

OBELISK

Tools required to make this design

Cutting
Punching
Riveting
Bending

Practical Punch/Shear (or Master Punch/Shear or XL5+ Power Bender)
Practical Punch/Shear (or Master Punch/Shear or XL5+ Power Bender)
Practical Punch/Shear (or Master Punch/Shear or XL5+ Power Bender*)
Practical RBR / Master RBR

*Fitted with 3mm Punch Block & Pins.

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, if preferred, unless these instructions tell you otherwise. Use a fine tip marker pen, pencil or scribe for marking hole, bend, scroll, roll points on the bars.

Component 1 Main Strut
15mm x 3mm x 1500mm (4)

Using the Practical Punch/Shear Tool (PPS), cut 4 lengths of 15mm x 3mm x 1830mm (6ft) steel strip down to 1500mm. Using the same tool, chamfer all corners. Mark hole positions H1-H7 and bend positions B1 and B2.

Using the Practical Riveting, Bending & Rolling Tool (PRBR), form the bends at B1 and B2. Use the templates on Template Sheet 1 for Component 1 to achieve the desired angles. Using the PPS tool punch holes H1-H7.

Component 2 Intermediate Strut
15mm x 3mm x 1295mm (4)

Using the PPS tool, cut 4 lengths of 15mm x 3mm x 1830mm (6ft) steel strip down to 1295mm. Using the same tool, chamfer all corners. Mark hole positions H8-H14 and bend position B3. Using the PRBR tool, form the bend at B3. Use the template on Template Sheet 1 for Component 2 to achieve the desired angle. Using the PPS tool punch holes H8-H14.

Component 3 Octagonal Hoop
15mm x 3mm x 800mm (4)

Using the PPS tool, cut 4 lengths of 15mm x 3mm x 914mm (3ft) steel strip down to 800mm. Mark hole positions H15-H22 and bend positions B4-B10. Using the PRBR tool, form all the bends to create an octagonal hoop. Use the template on Template Sheet 1 for Component 3/4 to achieve the desired shape. Using the PPS tool punch all the holes.

Component 4 Wide Octagonal Hoop
20mm x 3mm x 800mm (2)

Using the PPS tool, cut 4 lengths of 20mm x 3mm x 914mm (3ft) steel strip down to 800mm. Mark hole positions H23-H30 and bend positions B11-B17. Using the PRBR tool, form all the bends to create an octagonal hoop. Use the template on Template Sheet 1 for Component 3/4 to achieve the desired shape. Using the PPS tool punch all the holes.

ASSEMBLY INSTRUCTIONS

1 Using 10 x 3mm nuts and bolts connect the Main Struts (Component 1) to the inside face of each of the 20mm wide Octagonal Hoops (Component 4) using holes H2 and H5 on Component 1 and holes H23, H25, H27 and H29 on Component 4.

2 Using 10 x 3mm nuts and bolts connect the Intermediate Struts (Component 2) to the inside face of each of the 20mm wide Octagonal Hoops (Component 4) using holes H9 and H12 on Component 2 and holes H24, H26, H28 and H30 on Component 4.

3 Using 10 x 3mm nuts and bolts connect the Main Struts (Component 1) to the inside face of each of the 15mm wide Octagonal Hoops (Component 3) using holes H1, H3, H4 and H6 on Component 1 and holes H15, H17, H19 and H21 on Component 3.

4 Using 8 x 3mm nuts and bolts connect the Intermediate Struts (Component 2) to the inside face of each of the 15mm wide Octagonal Hoops (Component 3) using holes H8, H10, H11 and H13 on Component 2 and holes H16, H18, H20 and H22 on Component 3.

5 Using the PPS tool, punch a hole in the end of the Acanthus leaves as shown and attach them with 6 x 3mm nuts and bolts to the top of the main and intermediate struts using holes, H7 and H14 on Components 1 and 2 respectively.

6 Manually adjust the components as required to achieve the desired appearance before final tightening of all nuts. Note bolted connections can be made "permanent" with a dab of strong adhesive over the nut.



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 finishing.
However, even with aerosol or paint finish you can make your finished item look professional. In this case we use paints from the Plasti-Kote and Hammerite ranges - available from most DIY and Painting/Decorating outlets. For best results, always follow instructions on the tin and make sure the metal is free of all scale, dirt, grease or rust.

APPLIED FINISH AND DECORATION

Please note that the photograph is for illustrative purposes only and is intended as a guide to the appearance of the finished article.
(2)
It is recommended that the project is assembled in the first instance using nuts and bolts, loosely tightened. This provides an opportunity for component adjustment and substitution of amended components if necessary prior to final riveting (where applicable) or full bolt tightening. Note bolted connections can be made "permanent" with a dab of strong adhesive over the nut.
(1)

GENERAL NOTES

metalcraft™

Design Pack

Obelisk

Difficulty Rating:

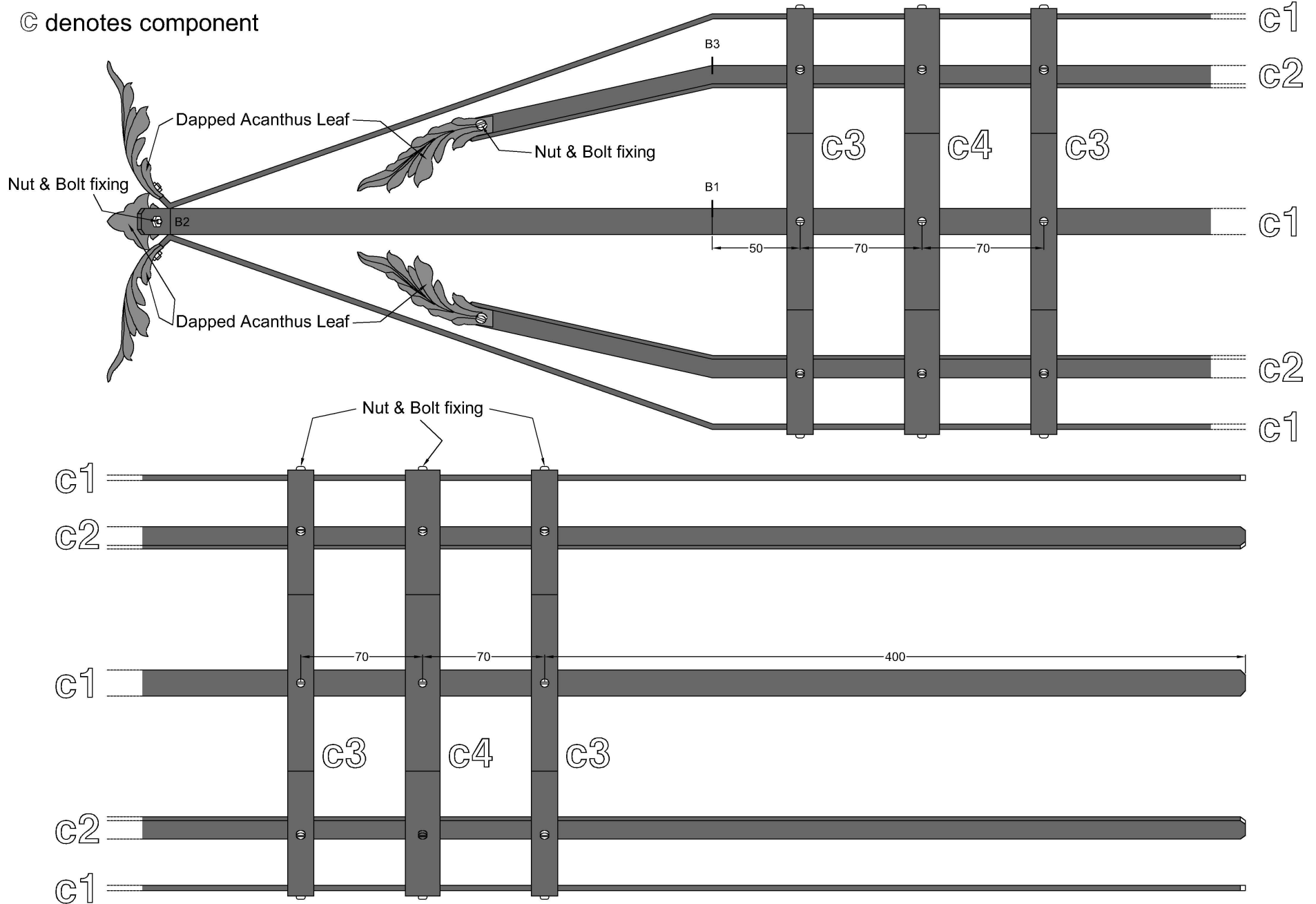
Easy	
Straightforward	✓
More complex	



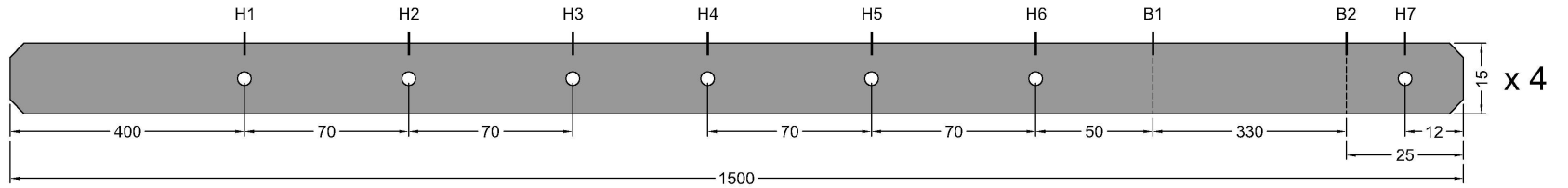
DESIGN PACK: OBELISK

KEY

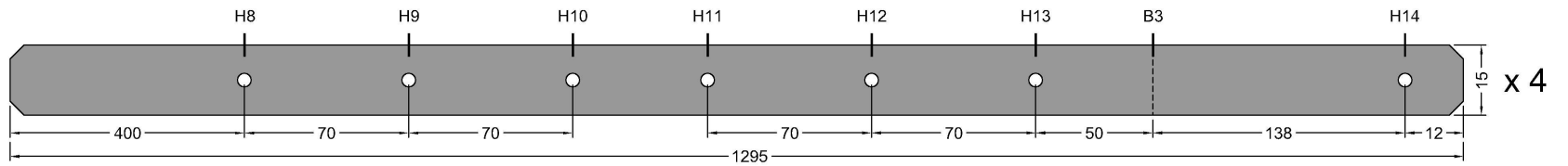
© denotes component



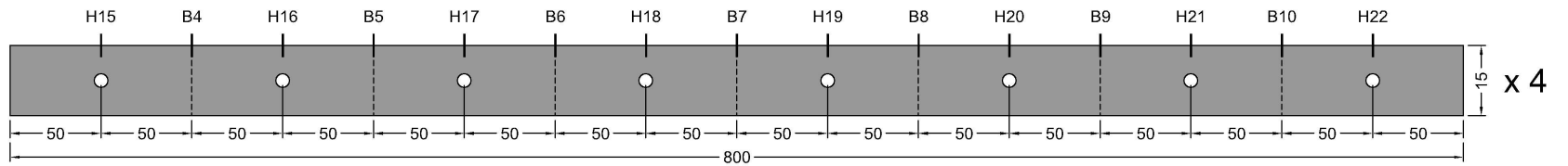
Component 1
1500 x 15 x 3mm



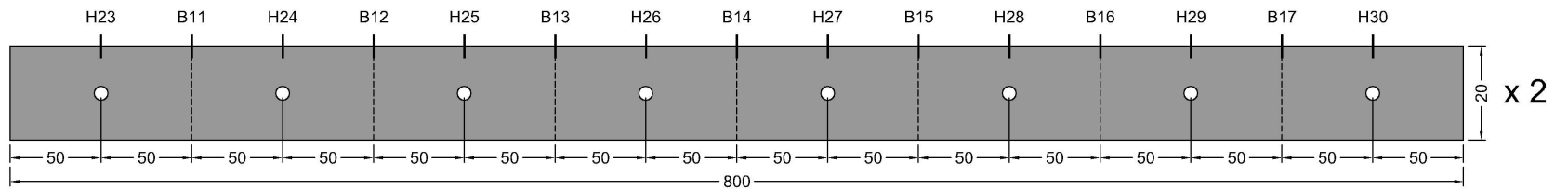
Component 2
1295 x 15 x 3mm



Component 3
800 x 15 x 3mm

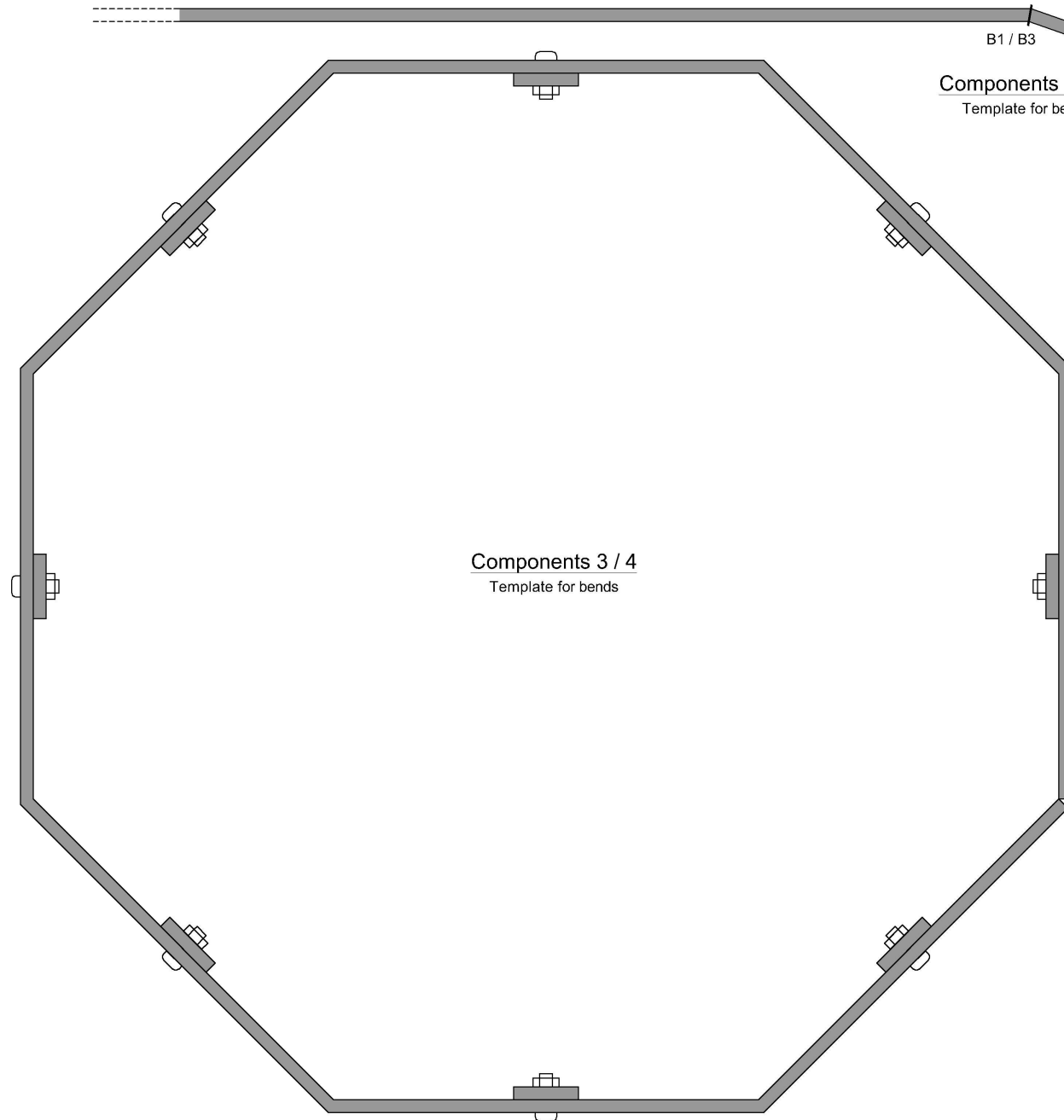


Component 4
800 x 20 x 3mm

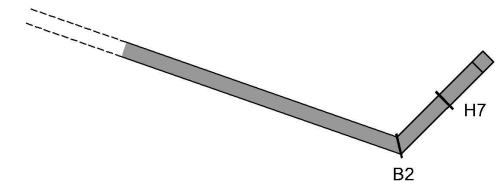


B1 / B3

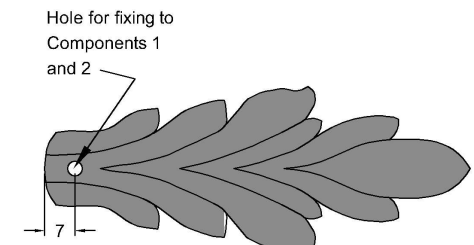
Components 1 & 2
Template for bends



Components 3 / 4
Template for bends



Component 1
Template for top bend



Dapped Acanthus Leaf

List of Materials Required:

- 8 x 1830mm (6ft) Lengths of 15mm x 3mm Steel Strip (Re-Order Ref: MC038)
- 4 x 914mm (3ft) Lengths of 15mm x 3mm Steel Strip (Re-Order Ref: MC037)
- 2 x 914mm (3ft) Lengths of 20mm x 3mm Steel strip (Re-order Ref: MC039)
- 48 x 10mm x 3mm Nuts & Bolts (Re-Order Ref: MC059L)
- 8 x 6mm x 3mm Nuts & Bolts (Re-Order Ref: MC058L)
- 8 No. L44 Dapped Acanthus Leaves (Re-Order Ref: MC1232)