Designed and created by Kevin Inkster (Arbortech's CEO and Founder), our Chaise Lounge was crafted from waste pine. This project plan is only intended as a guide to crafting this piece. Please remember that even though we used pine, any timber or sectional dimensions can be used - it's entirely up to you!

This chaise is a large wood shaping project that results in a striking sculpture which is also a piece of furniture. This shaper blank is simple to prepare and consists mostly of cutting to length and dressing the stock.

The process of making shaper blanks is very informal – even a ruler is hardly needed for this bench as over lengths can simply be shaped away. However, good quality glue lines are important for strong joints; everything else will be tidied up when shaping the wood.

This work sheet shows a basic concept and method of approach. The dimensions given can easily be changed to accommodate your own design ideas. In this example, Pinus Radiata was used, however any species of wood can be used and any sectional dimensions, as along as the final laminate contains the required sculptural mass to shape out your desired form.

First prepare the required timber sections by dressing the stock flat to ensure good glue joints. Note that the six pieces of wood which make up the back of the seat shown at Fig 4. A to F, are finger jointed where they meet in the right-hand corner. For this reason, they should go through the thicknesser together which will guarantee tight finger joints. Remember to leave all the wood and glue to set for as long as you can.

Cutting List:

Back Rest
A = 840 x 100 x 115 mm
B = 615 x 100 x 115 mm
C = 585 x 100 x 115 mm
D = 350 x 100 x 115 mm
E = 445 x 100 x 115 mm
F = 300 x 100 x 115 mm
Seat Panel
G, H, I, J = 1500 x 145 x 115 mm
Leg Sets
K = 300 x 115 x 145
L = 500 x 115 x 145

NB: Unless stated otherwise, all measurements are in mm

FIG 1

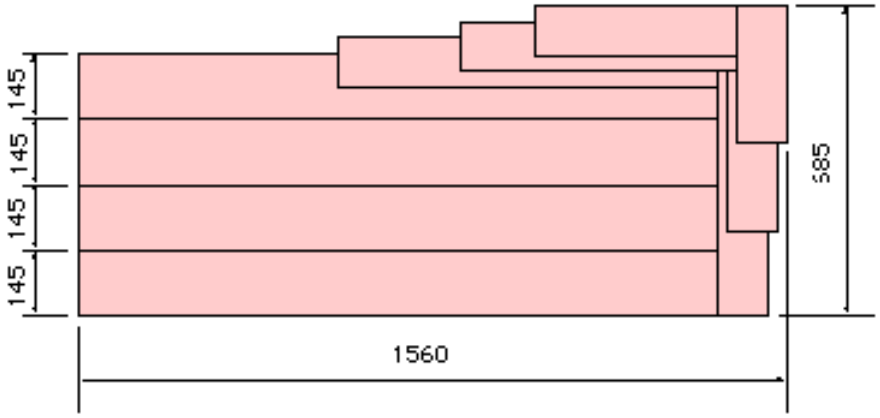


FIG 2

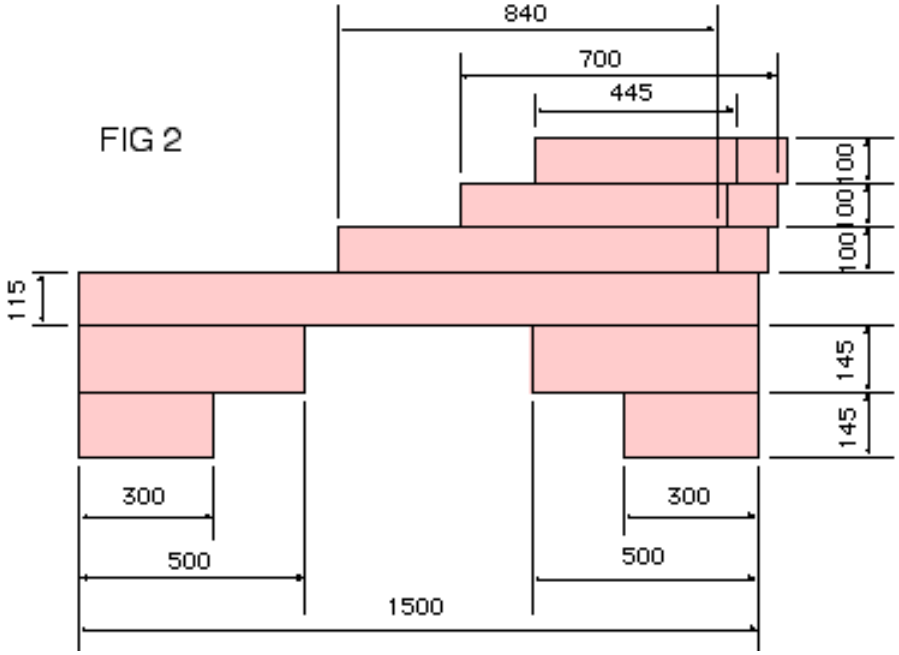
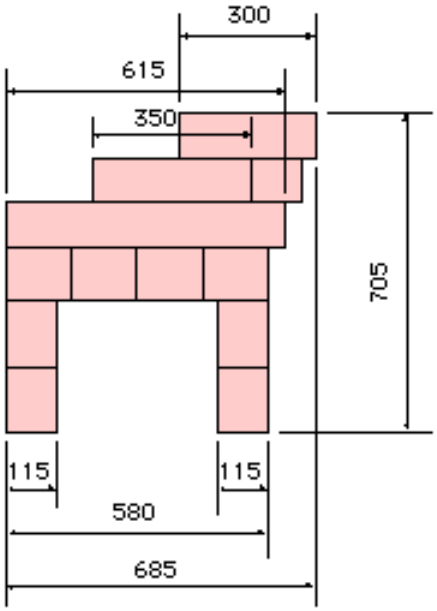


FIG 3



Method
Gluing

First glue together the seat sections Fig. 5 G, H, I & J. This is gluing side grain to side grain which keys well together. Simple white P.V.A. was used on pine, aliphatic for medium density woods and for dense hard woods, urea formaldehyde is recommended.

There are four sections each of K and L which make up the four leg blocks. (See fig 4.) These can be glued onto the underside of the seat section. There is plenty of space to position the F clamps because the blocks are staggered.

Once this has dried, stand the bench up on its feet and glue and clamp section A and B (Fig 4) as positioned in the drawing. Note that the end of section A butts hard against the side of B. A sash clamp can be used to make sure this butt joint is tight and then F clamps to tighten A & B down onto the bench seat.

Use the same procedure to glue and clamp the remaining two layers on top of each other. Fig 4 clearly shows which sections butt against, and which sections run through. Note also that each of the three layers that make up the back are staggered so they overlap each other by 35 mm. In fact, this is as approximate staggered you want to make it. If the overlap were to increase, then the back would lean further out. Suit yourself!

The shaper blank is now ready for shaping but firstly, with chalk or a felt tip, draw on the desired outside profiles. These are shown on the drawings at Fig 6 and 7. This should be done for side, end and plan views.

This helps to reinforce your understanding of the overall desired shape.

Position the shaper blank at a comfortable working height for example up on saw horses. Make sure the angle grinder is correctly fitted with the Arbortech accessories and that for safety purposes, you are wearing ear, eye and lung protection and preferably closed clothing as a boiler suit. Provide good lighting.

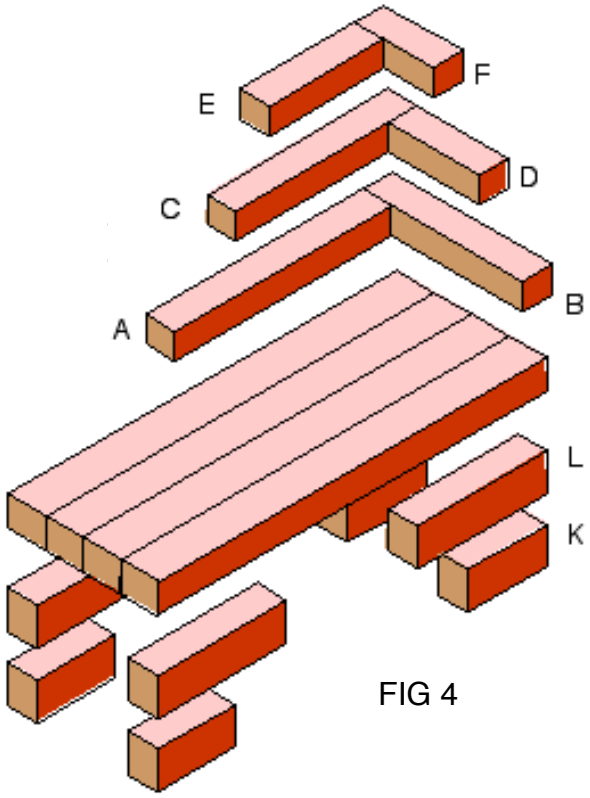


FIG 4

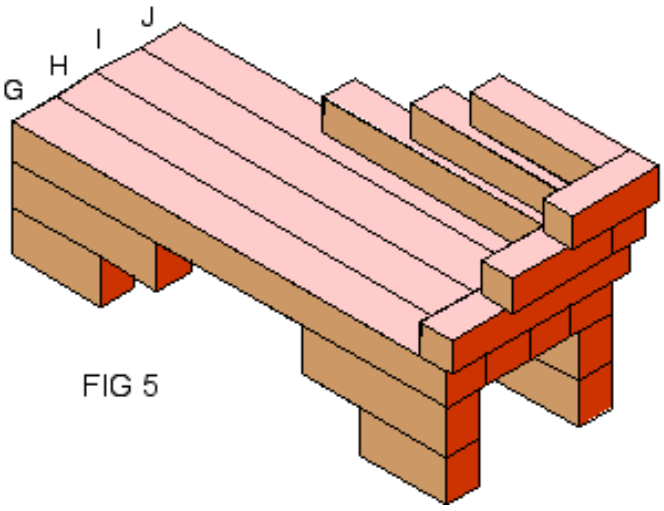


FIG 5

Shaping

It does not really matter where you start to shape. However, it is better to shape smaller amounts of wood away all over the seat rather than trying to finish shaping one particular area ahead of the rest. By shaping 'overall' you will slowly bring out more balanced profiles so that one area flows into another.

A common fault, is NOT shaping DEEP enough thus creating heavy clumsy profiles. Try avoiding being over cautious about removing the waste material. After all the square edges are removed, it can be hard to remember the original vision you had for the shape. Stop frequently, stand back and view from different angles, if necessary keep re chalking on shaping lines.

As the final shape appears it is very useful to use a coarse 40 grit abrasive fitted to an angle grinder back up disk (rubber pad) and with long bold sweeping actions, sand away the small uneven lumps, bumps, hollows and tool marks. This is a very fast procedure because the angle grinder turns so quickly. By doing a 'rough' smooth all over, you will immediately see where there is still too much wood and where it needs removing. Continue this process of shaping and coarse sanding until the desired shapes, forms and profiles are to your satisfaction. Make sure the legs stand even on level ground and correct them if it rocks. Now use a 60 then 80 grit abrasive to smooth all the surfaces.

Fine sand, either with a powered off set orbital sander, or by hand with 80 grit, reducing to 120 grit, or finer if using a dense hardwood.

Finishing

Remove all the fine dust from sanding and apply a finish of your choice.

This piece shown in the photograph was finished with two coats of cellulose sanding sealer and then with carnauba wax which was burnished on with a drill brush made from Mexican bristle.

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