

Picture Framing Calculator

Core Program made to easily append modules made later on.

At point-of-sale.

- New invoice opened with number and date automatically assigned
- Required fields for entering name and phone number
- Optional fields for address and email address
- Optional fields corresponding to which could have check boxes corresponding to:
 - Does the item require a mat?
 - Is the item being framed?
 - Does the item require glass/acrylic?
 - Is the item being stretched?
 - Is a caption required?
 - Is the item being laminated?
 - Other extras?

For the checked items a drop down menu could become available for them requesting more fields which are explained in more detail for each below. There will be the option for also opening more items with the same field requests in each.

For the fields that will need to become available and their purpose for each of the above main field items see following. Note that prices are calculated for each item, these prices will only be displayed on the screen while the printed invoice will only show the total

“Does the item require a mat?” - A mat is a border that goes around the item. *Note that this field is special in that the outer size of the mat becomes the default size assumed for all other options selected whereas if the “Does the item require a mat?” box is unchecked, the default size for all other items would be as the size entered under “item to be framed” or if not being framed either then elsewhere.*

If checked yes, a box opens to enter the “1st mat” number. The size dimensions for mats would be calculated the same as for mouldings only that the width of the mat is nominated by the customer. The most common width sizes are 50mm and 70mm and so a dropdown could open and request either 50mm, 70mm or custom with a box available to enter the custom size. The custom size should be a request for top, bottom and side margins. As with moulding, again + some arbitrary number scaling to outer mat size for labour cost for now.

It's also the case that customers often get more than one item framed within the same frame. This just adds a labour cost of say \$3 for now, for each extra window that needs to be cut. Also, the border widths between windows can vary.

The option needs to be given to add more mats, ie a request whether the customer would like second and later third mats etc. Each additional mat would default to the outer size of the first which is layed on the item first as well as the added labour cost of the first if more than one window has been elected for it. For each additional mat, a mat number is likewise requested and the material cost calculated from the outer dimension of the first.

The size of the inner window of each consecutive mat will be a larger dimension to the one before it though. Typically this is an addition of 6mm to length and breadth to the one before but it's not uncommon for a customer to want to customise that and so a drop down here where the options are standard or custom with a box to enter size for custom. Rather than a length * breadth request for the custom field though, it's more user friendly to simply ask for a margin difference. The typical margin difference for example would be 3mm so whatever custom margin they elect just involves

adding 2*margin difference to length and breadth of the previous mat for inner cut calculation. Using a margin measure instead also limits the possibility of error sizes, especially if negative numbers cannot be entered.

Also later there will be some options available here for the customer to select from a range of decorations which are just groove designs cut into the mat for graphic effect which will each have their own size dependent labour costs associated with them. Don't worry about this now but just keep it in mind for it to be added later at each mat iteration.

Clearly the labour function will need to be calculated for each mat.

Most commonly a customer only wants one mat but 2 or 3 is not uncommon. A request for 4 or more is rare but the option should be there for up to 5 or so.

Where mats are concerned, a customer may also want a caption which usually requires an added window to be cut but in the case of a plaque, may not. So maybe "is an extra window for a caption required?" should be requested.

Finally an optional drop down requesting what sort of mounting down is requested. The options are adhesive f/core, hinged, just backing. The mounting down costs depend on which of the 2 are chosen and the size of the mount window. If there is more than one window there is a charge for mounting the items for each one.

"Is the item being framed?" – if checked, a box opens for the operator to enter the number which will get checked against data lists for moulding dimensions (mm) and price per metre of that particular moulding. A function will then take that price/1000 to use a per millimetre price and then calculate the length of moulding required. With all units in mm, the length of moulding required will be $2(\text{length} + \text{breadth})$ of the item to be framed + $8(\text{moulding width}) + 100\text{mm}$ for play. The moulding dimensions and overall size of the frame can then be used to calculate the specific labour cost. For now we'll just say + some arbitrary number for labour that just scales to length of moulding for now but I'll replace that with a function also using height and width a little down the track.

A request for the size of the item to be framed will also be made here if not previously given because the customer is not framing with a mat.

An optional drop-down request for type of mounting down will also be needed here if no mat was selected.

"Does the item require glass/acrylic?" - If checked, a dropdown opens to select from ordinary glass, nonreflective glass, standard perspex 2mm, standard perspex 3mm, tru vue glass, museum glass, uv perspex 2mm, uv perspex 3mm.

Size and request for mounting down type will default to that given under "Does the item require a mat?" or if no mat then "Is the item being framed?" or if no frame will otherwise be requested here. A function will calculate cost dependent on glass/acrylic chosen and factor in labour scaled to size.

"Is the item being stretched?" - simply requests the length*breadth size of the item in mm and calculates price using a function of size and labour yet to be confirmed.

"Is a caption required?" - Cost determined by number of words, paper used and type of mounting down requested for the caption. Sometimes people supply their own plaque.

"Is the item being laminated?" same requests and actions as with "Is the item being stretched?"

“other extras?” option to add things that allow for the price of them to be added manually which will be included in the overall price calculation.