

# Hanging Garden

## Tools Required To Make this Design:

Scrolling: Mk2/2H or Mk 2/3 Scroll Former  
 Punching: Practical Punch/Shear, (or Master Punch/Shear or XL5+ Power Bender fitted with 3mm punch block & pin)  
 Cutting: Practical Punch/Shear (or Master Punch/Shear or XL5+ Power Bender)  
 Riveting: Practical RBR (or Master RBR or XL5+ Power Bender)  
 Bending: Practical RBR (or Master RBR or XL5+ Power Bender)  
 Rolling: Practical RBR (or Master RBR or XL5+ Power Bender)

We recommend that before starting you wipe all steel bars down so that they are free of grease, scale or dirt. After cutting any component, we also recommend that you trim the corners for a neater finish. Use a fine tip marker pen, pencil or scribe for marking hole, bend, scroll, roll points on the bars.

**Component 1 Uprights (x2)**  
 20mm x 3mm x 880\*mm

Cut two bars each 880\*mm long out of 20mm x 3mm material. Using the Design Sheet overleaf, mark bend points B1\*, B2\* and scroll points S1. Then mark all the hole positions H1.

\*This has been designed to hook over the top of a lap fencing panel approx 75mm deep. If your fence panel is different or you want to hook over a wall you need to alter the distance between B1 and B2 to suit the depth and in turn you may need to alter the overall length from 880mm to something longer.

Start by forming, the scroll at the bottom of the upright until mark S1 just touches the segment of the scroll former. Then on the RBR bend two 90 degree angles at B1 and B2 using Template 1 to check the angle. Finally, punch all the holes at H1.

**Component 2 Cross Bars (x11)**  
 20mm x 3mm x 600mm

Cut eleven bars each 600\*\*mm long out of 20mm x 3mm material. Using the Design Sheet overleaf, mark the hole positions H1.

\*\*This has been designed so that the uprights rest on vertical battens of a lap fence. The inner dimension of the battens on this panel is 560mm so you may need to alter the overall length from 600mm to suit the fence panel you are working with.

Then punch hole positions H1 accordingly taking great care to make sure the distance between the two holes on all eleven bars are identical.

**Component 3 Plant Pot Rings (x7)**  
 12mm x 2mm x 295mm

Cut seven bars each 295\*\*\*mm long out of 12mm x 2mm material. Using the Design Sheet overleaf, mark the hole position H2.

\*\*\*These rings have been designed to hold 4" (100mm) plant pots and we have made 7 as a sensible suggestion but you can make more if you like.

Roll each bar into a complete ring and finish by punching the hole at H2.

**Component 4 Plant Pot Supports (x7)**  
 12mm x 2mm x 160\*\*\*mm


Cut seven bars each 160\*\*\*mm long out of 12mm x 2mm material. Using the Design Sheet overleaf, mark the hole position H2 and bend point B3.

\*\*\*These supports have been designed to hold 4" (100mm) plant pots and we have made 7 as a sensible suggestion but you can make more if you like.


On the RBR bend a 90 degree angle at B1 using Template 1 to check angle. Finally punch hole H2.

**Assembly**


Starting with the frame itself, use 10mm x 3mm nuts and bolts to fix all cross bars to uprights at holes H1 as shown here. If any holes are too tight, use punch/shear to open up the hole a little more. Then go round each joint replacing the nut & bolt with a 10mm x 3mm rivet and rivet each joint on the RBR.



Then take each Plant Pot Ring and rivet it to a Plant Pot Support at Hole H2 as shown here using a 6mm x 3mm rivet. You can adjust the Plant Pot Supports horizontal leg if you want to trap a plant pot saucer underneath the pot as shown on the front cover.



The finished item can now be painted in a wide variety of finishes (smooth, satin, hammer and metallic) either by aerosol or by brush application. Powder coating and plastic dip finishes can also be applied but these type of finishes are more for commercial/industrial scale finishing. Then the finished item can be hooked onto the frame as shown.




This simple design can brighten up boring fence panels and give you additional space for growing plants. As well as for floral displays, its great for growing herbs, alpines or even strawberries.

As an alternative you can easily change the design from a hook over arrangement to a fix back to fence panel/wall version by modifying component 1 to have two 90 degree bends at the top with a screw fixing hole as shown here

**GENERAL NOTE**

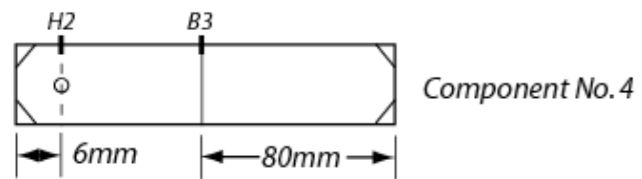
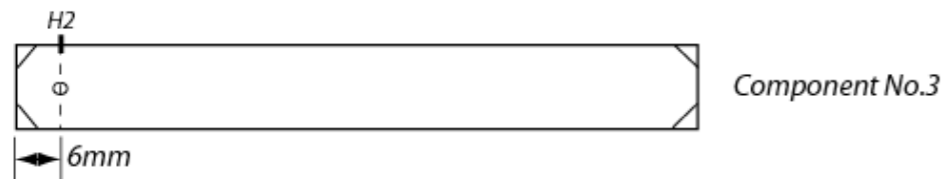
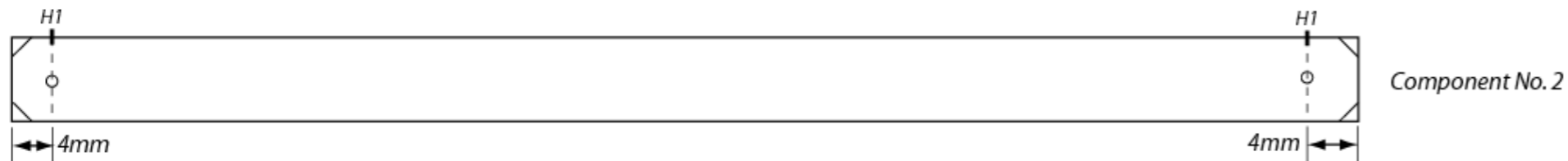
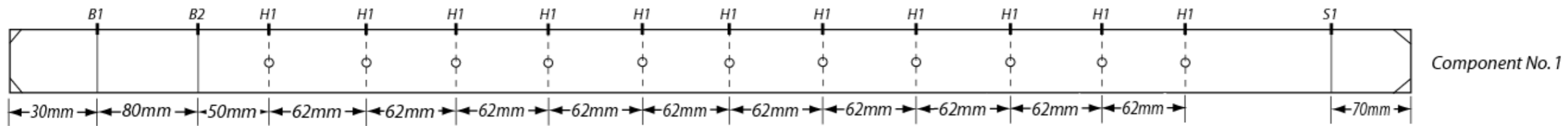


## Design Pack Hanging Garden

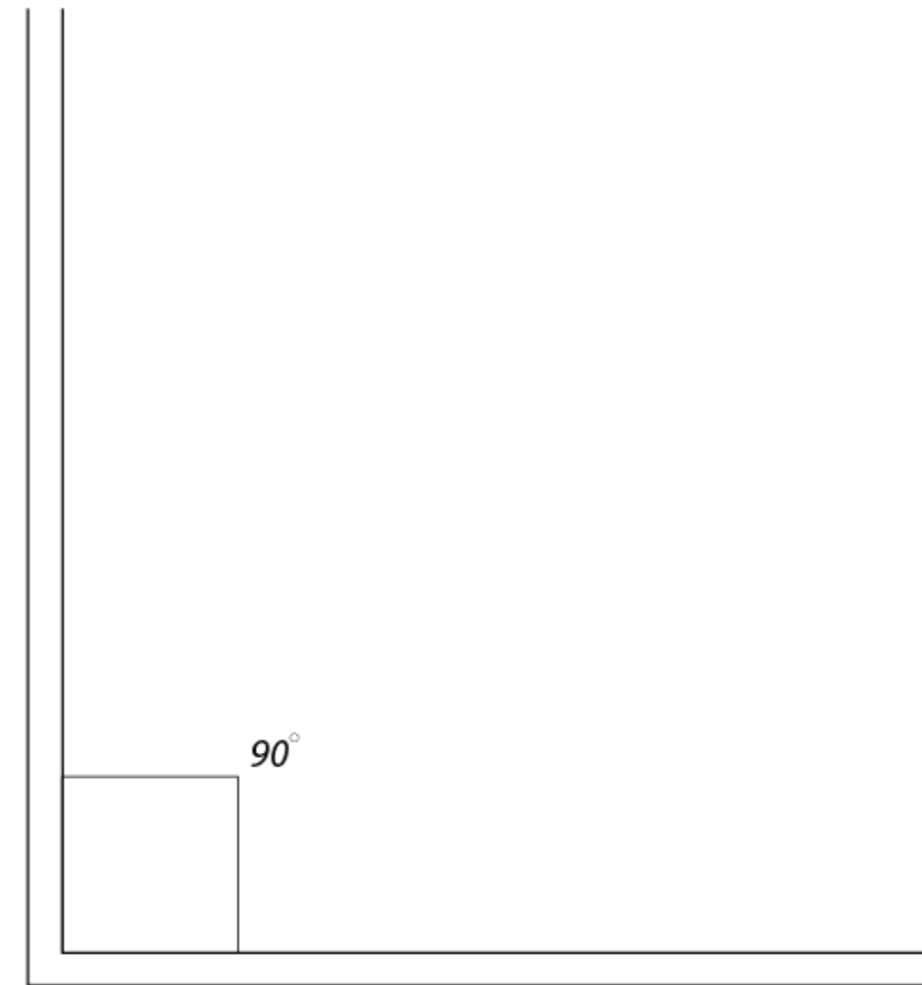
Difficulty Rating:	
Easy	✓
Straightforward	
More complex	

# Design Pack: Hanging Garden - Design Sheet

Not to Scale:



## Template 1



### List of Materials

- 13 Lengths x 20mm x 3mm x 3ft [Re-Order Ref: MC039]
- 4 Lengths x 12mm x 2mm x 3ft [Re-Order Ref: MC034]
- 22 x 10mm x 3mm Nuts & Bolts [Re-Order Ref: MC060L]
- 22 x 10mm x 3mm Rivets [Re-Order Ref: MC052L]
- 7 x 6mm x 3mm Rivets [Re-Order Ref: MC050L]