

The maximum sheet size we can laser-cut is 900 x 600mm. The materials listed below are available in this sheet size, unless stated otherwise. Unlike metal-etching you don't have to use a minimum area of material or fit to a set size like A4; we only charge for the material required for the job.

Please note that the thicknesses of all materials are **nominal** and in most cases do vary slightly from sheet to sheet. The sheet thicknesses below are up to the maximum we can laser-cut, but we can surface etch into any thickness. With thicker materials, such as 4mm acrylic or MDF, the cut edge will not be completely vertical but slightly chattered.

We can apply "double sided" adhesive tape (commercial strength) to most sheet materials before cutting – please let us know if you wish us to quote for this option.

Where materials are listed as "available to order", we may have to charge for the cost of a full sheet of material if it isn't something we expect to use again.

We can supply sample pieces for most of the following materials - please send a self addressed envelope with large size stamp.

## Plastics:

### **Acrylic** (trade name - Perspex).

We usually have clear acrylic in stock in 0.5, 0.8, 1, 1.5, 2, 3, 4 and 6mm and white acrylic in 2, 3 and 5mm. (Other colours and thicknesses are available to order)

Use good quality solvents, such as EMA Plastic Weld, Pheonix Precision Superweld or Plastruct Liquid Glue (as sold with the Plastruct ABS shapes in many model shops). SuperGlue (cyanoacrylate) can be used, but unless you have SuperGlue specifically designed for use with acrylic, it can produce a white "film" over the surface.

### **Laserable-plastic** (trade name - Rowmark)

We use this material for our standard range of windows, doors, brackets and signs etc.

It is similar in appearance to Styrene (plasticard) but is a "tougher" material and will require longer for solvents to take effect.

We recommend using solvents such as EMA Plastic Weld, Pheonix Precision Superweld or Plastruct Liquid Glue (as sold with the Plastruct ABS shapes in many model shops).

Alternatively SuperGlue (cyanoacrylate) can be used.

White laserable-plastic is available in 0.5, 0.75, 1, 1.5 and 3mm.

Black laserable-plastic is available in 0.5, 0.75, 1 and 1.5mm

Other colours are available to order in 0.8 and 1.5mm

**Mylar** is an opaque beige plastic material, available in 190, 250, 350 and 500 microns (0.19 – 0.5mm)

Very fine detail can be cut in the 190, 250 and 350 micron sheets, so is ideal for small scale detailing and overlays for coach sides etc. This is the material we use for our range of brick and stone detailing strips and for our N scale valances.

It is designed to be used for making stencils, so is not affected by solvents. We recommend using a good quality spray adhesive, such as 3M Craft Mount, or SuperGlue (cyanoacrylate). Bostic, UHU or Humbrol Polystyrene Cement (tube) will also glue it to itself or other plastics. Alternatively, we can apply "double-sided" adhesive tape to the back before laser-cutting.

### **Painting plastic components:**

If required, any sticky residue created by the laser-cutter process can be removed with warm soapy water, or by lightly sanding with fine "wet & dry" paper. We recommend spraying with an acrylic based primer, such as Halfords car primer or Hycote Plastic Primer. You can then use your preferred paint - either by hand or using spray paints from an aerosol or airbrush.

## Papers Card and board:

**Coloured paper and thin card.** We keep in stock A1 sheets of paper (usually 135g - approx 0.18mm) and card (usually 270g card - approx. 0.35mm) in Graphite Grey, Mocha Brown, Scarlet Red (all as used for our range of self-adhesive tiles and slates) black and white, plus 500 x 650mm sheets of Windsor and Newton pastel paper (approx. 0.25mm) in Terracotta (as used for our self-adhesive tiles) and Smoke Grey. When cut the edges can have a dark colourisation – not usually noticeable on papers and thin card, except for with white and pale colours, which are difficult to keep clean.

**Laserboard** by PolyBAK is a durable polymer-impregnated Kraft board available in 0.6 and 0.9mm sheets. It has a smooth surface, mottled dark brown in colour; it's flexible with excellent strength and moisture resistant. It takes paint well (you may want to use a primer as a base coat) and it laser-cuts well with very little, if any, scorching. (most importantly it has no added formaldehyde, unlike other imitation laserboards)

**Mount card** (approx. 1.3mm) We stock this picture framing card in white and various shades of cream. We usually also have a choice of other colours available. When laser-cut the edges will have a golden brown colourisation.

**Oiled Manilla Card.** This stencil card laser-cuts and folds along laser-etched lines beautifully so is ideal for small scale modelling. We use it for our N scale greenhouse kits, picnic tables and furniture kits. It varies in colour from a mottled light buff to a dark mahogany brown.

We can also laser-cut other types of paper and card, including **Dutch grey board** (sheet size 640 x 450mm in 1 and 2mm), but this cuts with a very black sooty edge.

## Timbers:

**Balsa sheet** is available to order in 0.8, 1.5, 2.4, 3.2 and 5mm, with a maximum sheet size of 100 x 900mm. When cut the edges will have a dark colourisation and may be "sooty". Glues with PVA (wood glue)

**Bass Wood** is available in 0.8, 1.6, 2.4 and 4mm (2, 3, 3.2, 4.8, 5 and 6mm to special order) It laser-cuts beautifully, with a golden non-sooty edge, but is only available in small sheet sizes – please email for further information. Glues with PVA (wood glue).

**MDF** is available in 600 x 900mm sheets in 1.5, 2, 3, 4 and 6mm. 1mm is only available in small sheets. MDF is generally consistent in thickness except for 1.5mm which can vary from sheet to sheet. The cut edge will have a dark colourisation. Glues with PVA (wood glue) and SuperGlue. It isn't suitable for outdoor use or in damp environments.

We use MDF for the building shells of our building kits and is the material we generally use for bespoke building kits. It is an inexpensive sturdy material with a smooth surface, which is perfect for laser-etching brickwork and other surface detail.

**Ply-wood.** We stock Birch Ply in 0.8, 1.5, 2, 3, and 4mm, Poplar Ply in 3 and 4mm, Lite ply in 2 and 3mm. We can also acquire 0.4, 0.6 and 1mm Birch ply to order. When cut the edges will have a golden to dark colourisation which will be "sooty" in the case of thin Birch ply and Lite ply. Glues with PVA (wood glue) We use Birch plywood for our 0 and 00 scale pallets and N gauge sleepers.

**Timber veneers** - approximately 0.5mm thick. Please contact us about the timbers available. Glues with PVA (wood glue) or spray adhesive such as 3M Craft Mount, or we can apply "double sided" adhesive tape to the back before laser-cutting.

We use timber veneer for our cable-drum kits.

Please enquire about any other materials you may want laser-cutting, but bearing in mind we can't laser-cut any metals, glass or Styrene (plasticard) due to the acid it produces.

We can't laser-cut any materials supplied by customers, unless its composition can be verified.