CHANDELIER

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

1 Main Arms 914mm (x 4)

COMPONENT 1

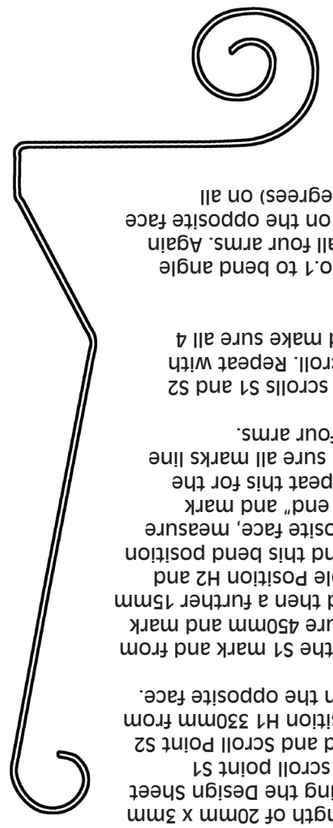
Take a full 914mm length of 20mm x 3mm and trim corners. Using the Design Sheet as a reference, mark scroll point S1 100mm from one end and Scroll Point S2 320mm and Hole Position H1 330mm from the other end and on the opposite face.

On the same face as the S1 mark and from the same end, measure 450mm and mark bend position B2 and then a further 15mm beyond this mark Hole Position H2 and another 15mm beyond this bend position B3. Then on the opposite face, measure 350mm from the "S1 end" and mark bend position B1. Repeat this for the other 3 arms making sure all marks line up accurately on all four arms.

Start by forming the scrolls S1 and S2 to create a large S scroll. Repeat with the other 3 arms and make sure all 4 scrolls are identical.

Next use Template No.1 to bend angle B1 (140 degrees) on all four arms. Again using template No.1 on the opposite face bend angle B2 (150 degrees) on all four arms and then bend angle B3 (90º) on them all.

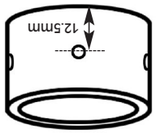
Finally, punch holes H1 and H2 on all arms.



2 Large Connecting Collars (x 2)

COMPONENT 2

Take the first large collar and lay it on Template No.3 and mark the four equally spaced holes H3 and adjust the platform so that the hole is in the centre of the collar as shown in this illustration. Repeat for the second collar.



3 Chain Brace 70mm (x 1)

COMPONENT 3

Cut a 70mm length of 15 x 3mm and trim the corners. Next mark the two bend points B4 17mm from each end and the two hole positions H4 8mm from each end as well as the central hole H7. Next use Template No.2 to bend the brace into shape (approximately* - see below).

Finally, punch holes H4 and H7.

4 Assembly

Next take two of the arms (component 1) and one of the collars (component 2) and join together (Hole 2 on the Arm) with Hole 3 on the collar with a 10mm x 3mm nut & bolt as shown in Diagram No.1 so that the two opposite arms are connected to the collar. There is no need to tighten up the nut and bolt at this stage. Next take the other collar and place it between the two top scrolls and mark hole positions H5 needed on the arms to join them to the top collar.

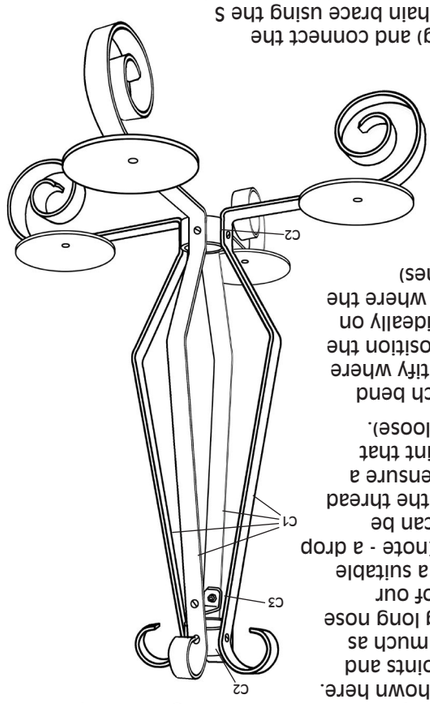
Next lay the chain brace (component 3) in between the arms and mark the position on the arms where the holes H4 touch the arms and mark these as the H6 holes. (* if necessary, adjust the bend B4 slightly to improve the alignment at this stage).

Undo the nuts & bolts and disconnect the arms from the bottom collar. Lay these two arms on the other two arms to mark the H5 position on them and punch all 4 H5 holes and the two H6 holes.

5

Using the 10mm x 3mm nuts and bolts (loosely joined) re-assemble the first two arms as per diagram 1 again but this time with the collars in the right orientation and connect them to the top collar. Add the brace, and finally add the two remaining arms as per the diagram shown here.

Go round all joints and tighten up as much as possible using long nose pliers or one of our spanners and a suitable screw driver. (note - a drop of superglue can be dropped into the thread of the nut to ensure a permanent joint that doesn't work loose).



Then from each bend point B3, identify where you wish to position the Candle Trays (ideally on the high spot where the S2 scroll finishes) and mark the point on each arm and punch. Then attach the Candle Trays (again with a nut and bolt fixing) and connect the chain to the chain brace using the S hook in hole H7 of the chain brace. Shorten the chain as necessary with croppers or hacksaw.

(SPECIAL NOTE – If using lighted candles make sure the candles are stable and secure on the candle trays. Depending on the size of candle used, suitable holders can be purchased separately from our Metalcraft range).

DIFFICULTY RATING:	
EASY	
STRAIGHTFORWARD	✓
MORE COMPLEX	

Design Pack
CHANDELIER

metalcraft™

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 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.

J&CR WOOD

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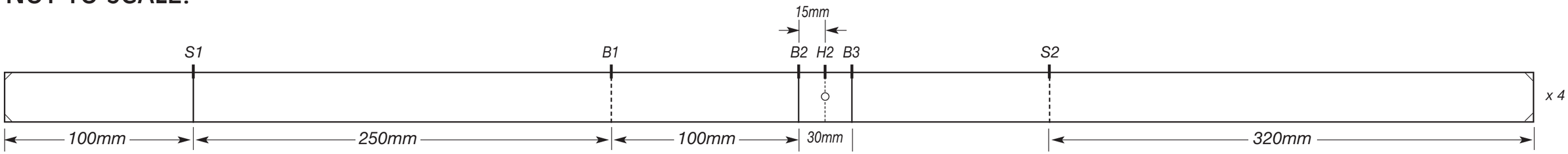
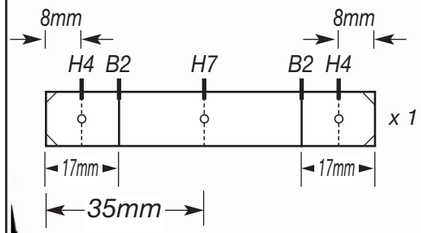
Design Pack: CHANDELIER - DESIGN SHEET

NOT TO SCALE:

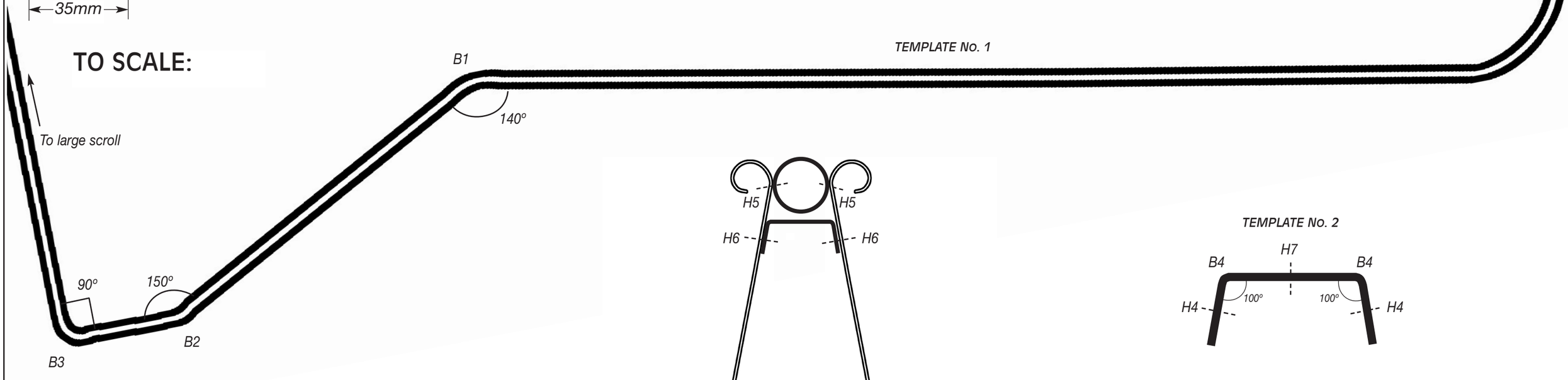


COMPONENT No. 1 914mm



COMPONENT No. 2 70mm

TO SCALE:



TEMPLATE No. 1

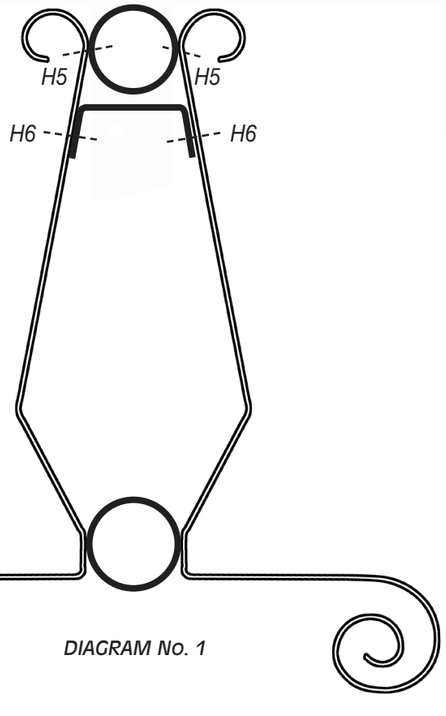
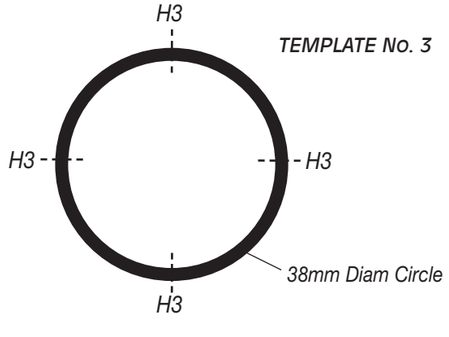


DIAGRAM No. 1

TEMPLATE No. 2

TEMPLATE No. 3



List of Materials Required:

4 x 914mm (3ft) Length of 20mm x 3mmSteel Strip [Re-Order Ref: MC039]

1 x 914mm (3ft) Length of 15mm x 3mm Steel Strip [Re-Order Ref: MC037]

2 x Large Collars [Re-Order Ref: MC1291]

14 x 10mm x 3mm Nuts & Bolts [Re-Order Ref: MC060L]

4 x T41 Candle Trays [MC1160]

1 x Chain S Hook [MC1300]

2m x Welded Oval Chain [MC1298]