

LOG BURNER

Tools Required to Make this Design:

Scrolling: Mk 2/2H (or Mk 2/3) Scroll Formers
 Punching: Practical Punch/Shear (or Master Punch/Shear or XL5+ Power Bender fitted with 3mm punch block & pin - or use 5mm holes but 5mm rivets will be required*)
 Riveting: Practical RBR (or Master RBR or XL5+ Power Bender - *see above)
 Bending: Practical RBR (or Master RBR or XL5+ Power Bender)
 Rolling: Practical RBR (or Master RBR or XL5+ Power Bender)
 Cutting: Practical Punch/Shear (or Master Punch/Shear or XL5+ Power Bender)

1 Uprights 777mm (x 14)

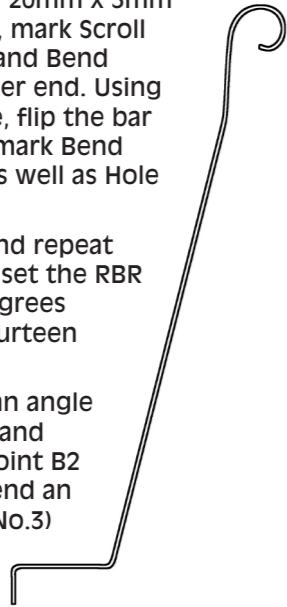
COMPONENT 1

Cut fourteen 777mm lengths of 20mm x 3mm strip and trim corners. On each, mark Scroll Point S1 150mm from one end and Bend position B3 27mm from the other end. Using the Design Sheet as a reference, flip the bar over and on the opposite face mark Bend positions B1 and B3 as shown as well as Hole Positions H1 & H2.

Now form a scroll to point S1 and repeat for the other 13 Uprights. Next set the RBR tool to bend an angle of 170 degrees (Template No.1) and bend all fourteen uprights at point B1.

Next set the RBR tool to bend an angle of 100 degrees (Template No.2) and bend all fourteen uprights at point B2 and then set the RBR tool to bend an angle of 90 degrees (Template No.3) and bend all fourteen uprights at point B3, to achieve the shape shown here.

Finally, punch holes H1 and H2 on all fourteen uprights.



2 Foot 250mm (x 3)

COMPONENT 2

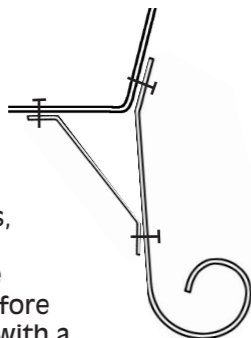
Take another length of 20mm x 3mm and cut three lengths of 250mm and trim the corners. Mark Scroll point S2 140mm from one end and Bend point B4 30mm from the other. Form scroll on all three pieces to S2 and then set angle of bend to 160 degrees (Template No.4) and bend all the three feet at B4.



3 Foot Supports 120mm (x 3)

COMPONENT 3

Take three of the leftover pieces from cutting the uprights and cut down to 120mm and trim corners. Mark Bend positions B5 and B6, 20mm from each end and then set the RBR tool to bend an angle of 140 degrees at B5 (template No.5 left hand side) and bend all three pieces. Next set the tool to bend 145 degrees and bend at B6 on all three pieces.



4 Initial Assembly

At this point, you can select any upright and lay it down flat with one of the Feet and one of the Foot Supports. Mark out the three rivet points and punch holes in all three components. Repeat this with 2 more uprights, and the other 2 Feet, and Foot Supports. Make sure all three are marked in the same positions before punching and riveting together with a 10mm x 3mm rivet.

5 Top Ring (Two piece) 686mm (x 2)

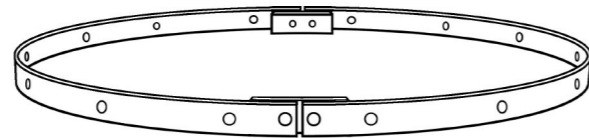
COMPONENT 4

Next cut two 686mm lengths and trim the corners. Mark all hole positions H3 and roll into a semi-circle. Repeat with the other length so that when put together it should form a circle 440mm in diameter. Now punch all H3 hole positions.

6 Top Ring Joint Straps 25mm (x 2)

COMPONENT 5

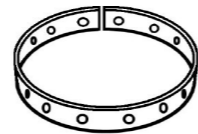
Use an offcut to cut two 25mm lengths and trim corners. With the RBR tool still set for rolling the Top Ring diameter, roll to match the top ring curvature. Offer these up to the two joints of the Top Ring semi circles and mark on these straps and the corresponding ends of the semi-circles the hole positions required to enable them to be joined with the strap. Punch these holes and rivet using a 10mm x 3mm rivet.



7 Small Lower Ring 325mm (x 1)

COMPONENT 6

Now cut a 325mm length and trim the corners. Mark all 14 hole positions H4 and roll into a ring approx 106mm in diameter. Then punch all 14 holes.



8 Assembly

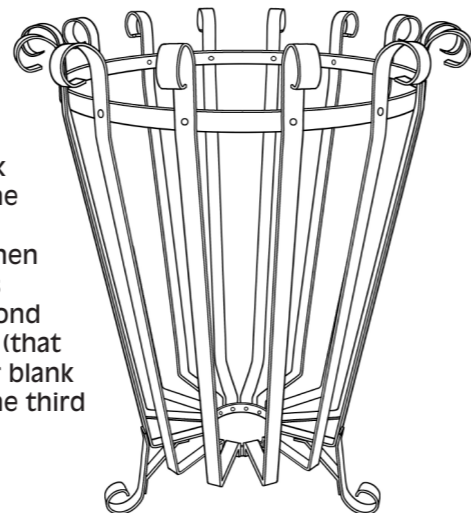
Start by riveting with the first of the three uprights with feet attached (from Stage 4 above) to the outside of the Top Ring as shown in this illustration here at hole H2 on the upright and H3 of the ring using a 10mm x 3mm rivet

To do this you will need to rotate the upright through 90 degrees to get the joint in the RBR tool. After riveting, twist the upright back to its correct position.

At this point you may well need the assistance of another person to support the weight of the Log Burner as it steadily gets riveted together.

Using the same technique, now rivet the next leg by leaving 4 blank holes between the first leg and the second leg and then three blank holes between the second leg and the third (that should leave four blank holes between the third and the first).

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metalcraft™ Design Pack LOG BURNER

DIFFICULTY RATING:

EASY

STRAIGHTFORWARD

MORE COMPLEX



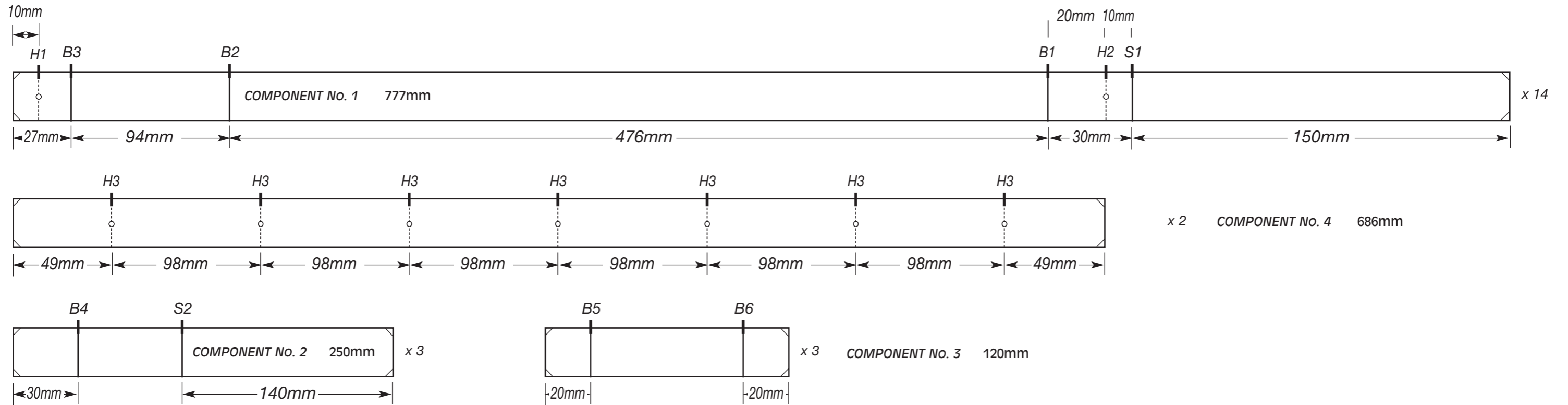
The finished item can now be painted in a wide variety of finishes (smooth, satin, hammer and metallic) either by aerosol or by brush application. Powder coating and plastic dip finishes can also be applied but these type of finishes are more for commercial/industrial scale finishing.
 However, even with aerosol or paint finish you can make your finished item look professional. In this case we used paints from the Plast-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.
 Please Note: This item will probably require a specialist paint such as barbecue paint or exhaust paint to withstand the high temperatures

8 Assembly cont.
 Finally, using the same technique, rivet the remaining uprights (without feet) in sequence around the periphery of the top ring.
 With all uprights riveted in place to the Top ring, turn the whole thing upside down and take the small Lower Ring and fit inside all the bent flats of the uprights using fourteen 10mm x 3mm Nuts & Bolts. Finally the MC1206 Bowl Candle Tray can be dropped in to the lower ring to act as a removable ash collector.

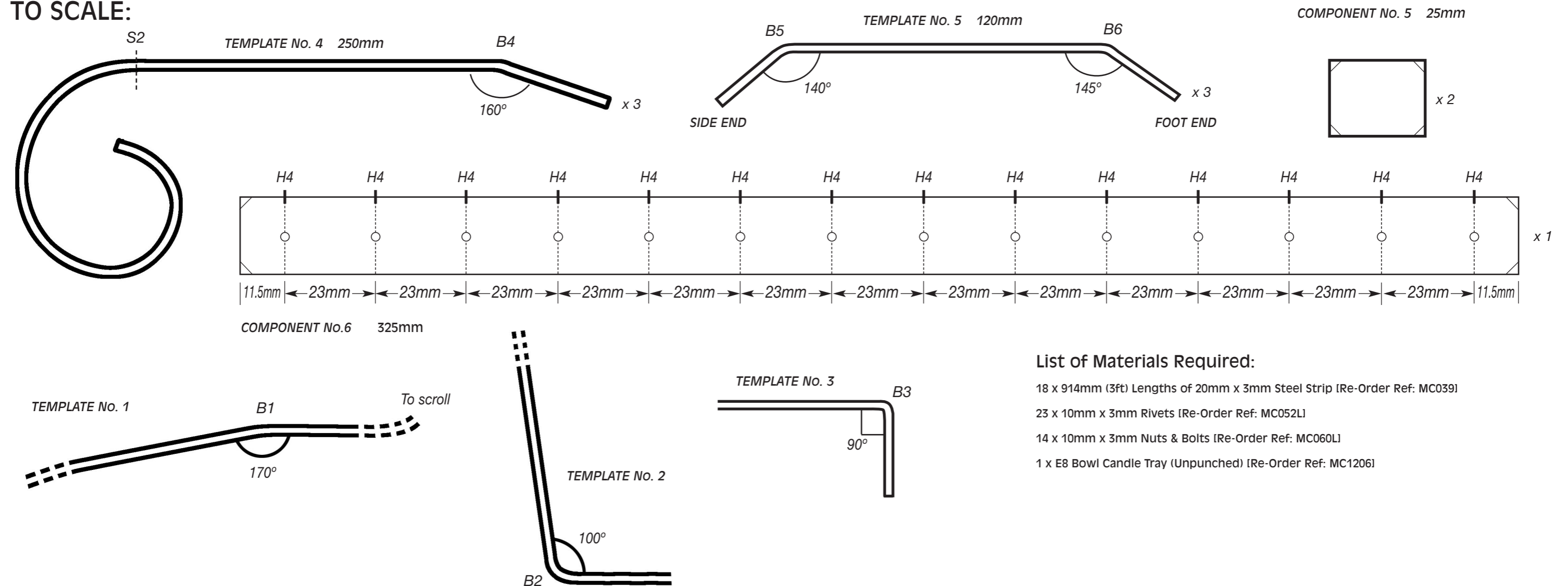


Design Pack: LOG BURNER - DESIGN SHEET

NOT TO SCALE:



TO SCALE:



List of Materials Required:

- 18 x 914mm (3ft) Lengths of 20mm x 3mm Steel Strip [Re-Order Ref: MC039]
- 23 x 10mm x 3mm Rivets [Re-Order Ref: MC052L]
- 14 x 10mm x 3mm Nuts & Bolts [Re-Order Ref: MC060L]
- 1 x E8 Bowl Candle Tray (Unpunched) [Re-Order Ref: MC1206]