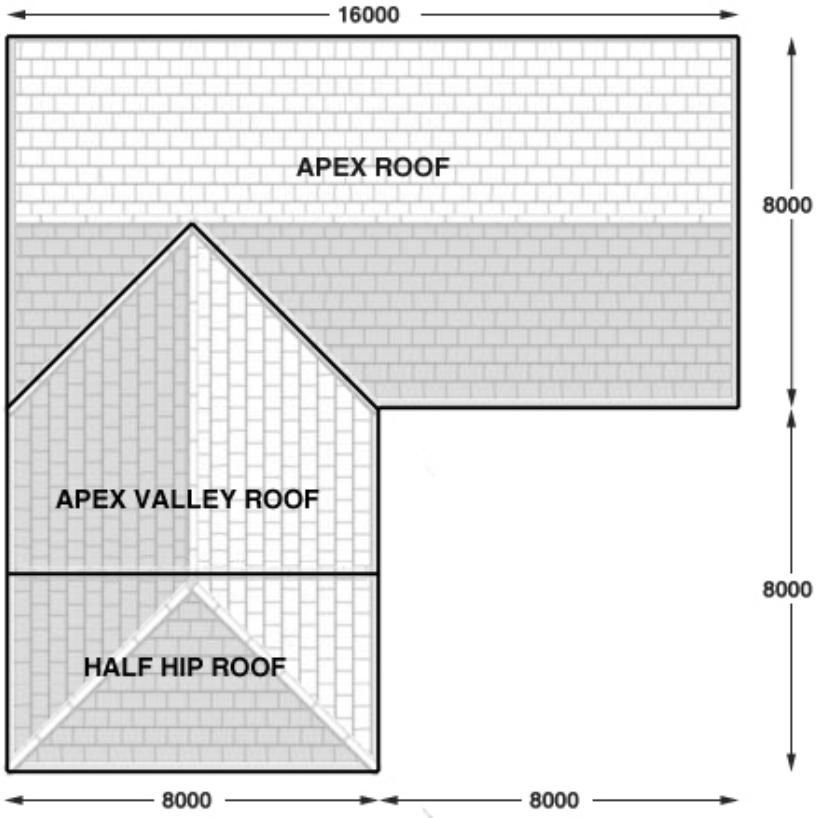


If you wish to stop and close this current Estimate:

1. Press the **Close** button on the top left of the **Job Summary** screen.
2. You are transferred to the **My Jobs** screen. Close this screen also using the **Close** button.
3. You are now in the **Main Menu** Screen. To close **EstimatorXpress®** press the **Exit** button in the top right of screen.

ESTIMATING A HALF HIP ROOF

The **Half Hip Roof Workbook** is used to estimate the part of the roof show below that tees into the Apex Roof we estimated in the previous tutorial.

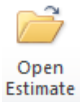


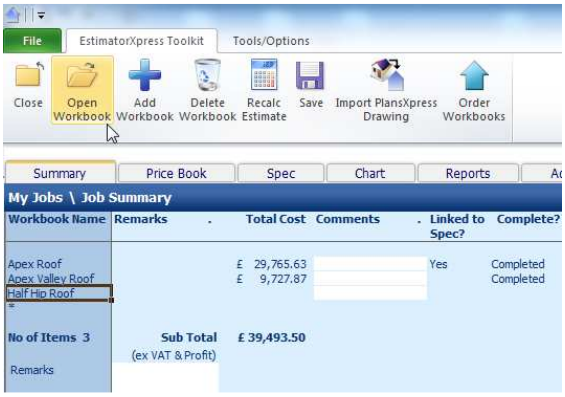
If you wish to start this tutorial having closed EstimatorXpress®:

1. Press the **My Estimates** button at the top of the **Main Menu** screen.

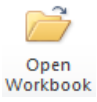
2. This will transfer you to the **My Jobs** screen. Click on the estimate you created for the Apex Roof tutorial.

3. Press the **Open Estimate** button. You are now ready to start the next tutorial.

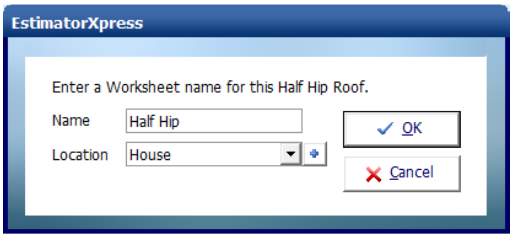




[1] To start estimating the roof click on **Half Hip Roof** in the Job Summary.



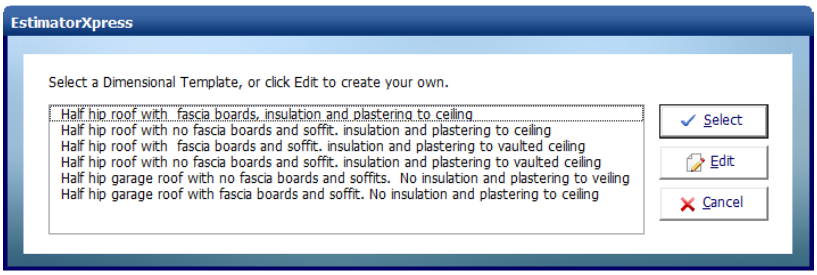
[2] Click the **Open Workbook** button.



You are then transferred to **Summary of Half Hip Roof Workbook** and a dialog box will automatically pop up asking you to give a name and location for the roof.

[3] Enter any name you think is sensible and then select **House** for location. Click **OK.**

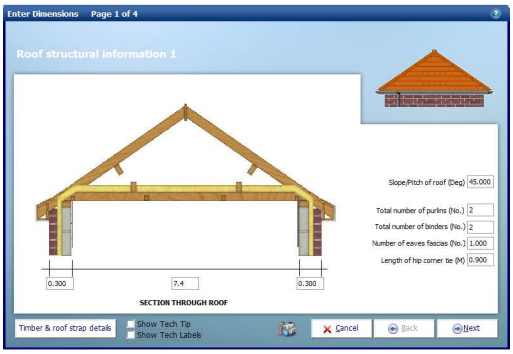
EstimatorXpress® then transfers you into the **Dimensions** screen of the **Half Hip Roof Worksheet**.



Another dialog box will automatically pop up asking you to select a template.

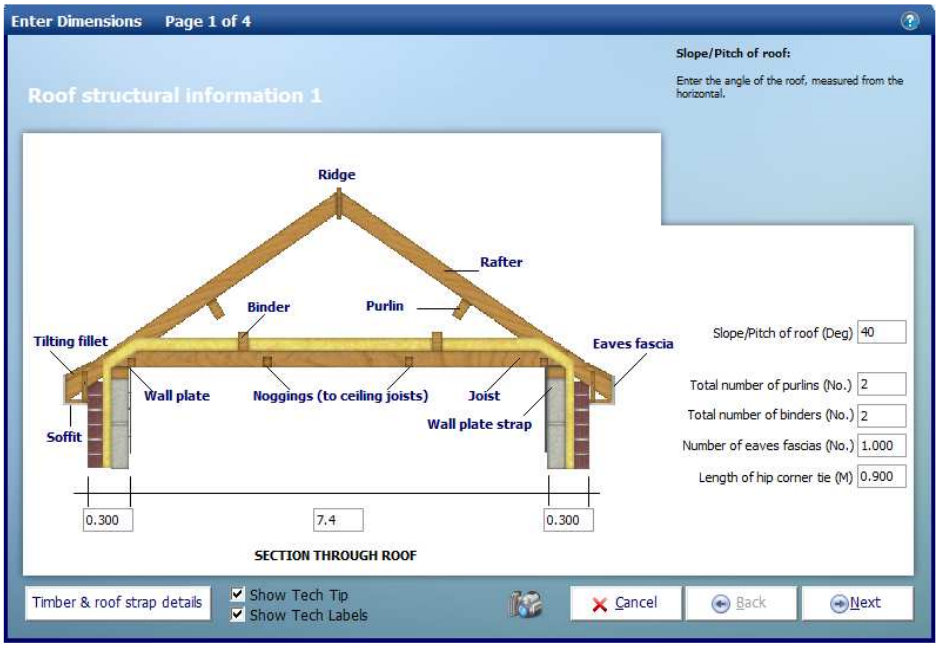
[4] Choose the **Half hip roof with fascia boards, insulation and plastering to ceiling** template**.**

[5] Click **Select.**



The **Dimensions Wizard** will automatically open up which is a dialog box containing drawings to assist you in entering and confirming dimensions for the **Half Hip Roof.**

TIP: Before you enter any dimensions, you may find it useful to switch on **Tech Tips** by ticking the **Show Tech Tips** check box in order to display useful information about each dimension in the top right of the screen, and also to switch on **Tech Labels** by ticking the **Show Tech Labels** check box. You can turn them on and off at any time by ticking and unticking the check boxes.



Enter the figures as shown above. You can hit the **Enter** or **Tab** key after entering a number to skip to the next box. For each box you should see an appropriate Tech Tip in the top right of the window.

[6] Set the **Clear span of joists** to 7.4.

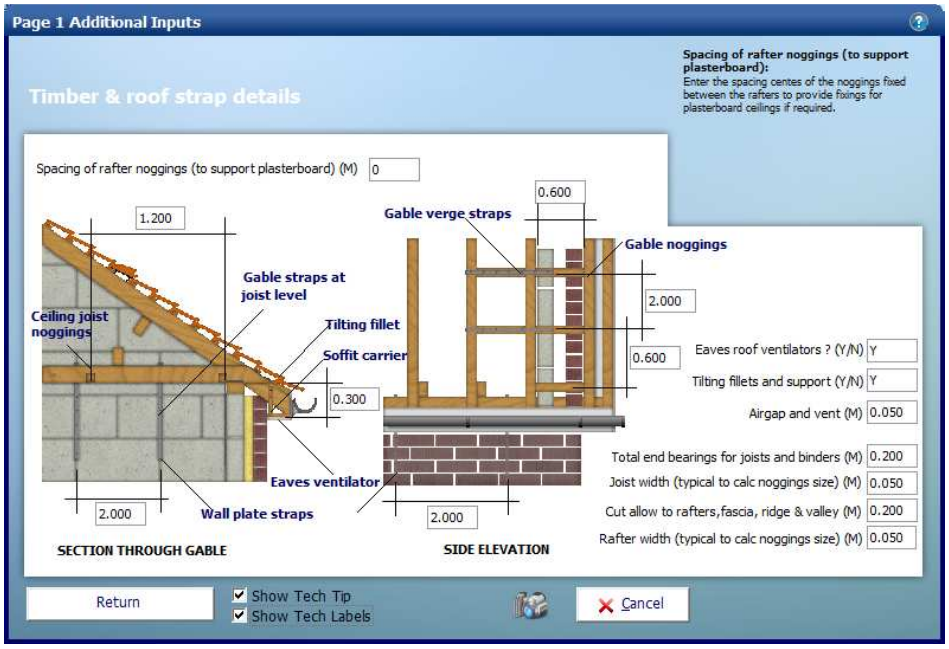
[7] Set the **Slope/Pitch of roof** to 40.

[8] Set the **Total number of purlins** to 2

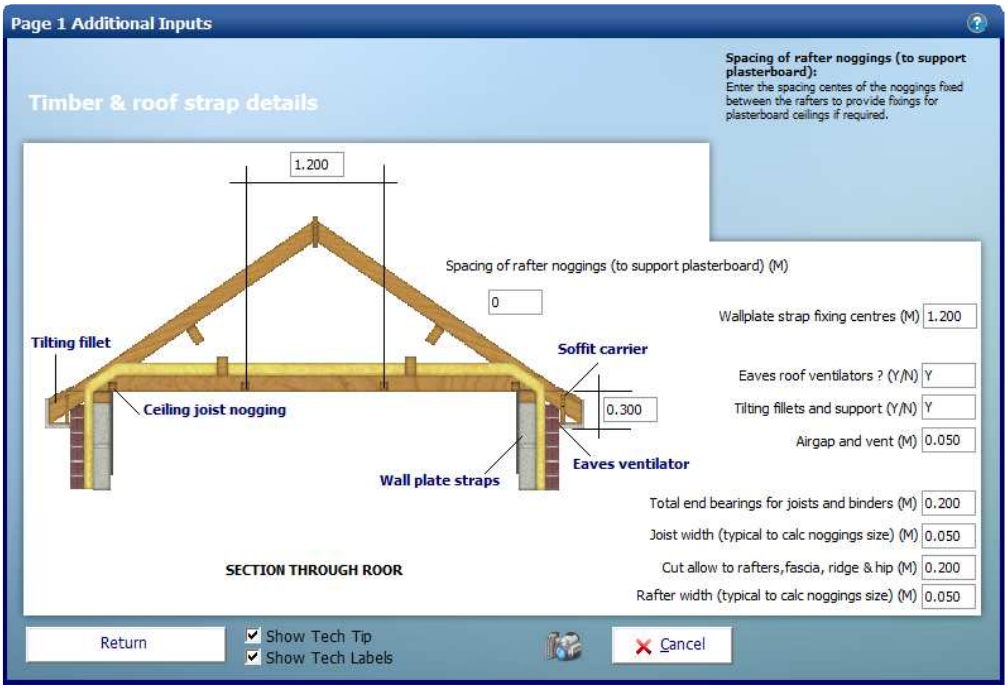
[9] Set the **Total number of binders** to 2.

Before you click **Next,** remember there is sometimes an additional input screen.

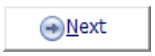
[10] Click the **Timber & roof strap details** button in the bottom left hand corner of the window.



Most of these items are fairly standard and will not need changing very often; on this screen we have just changed Spacing of rafter noggins (to support plasterboard) from 1.2 to 0 as we are not plastering the rafters.

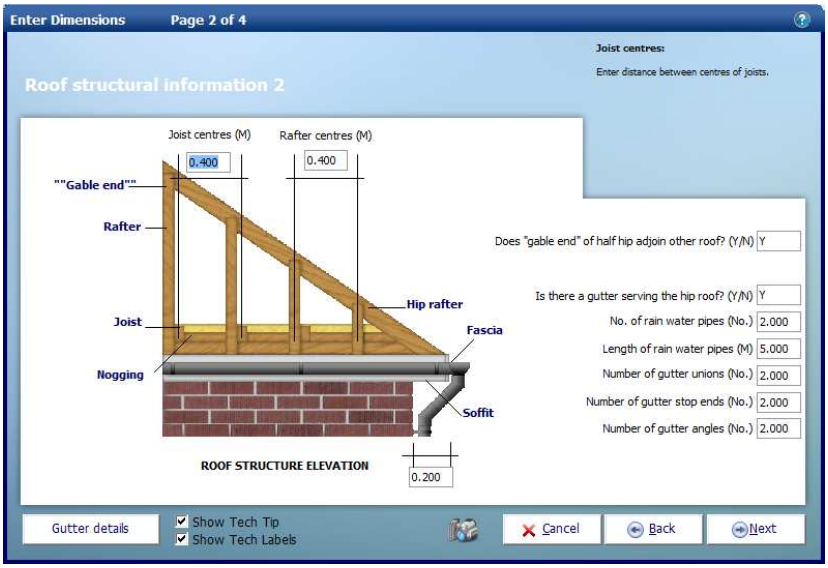


[11] Click **Return** to return to **Roof Structural Information 1.**



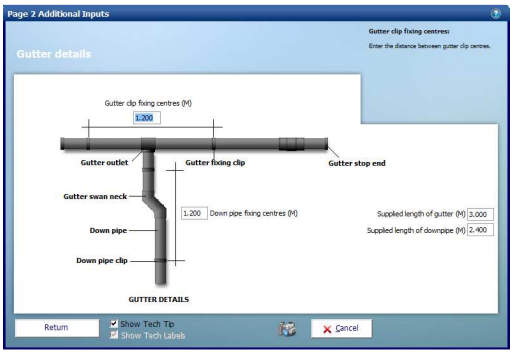
[12] Click **Next** to continue.

You might notice that page 2 is similar to Page 2 of the **Apex Roof** and **Apex Valley Roof Workbooks**. One difference however is that it doesn't ask us for a length dimension. This is because the **Workbook** only deals with working out the half hip end so it calculates the width of the roof from the pitch of roof entered on page 1 of the **Dimensions Wizard**.



Confirm the dimensions are set as required.

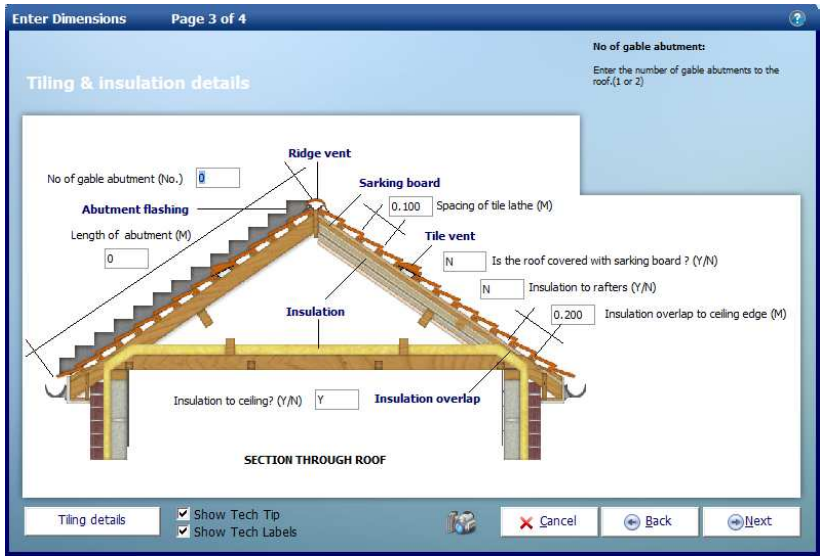
[13] Click **Gutter details**.



This Additional Inputs screen lets you change the gutter details if needed.

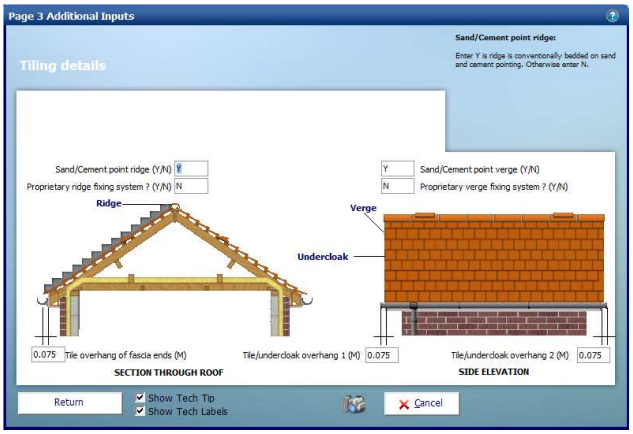
[14] Leave the figures as they are and click **Return** to return to Roof Structural Information 2.

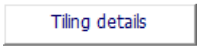
[15] Click **Next** to continue to page 3 of 4.



Page 3 of 4 of the **Apex Roof Dimensions Wizard** deals with **Tiling & insulation information**. Again we are going to use the default values for this example estimate. This page also covers abutments. The roof we are estimating join a wall which would require lead flashing to be calculated, but if it did this is where we would enter the length and number of gable abutments.

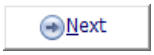
Page 3 also has an Additional Inputs screen for **Tiling details**. Not every **Dimensions Wizard** page has Additional Inputs but if it does you will always find the button in the bottom left of the page. It's worth remembering this when going through **Dimension Wizards** in other workbooks.



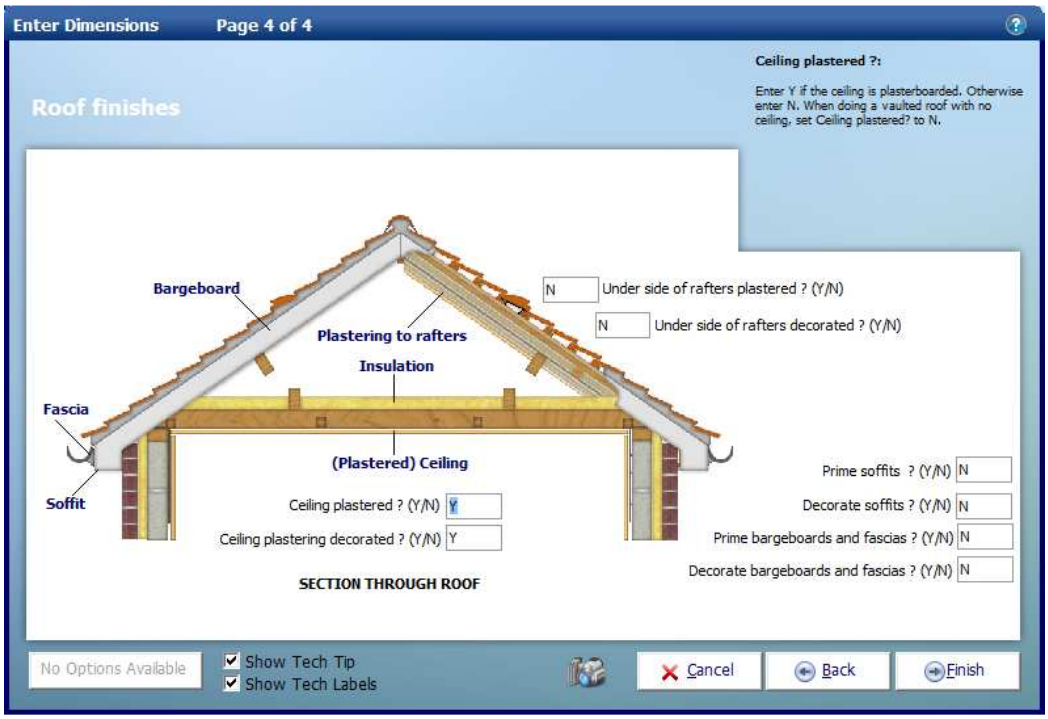


[16] Click **Tiling details**.

[17] Once you have had a look at this screen click **Return** to go back to Page 3.

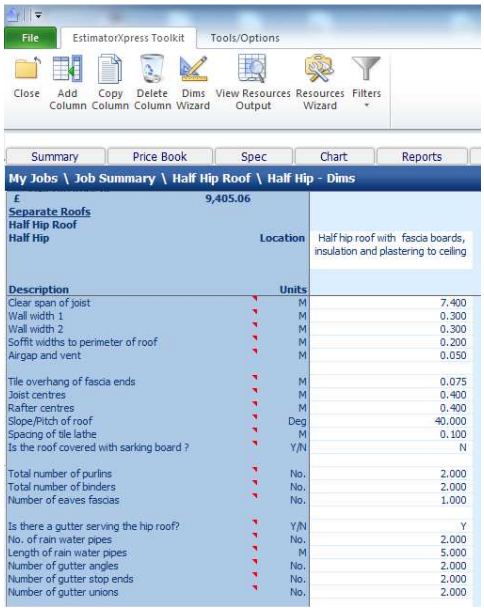


[18] Click **Next** to go to Page 4.



[19] Page 4 of 4 concerns **Roof finishes**, this page is where you can enter details of plastering and decorating associated with the roof. Once more we are going to leave the default values and then click **Finish** to close the **Dimensions Wizard**.

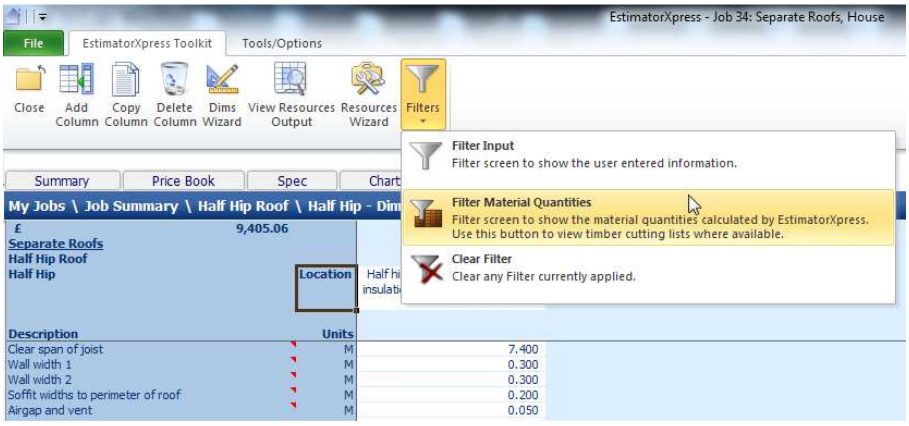
You will then be returned to the **Worksheet** where you will be able to see the dimensions you've just entered and the total for the **Worksheet** at the top left side of the sheet.



If you make a mistake entering your dimensions simply click on the column showing the dimensions then click **Dims Wizard** on the top menu to go through the **Dimensions Wizard** again.

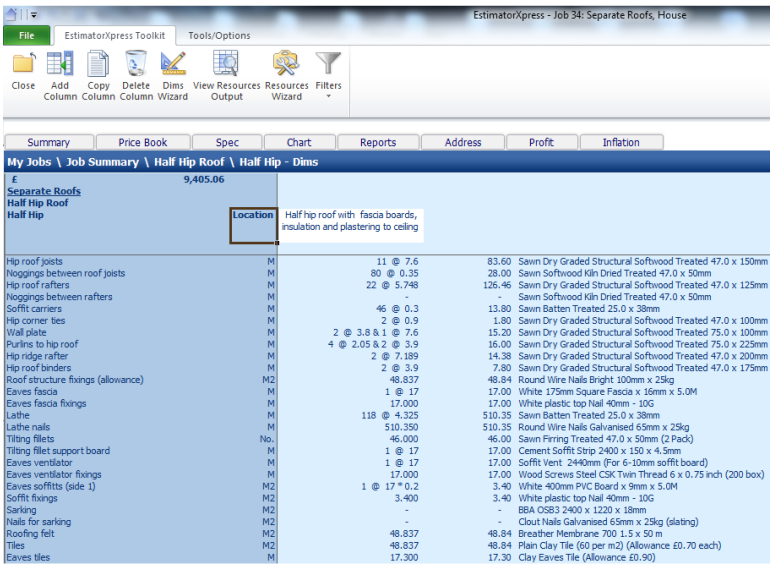
Alternatively you can click any cell with a white background and type a new value in directly.

As well as calculating the cost of the roof the **Worksheet** also calculates the materials required. You can display a full breakdown of the material requirements including a cutting list for the roof timbers.

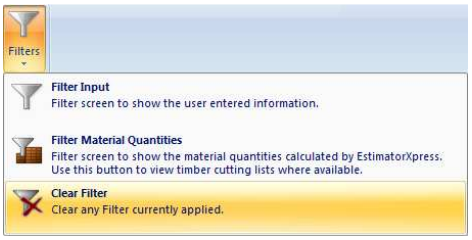


[20] Click on **Filters** and then **Filter Material Quantities.**

Your **Worksheet** should then look like this:



As you can see **EstimatorXpress®** will list the number and length of each timber required such as joist, rafters, purlins and binders, as well as the total length required in metres.

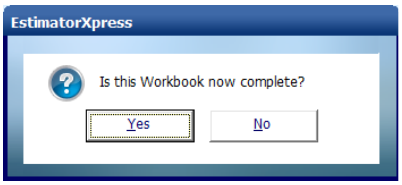


[21] To return to the normal view of the worksheet click **Filters** and then click **Clear Filter.**

[22] Click **Close** to go back to the list of **Worksheets** in the **Half Hip Roof Workbook**.

If you need to estimate multiple apex roofs you could click **Add Worksheet** to add another **Worksheet** and repeat the whole process.

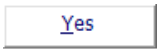
[23] Click **Close** again to go back to the **Job Summary** screen.



You will see this window pop up.

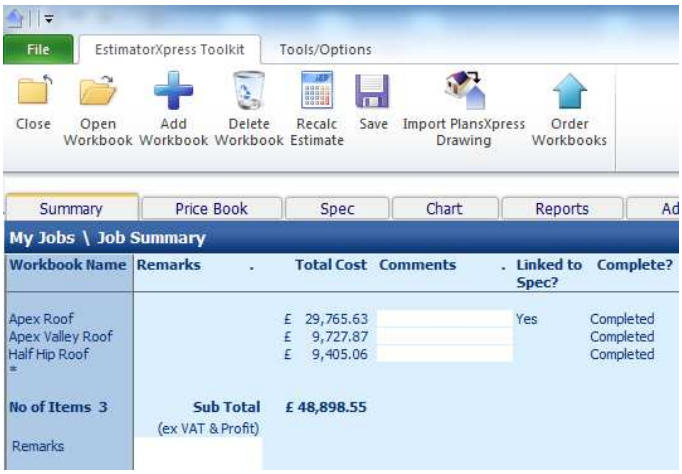
Clicking yes will mark the **Workbook** as being complete. This is to help you keep track of which **Workbooks** you have completed.

Even if you click yes you can still go back into the workbook and make changes if required.



Click **Yes**.

You are returned to the **Job Summary** and the price of the **Half Hip Roof Workbook** can be seen with the total cost of all your work estimated so far.



If you wish to stop and close this current Estimate:

Press the **Close** button on the top left of the **Job Summary** screen.

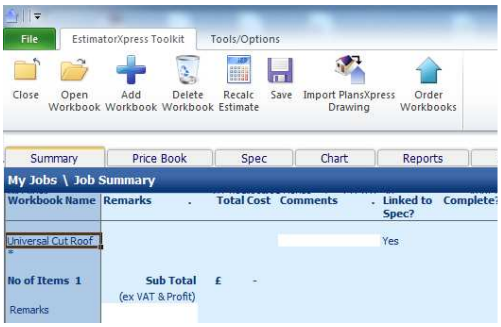
You are transferred to the **My Jobs** screen. Close this screen also using the **Close** button.

You are now in the **Main Menu** Screen. To close **EstimatorXpress®** press the **Exit** button in the top right of screen.

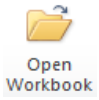
ESTIMATING A ROOF USING THE UNIVERSAL CUT ROOF

We are now going to use the **Universal Cut Roof Workbook** to estimate the roof we previously estimated using **the Apex Roof, Apex Valley** and **Half Hip** roof **Workbooks** to show you an alternative method to price the same work.

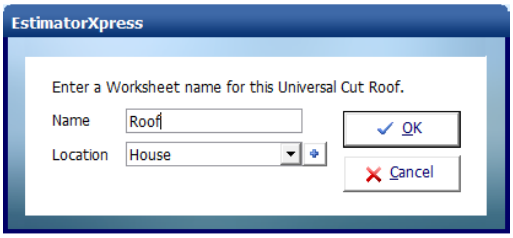
To begin, create a new estimate containing only the **Universal Cut Roof** workbook. See page 41 of the **EstimatorXpress® Getting Started Guide** for a detailed explanation of creating a new estimate.



[1] To start estimating the roof click on **Universal Cut Roof** in the Job Summary.

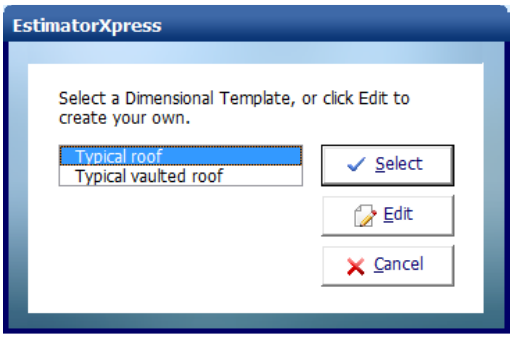


[2] Click the **Open Workbook** button



You are then transferred to **Summary of Universal Cut Roof Workbook** and a dialog box will automatically pop up asking you to give a name and location for the roof.

[3] Enter any name you think is sensible and then select **House** for location. Click **OK.**



There are only two dimensional templates to choose from **Typical roof** (flat ceiling) or **Typical vaulted roof.**

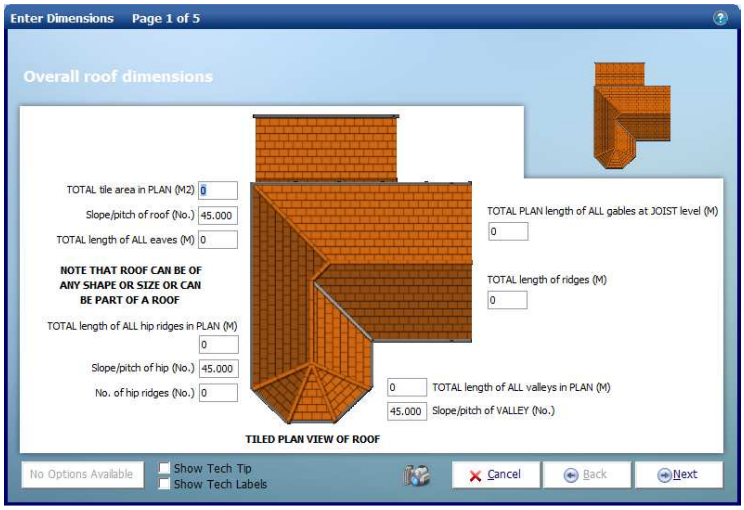
[4] Click on **Typical roof**.

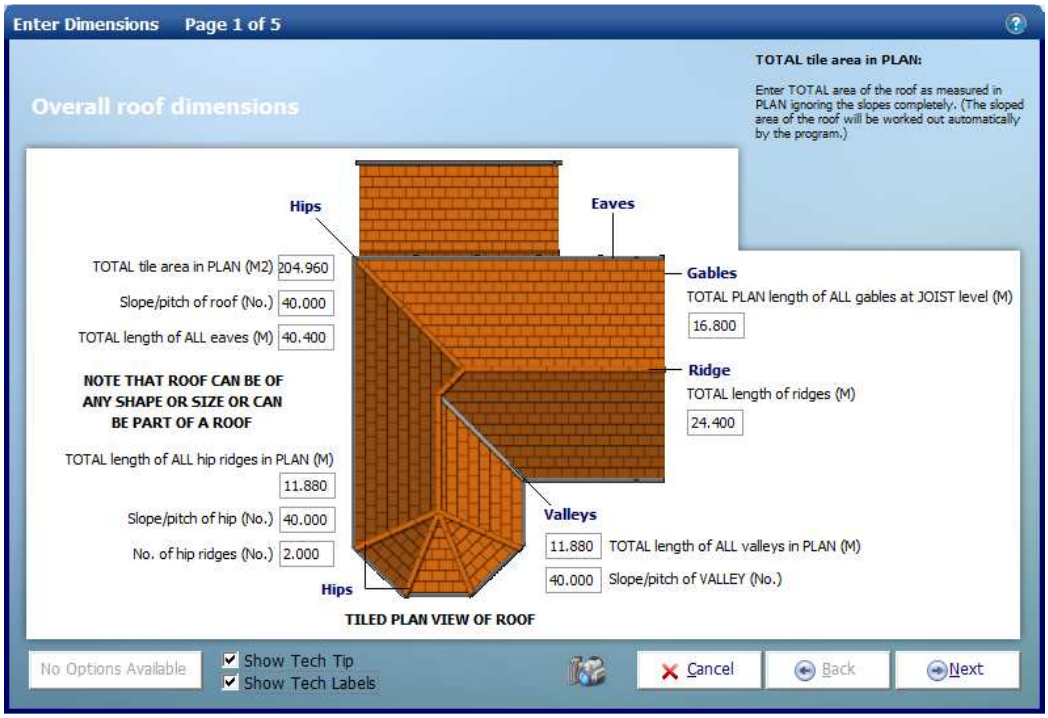
[5] Click **Select**.

Page 1 of 5 of the **Dimensions Wizard** will pop up asking us to enter the Overall roof Dimensions.

Remember to tick **Show Tech Tip** and **Show Tech Labels.**

The **Universal Cut Roof Workbook** will ask us for a lot more information rather than it automatically being worked out. The idea behind this is that we might have a complicated roof that the regular roof **Workbook** won't be able to calculate.





Using the plan at the start of the tutorial we can work out the dimensions required to fill in Page 1 of 5. You could do the same using a scale ruler and printed plan. Enter the following dimensions:

[6] Set the **TOTAL tile area in PLAN** to 204.96.

[7] Set the **Slope/pitch of roof** to 40.

[8] Set the **TOTAL length of ALL eaves** to 40.4.

[9] Set the **TOTAL length of ALL hip ridges in PLAN** to 11.88.

[10] Set the **Slope/pitch of hip** to 40.

[11] Set the **No. of hip ridges** to 2.

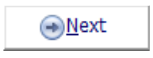
[12] Set the **TOTAL PLAN length of ALL gables at JOIST level** to 16.8.

[13] Set **the TOTAL length of ridges** to 24.4.

[14] Set the **TOTAL length of ALL valleys in PLAN** to 11.88.

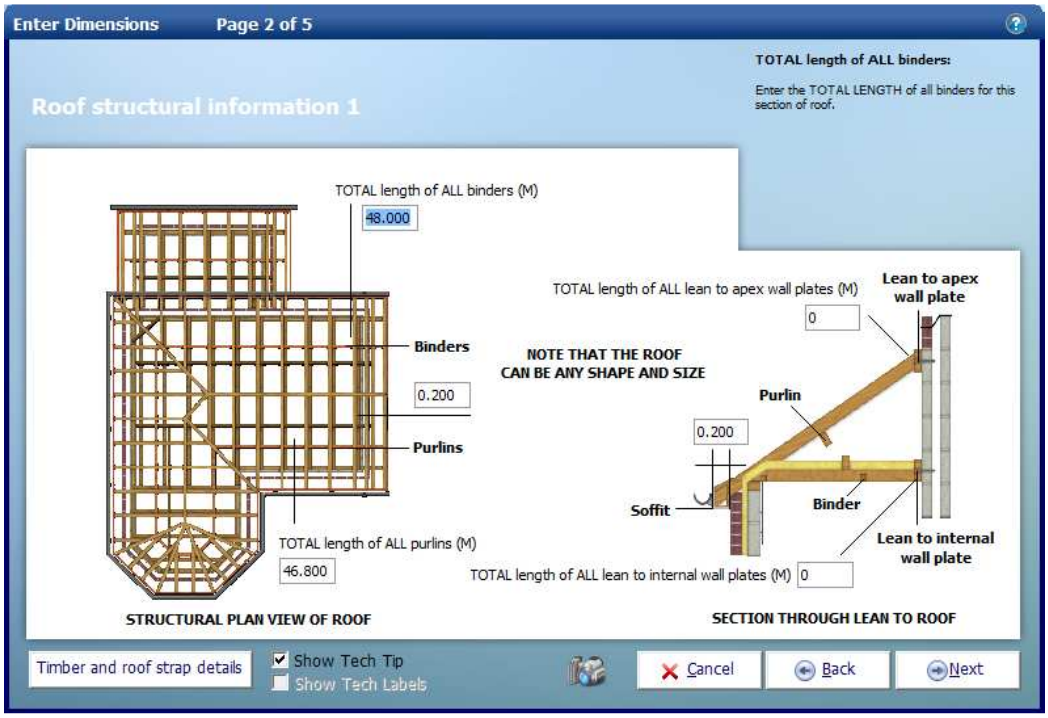
[15] Set the **Slope/pitch of VALLEY** to 40.

Please note the roof shown in the **Dimensions Wizard** is just an example of the type of roof you could estimate. The roof estimated depends entirely on the information provided by the user.



[16] Click **Next** to continue.

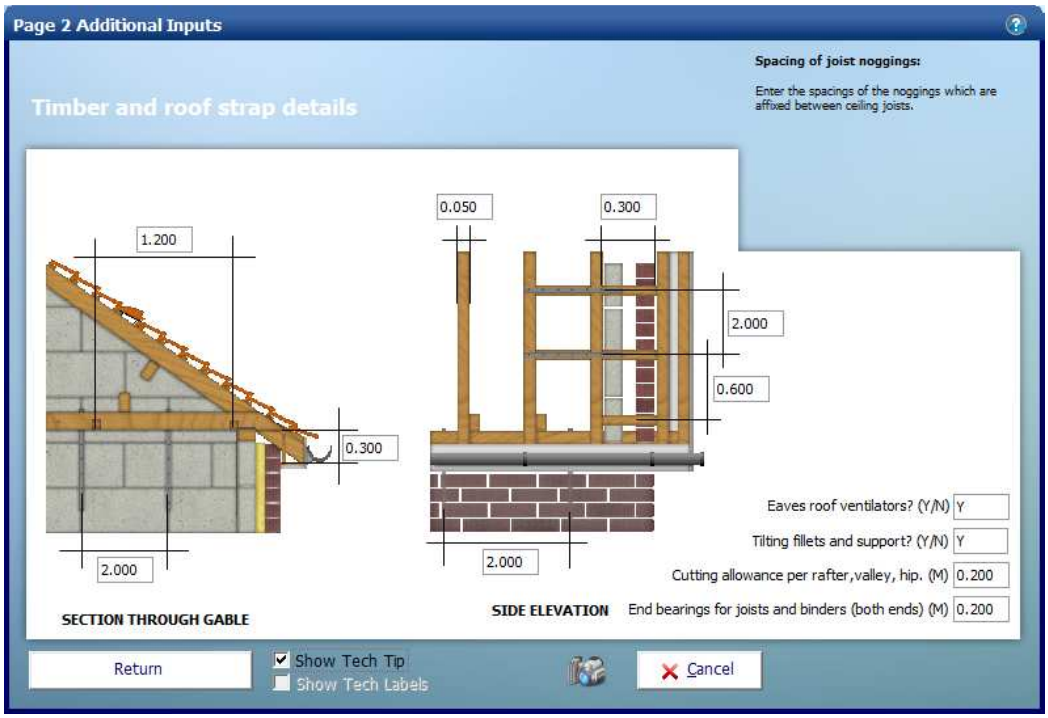
Page 2 is shown below. This is where we need to enter information such as the length of ALL purlins and binders and also the soffit width to gable and eaves.



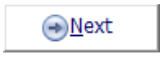
[17] Set the **TOTAL length of ALL binders** to 48.

[18] Set the **TOTAL length of ALL purlins** to 46.8.

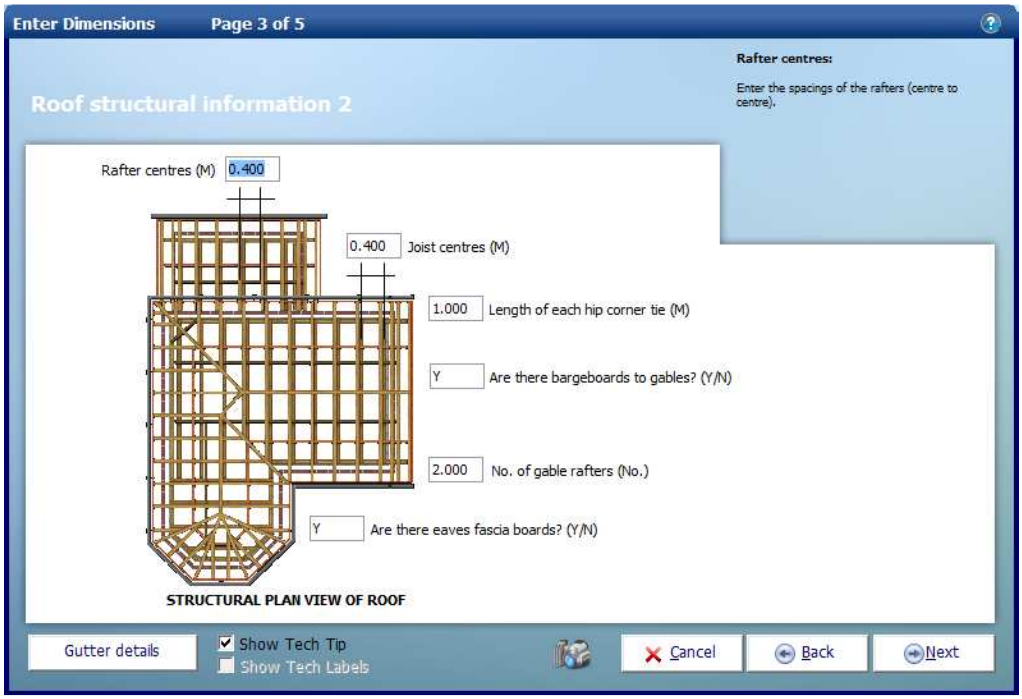
[19] Click **Timber and roof strap details** to go to the Additional Inputs window.



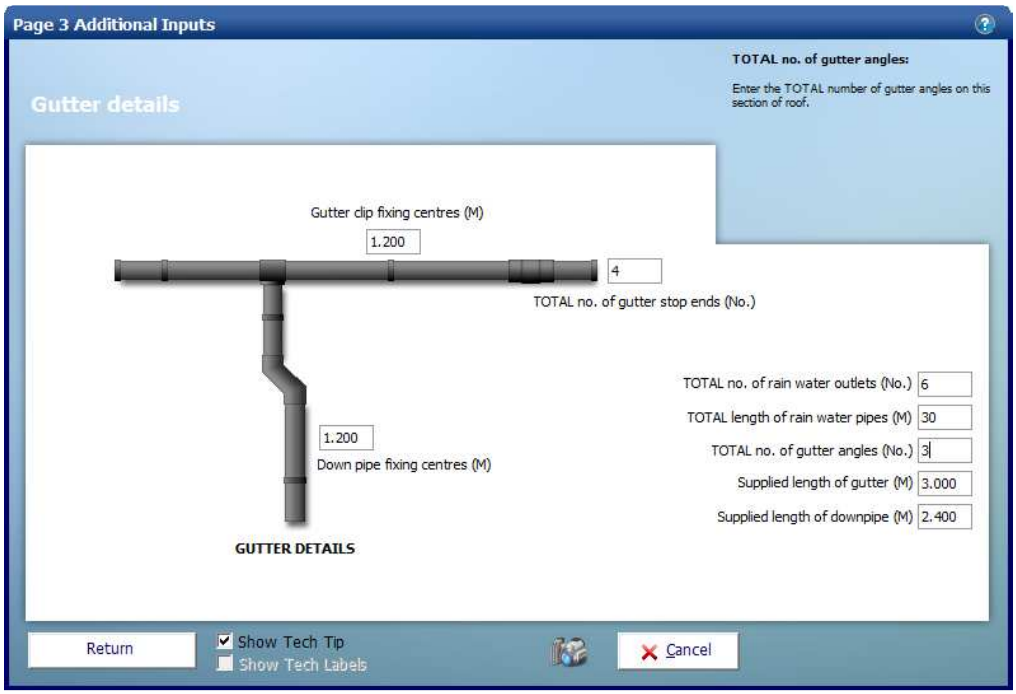
[20] We are going to leave values as they are and click **Return** to go back to Page 2.



[21] Click **Next** to proceed to page 3.



[22] Click **Gutter details**.



[23] Set the **TOTAL no. of gutter stop ends** to 4.

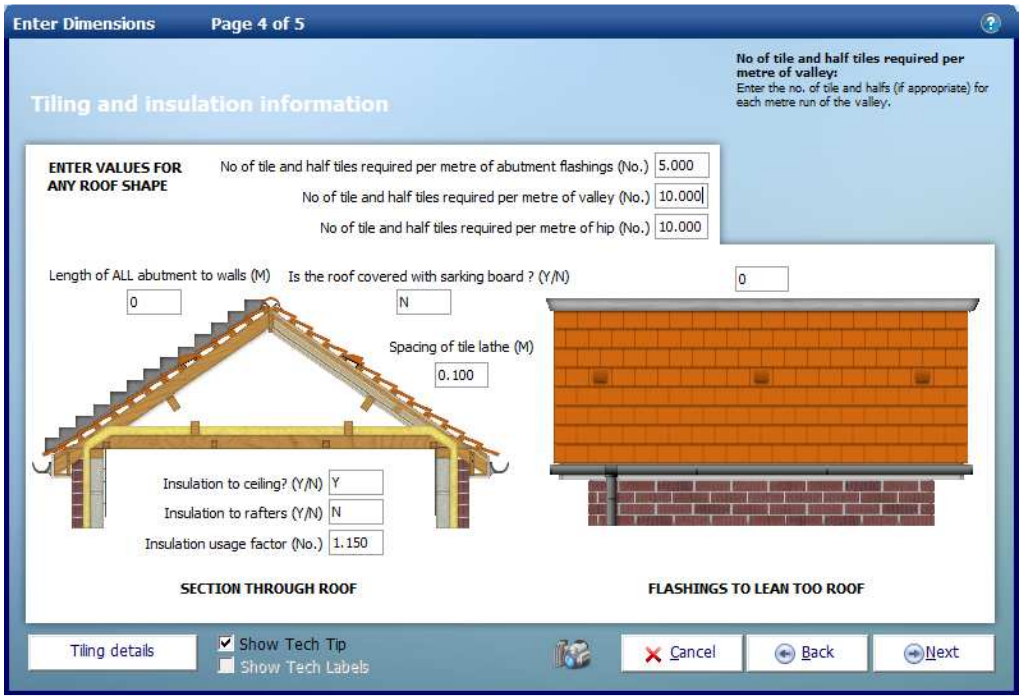
[24] Set the **TOTAL no. of rain water outlets** to 6.

[25] Set the **TOTAL length of rain water pipes** to 30.

[26] Set the **TOTAL no. of gutter angles** to 3.

[27] Click **Return**.

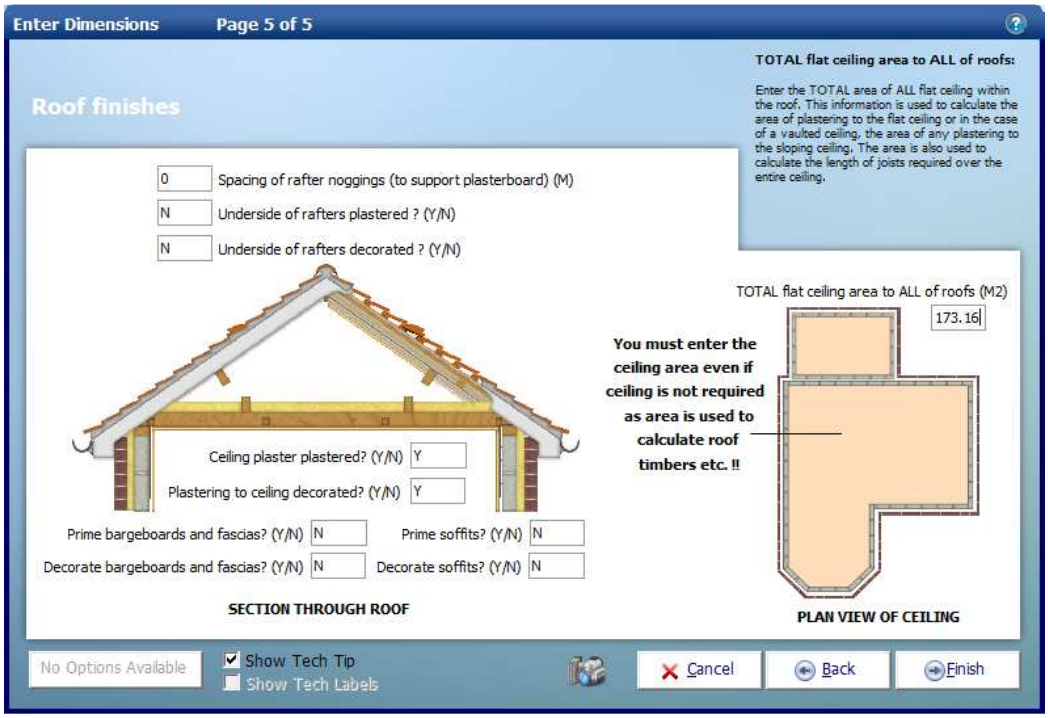
[28] Again we are going to leave the values as they are and click **Next** to move onto the next window.



[29] Set the **No of tile and half tiles required per metre of valley** to 10.

[30] Set the **No of tile and half tiles required per metre of hip** to 10.

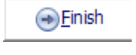
[31] Click **Next**.



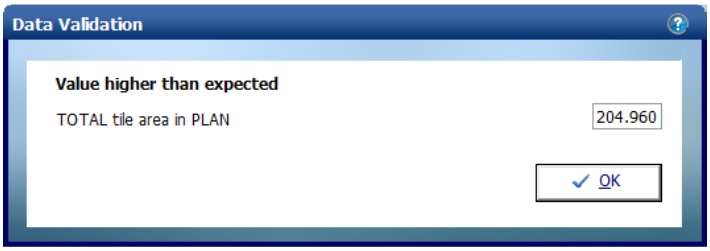
[32] Set the **Spacing of rafter noggings (to support plasterboard)** to 0.

[33] Set the **TOTAL flat ceiling area to ALL of roofs** to 173.16.

[34] Set the **Spacing of rafter noggins (to support plasterboard)** to 0.



[35] Click **Finish**.



If you have entered the values shown in this tutorial you should see the **Data Validation** window. This window will pop-up if **EstimatorXpress®** thinks the value entered might be higher than it should be for a typical roof being priced up in the **Universal Cut Roof Workbook**. However we know the value we have entered is correct.

[36] Click **OK**.

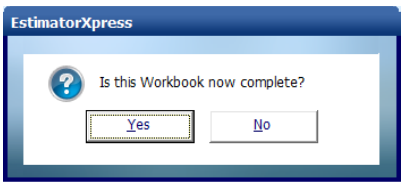
You will then be returned to the **Worksheet** where you will be able to see the dimensions you've just entered and the total for the **Worksheet** at the top left side of the sheet.

If you make a mistake entering your dimensions simply click on the column showing the dimensions then click **Dims Wizard** on the top menu to go through the **Dimensions Wizard** again.

Alternatively you can click any cell with a white background and type a new value in directly.

[37] Click **Close** to go back to the list of **Worksheets** in the **Universal Cut Roof workbook**.

[38] Click **Close** again to go back to the **Job Summary** screen.

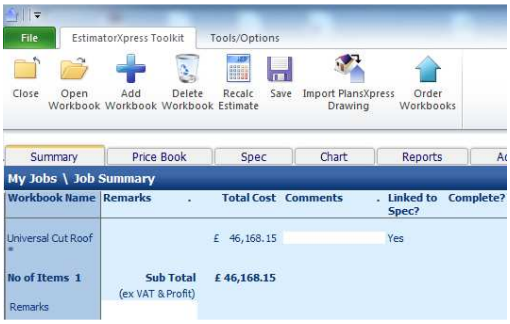


You will see this window pop up.

Clicking yes will mark the **Workbook** as being complete. This is to help you keep track of which **Workbooks** you have completed.

Even if you click yes you can still go back into the **Workbook** and make changes if required.

You are returned to the **Job Summary** and the price of the **Universal Cut Roof Workbook** can be seen with the total cost of all your work estimated so far.



You will notice that the 2 methods of pricing the roof have come out differently; using separate roof workbooks is 6% higher in cost. If you take a look at the reports in each estimate and compare the quantities of resources you will see that the separate roofs are over-estimating for some items. Where the **Apex Valley Roof** tees into the **Apex Roof** the tile area has been subtracted but we have allowed for too much lathe, roofing felt and timber for the rafters. The Soffit detail has also not been subtracted. Additionally the verge detail of **the Apex Valley Roof** should be subtracted as we know that there is in fact a **Half Hip Roof** attached to the gable end. We could now go back through the individual **Workbooks** to set some resources as 'not required' or subtract quantities of items to make the quote more accurate.

In this example of a complex roof the **Universal Roof Workbook** has produced the more accurate results, but the separate **Workbooks** have provided us with cutting list for all of our timbers required and with a little more work could be just as accurate in its material quantities. As the user of the system you can decide whether you wish to get an accurate estimate quickly, or to put a bit more time in to the estimate in order to make your job of ordering materials and carrying out the work a bit simpler.

If you wish to stop and close this current Estimate:

Press the **Close** button on the top left of the **Job Summary** screen.	
You are transferred to the **My Jobs** screen. Close this screen also using the **Close** button.	
You are now in the **Main Menu** Screen. To close **EstimatorXpress®** press the **Exit** button in the top right of screen.	

Congratulations! You have completed the **EstimatorXpress® Roofing Trade Edition Tutorial**. You should now return to the EstimatorXpress Getting Started Guide to learn about the **Bar Chart Planner** and the **Reports** within **EstimatorXpress®**.