

SANTA WALL ART

Tools Required to Make this Design:

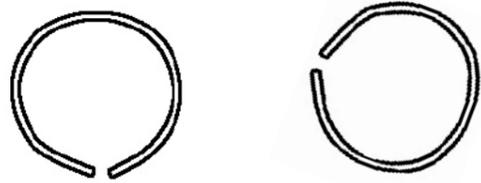
Scrolling: Mk 1/2 Scroll Former
 Punching: Practical Punch/Shear (or Master Punch/Shear or XL5+ Power Bender fitted with 3mm punch block & pin)
 Riveting: Practical RBR
 Bending: Practical RBR
 Rolling: Practical RBR
 Cutting: Practical Punch/Shear (or Master Punch/Shear or XL5+ Power Bender)

Note- with all lengths of steel it is recommended that you wipe it clean of any oil or scale before working and for a better finish trim the corners of all cut lengths. Use a fine tip indelible marker or pencil to mark the steel.

1 Nose and also Bobble For Hat 140mm (x 2) COMPONENT 1

Take one 914mm length of 12mm x 2mm material and mark out and cut two lengths 140mm long.

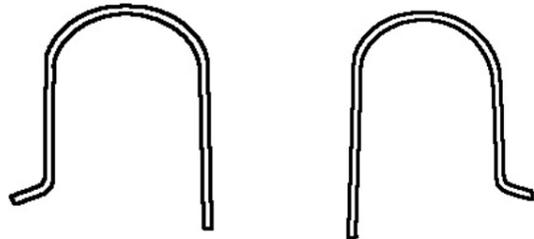
On the Practical RBR tool, roll each length into a tight circle so that both ends meet and check against Template 1.



2 Outer Eyes 150 (x 2) COMPONENT 2

From the remainder of the length used for Component 1 mark out and cut two lengths each measuring 150mm.

Mark out Bend Point B1 12mm from one end and then Roll Point R2 a further 35mm beyond that. Then mark roll point R1 55mm from the other end of the bar.

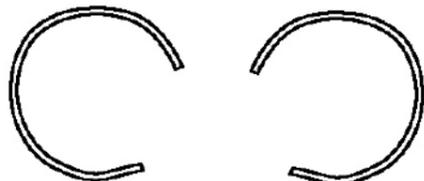


Then use Template 2 to bend an angle of approx 100 degrees on the RBR tool for both Outer Eyes at B1. Then roll a semi circle between points R1 & R2 taking care to roll on the correct side of the bar so that you produce the shape shown for Component 2 in Template 1. Repeat for the other outer eye.

3 Cheeks 140mm (x 2) COMPONENT 3

Take a new 914mm length of 12mm x 2mm material and mark out and cut two lengths 140mm long.

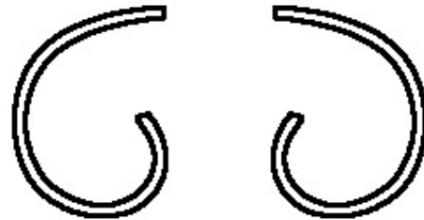
On the Practical RBR tool, roll each length into an incomplete circle that is open at both ends and check against Component 3 on Template 1.



4 Inner Eyes 190mm (x 2) COMPONENT 4

From the remainder of the length used for Component 3 mark out and cut two lengths each measuring 190mm.

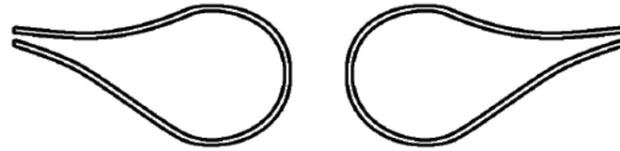
Mark out scroll point S1 100mm from one end and then 5mm from this, mark cutting point C1. Next form a scroll on the Mk1/2 scroll former so that the S1 mark just touches the segment. Check the resulting scroll shape



against Template 1 before carefully cropping it down at mark C1 in the Punch/Shear to ensure it fits in the outer eye 1. Check the final shape against Component 4 in Template 1. Repeat for the other inner eye.

5 Moustache 240mm (x 2) COMPONENT 5

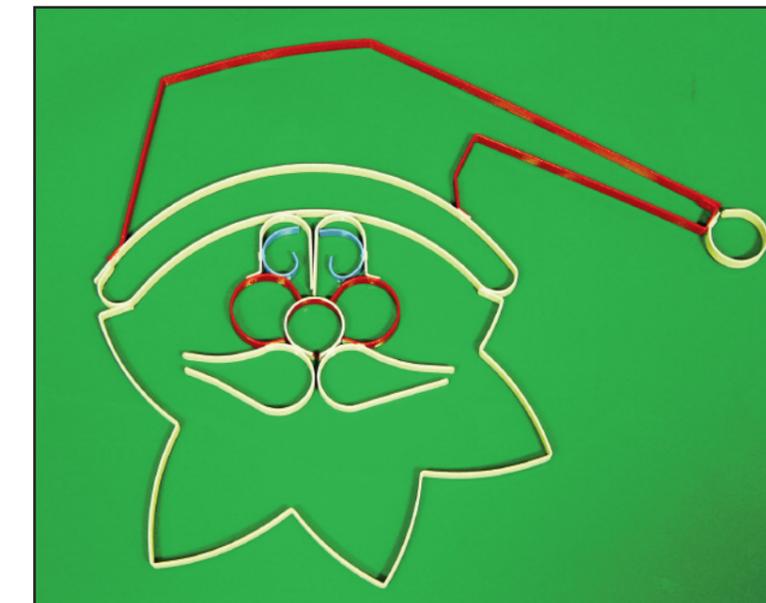
From the remainder of the length used for Components 3 & 4 mark out and cut one length of 240mm. Then take another 914mm length and cut the other 240mm length.



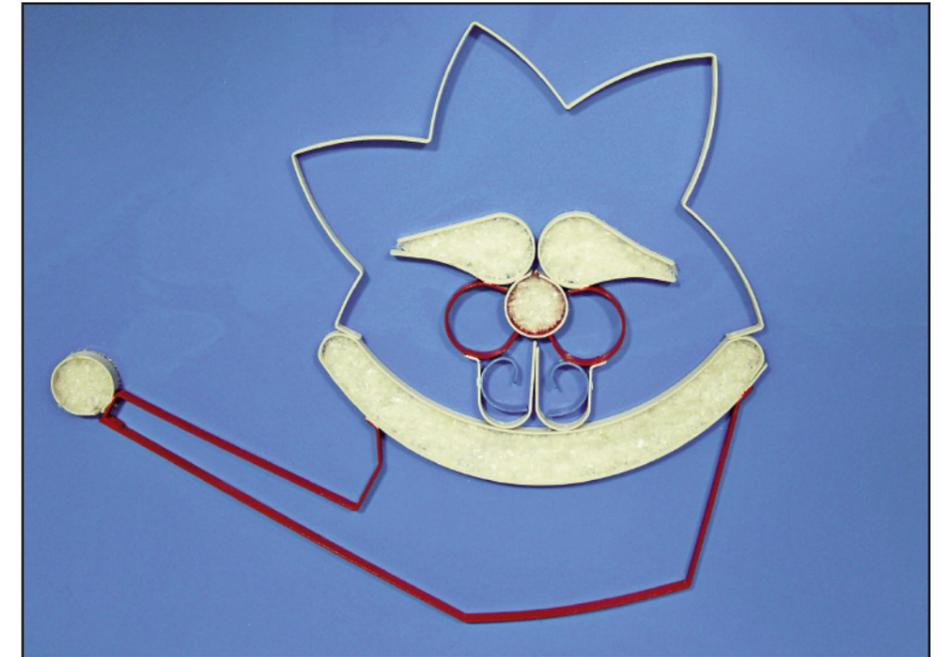
Mark out roll point R3 70mm from one end of the bar and roll point R4 70mm from the other end. Then at the R4 end of the bar make a further mark R5 20mm from the end of the bar.

Then start by rolling the region between marks R3 and R4 until you form an elongated "U" section. Then turn the bar over and roll between marks R4 & R5 a slight curve. Turn bar over again and roll again between R3 & R4 until both ends meet. For best results apply very gradual increases in pressure of the handle of the RBR tool to do this intricate rolling work and don't be tempted to rush it.

Repeat for the other side of the moustache.



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.



metalcraft™

Design Pack SANTA WALL ART

DIFFICULTY RATING:

EASY	<input type="checkbox"/>
STRAIGHTFORWARD	<input type="checkbox"/>
MORE COMPLEX	<input checked="" type="checkbox"/>

SANTA WALL ART cont.

6 Hat Fur 820mm (x 1) COMPONENT 6

From another full 915mm length, mark and cut an 820mm length.

Mark out roll points all from the same end as follows: R6 - 15mm R7 - 55mm, R8 - 70mm, R9 - 410mm, R10 - 450mm and roll point R4 70mm from the other end. Then at the R4 end of the bar make a further mark R5 20mm from the end of the bar.



Then start by rolling a tight curve in the region between marks R6 and R7 using Template 1 as guidance. Then using Template 1 again roll the more gradual radius between R8 and R9.

Then repeat the rolling of the tight radius between points R9 and R10, before rolling the gradual radius between R10 and the end of the bar so that the end overlaps the other end by approx 15mm. This is probably the most testing part of the design but develops your rolling skills. Remember if you do make a hash of it then you can always flip the bar over roll in the opposite direction to straighten the bar out and start again. There is also a spare length of the steel which you may need if all else fails.

7 Beard 800mm (x 1) COMPONENT 7

From another full 915mm length, mark and cut a 800mm length.

Then carefully mark out all the bending positions B1 to B9 at the distances shown on the Design Sheet. Mark B1, B3, B5, B7, & B9 on one side of the bar and then the other 4 bending positions B2, B4, B6 & B8 on the other side of the steel bar,



Start by rolling a curve from one end of the bar to the other using Template 3 as guidance to the curvature you need to achieve. Make sure marks B1, B3, B5, B7 & B9 are on the inner face of the curve.

Then set the Practical RBR to bend a 90° bend using Template 5 and a small offcut piece. Next bend a 90° angle at points B1 and B3. Flip the bar over and then bend a 90° angle at B4, flip over again and bend B5,, flip over again to bend B6 and flip over one last time to bend B7 & B9.

7 Finally , bend B2 and B8 gradually , don't go for 90 degree bend – stop short of full bend to allow for fine adjustment until the two ends of the bar are in the position shown in template 4 whereby the ends will give a good rivet joint with the hat fur (Component 6).

8 Santas Hat (Lower section) 315mm (x 1) COMPONENT 8

From the offcut from Components 1 and 2 cut this down to 315mm in length. Then mark all the bend points B10, B11, B12, B13 and B14. Because all bends are different angles and in different directions use Template 6a to form the required angles at B14, B13 and Template 6b to form the required bends B12, B11, B10.



9 Santas Hat (Upper section) 315mm (x 1) COMPONENT 9

From the leftover piece from which the second half of the moustache was cut (Component 5) mark and cut a 660mm length. Then mark all the bend points B15, B16, B17. Because all bends are different angles and in different directions use Template 7b to form the required angles at B15 and Template 7a to form the required bends B16, B17 .



You can then put a very gentle curve between points B17and B16, B16 and B15 and finally B15 and the end of the bar to give a little extra style. Depending on how much curve you put in, you may also have to adjust the curvature on Component 8 accordingly.

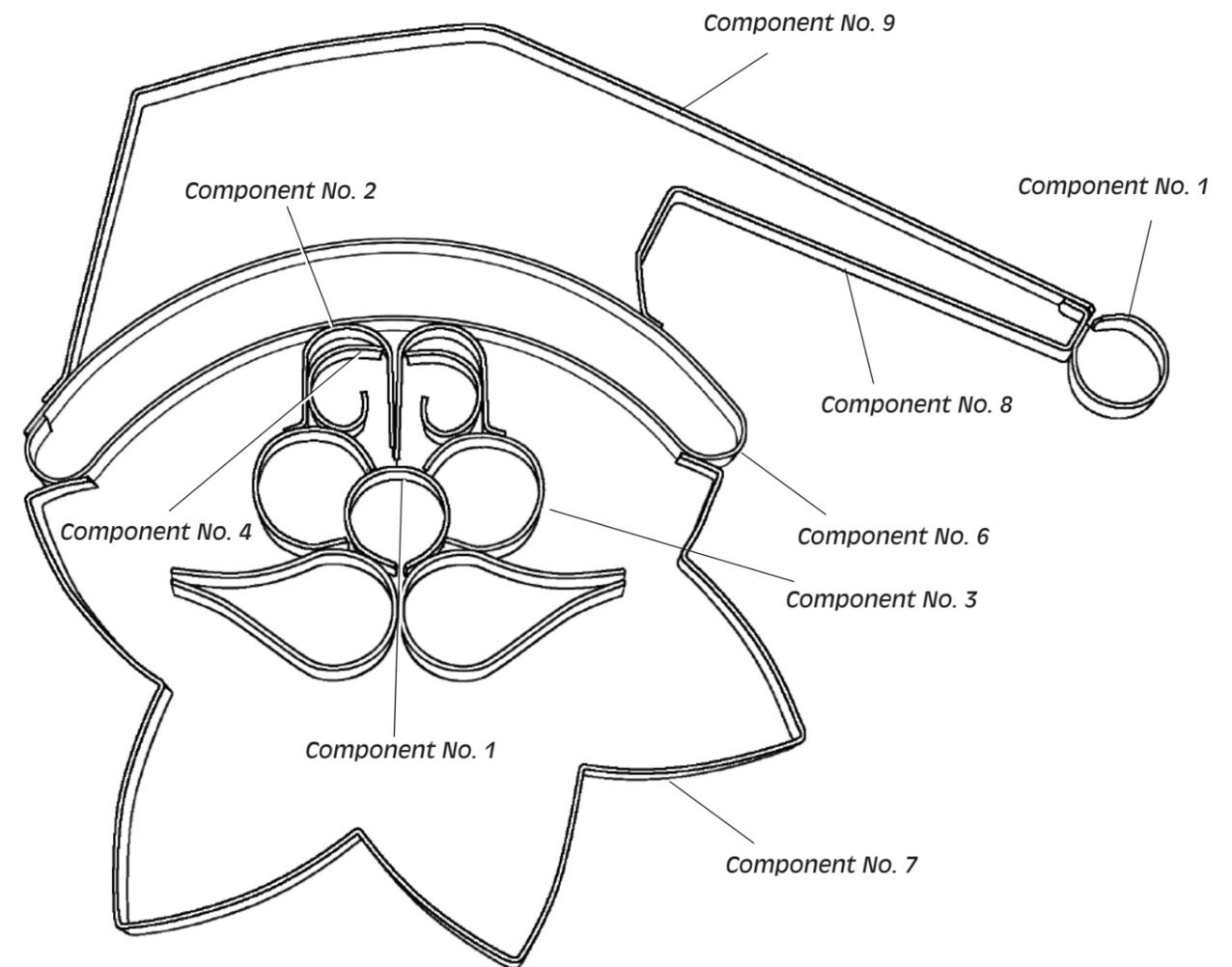
10 Assembly

Once all components are made, simply arrange them over the Template 1 (and Templates 4, and 6&7) to piece all the elements into the finished item. Then mark all the rivet points as per the templates and make any slight bend/roll adjustments to achieve all the required joints.

Then punch all holes required for riveting and use the 6mm x 3mm rivets to join all the components to each other starting with the facial features (Components 1, 2, 3, 4 & 5). Next rivet Components 8 and 9 to Component 6, then the face to hat fur before finally the beard to hat fur.

When you have finished your Santa Wall Art you can simply paint it using the instructions under the "Finishing" Section overleaf then you can go to town with dressing it with additional touches and paint effects as shown on the same page as the finishing section.

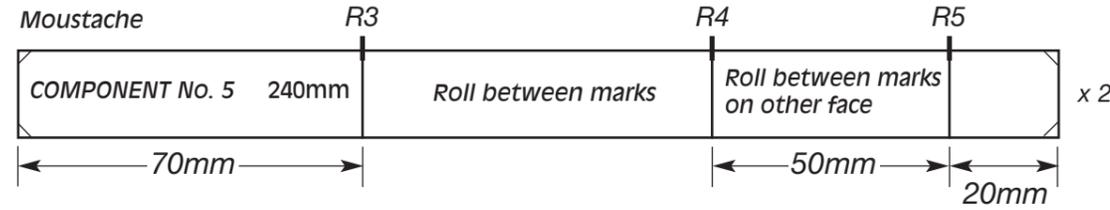
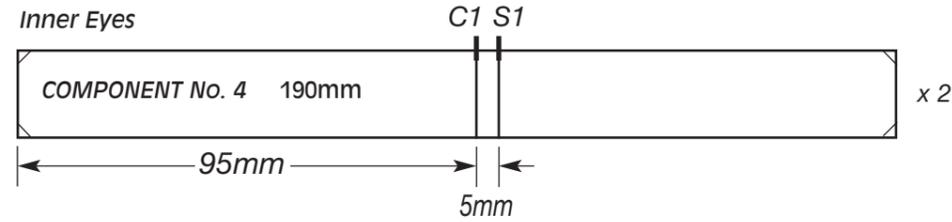
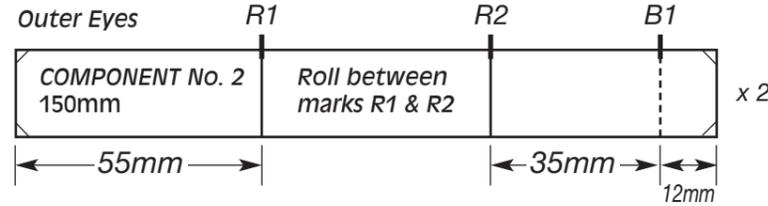
THE COMPLETED SANTA WALL ART



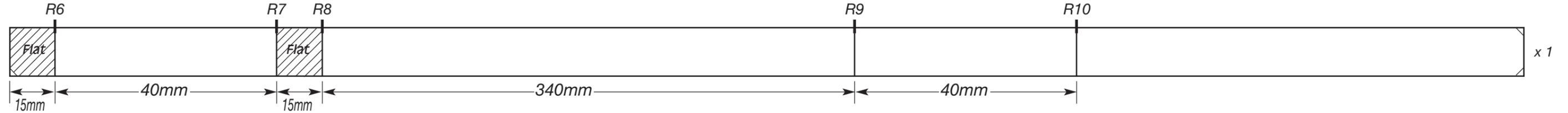
Design Pack: SANTA WALL ART - DESIGN SHEET

NOT TO SCALE:

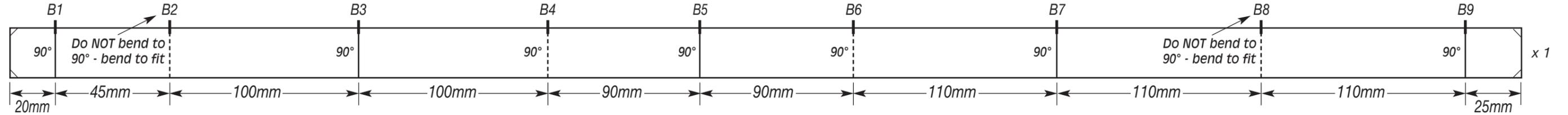
Nose & also Bobble for Hat



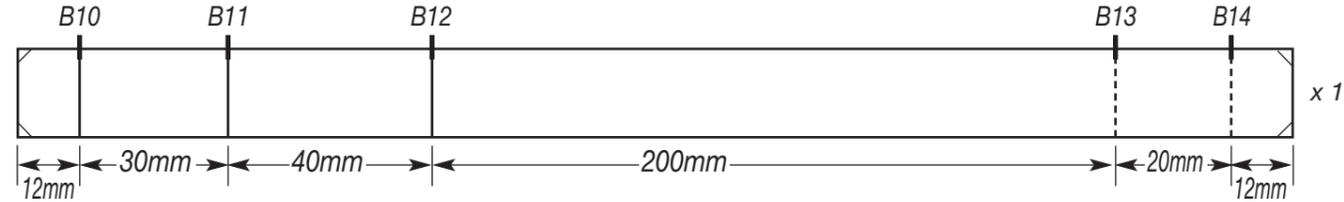
COMPONENT No. 6 - Hat Fur 820mm



COMPONENT No. 7 - Beard 800mm



COMPONENT No. 8 - Santa's Hat lower section 315mm

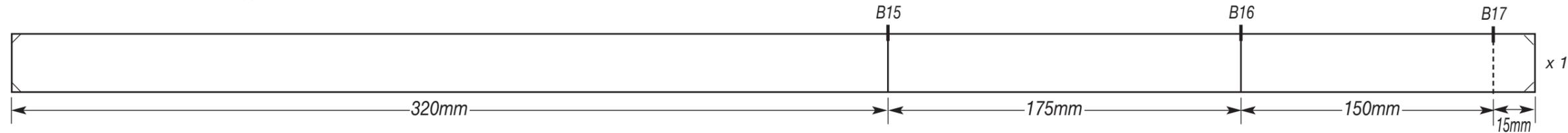


List of Materials Required:

6 x 914mm (3ft) Length of 12mm x 2mm Steel Strip [Re-Order Ref: MC034]

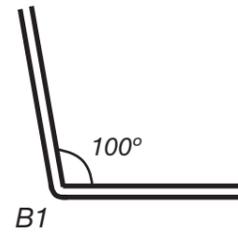
17 x 6mm x 3mm Rivets [Re-Order Ref: MC050L]

COMPONENT No. 9 - Santa's Hat upper section 660mm



TO SCALE:

TEMPLATE No. 2



COMPONENT 9

COMPONENT 8

COMPONENT 2

COMPONENT 6

COMPONENT 4

COMPONENT 4

R6

COMPONENT 3

COMPONENT 3

R8

R10

R9

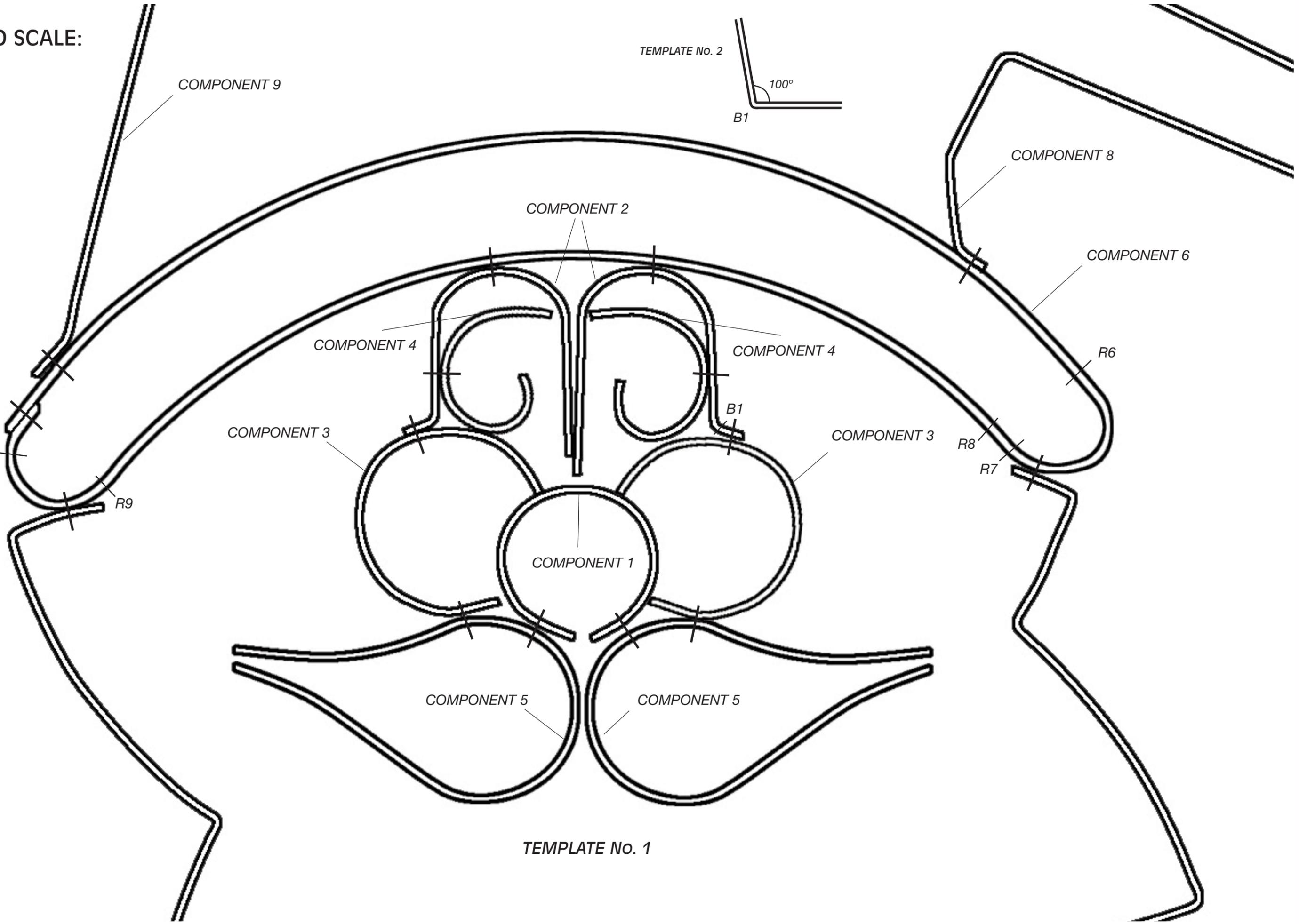
R7

COMPONENT 1

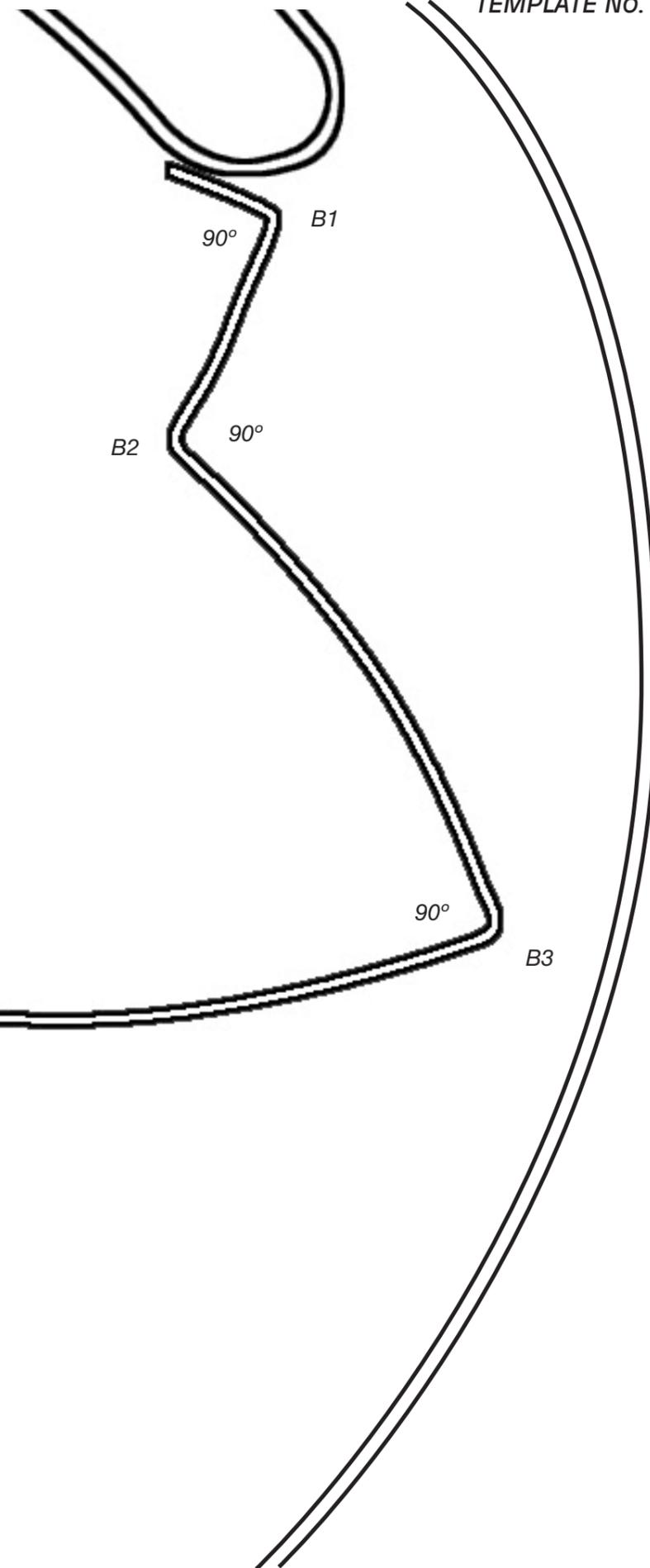
COMPONENT 5

COMPONENT 5

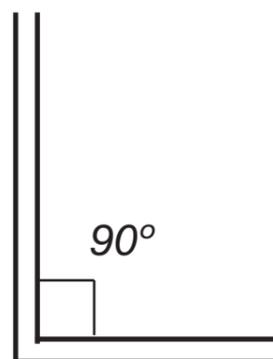
TEMPLATE No. 1



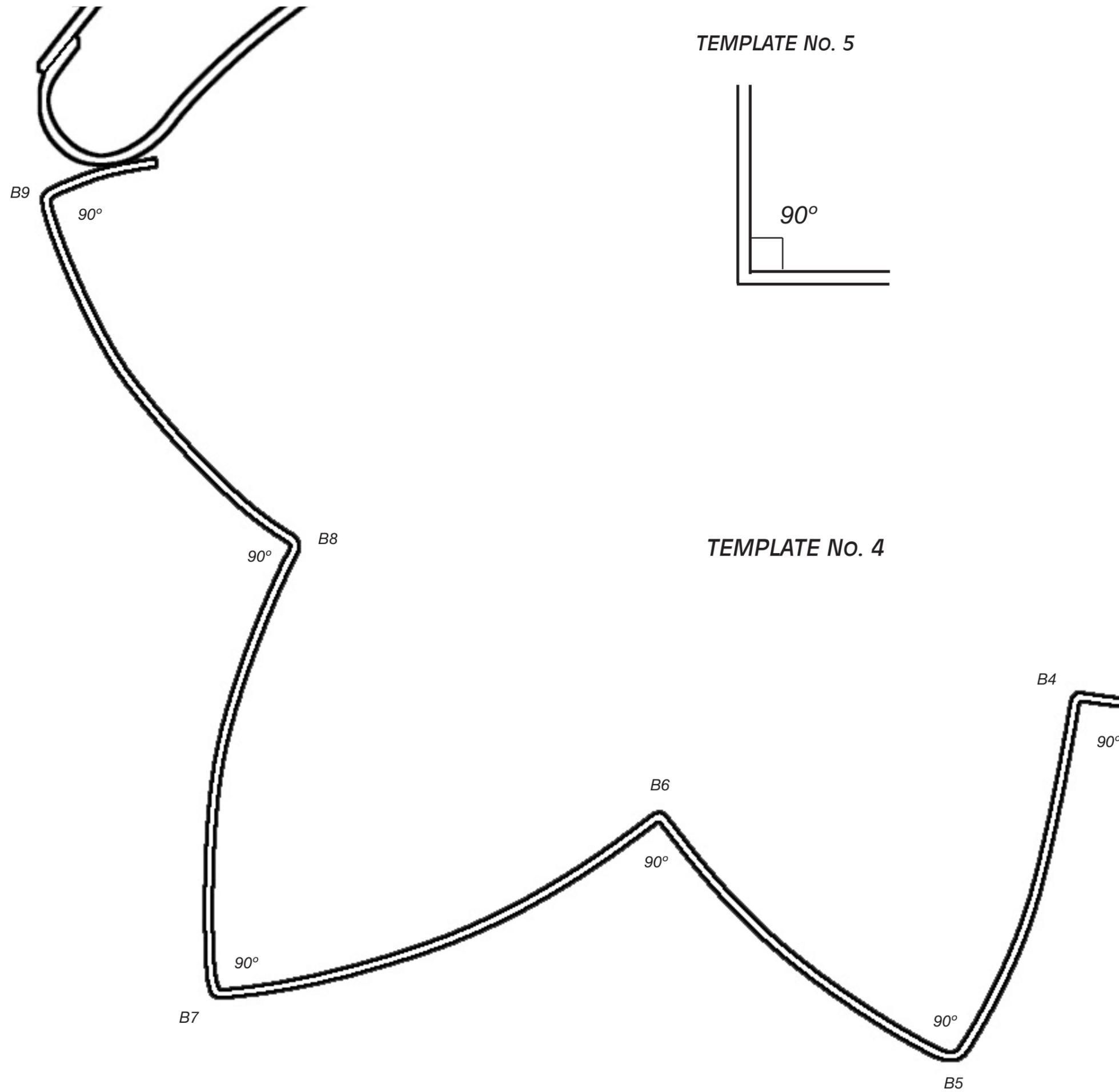
TEMPLATE No. 3

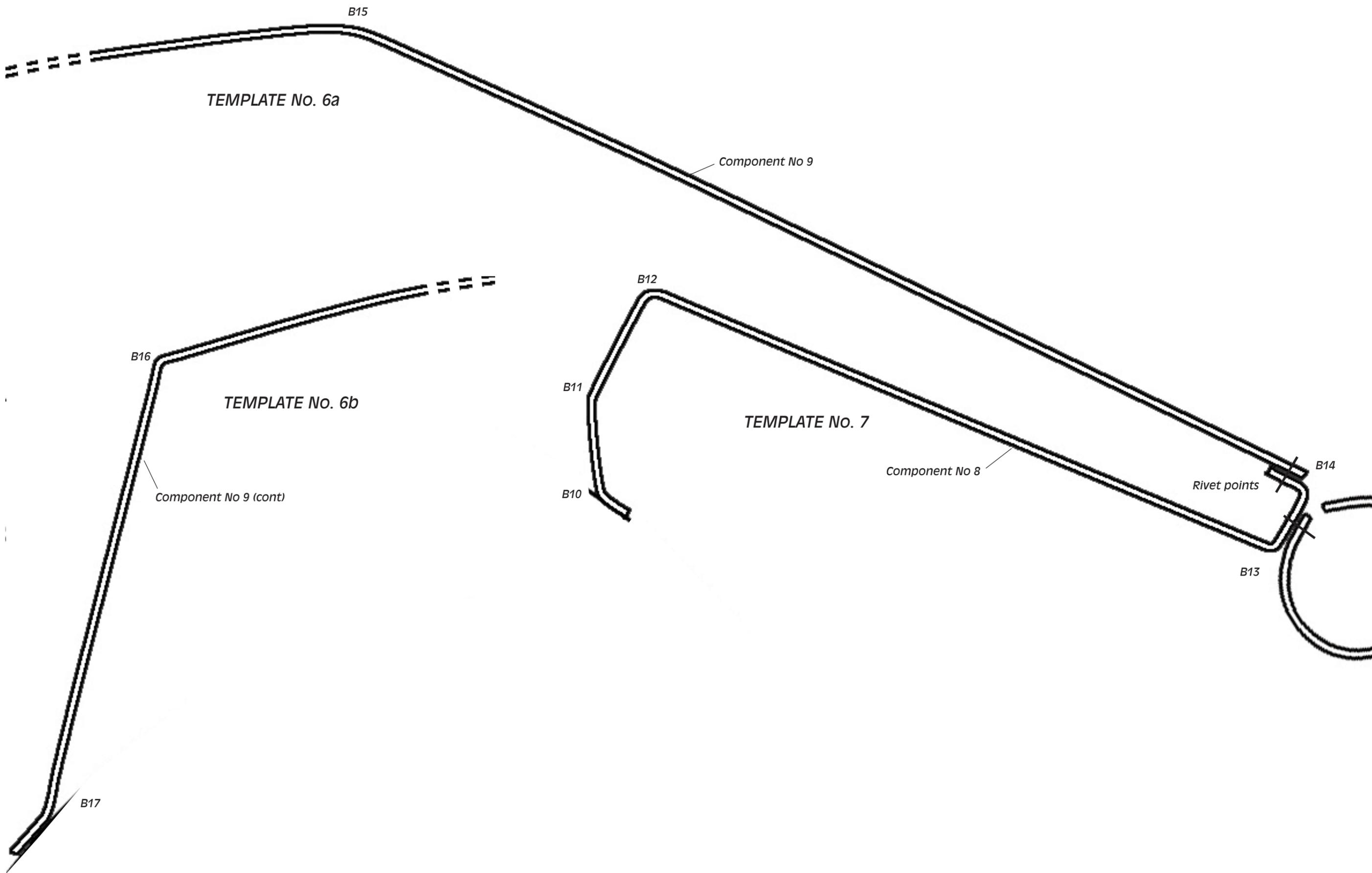


TEMPLATE No. 5



TEMPLATE No. 4





TEMPLATE No. 6a

Component No 9

TEMPLATE No. 6b

Component No 9 (cont)

TEMPLATE No. 7

Component No 8

Rivet points

B15

B16

B12

B14

B11

B13

B10

B17