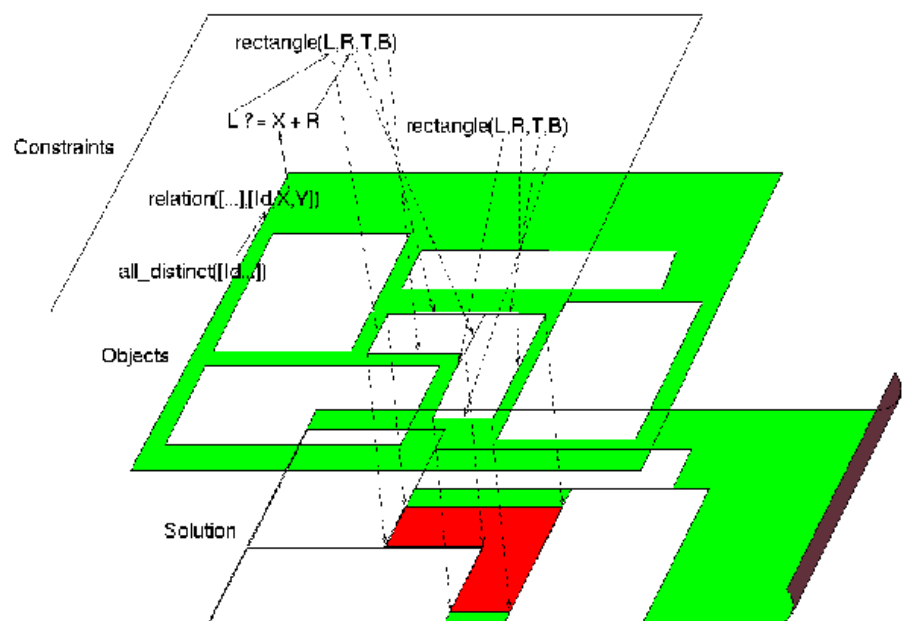


# MASTER PIECE

## Product Description

– Expert Services for Industry –



## Intelligent Estimation and Minimisation of Material Wastage

MasterPiece is a customer facing expert system, combining automation of technical function with strong support for selling. One of the most important aspects of MasterPiece is an optimisation computation to reduce material wastage. Using the latest computing techniques a near optimal cutting plan is generated for both small and large jobs.

MasterPiece supports the merchandising process from first contact with the customer to fitting of the floorcovering, both in the

store and on the road. The system is flexible in the way it can be used, according to the requirements of the enduser organisation, which may include:

- At the retail store on the salesman's desk and/or in the back office
- On a hand held tablet PC in the customer's home during the 'measure-up' visit
- At a central administration office and/or call centre.

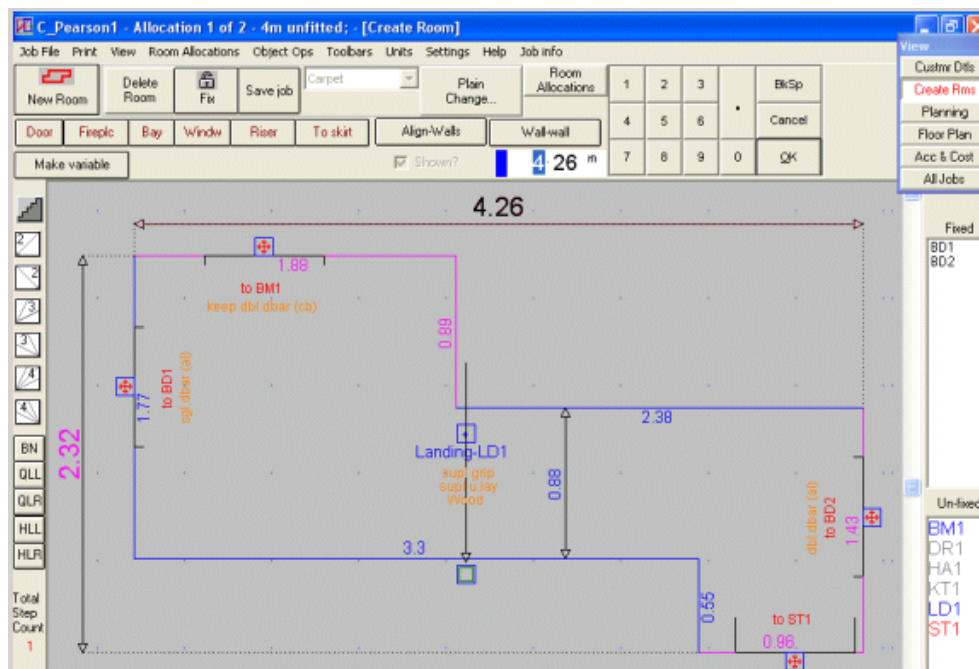
### Illustrating Using MasterPiece

MasterPiece has a number of modules which include:

1. Creating The Rooms
2. Cutting Plan Optimization
3. Floor Plan
4. Estimate Creation

### 1. Creating the rooms

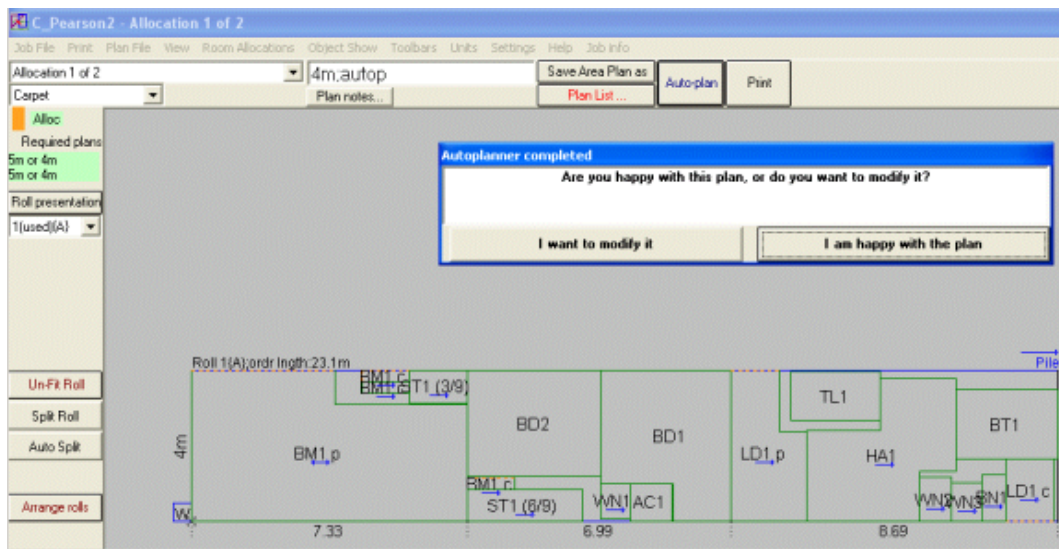
MasterPiece enables rooms to be drawn freehand and then measurements, pile directions, room features and fitting requirements to be captured. All this information can be gathered while the estimator is in the room, before moving on to the next room.



## 2. Cutting Plan Optimisation

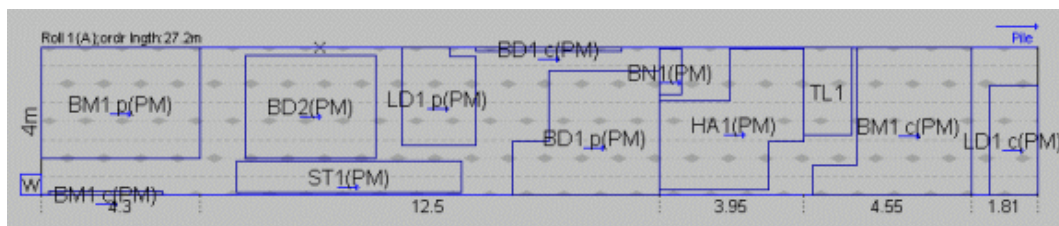
MasterPiece supports both interactive and automatic generation of cutting plans. Planning can be to one or many rolls of material, of the same or varying widths. The user is able to control seam positions and also the extent to which a flight of stairs can be cut into smaller runs to reduce wastage.

The integrated optimisation program calculates a near to optimal solution in about a minute, even for complex carpeting requirements such as a whole house or a hall-stairs-landing. On average a 4 compared to manual planning with pencil and paper. The picture below shows a plan created by the autoplanner.



The autoplanner is made visual to help convince the customer that the estimate will include the minimum amount of material, therefore at lowest cost to what your competitors might offer.

Patterned carpet introduces additional constraints to the planning process, to account for pattern matches, pattern line ups and centring of the motif down a flight of stairs. The picture below shows a plan for a patterned material.



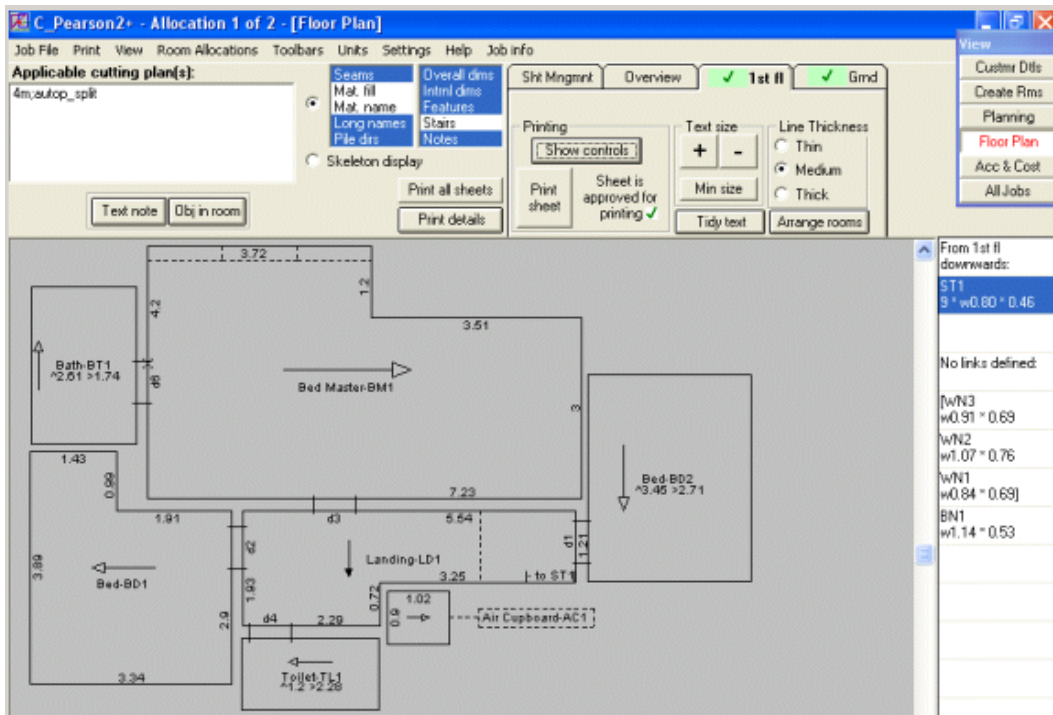
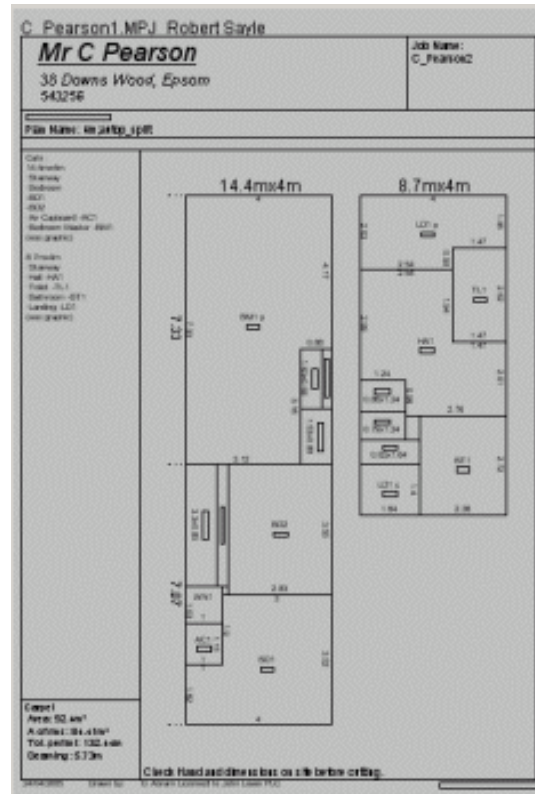
The task of cutting up the carpet is made easier for the fitter by closing the gaps between rooms, and using a portrait presentation, as shown in this picture.

This can also be printed as a reverse side view to make cutting from the reverse side of the material easier.

### 3. Floor Plan

The floor plan shows an architect's view of the rooms to be fitted. This is useful for showing the customer where any seams will fall and the way the pile will run. It is also provided to the fitter with the fitting instructions.

The floor plan below shows a job which has been planned for economy, rather than to achieve matching piles in adjacent rooms.



## 4. Estimate Creation

The picture below shows a cost breakdown that would be shown to the customer, typically prior to an estimate being saved and printed.



Item	Req	Price	Total
Pendle Twist (Mocha)	92.40	£22.00	£2032.80
Janelle Crumb Rubber Underlay Blue	84.36	£5.25	£442.89
Heavy Paper Underlay	9.10	£0.30	£2.73
Coir Natural 17mm Roll 100m wide	0.70	£29.00	£20.30
To supply and fit 6mm plywood	2.74	£14.50	£39.83
To supply & fit Single Edging, Copy Brass, 1m	5	£5.10	£25.50
To fit Coir door matting	0.70	£4.50	£3.15
To fit carpet in flat area (Carpet)	63.84	£3.00	£191.52
To fit carpet on hall, stairs & landing (Carpet)	28.56	£6.00	£171.36
To move furniture and replace on completion	4	£17.50	£70.00
To uplift existing carpet	79.36	£1.10	£87.30

Total £3178.62

Save estimate

## MasterPiece – Competitive Advantages

### Sale clinched during visit more often

- Printed estimate is provided in the home, avoids delay between the measure and estimate arriving with customer.
- The autoplaner is visual and convinces customer that the most efficient plan has been generated.
- Different options can be rapidly evaluated (different materials, with/without seam, different materials for particular rooms).

### More competitive estimates

- Plans with less wastage (on average 4% less carpet, 9% less underlay and gripper).

### Reduced occurrence of mistakes

- Trials have shown that 70% of estimator errors are avoided and the liability for any errors can be clearly established.

### Time saved through reduced effort

- Reduced planning time.
- Reduced costing time.
- Automated instructions to fitter.
- No paper forms to fill.
- Estimators can receive their tasks by email or internet.

**Improved selling when customer visits the store**

- A rough estimate can be generated for a customer who brings no measurements, meeting the customer's expectations.
- Firm estimate based on customer's own measurements can be generated by a salesman without an estimator's skills. This not only does this improve customer service but also can save the expense of visiting the customer.
- Revisions can be done while with customer or on telephone, even if the estimator is not present.

**Improved administration in store with reduced effort**

- A complete record of each job is immediately accessible, for instance when customer telephones or visits.
- Consistent plans and costing information available throughout the organisation.

**Saved training time and effort**

- A new estimator is ready for operation in a couple of weeks, whereas it typically this would takes 6 months.
- Salesmen from non carpet retailers become expert in carpet estimation processes with minimal training.
- Estimators can be chosen for their customer oriented skills rather than their technical skills.

**IF Computer GmbH**

IF Computer GmbH has been a preferred partner for resource allocation and optimisation software for many years. Use of the latest software technologies enable us to deliver to you flexible software solutions to benefit the efficiency and competitive advantage of your own company or service. World-wide projects for household name companies underly our success.

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