

SHELF LOGIC® REPORT

For Shelf Logic Enterprise Edition

USER'S MANUAL

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Starting Shelf Logic[®] Report

You can reach the Custom Report Writer from the Reports Menu. Select “Report Writer” and then you can select “New Report” to create a new report, “Run Report” to run an existing report and “Edit Report” to change an existing report.

When you choose to run an existing report, you will be asked for the report name and then the report is run. When you choose “New Report” or “Edit Report”, you will see the *Report Writer Window*, as shown in the figure below.

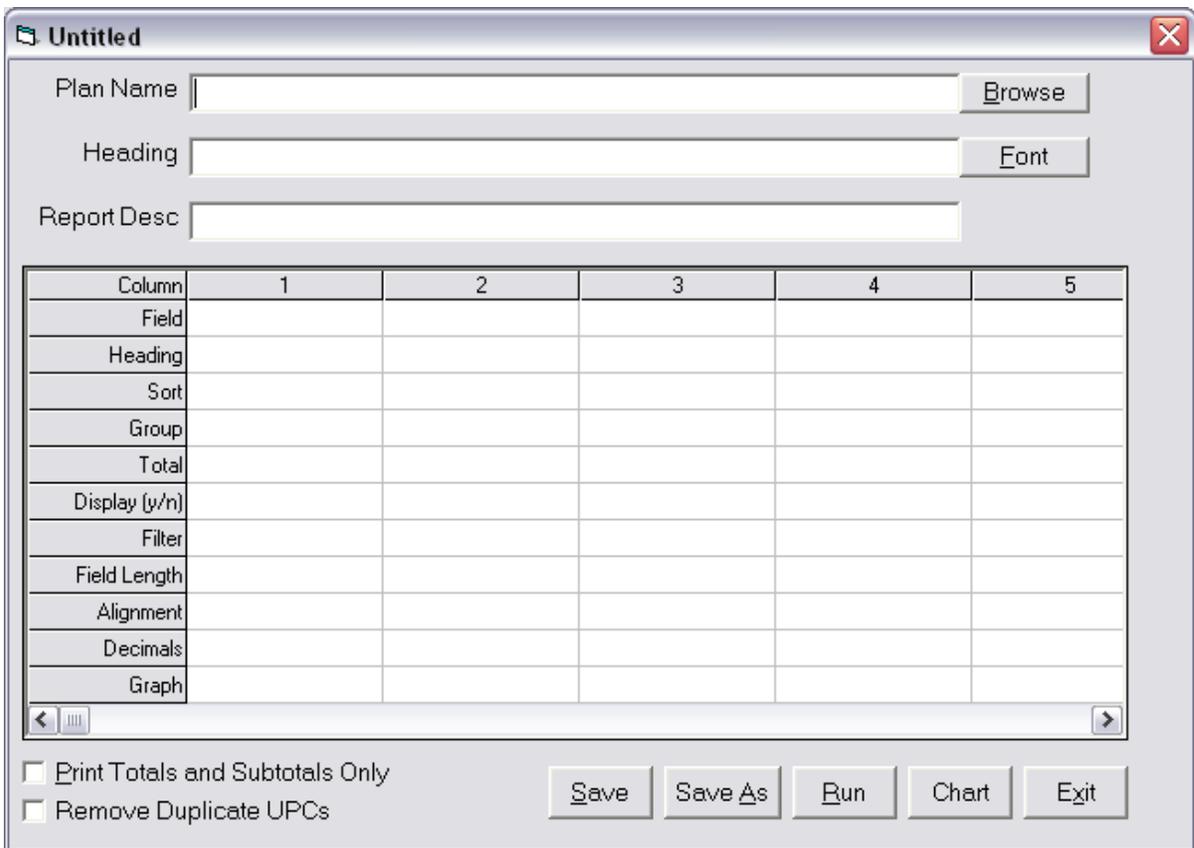


Figure 1. The Report Writer Window

The columns labeled 1,2,3 etc represents columns on the report. For each report column, you specify the field or formula, the column heading, number of decimals places, etc.

Once that is done, you can save and run the report. If you have indicated that one or more columns is to be charted on a graph, you can click on the “Chart” button. You can print the report and chart graph to the screen or printer.

Information the grid can be changed so fine tune your report. The “Save As” button can save this report under another name, so you can use it to start off a similar report.

When modifying a report, the grid will be filled in with the report information. When you run a report, you won’t see this window at all.

How a Report Works

When you run a report, it goes through each face on the plan.. Each line on the report is another face. If there is 20 faces on a plan, the report will have 20 lines (assuming no totals, subtotals or groups, and you haven’t checked “Remove Duplicates UPCs” and “Print Totals and Subtotals Only”.

At the top is the “Plan Name” field. If this report is associated with a particular plan, you can enter its path and name here, or click the “Browse” button to look for it.

You can leave the Plan Name field blank, in which case it can be used for many different plans. Before the report is run, you will be asked for the Plan Name for that particular report run.

Section 4 – Creating a New Report

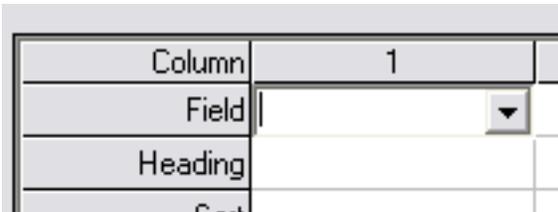
It is here in the grid that you define the report columns that make up the report. There can be up to 25 columns on a report, reflected by columns 1 through 25. For each column, there are a number of report column properties you can specify. Each row represents one report column property.

Let's look at each column property.

Field Property

This is where you enter what's to be displayed for this report column. It can be a database field, a built-in function or a formula involving both fields and built-in functions.

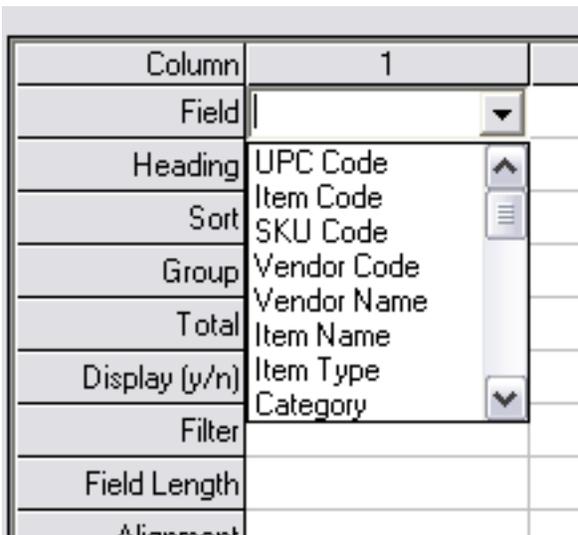
When you click in the "field" grid, a pull-down box will appear.



Column	1	
Field		▼
Heading		
Sort		

Figure 2.

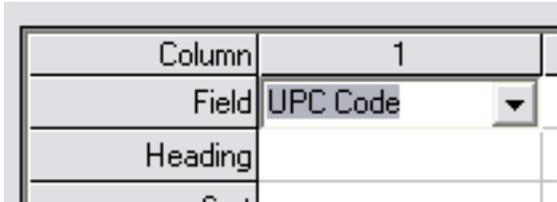
It contains a list of all database fields. Clicking on the pull-down box's down arrow displays this list.



Column	1	
Field		▼
Heading	UPC Code	▲
Sort	Item Code	☰
Group	SKU Code	
Total	Vendor Code	
Display (y/n)	Vendor Name	
Filter	Item Name	▼
Field Length	Item Type	
Alignment	Category	

Figure 3. The Field Pull-Down

When you select one of these, it will appear in the “field” position.



Column	1
Field	UPC Code ▼
Heading	
Sort	

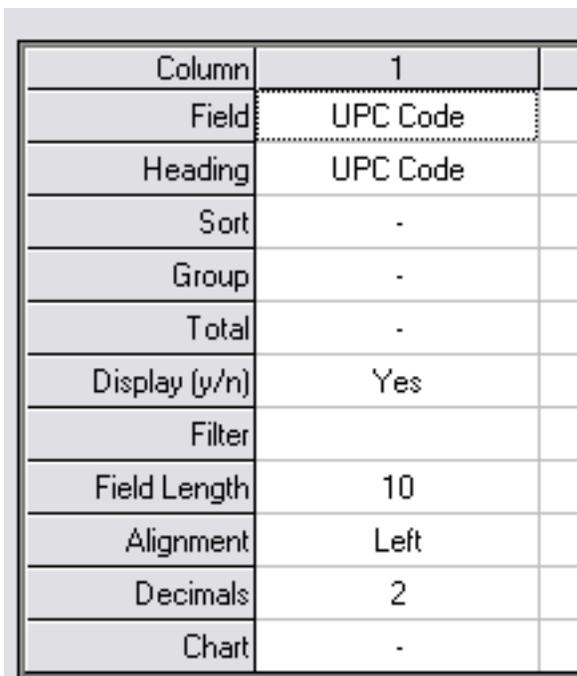
Figure 4. Selecting a Field

So the “UPC Code” will appear as the first column of the report.

Using a Built-in Function

To use a built-in function, type a dollar sign or click on the “Show Functions” button and a pop-up of all available functions will appear in a listbox. The functions are grouped by Plan, Section, Shelf, Face, Product and Product Sales. When you select a function, it will appear with the brackets in place. So you don’t have to enter the starting “[“ or ending “]” for a function.

When this field has been specified, you can move to the next column or make changes in the display of the first column. Either way, when the cursor leaves the “field” box, defaults for the rest of the rows for this first column are displayed, as shown below:

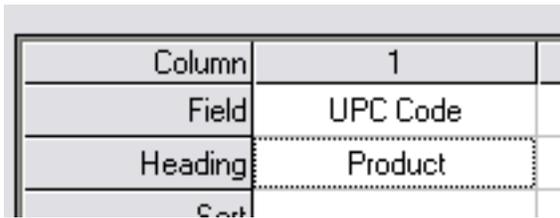


Column	1
Field	UPC Code
Heading	UPC Code
Sort	-
Group	-
Total	-
Display (y/n)	Yes
Filter	
Field Length	10
Alignment	Left
Decimals	2
Chart	-

Figure 5. Column Configuration

Heading

This is where you define the report column heading. This defaults to the field name in the “Field” box above. In the example below, we click in the heading grid cell and changed the column heading to “Product”, as shown in the figure below:



Column	1
Field	UPC Code
Heading	Product
Sort	

Figure 6. Column Heading

Multi-Line Headings

You can create multi-line column headings by using the “^” character to indicate a new line. For example, the column heading “Square^Feet” will be a 2 line column heading, and will look like:

Square
Feet

The above is for a left justified column. If right justified, the column heading will be like:

Square
Feet

Sort

This lets you sort the report by this report column. When you click in the “Sort” cell, a pull-down box will appear with the sort choices, as shown below:

Sort	
Group	No
Total	Ascending
	Descending

Figure 7. Sort Options

You can choose to sort the column in ascending or descending order, or select “No” to have no sort. The default is “no sort”.

We’re going to sort the report by the UPC Code field, so we’ll select “ascending”.

Column	1
Field	UPC Code
Heading	Product
Sort	Ascending

Figure 8. The sort order is chosen

The report can be sorted by any number of fields. The sort order is the same as the column order. So if each column was sorted, then the report is sorted by column 1, then within that by column2, and then within that by column3., etc.

Group

This lets you group similar information together on the report. When you click in the “Group” cell, a pull-down box will appear with the group choices, as shown below:

Group	
Total	No
Display (y/n)	Break
	Sub Total

Figure 9. Group Options

You can choose to group the data in this column by choosing “Group”. In this example, since this column displays the “UPC Code”, there will be a blank line after each group of UPC Codes. When you group a field, this field should also be sorted.

Here’s an example of how the grouping looks on the report.

UPC Code

111113-5101
111113-5101
111113-5101
111113-5101

125875-5073
125875-5073

131300-0202
131300-0202
131300-0202
131300-0202

160002-6010
160002-6010
160002-6010
160002-6010

Figure 10. Example of Groups

Group Sub Totals

You can generate sub totals at the end of a group by selecting “SubTotal” for the Group specification.

When you select “Sub Total”, there must be one or more fields that are totaled. A totaled field will generate a subtotal for each grouped field specifying a subtotal.

For example, we’ll make column 2 the face width and make this a total field.

Untitled

Plan Name Browse

Heading Font

Report Desc

Column	1	2	3	4	5
Field	UPC Code	Width			
Heading	UPC Code	Width			
Sort	Ascending	-			
Group	Sub Total	-			
Total	-	Total			
Display (y/n)	Yes	Yes			
Filter					
Field Length	13	10			
Alignment	Left	Left			
Decimals	2	2			
Chart	-	-			

Suppress Details

Remove Duplicate UPCs

Chart Save Save As Run Exit

Figure 11. The Field Grid

When the report is run, there will be a subtotal after each grouping, as shown below:

UPC Code	Width
111113-5101	11.30
111113-5101	11.30
111113-5101	11.30
111113-5101	11.30
***111113-5101	45.20
125875-5073	9.40
125875-5073	9.40
***125875-5073	18.80
131300-0202	6.46
131300-0202	6.46
131300-0202	6.46
131300-0202	6.46
***131300-0202	25.84

Figure 12. Subtotals

The “UPC Code” column is the one being grouped so the “***” is put in front of the group. The “Width” column is being totaled so the group subtotal for width appears in the “Width” column.

Total

This lets you total up the column. At the end of the report, a total of this column is displayed. If any column is a grouped column indicating a subtotal, then a sub total will also appear in this column.

This is shown in Figure 13 above.

When you click in the total cell, a pull-down will display the choice of no total, totals or averages.

Total	
Display (y/n)	No
Filter	Total
	Average

Figure 13. Totals Options

Display

This determines if the column is displayed in the report. There may be times when you want to filter or sort by a certain column without actually displaying it.

When you click in the “Display” cell, a pull-down gives you a choice of “yes” and “no”.

Display (y/n)	Yes
Filter	Yes
Field Length	No

Figure 14. Display Options

The default is “yes”.

Filter

This lets you filter the records that appear on the report. You can use any comparison such as greater than, less than, etc. Here’s a list:

- > greater than
- < less than
- >= greater than or equal to
- <= less than or equal to
- = equal to
- <> not equal to
- like pattern match (such as “like %ing” which indicates ending with “ing”)
 - %abc = ending in “abc”
 - abc% = beginning with “abc”
 - %abc% = containing “abc”

Here are some examples (we are doing this in the “Width” column):

- > 6 width greater than 6 (inches or cm)
- <= 12 width less than or equal to 12 (inches or cm)

Let's run our report but only include items where the product width is more than 10 (inches or cm). Here's what the "Field Grid" looks like:

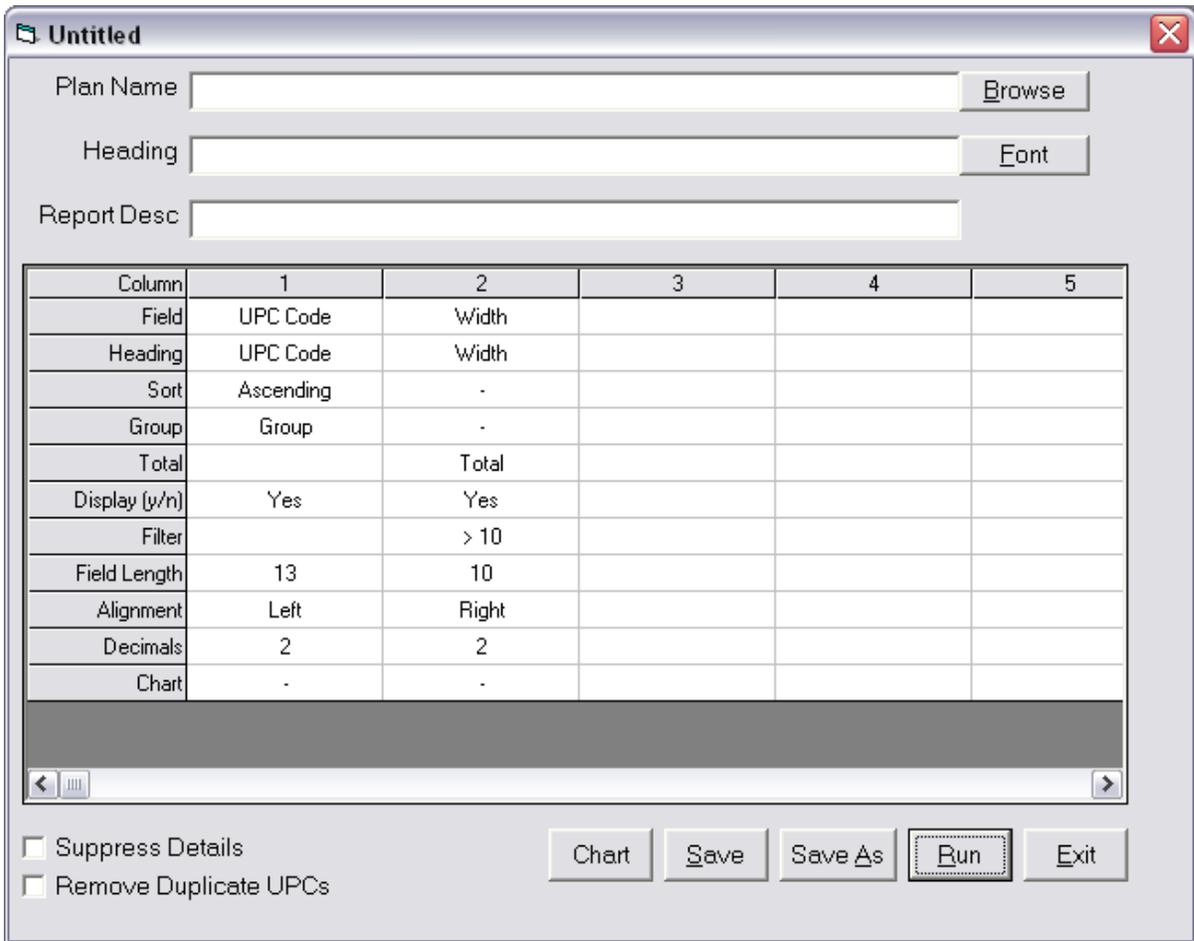


Figure 15. Using Filters

When run, then report looks like this:

UPC Code	Width
111113-5101	11.30
111113-5101	11.30
111113-5101	11.30
111113-5101	11.30
370000-66897	11.50
370000-66897	11.50
432893-0427	14.20
432893-0427	14.20
611431-71057	12.20
611431-71057	12.20

Figure 16. Report of Width over 10

You can see that only items with a width more than 10 are included in this report.

You can specify a filter for more than one column. In that case, and “AND” comparison is done with the columns. For example, if the filter for the “UPC Code” column is “like 202*” and the filter for the “Width” column is “> 10”, then the report filter would be:

UPC Code starting with “202” AND Width greater than 10

Field Length

This lets you specify the width of this column on the report. This roughly corresponds with the number of characters. But since each character is a different width, it’s not always the same. The default amount is 10, about 10 characters.

Alignment

This determines the alignment for the column on the report. When you click in the alignment cell, a pull-down gives you a choice of left justified, right justifies, or centered.



Figure 17. Alignment Options

This also controls how the column is sorted. If the column is right justified, then it's sorted right to left.

Decimals

This determines how the number is formatted on the report and lets you specify the number of decimal places to display. Or, you can specify "0" and have no decimal places.

The default amount is 2. If this is not a number field, then this has no effect.

Graph

This determines if this column is going to be put on a graph. When you click in the "Graph" cell, a pull-down gives you the choice of "yes" or "no".

The following information is entered at the top of the window, outside of the grid.

Plan Name

This is where you can enter the name of the plan that this report is associated with. You need to enter the full path and name of the plan. You can use the "Browse" button to look for and select your plan.

Generic Reports

If you leave the "Plan Name" field empty, then you will be prompted to enter the plan name each time the report is run. This means the report is 'generic' and can be used with any plan.

If a plan name has been entered in the “Plan Name” field for the report, it can be erased and the report made ‘generic’ again.

Heading

This is the heading of the report. Next to it is a button marked “Font”. Clicking on this lets you change the font style and size for the heading.

Report Desc

This is a short description of the report and is used for in report libraries to help identify a report.

Print Totals and Subtotals Only

Checking this will print only the subtotals and totals. The detail lines of the report will not print.

Example:

Here’s a report with subtotals and totals. This checkbox is not checked so the detail lines will also print on the report.

UPC Code	Width
131300-0202	6.46
131300-0202	6.46
131300-0202	6.46
131300-0202	6.46
***131300-0202	25.84
611431-71057	12.20
611431-71057	12.20
***611431-71057	24.40
	50.24

Figure 18. Report Details present

Now here's the same report but the "Print Totals and Subtotals Only" checkbox is checked.

UPC Code	Width
***131300-0202	25.84
***611431-71057	24.40
	50.24

Figure 19. Subtotals and Totals Displayed

Only the subtotals and the total appear on the report. If there was no grouping for the UPC Code column, then only the total will be displayed, as shown below.

UPC Code	Width
-----------------	--------------

50.24

Remove Duplicate UPCs

The Remove Duplicate UPCs checkbox lets you trim reports by eliminating duplicate upc codes from the report. This assumes that the report is sorted by the UPC code.

Let's look at an example. This is the report with "Remove Duplicate UPCs" checkbox unchecked so duplicates will appear if there is more than one face for a UPC code.

UPC Code	Width
111113-5101	11.30
111113-5101	11.30
111113-5101	11.30
111113-5101	11.30
125875-5073	9.40
125875-5073	9.40
131300-0202	6.46
131300-0202	6.46
131300-0202	6.46
131300-0202	6.46
160002-6010	7.57
160002-6010	7.57
160002-6010	7.57
160002-6010	7.57

Figure 20. Report with Duplicate Faces

This plan has 4 faces of UPC code "111113-5101", 2 faces of UPC code "125875-5073" and so on.

When the "Remove Duplicate UPCs" checkbox is checked., each UPC code will appear only once on the report, as shown below.

<u>UPC Code</u>	<u>Width</u>
111113-5101	11.30
125875-5073	9.40
131300-0202	6.46
160002-6010	7.57

Figure 21. Duplicate UPC Codes Removed

This is how the Field Grid looks before running the report.

Column	1	2	3	4	5
Field	UPC Code	Width			
Heading	UPC Code	Width			
Sort	Ascending	-			
Group	No	-			
Total	-	No			
Display (y/n)	Yes	Yes			
Filter					
Field Length	15	10			
Alignment	Left	Right			
Decimals	2	2			
Graph	-	-			

Print Totals and Subtotals Only
 Remove Duplicate UPCs

Save Save As Run Chart Exit

Figure 22. The Field Grid for this Report

Save

This button saves the report. If the report hasn't been saved yet, you will be asked for a report name.

Save As

This button saves the report under a different name.

Run

This runs the report. You will return back to the Field Grid after viewing the report.

Chart

This button displays a graph of the columns selected for the graph. Whichever column has a “Yes” for the “Graph” row will appear on the graph.

Here’s what the graph of the items widths on the plan.

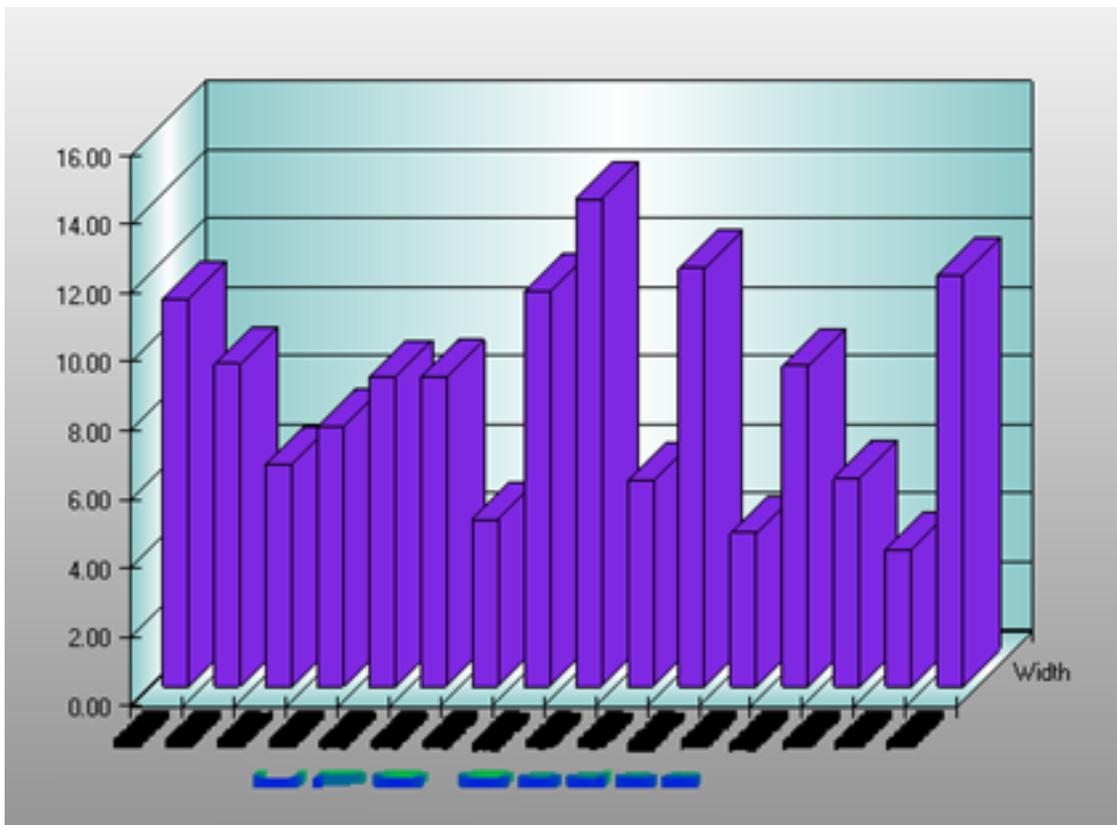


Figure 23. Graph of Item Widths

If you choose more than one field to display, they are displayed together on the same graph, one behind the other. Here's the Field grid for this graph. We will graph the "Cost" field as well as the "Width" field.

Plan Name

Heading

Report Desc

Column	1	2	3	4	5
Field	UPC Code	Width	Cost		
Heading	UPC Code	Width			
Sort	Ascending	.	.		
Group	.	.	.		
Total	.	.	.		
Display (y/n)	Yes	Yes	Yes		
Filter					
Field Length	13	10	10		
Alignment	Left	Right	Right		
Decimals	2	2	2		
Graph	.	Yes	Yes		

Print Totals and Subtotals Only
 Remove Duplicate UPCs

Figure 24. Graphing More than One Column

When the "Graph" button is pressed, the graph will look like this:

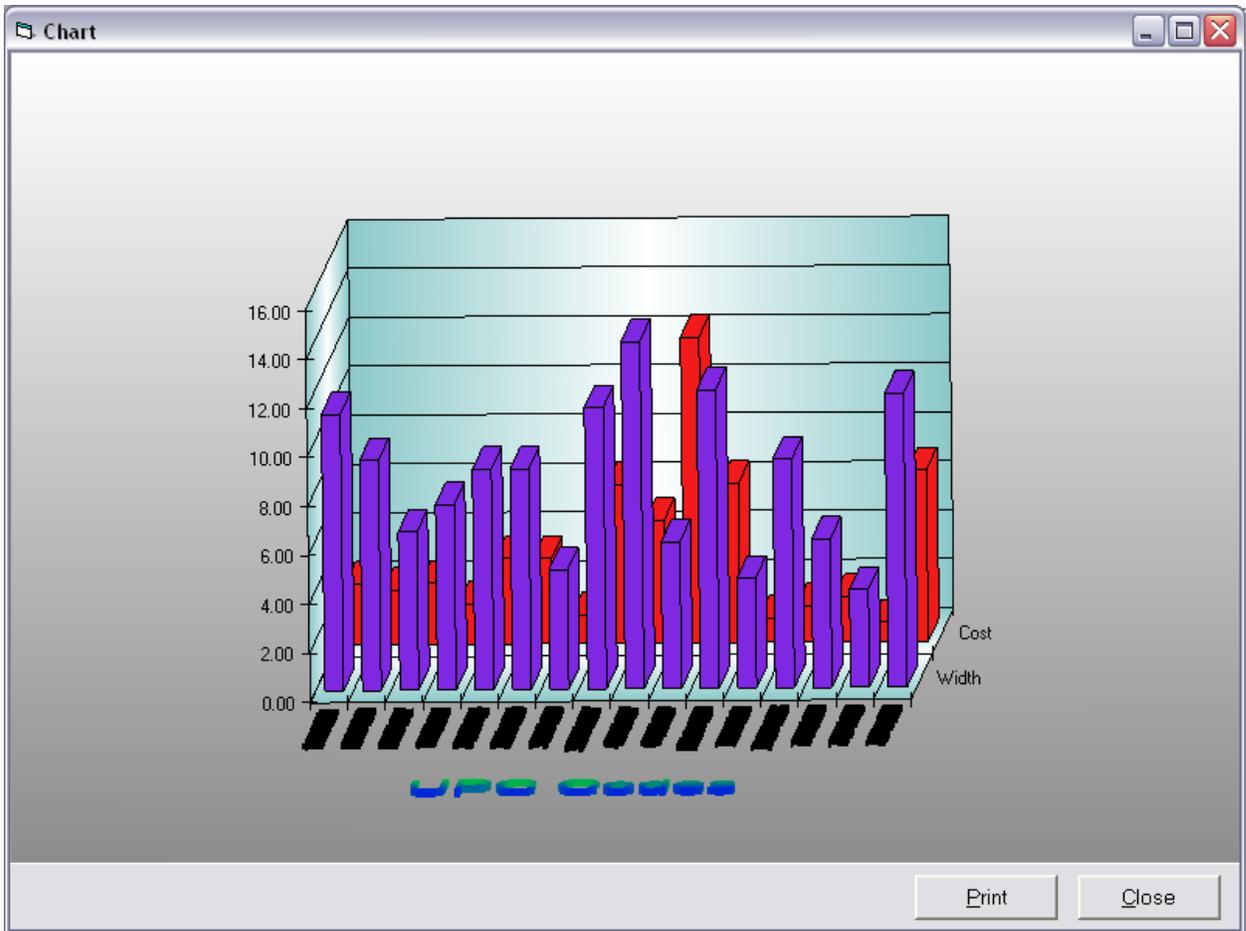


Figure 25. The Graph of Two Columns

The “width” column is on dark purple and the “cost” column is in red.

Section 5. Built-In Functions

Shelf Logic Report comes with a large number of built-in functions that can be used by themselves or within formulas. All built-in functions start with a “\$” sign and are surrounded with “[]” characters.

These functions are divided in 5 groups, according to the various elements of the plan. These are plan, section, shelf and face. Each function starts with either “plan”, “section”, “shelf”, or “face”. Each determines how information is totaled. If it’s a plan level function, you’ll get information totaled for all faces on the plan. A section level function gives you totals for all products in a section. A shelf level function gives you totals for all products on a shelf. The face level gives you information about a single facing. Product level functions gives you information about all faces of a product.

For example, “Face Cube” gives you the cubic feet (or cm) of the current face. If you move up to the Shelf Level, the function “Shelf Face Cube” gives you the total cubic feet (or cm) or all faces on the shelf. Moving up again to the plan level, the function “Plan Face Cube” gives you the total cubic feet (or cm) or all faces on the plan.

Specific Arguments

Some functions can have an argument after it, put in parenthesis. When used with a section level function, it can be used to specify a specific section nbr. So if the current face belongs in section 1, that is the sections used on the report. You can specify a different section number to report on by putting it in parentheses after the function.

For example, the function “Shelf Width” gives you the shelf width for the shelf on which the current face resides. So let’s say the first face of the plan resides on shelf 1. “Shelf Width” would give us the width of shelf 1. If you want the width of shelf 2, you would use the function “Shelf Width(2)”. The final function as used will look like “[Shelf Width(2)]”.

When used at the section level, you can indicate a specific section. When used at the shelf level, it indicates a specific shelf.

When used at the face level, it can indicate a specific face. Faces have additional arguments. You can put the letters “UPC:” followed by a UPC Code. Instead of the current face, information about a specific UPC Code can be used. You can also use the word “KEY:” followed by a key number.

For example: [Face Width(UPC:1982730-9928)] gives you the width of the face with UPC Code 1982730-9928.

[Face Width(KEY:43)] gives you the width of the face with a key number of 43.

When used in the “Field Grid”, the function would have a “\$” sign in front of it and start and end with “[]” characters. So in the “Field Grid”, “Plan Face Cube” would be written as “[\$Plan Face Cube]”. In order to make the functions more readable, we will leave out the \$ and [] characters in the list of functions. They will be shown in examples however, so you can see exactly how to use them.

There is a 5th group that doesn’t start with “plan”, “section”, “shelf”, “face” and has general functions, like “Days Supply”, that also work on the plan level.

All functions are not case sensitive. This means they can be in upper case, lower case or mixed case.

Plan Level Functions

There are functions that operate on the plan level, they give you numbers that are for the entire plan. These functions all start with “Plan”.

Plan Function List

Plan Area – The area of the plan in square feet or square cm. This is the display height multiplied by the display width.

Plan Cost – The total cost of all products on the plan.

Plan Face Area – This is the total area of all the faces on the plan in square feet or square cm. This is the face height times the face width of all faces on the plan.

Plan Face Cube – This is the volume of all items on the plan in cubic feet or cubic cm. This is the total of the face height times the face width times the face depth of each item in the facing stack.

Plan Face Linear – This is the total length of all the faces in the plan touching shelves in feet or cm.

Plan Face Quantity – This is the total number of faces in the plan.

Plan Height – The height of the plan in feet or cm. This is the display height as shown in the “Display Setup” window.

Plan Kickplate – The height of the kickplate in inches or cm. This is defined in the “Display Setup” window.

Plan Peg Area – This is the total area, in feet or cm, available for peg products. This is the total plan area minus the area reserved for shelves.

Plan Peg Cost – The total cost of all peg products on the plan.

Plan Peg Retail – The total retail value of all peg products on the plan.

Plan Peg Wholesale – The total sell price of all peg products on the plan.

Plan Product Quantity – This is the total number of products in the plan.

Plan Retail – The total retail value of all products on the plan.

Plan Sections – The number of sections on the plan

Plan Shelf Area – The total shelf area on the plan in feet or cm. This is the total shelf height times the total shelf depth. It's the area looking down on the shelves.

Plan Shelf Back Area – The total shelf area on the plan background available for product facings. This is measured in feet or cm. This is the total shelf height times the total shelf length..

Plan Shelf Cost – The total cost of all shelf products on the plan.

Plan Shelf Cube – The total shelf volume on the plan in cubic feet or cubic cm. This is the total shelf height times the total shelf length times the total shelf depth.

Plan Shelf Length – This is the total length of all shelves on the plan in inches or cm.

Plan Shelf Retail – The total retail value of all shelf products on the plan.

Plan Shelf Wholesale – The total sell price of all shelf products on the plan.

Plan Vertical Notch Spacing – This is the distance between vertical notches in the plan uprights.

Plan Wholesale – The total wholesale value (sell price) of all products on the plan.

Plan Width – The width of the plan in feet or cm. This is the display width as shown in the "Display Setup" window.

Note: For the following three sales functions, you will need to specify a range of sales data.

Plan Cost of Goods Sold – The actual cost of goods sold for all products on the plan.

Plan Net Sales – The actual cost of goods sold for all products on the plan.

Plan Units Sold – The actual units sold for all products on the plan.

Section Level Functions

Section Level Functions are related to information about sections. These functions can be for the current section or for a specific section. By putting the section number in parenthesis, you can specify one section. If not, the section in which the current face resides is used.

Remember, the reports are done by going through each face on the plan, so the section for each face is determined and is the one used unless a specific section is specified in parenthesis.

For example:

Section Width – is the width of the section in which the faces resides

Section Width(3) – is the width of section three

The section level functions are divided into three major groups. The first groups of functions are for the entire section. The second groups is for products on shelves only on the sections. The third is for products on peg hooks in the section. So you can get information about the entire section or just the shelf or peg areas of the sections. For example, the “Section Face Area” function is the face area of all faces in the section. The “Section Peg Face Area” function gives you the face area of the peg products in the section. The “Section Shelf Face Area” function gives you the face area of the products on shelves in the section.

Section Function List

Section Area - This is the area of the section in square feet or cm

Section Cost - This is the total cost of all products in the section.

Section Cost of Goods Sold - This is the cost of goods sold for all products in the section for the selected range of sales data.

Section Face Area - This is the total area of all faces in the section in square feet or cm.

Section Face Cube - This is the total cubic feet of all faces in the section in cubic feet or cm.

Section Face Linear - This is the total linear feet of all faces in the section in feet or cm.

Section Face Quantity - This is the total number of faces in the section.

Section Left - This is the distance, in feet or cm, from the left edge of the plan to the start of the section.

Section Net Sales - This is the net sales for all products in the section for the selected range of sales data.

Section Number - This is the section number.

Section Peg Area - This is the area available for peg products. It's the section area minus the area of all shelves in the section.

Section Peg Cost - - This is the total cost of all products on peg hooks in the section.

Section Peg Cost of Goods Sold - This is the cost of goods sold for all products on peg hooks in the section for the selected range of sales data.

Section Peg Face Area - This is the total area of all faces on peg hooks in the section in square feet or cm.

Section Peg Face Cube - This is the total cubic feet of all faces on peg hooks in the section in cubic feet or cm.

Section Peg Face Quantity - This is the total number of faces on peg hooks in the section

Section Peg Net Sales - This is the net sales for all products on peg hooks in the section for the selected range of sales data.

Section Peg Product Quantity - This is the number of products on peg hooks in the section.

Section Peg Retail - This is the total retail value of all products on peg hooks in the section.

Section Peg Units Sold - This is the units sold for all products on peg hooks in the section for the selected range of sales data.

Section Peg Wholesale - This is the total wholesale value of all products on peg hooks in the section. This is based on the sell price of the product.

Section Product Quantity - This is the number of products in the section.

Section Retail - This is the total retail value of all products in the section.

Section Shelf Area - This is the total area of all shelves in the section. The shelf area is defined as the shelf length times the shelf depth.

Section Shelf Back Area - This is the total background area of all shelves in the section. The shelf back area is defined as the shelf length times the shelf height.

Section Shelf Cost - - This is the total cost of all products on shelves in the section.

Section Shelf Cost of Goods Sold - This is the cost of goods sold for all products on shelves in the section for the selected range of sales data.

Section Shelf Cube - This is the total cubic feet of all shelves in the section.

Section Shelf Face Area - This is the total area of all faces on shelves in the section in square feet or cm.

Section Shelf Face Cube - This is the total cubic feet of all faces on shelves in the section in cubic feet or cm.

Section Shelf Face Quantity - This is the total number of faces on shelves in the section

Section Shelf Net Sales - This is the net sales for all products on shelves in the section for the selected range of sales data.

Section Shelf Product Quantity - This is the number of products on shelves in the section.

Section Shelf Retail - This is the total retail value of all products on shelves in the section.

Section Shelf Quantity - This is the number of shelves in the section.

Section Shelf Units Sold - This is the units sold for all products on shelves in the section for the selected range of sales data.

Section Shelf Wholesale - This is the total wholesale value of all products on shelves in the section. This is based on the sell price of the product.

Section Units Sold - This is the units sold for all products in the section for the selected range of sales data.

Section Wholesale - This is the total wholesale value of all products in the section. This is based on the sell price of the product.

Section Width - This is the width of the section in feet or cm.

Shelf Level Functions

Shelf Level Functions give you information about shelves. Some shelf functions can be for the current shelf or for a specific shelf. By putting the shelf number in parenthesis after the function, you can specify an individual shelf. If not, the shelf on which the current face resides is used.

For example:

[\$Shelf Width] – is the width of the shelf in which the faces resides

[\$Shelf Width(3)] – is the width of shelf three

Shelf Function List

Shelf Angle – This is the angle of the shelf in degrees. Zero degrees is a normal shelf. More than zero degrees mean the shelf slopes downward.

Shelf Area – The shelf area in square feet or cm. This is the shelf length times the shelf depth. It's the area looking down on the shelf.

Shelf Back Area – The shelf background area in square feet or cm. This is the shelf height times the shelf length. It's the shelf area looking straight at the plan.

Shelf Cost – The cost of all products on the shelf.

Shelf Cost of Goods Sold - This is the cost of goods sold for all products on the shelf for the selected range of sales data.

Shelf Cube – The shelf volume in cubic feet or cubic cm. This is the shelf height times the shelf length times the shelf depth.

Shelf Depth – This is the depth of the shelf in feet or cm.

Shelf Face Area – This is the total area of all the faces on the shelf in square feet or square cm. This is the face height times the face width for all faces on the shelf.

Shelf Face Cube – The total cubic feet (or cm) of all items on this shelf.

Shelf Face Linear – The total linear space taken up by all faces touching the shelf.

Shelf Face Quantity – The number of faces on this shelf.

Shelf Height – This is the height of the shelf in feet or cm.

Shelf ID – This is the ID of the shelf on which this face resides.

Shelf Left – This the distance from the left edge of the plan to the left edge of the shelf in feet or cm.

Shelf Length – This is the length of the shelf in feet or cm.

Shelf Net Sales - This is the net sales for all products on the shelf for the selected range of sales data.

Shelf Number – The shelf number in which this face resides.

Shelf Notch Position – This is the notch position used for the shelf. It's the shelf position above the floor divided by the vertical notch amount. If the shelf is 12 inches off of the floor and the vertical notch amount is 2 inches, then the Shelf Notch Position would be 6.

Shelf Product Quantity – The number of products on this shelf.

Shelf Retail – The retail value of all products on the shelf.

Shelf Section – The section number in which the shelf resides.

Shelf Thick – This is the thickness of the shelf in inches or cm.

Shelf Top – This the distance from the top edge of the plan to the top of the shelf in inches or cm.

Shelf Units Sold - This is the units sold for all products on the shelf for the selected range of sales data.

Shelf Wholesale – The wholesale value (sell price) of all products on the shelf.

Face Level Functions

Face Level Functions deal with information about a single face.

Face Area – This function gives you the area of the current facing. That’s the face width times the face length.

Face Area On Shelf – This function gives you the area of this face and all other similar faces on the shelf. Similar means all faces with the same UPC Code. So if the current face is UPC Code “12345678” and it resides on shelf number 2, and there are 3 other items on shelf number 2 with the same UPC Code of “12345678”, then the areas of all four faces added together will be the result of this function.

The “Face Area On Shelf” function is NOT the same as the “Shelf Face Area” function. The “Face Area On Shelf” function gives you the areas of faces on the shelf similar to the current face. The “Shelf Face Area” function gives you the area of ALL faces on the shelf.

This is true for all functions beginning with “Face”. The results apply only to faces the same as the current face. Or if you specify a specific face (see below), then the results are for all items the same as the specified face. This differs from the Plan and Shelf level functions which give results on all faces, the same or not.

Face Area On Plan – This function is like the “Face Area On Shelf” but gives you the area of this face and all other similar faces on the entire plan. Again, this function is not the same as the “Plan Face Area” function. The “Face Area On Plan” function gives you the areas of faces on the plan similar to the current face. The “Plan Face Area” function gives you the area of ALL faces on the plan.

Some face functions can be for a specific face instead of the current face. To do this, you put the desired UPC code in parenthesis after the function.

For example:

[\$Face Width(123456789-0)] – is the width of a face with a UPC Code of 123456789-0

Face Function List

Face Area – This is the area of the face in square feet or square cm. This is the face height times the face width.

Face Cost – This is the cost of a single facing according to its merchandising style.

Face Cube – This is the volume of a single facing in cubic feet or cubic cm. This is the face height times the face width times the face depth.

Face Depth – This is the depth of the face in inches or cm.

Face Height – This is the height of the face in inches or cm.

Face Item Quantity – This is the number of items stacked in this facing.

Face Key Number – The key number of this face as it appears when the plan is printed.

Face Key Quantity – The number of faces assigned to a particular key number (used with the combine key number option). If the Combine Key Numbers option is used, then only one line will print on the report for each combined group of key numbers. The Face Key Quantity tells you how many faces are combined and represented on that one report line.

Face Left – This the distance from the left edge of the plan to the left edge of the face in inches or cm.

Face Merchandising Style – This the merchandising style of this face, either unit, tray, case or display.

Face Peg Hook Length – For a peg item, this is the peg hook length in inches or cm.

Face Peg ID – This is the peg ID of the peg used for this face.

Face Peg Label Height – This is the height in inches or cm of the label (if used) with the peg used for this face.

Face Peg Label Offset – This is the offset distance of the label (if used) with the peg used for this face.

Face Peg Label Width – This is the width of the label (if used) with the peg used for this face.

Face Peg Rise – This is the rise distance of the label (if used) with the peg used for this face.

Face Peg Type Name – This is the type of peg used (if used) either single or double with or without labels.

Face Peghole Column – This is the peghole number from the left edge of the product to the peghole (if peg item).

Face Peghole Distance from Left – This is the distance from the left edge of the product to the center of the peghole (if peg item).

Face Peghole Distance from Top – This is the distance from the top edge of the product to the center of the peghole (if peg item).

Face Peghole Row – This is the peghole number from the top edge of the product to the peghole (if peg item).

Product Retail Price – This is the suggested retail of this facing according to the face's merchandising style.

Face Section – This is the section in which the facing is located.

Face Sell Price – This is the selling price of this facing according to the face's merchandising style.

Face Shelf Number – This the Shelf Number of the shelf on which this facing is located.

Face Side – The current side of the face, either front, side or top.

Face Stack – This is the number of products stacked in the facing. This is the same as the Face Item Quantity..

Face Stack Max – This is the maximum number of products that could be stacked in the facing. This is the same as the Face Stack if the face uses Auto Fill.

Face Top – This the distance from the top edge of the plan to the top of the face in inches or cm.

Face Width – This is the width of the face in inches or cm.

Product Level Functions

Product Level Functions deal with information about a particular product and represents information about all facings of that product. Like the Face Level Functions, you can put a UPC Code in parenthesis and information about that product will be produced.

For example:

[\$Product Net Sales(123456789)]

The product with UPC Code 123456789 will be reported on.

Product Function List

Product Area On Plan – This is the total area of all the faces in the plan of this product in square inches or square cm. This is the face height times the face width times each facing on the plan.

Product Cost – This is the total cost of all of this product on the plan according to its merchandising style.

Product Cost of Goods Sold – This is the product's cost of goods sold for the sales range specified.

Product Cube – This is the volume of all facings of this product on the plan in cubic feet or cubic cm. It is the cube amount of all products in all facings of the product on the plan. This is the face height times the face width times the face depth times the stack amount times each product facing on the plan.

Product Depth – This is the total depth of all faces with the same UPC Code.

Product Faces – This is the total number of all similar facings on the plan.

Product Faces Wide – This is the number of facings wide for this product.

Product Faces High – This is the number of facings high for this product.

Product Height – This is the total height of all faces with the same UPC Code.

Product Linear – This is the total length of all faces in feet or cm touching all shelf and in peg areas in inches or cm.

Product Net Sales – This is the product's net sales for the sales range specified.

Product Retail Price – This is the total suggested retail of all of this product on the plan according to the face's merchandising style.

Product Quantity – This is the total number of items stacked in all similar facings on the plan. Similar means the same UPC Code.

Product Sell Price – This is the total selling price of all of this product on the plan according to the face’s merchandising style.

Product Units Sold – This is the product’s number of units sold for the sales range specified.

Product Width – This is the total width of all faces with the same UPC Code.

Product Sales Level Functions

Product Sales Level Functions deal with sales information about a particular product. While the Product Level Function deal with product information for the particular plan, the Product Sales information is for the product regardless of the plan. For example, the Net Sales of a product is for all sales of the product independent of any plan.

Product Sales Level Functions used entered sales data for its calculations.

For any Product Sales Level Function using actual amounts,, you must use the Sales Range Button to indicate the range of sales information used for the report. The same Sales Range information is used for all Product Sales Level Functions on the report and needs to be entered only once for each report.

The functions basically fall into two groups, actual amounts and projected amounts. The projected amount are based on the quantity of products on the plan and the cost, selling price and retail price entered for the product. The actual amounts are based on the actual sales figures entered for the chosen time period.

Product Sales Function List

Product Sales Actual Gross Margin – This is the actual Gross Margin for this product. Its formula is:

Product Net Sales – Product Cost of Goods Sold

Product Sales Actual Plan Cost – This is the actual cost of all of this product on the plan. This uses the Cost of Goods Sold to get the actual cost for one product and calculates the cost of all products on the plan. Its formula is:

$(\text{Product Cost of Goods Sold} / \text{Product Units Sold}) * \text{Product Quantity on Plan}$

Product Sales Actual Plan Retail – This is the actual retail value of all of this product on the plan. This uses the Net Sales to get the actual retail sale for one product and calculates the retail value of all products on the plan. Its formula is:

$(\text{Product Net Sales} / \text{Product Units Sold}) * \text{Product Quantity on Plan}$

Product Sales Actual Profit Margin – This is the actual Profit Margin for this product. Its formula is:

$(\text{Product Net Sales} - \text{Product Cost of Goods Sold}) / \text{Product Net Sales}$

Product Sales Actual Profit Per CuFt – This is the actual Profit Margin for this product per the product cubic feet. This is the actual profit for each product divided by its cubic foot amount. Its formula is:

$(\text{Product Net Sales} - \text{Product Cost of Goods Sold}) / \text{Product Units Sold} / \text{Face Cube}$

Product Sales Inventory Turnover – This is the number of turns of inventory on the plan according to the sales in the chosen time period. Its formula is:

$\text{Product Units Sold} / \text{Product Quantity on Plan}$

Product Sales Projected Gross Margin – This is the Projected Gross Margin for this product. Its formula is:

$(\text{Face Sell Price} - \text{Face Cost}) * \text{Product Quantity on Plan}$

Product Sales Projected Plan Cost – This is the cost of all of this product on the plan. This uses the cost for one product and multiplies it by the number of products on the plan. Its formula is:

$\text{Face Cost} * \text{Product Quantity on Plan}$

Product Sales Projected Plan Retail – This is the retail value of all of this product on the plan. This uses the retail price for one product and multiplies it by the number of products on the plan. Its formula is:

$\text{Face Retail Price} * \text{Product Quantity on Plan}$

Product Sales Projected Plan Wholesale – This is the wholesale value of all of this product on the plan. This uses the sell price for one product and multiplies it by the number of products on the plan. Its formula is:

$\text{Face Sell Price} * \text{Product Quantity on Plan}$

Product Sales Projected Profit Margin – This is the Projected Profit Margin for this product. Its formula is:

$(\text{Face Sell Price} - \text{Face Cost}) / \text{Face Sell Price}$

Product Sales Projected Profit Per CuFt – This is the projected Profit Margin for this product per the product cubic feet. This is the projected profit for each product divided by its cubic foot amount. Its formula is:

$((\text{Face Sell Price} - \text{Face Cost}) / \text{Product Quantity on Plan}) / \text{Face Cube}$

Other Level Functions

The following functions don't fit into the previous categories.

Sequential Number – This is used to create a sequential number. A sequential number is printed for each line of the report.

Column Formulas

Instead of entering a database field for the column, you can enter formulas using fields, constants and the built-in functions.

You can use operations that perform multiplication, division, addition and subtraction. You can use parenthesis to group operations. When database fields or built-in functions are used in formulas, they must be surrounded with “[“ and “]”. So the UPC Code database fields when used in a formula would be “[UPC Code]”. Don’t worry about the capitalization of letters in database field names or in the built-in functions.

Let’s look at some examples, entered exactly as it should look in the “Field” cell:

[Width] * [Height]

This is the width of the current face multiplied by the height of the current face. This gives us the area of the face. Here it is used in a report.

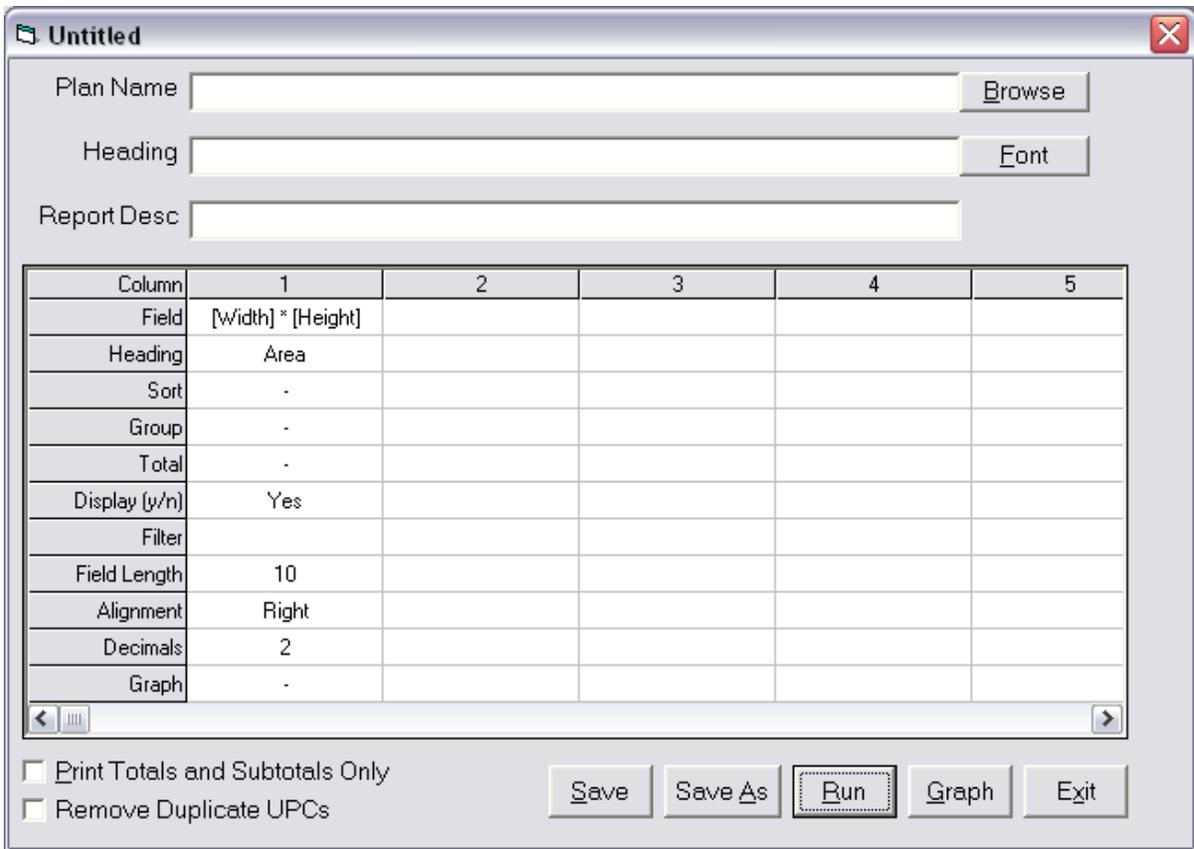


Figure 26. Using a Formula

In the “Field” cell, you can see the “[Width] * [Height]” formula. The heading was changed to “Area” and the justification was changed to “right” justify.

When the report is run, it will look like this:

Area

194.35
194.35
164.70
164.70
63.92
63.92
60.02
60.02
81.00
81.09

Figure 27. The Result of the Formula

Since the width and height are in inches or cm, each figure represents square inches or square cm.

If we want to express the result in terms of square feet instead of square inches, you can divide the width and height by 12 so they represent feet and then multiply them together. The formula would be:

$$[\text{Width}] / 12 * [\text{Height}] / 12$$

You could also use:

$$[\text{Width}] * [\text{Height}] / 144$$

We've done it both ways to compare and put it next to the original formula giving square inches.

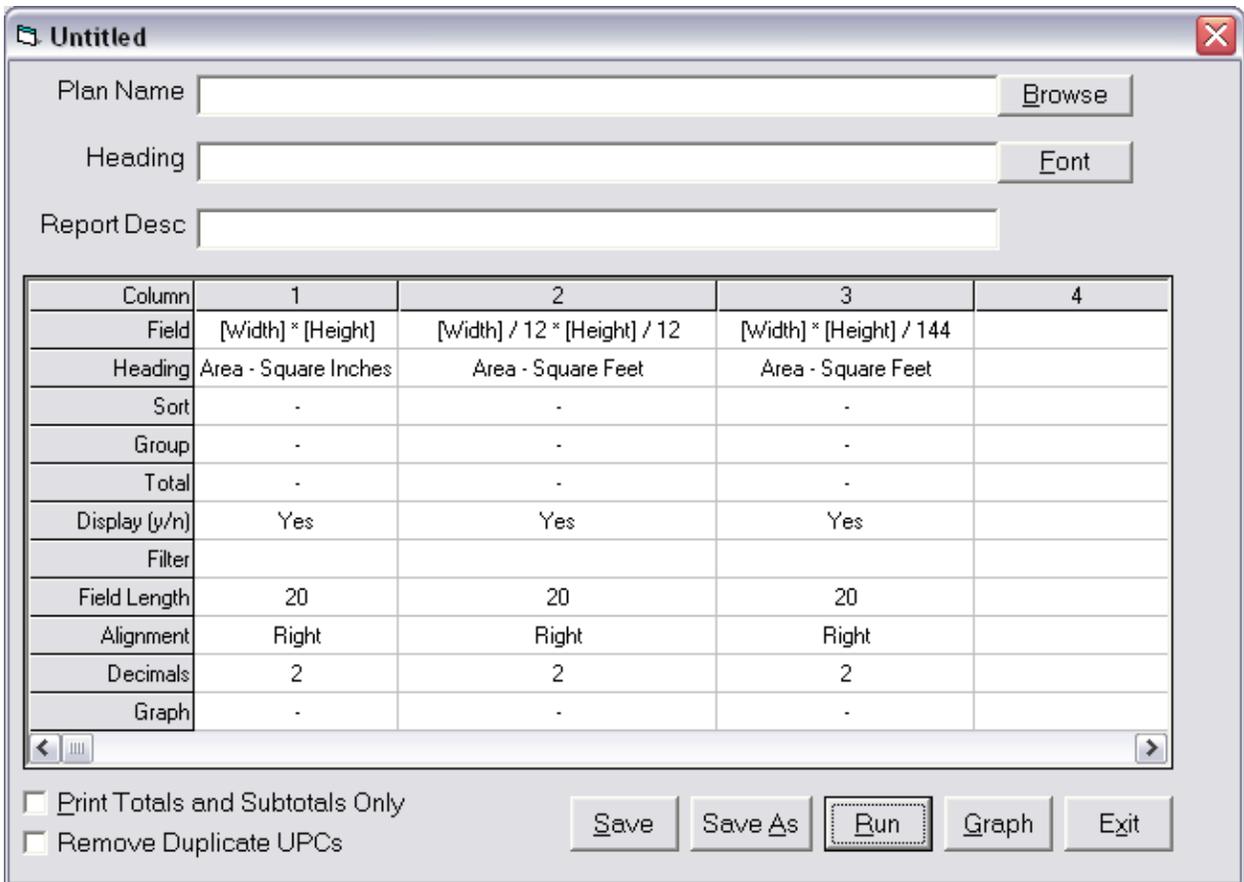


Figure 28. Getting Square Feet from Square Inches

Notice the original “width x height”, and then 2 ways to get square feet. When run, the report looks like:

Area - Square Inches	Area - Square Feet	Area - Square Feet	Area - Square Feet
194.35	1.35	1.35	1.35
194.35	1.35	1.35	1.35
164.70	1.14	1.14	1.14
164.70	1.14	1.14	1.14
63.92	0.44	0.44	0.44
63.92	0.44	0.44	0.44
60.02	0.42	0.42	0.42
60.02	0.42	0.42	0.42
81.00	0.56	0.56	0.56

Figure 29. The Comparison of Square Inches to Square Feet

Using Parenthesis in Formulas

Parenthesis can be used to group expressions together in a formula.

$([\text{suggested retail}] - [\text{cost}] / [\text{suggested retail}]$

This formula uses parentheses to group the subtraction operation so it's done first. That result is then divided by the "suggested retail" field.

Here are some basics to creating reports.

Include UPC Code

First, since the report goes face by face through the plan, you will probably want to display the UPC Code to identify the face. And you will probably want to sort by the UPC Code as well.

Remove Duplicates or Not

For reports, you have a major choice of displaying each face or just a single UPC Code, removing duplicate UPC Codes from the report. This is useful since most other information (like width, cost) about each face with the same UPC Code is also the same.

In this next report, we display each face and where there are multiple faces of the same item, all faces are displayed.

UPC Code	Width
111113-5101	11.30
111113-5101	11.30
111113-5101	11.30
111113-5101	11.30
125875-5073	9.40
125875-5073	9.40
131300-0202	6.46
131300-0202	6.46
131300-0202	6.46
131300-0202	6.46
160002-6010	7.57
160002-6010	7.57
160002-6010	7.57
160002-6010	7.57

Figure 30. A Report with All Faces

You can see there are 4 faces of UPC “111113-5101”, 2 faces of “125875-5073” and so on.

In this next report, we check the “Remove Duplicate UPCs” and the report will look like:

UPC Code	Width
111113-5101	11.30
125875-5073	9.40
131300-0202	6.46
160002-6010	7.57

Figure 31. Report with Each Item Once

The report is much shorter, each UPC Code is listed only once. When you use the “Remove Duplicate UPCs” feature, make sure the report is sorted by the UPC Code.

Notice that the value in the “Width” column doesn’t change when duplicates are removed.

Let’s extend this example and individually total up the widths of all items.

We’ll do this by having a subtotal grouping on the UPC column and totaling the Width column. The Field Grid will look like:

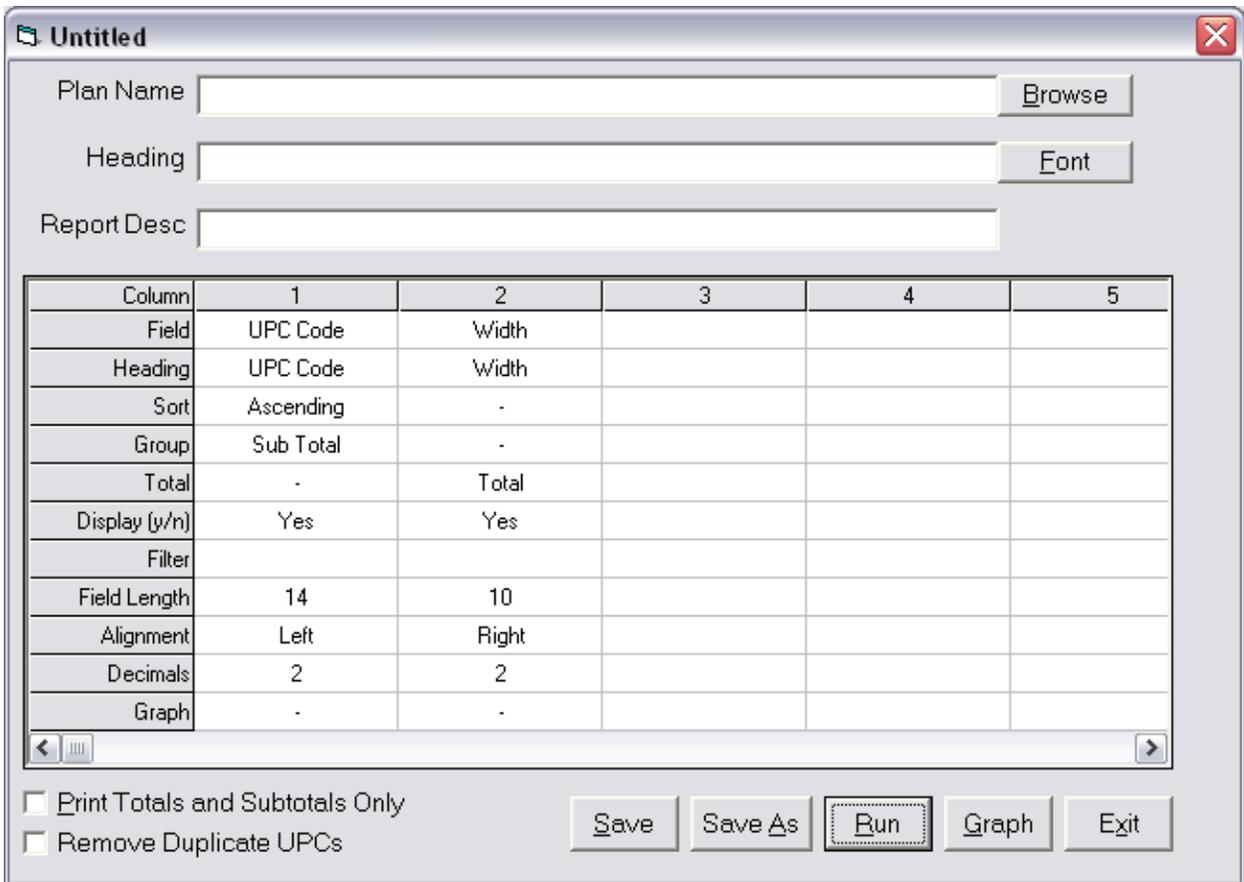


Figure 32. The Field Grid for Subtotaling the Widths

When run, the report looks like:

UPC Code	Width
111113-5101	11.30
111113-5101	11.30
111113-5101	11.30
111113-5101	11.30
***111113-5101	45.20
125875-5073	9.40
125875-5073	9.40
***125875-5073	18.80

Figure 33. The Subtotalled Report

The individual faces are shown on the report with a subtotal for each UPC Code. The subtotal represents the total width of all similar items on the plan.

If you remove duplicates from the report and wish to get a total width for all UPC Codes on the plan, you would use of the built-in functions. The function to use is the “Face Width On Plan” function. It gives you the total width of all faces of similar items on the plan. So when the report is run and the first line of the report is UPC Code “111113-5101” (as it is in the above example), the “Face Width On Plan” function will give you the total width of all faces with UPC Code “111113-5101”.

Let’s do this report but we’ll remove duplicates and use the “Face Width On Plan” function. Here’s the Field Grid we’ll use.

Column	1	2	3	4	5
Field	UPC Code	Width	[\$Face Width On Plan]		
Heading	UPC Code	Width	Total Width		
Sort	Ascending	-	-		
Group	No	-	-		
Total	-	No	No		
Display (y/n)	Yes	Yes	Yes		
Filter					
Field Length	14	10	12		
Alignment	Left	Right	Right		
Decimals	2	2	2		
Graph	-	-	-		

Figure 34. Using a Built-in Function

We don’t need subtotals on the “UPC Code” column since our “Face Width On Plan” function gives us the subtotal for each group of similar items, so it was set to “No” for the “group”. When run, the report looks like:

UPC Code	Width	Total Width
111113-5101	11.30	45.20
125875-5073	9.40	18.80

Figure 35. Report with Built-in Function

The UPC Codes are listed once. The “Width” column gives the width a single face. The “Total Width” column (which is our built-in function) gives you the total of all faces with the same UPC Code.

The bottom line is that when removing duplicates, you have to decide if information is for a single facing or all facings on the plan and use the appropriate field or built-in function.

Let's look at the included reports to get an idea of how they work and how to build reports.

Product Listing Report

We'll start with the Product Listing Report. Here's what one looks like:

Shelf #	Key #	Item No.	UPC Code	Description	Faces	Side	Stk	Hook
0	1	15528	714630-15528	Self Fastner Bib	1	1	70	12
0	2	15528	714630-15528	Self Fastner Bib	1	1	70	12
0	3	15528	714630-15528	Self Fastner Bib	1	1	70	12
4	4	14000	345001-4000	LOL Margarine Sticks	1	1	8	0
4	5	14000	345001-4000	LOL Margarine Sticks	1	1	8	0
4	6	14000	345001-4000	LOL Margarine Sticks	1	1	8	0
4	7	14000	345001-4000	LOL Margarine Sticks	1	1	8	0
4	8	14000	345001-4000	LOL Margarine Sticks	1	1	8	0
4	9	14000	345001-4000	LOL Margarine Sticks	1	1	8	0
0	10	15528	714630-15528	Self Fastner Bib	1	1	70	12
0	11	15528	714630-15528	Self Fastner Bib	1	1	70	12
0	12	15528	714630-15528	Self Fastner Bib	1	1	70	12
4	13	14000	345001-4000	LOL Margarine Sticks	1	1	8	0
4	14	14000	345001-4000	LOL Margarine Sticks	1	1	8	0
4	15	14000	345001-4000	LOL Margarine Sticks	1	1	8	0
3	16	6010	160002-6010	Honey Nut Cheerios	1	3	1	0
3	17	6010	160002-6010	Honey Nut Cheerios	1	1	5	0
3	18	6010	160002-6010	Honey Nut Cheerios	1	2	1	0
3	19	6010	160002-6010	Honey Nut Cheerios	1	2	1	0

Figure 36. Product Listing Report

It identifies each facing according to its Key Number. It's sorted by Key Number and displays the UPC Code and item description. Also displayed is the side onto which the item is placed and the number of items stacked in the facing. If the facing is on a peg, then the hook length is also displayed.

Here's the Field Grid for this report:

Column	1	2	3	4	5	6	
Field	[\$shelf nbr]	[\$face key nbr]	Item Code	UPC Code	Item Name	[\$face key qty]	[\$fa
Heading	Shelf #	Key #	Item No.	UPC Code	Description	Faces	
Sort	-	Ascending	-	-	-	-	
Group	-	-	-	-	-	-	
Total	-	-	-	-	-	-	
Display (y/n)	Yes	Yes	Yes	Yes	Yes	Yes	
Filter							
Field Length	10	10	10	15	30	6	
Alignment	Right	Right	Left	Left	Left	Right	F
Decimals	0	0	0	2	2	0	
Graph	-	-	-	-	-	-	

Figure 37. Definition for the Product Listing Report

Let's look at each column on the report.

Column 1. Shelf #

This displays the shelf number on which this face resides. We use a built-in function, "Shelf Nbr" that displays the shelf number for a face. The function has a dollar sign in front of it and is surrounded by [] characters.

Column 2. Key #

This displays the Key Number for the face. We use the built-in function of "Face Key Nbr" to display the face's Key Number. The report is sorted by this column so the "Sort" row is set to "ascending".

Column 3. Item Code

This is a field from the item database, the "Item Code" field.

Column 4. UPC Code

This is a field from the item database, the "UPC Code" field.

Column 5. Item Name

This is a field from the item database, the “Item Name” field.

Column 6. Faces

This displays the number of faces assigned to this Key Number. It is used when the “Combine Key Number” option is selected in Shelf Logic. If the option is not selected, as it is in this example, then the Faces column will always be “1”.

We use the built-in function “Face Key Qty”. which gives us the number of faces for the Key Number. This will change automatically if the “Combine Key Number” option is turned on.

Column 7. Side

This column tells us on which side the face is turned. “1” is fro the front view, “2” for the side view and “3” fore the top view. We use the built-in function “Face Side” to give the current side for the face.

Column 8. Stk

This column displays the number of item stacked in this facing. It include the face and all item stacked behind it. We use the built-in function “Face Stack” to give the stack amount for the face.

Column 9. Hook

This column displays the hook length for the face if it is put on a peg hook rather than on a shelf. If the face is on a shelf, the Hook Length will be zero. We use the built-in function “Face Hook” to give the hook length for the face.

Space Analysis Report

The next report we'll look at is the Space Analysis Report. Here's what it looks like:

Facings	UPC Code	Item Name	Qty	Linear Feet	Square Feet	Cubic Feet	Percent of Cubic Total
9	345001-4000	LOL Margarine Sticks	72.00	3.65	1.48	1.38	4.90
6	714630-15528	Self Fastner Bib	420.00	0.00	4.50	4.46	15.78
4	111113-5101	All Detergent	4.00	3.77	2.73	1.45	5.12
4	131300-0202	Milkbone	16.00	2.15	1.63	1.32	4.69
4	160002-6010	Honey Nut Cheerios	8.00	2.79	0.99	0.89	3.16
4	702300-0071	Tidy Cat Box Liners	36.00	1.49	0.86	0.84	2.96
4	761744-6068	Stanley Saw Glide	48.00	0.00	5.67	5.67	20.05
3	477528-7627	Stanley Pipe Wrench	24.00	0.00	4.50	4.50	15.92
2	125875-5073	Glad Handle-Tie	12.00	1.57	0.89	0.84	2.98
2	370000-66897	Pampers Premium	4.00	1.92	2.70	2.12	7.50
2	432893-0427	Coca-Cola Glass Set	2.00	2.37	1.61	1.09	3.86
2	611431-71057	Huggies	6.00	2.03	2.29	2.16	7.63
2	754570-8000	Garelick Organic Mil	2.00	1.01	0.83	0.42	1.49
1	298390-0089	Reeses PB Pie	3.00	0.75	0.56	0.43	1.51
1	298390-0090	Snickers Pie	3.00	0.75	0.56	0.43	1.51
1	754571-3800	Garelick Organic 2%	3.00	0.33	0.26	0.26	0.94
						28.26	

Figure 38. The Space Analysis Report

This report tells you how much space is used by each product on the plan. All faces are summed up together on one report line. The report displays the number of items, the linear feet taken up on shelves, the square footage and cubic footage of each product.. The final column gives the percentage of this product to the total cubic feet of all products on the plan.

Here's the report definition as seen in the Field Grid.

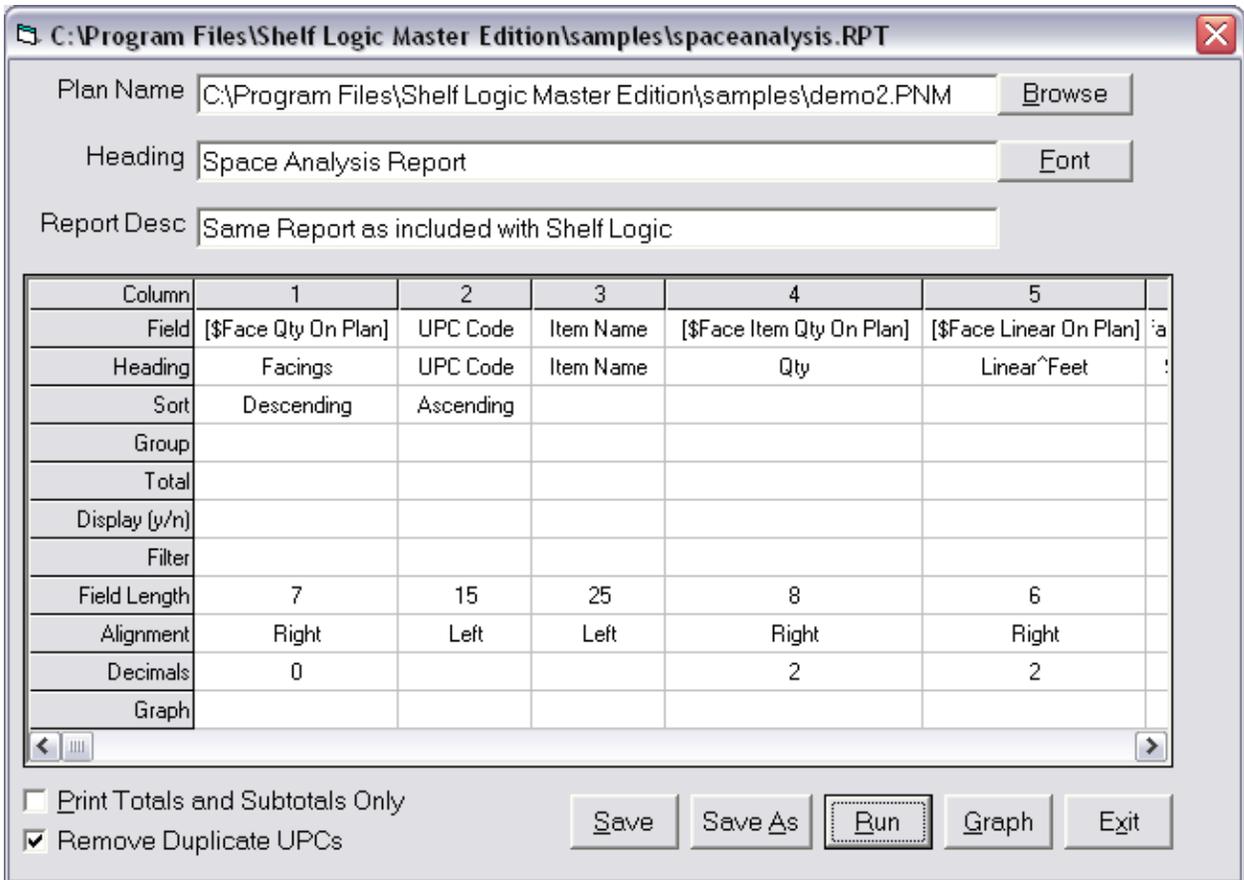


Figure 39. Space Analysis Report definition screen

Let's look at each column of the report in detail.

Column 1. Facings

The first column tells you the number of facings for this UPC Code. This is done using the built-in function “Face Qty On Plan”, which gives you the number of faces on the plan for a particular UPC Code. *Note:* this is the number of facings, not the total number of product stacked behind a facing.

The report is sorted, in descending order, by this column. This way, the products with the most facings are seen first.

Column 2. UPC Code

This is a field from the item database, the “UPC Code” field. The report is sorted by this column, but sorted within the facing sort.

Column 3. Item Name

This is a field from the item database, the “Item Name” field.

Column 4. Qty

This gives you the total number of products on the plan for this UPC Code. This of the number of facings multiplied by the number of items stacked in each facing. This uses the built-in function “Face Item Qty On Plan”, which gives you the total qty on the plan for a particular UPC Code.

Column 5. Linear Feet

This column tells you the number of linear feet taken up by all product with this UPC Code. Linear feet means the number of feet touching the shelf, if the item is on a shelf. If you have a one foot wide item on a shelf and another item stacked on top of this item, then the linear feet is 1, since only one foot of the item is touching the shelf. If the item were sitting on the shelf next to the first one, instead of on top, there would be 2 linear feet.

The widths of items on peg hooks are always included in linear feet.

To get the total linear feet on the plan for this UPC Code, we use the built-in function “Face Linear On Plan”.

Note: If you notice the heading for this column is “Linear^Feet” The “^” character skips down to the next line so you get a 2 line column heading.

Column 6. Square Feet

This column displays the total square footage of all faces for this UPC Code. Unlike the Linear footage, faces don’t have to be touching the shelf to be counted. To do this we use the built-in function “Face Area On Plan” which gives us the total square footage of all faces with this UPC Code.

Column 7. Cubic Feet

This column displays the total cubic footage of all faces for this UPC Code. To do this we use the built-in function “Face Cube On Plan” which gives us the total cubic footage of all faces with this UPC Code.

Important Note: When doing functions with cubic feet, we are always dealing with all products, not just faces. The Linear and Square footage function operate on faces only. With Cubic feet, faces AND all items stacked behind the faces are used for the calculation.

Column 8. Percent of Cubic Total

This column displays the percentage that this UPC Code takes up compared to the total of all items on the plan. For this we use a formula that uses built-in functions.

$$([Face\ Cube\ On\ Plan] / [Plan\ Face\ Cube]) * 100$$

The formula is the ratio of cubic feet for this UPC over the total of all UPCs.

The “Face Cube On Plan” function gives us the total cubic feet of all item of this UPC Code. This is divided by the “Plan Face Cube” function, which gives us the total cubic feet of all items in the plan. The result of this is then multiplied by 100 to get a percentage.

Financial Analysis Report

Our final report is the Financial Analysis Report, which gives you potential profits from our planogram. Here's the Financial Analysis Report:

Financial Analysis Report											
Category	UPC Code	Item Name	Qty	Suggested			Inv Cost	Retail Value	Profit	Percent of Space	Percent Of Profit
				Cost	Retail	Margin					
baby	370000-66897	Pampers Premium	4	6.50	12.99	49.96	26.00	51.96	25.96	7.50	1.65
baby	611431-71057	Huggies	6	6.50	12.99	49.96	39.00	77.94	38.94	7.63	2.48
baby	714630-15528	Self Fastner Bib	420	1.50	2.99	49.83	630.00	1255.80	625.80	15.78	39.80
***baby			430				695.00	1385.70	690.70	30.91	43.93
grocery	160002-6010	Honey Nut Cheerios	8	1.65	3.29	49.85	13.20	26.32	13.12	3.16	0.83
grocery	298390-0089	Reeses PB Pie	3	3.50	6.99	49.93	10.50	20.97	10.47	1.51	0.67
grocery	298390-0090	Snickers Pie	3	3.50	6.99	49.93	10.50	20.97	10.47	1.51	0.67
grocery	345001-4000	LOL Margarine Sticks	72	1.15	2.29	49.78	82.80	164.88	82.08	4.90	5.22
grocery	754570-8000	Garelick Organic Mil	2	1.85	3.69	49.86	3.70	7.38	3.68	1.49	0.23
grocery	754571-3800	Garelick Organic 2%	3	0.80	1.89	57.67	2.40	5.67	3.27	0.94	0.21
***grocery			91				123.10	246.19	123.09	13.51	7.83
hardware	477528-7627	Stanley Pipe Wrench	24	12.50	25.00	50.00	300.00	600.00	300.00	15.92	19.08
hardware	761744-6068	Stanley Saw Glide	48	7.00	14.00	50.00	336.00	672.00	336.00	20.05	21.37
***hardware			72				636.00	1272.00	636.00	35.97	40.45

Figure 40. The Financial Analysis Report

The report is sorted by category and then by the UPC Code. Each category is grouped and has a subtotal displayed for several columns. For each UPC Code, there's the total number on the plan, it's cost and retail, and the potential profit. There is also a comparison of this UPC to the total plan based on percent of space used and percent of profit compared to the other profits.

Here's the Field Grid for this report.

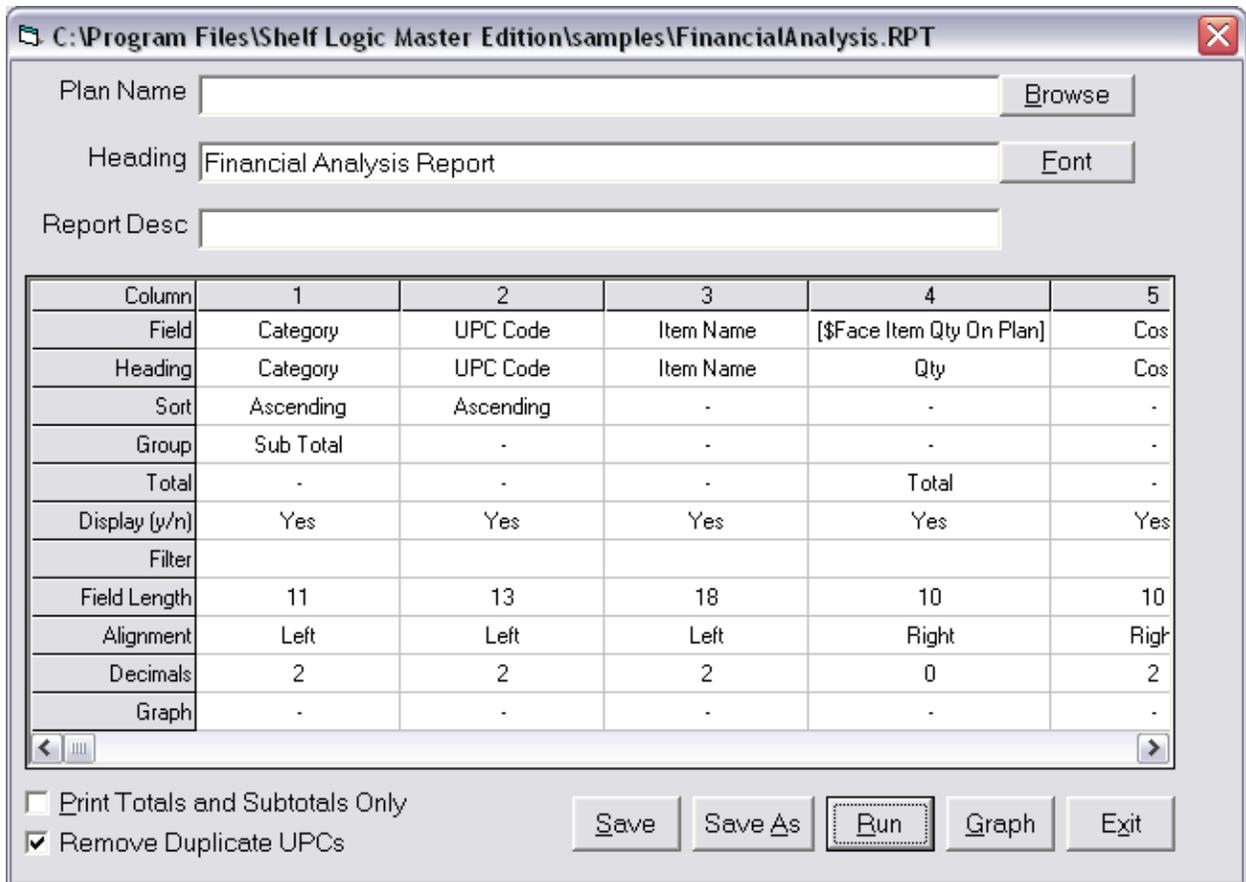


Figure 41. Financial Analysis Report in the Field Grid

Let's look at each column of the report in detail.

Column 1. Category

This is a field from the item database, the "Category" field. The report is sorted by this column, and there is a group break with a subtotal displayed.

Column 2. UPC Code

This is a field from the item database, the "UPC Code" field. The report is sorted by this column, but sorted within the category sort.

Column 3. Item Name

This is a field from the item database, the "Item Name" field.

Column 4. Qty

This column gives the total quantity of products with this UPC Code. We want the total of all items, not the nbr of faces. For this we use the built-in function "Face Item Qty On Plan", which gives us the total number of items on the plan for this UPC Code.

Column 5. Cost

This is a field from the item database, the “Cost” field.

Column 6. Suggested Retail

This is a field from the item database, the “Suggested Retail” field.

Column 7. Margin

This column gives us the profit margin for this UPC Code. It is a formula field:

$$([\text{Suggested Retail}] - [\text{cost}]) / [\text{Suggested Retail}] * 100$$

The “Suggested Retail” minus the “Cost” gives us the profit dollars. When divided by the “Suggested Retail” field, it gives us the retail profit margin. This is then multiplied by 100 to get a percentage.

Column 8. Inv Cost

This column gives us the total cost of all product with this UPC Code. For this we use the built-in function “Face Cost On Plan”, which gives us the cost of all similar items on the plan.

Column 9. Retail Value

This column gives us the total retail value of all product with this UPC Code. For this we use a formula which multiplies the total number of items for this UPC Code by the retail cost of an item. For this we use a built-in function “Face Retail On Plan”, which gives us the retail price of all similar items on the plan.

Column 10. Profit

This is the potential profit for all items on the plan with this UPC Code. This is done using a formula with two built-in functions. We use the “Face Retail On Plan” function which is the total retail value of all similar items on the plan and subtracts the “Face Cost On Plan” function, which is the total cost of all similar items on the plan. The result is the profit amount for all items having this UPC Code.

Here’s the formula:

$$[\text{\$Face Retail On Plan}] - [\text{\$Face Cost On Plan}]$$

Column 11. Percent of Space

This gives us the amount of cubic feet taken up by all similar items as compared to the total cubic feet of all items on the plan. This is the percentage of space taken up by this UPC Code. For this, we use a formula that compares the space used by this UPC with all items. The “Face Cube On Plan” function gives us the total cubic feet taken up by all items with this UPC Code. This is divided by the “Plan Face Cube” function, which is the total cubic feet of all items on the plan. This is then multiplied by 100 to get a percentage.

Here's the formula:

$$([\text{\$Face Cube On Plan}]/[\text{\$Plan Face Cube}])*100$$

Column 12. Percent of Profit

This gives us the amount of profit of this UPC Code compared to the total profit of all items on the plan. For this we use a formula with several built-in functions. First we get the profit for this UPC Code by taking the total retail value of this UPC Code (the "Face Retail On Plan" function) and subtracting the cost of this UPC Code (the "Face Cost On Plan" function). Then we get the total profit by taking the total retail value of the plan (the "Plan Retail" function) and subtracting the total cost of all items on the plan (the "Plan Cost" function). We then divide the profit for this UPC Code by the total profit and multiply by 100 to get a percentage. Here's the formula:

$$(((\text{\$Face Retail On Plan}] - [\text{\$Face Cost On Plan}])/([\text{\$Plan Retail}] - [\text{\$Plan Cost}]))*100$$