

WALL CLOCK

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

1 Sides for Frame 914mm (x 2)
Take two 914mm lengths of 12mm x 2mm strip and trim corners. Using the Design Sheet as a reference, mark Bend Points B1 15mm from each end. Bend using Template No.1 to get a right angle bend at both these points to create both side frames.

2 Top/Bottom for Frame 194mm (x 2)
Take another length of 12mm x 2mm and cut two lengths of 194mm and trim the corners and mark Holes H1 7mm from each end and punch all holes.

Arrange the frame as shown, taking great care to keep the frame square and mark on the bent sections of the Sides for the frame where holes H1 line up. Punch and rivet with four 6mm x 3mm rivets to create the main frame for the clock.

3 In-fill 'S' Scrolls 457mm (x 10)
Take a full length of 10mm x 1.6mm and cut in half and trim corners of both pieces. On each length mark scroll point S1 150mm from each end but on opposite faces. Scroll each end to form an S scroll and repeat to create 9 other identical S scrolls. (Note – because the in-fill pattern is random it is not critical that all scrolls are exactly identical and if preferred you can make use these 5 lengths of material to make random size S scrolls on either the Mk1/2 scroll former and/or Mk 2/2H or Mk 2/3. We have chosen same size scrolls purely to demonstrate the principle of making this clock).

4 Clock Plate Fixing Brackets 25mm (x 2)
Next cut two 25mm lengths of 12mm x 2mm and trim the corners. Mark Bend point B1 in the middle and mark hole positions H2 5mm from each end.

With the RBR tool still set for Bending a 90° angle, bend at B1 and check against the Template No.1. Finally, punch hole positions H2.

5 Large Clock Back Plate MC1266 (x 1)
Take the Large square back plate and measure down one edge 97mm (the centre) and make a mark. Repeat down the opposite side. Then punch a hole 8mm in from each point and rivet each Clock Plate Fixing Bracket in position with an 6mm x 3mm rivet. You may need to rotate the bracket to get it into the RBR tool but you can twist it back into position after riveting.

6 Assembly
Start by laying out your in- fill scrolls within the frame of the clock to your preferred pattern. If you want you can use the layout shown in the example layout on the Design Sheet. Whilst it is OK for part of a scroll to go behind the clock plate make sure enough space is left at the back of the plate for a clock movement to be located.

When you are happy with the layout mark most of the joints where scrolls touch each other or the sides of the frame. You don't need to rivet every joint, just enough to ensure the in-fill is secure in the frame and the frame feels rigid.

Punch the initial marked joints and carefully build up the pattern by riveting together. When a number of joints are riveted, some distortion can take place so double check holes line up before punching and riveting together with 6mm x 3mm rivets. Because the in-fill is made from 10mm material and the frame 12mm make sure that all holes are punched in the centre of the scrolls (but the punch and shear is not adjusted so that frame material is deliberately punched off centre because we want the in fill to sit at the back of the frame to allow the clock plate to sit level with the front.

When the infill is completed, place the large Clock Plate in place in the centre of the frame and mark where the two holes on the fixing brackets line up with the sides of the frame and mark the two holes required on the frame to fix it in place. Punch the two holes and rivet in place.

7 After painting (see Finishing notes), use a suitable adhesive to glue the Chapter ring in place and when this is dry, assemble the clock movement and hands as shown in diagram 1. The movement takes 1 AA 1.5v Battery (not supplied).

Finishing
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 -
For best results, always follow instructions on the tin and make sure the metal is free of all scale, dirt, grease or rust.





Design Pack

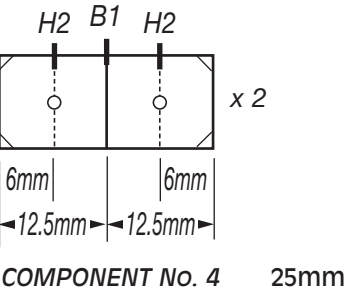
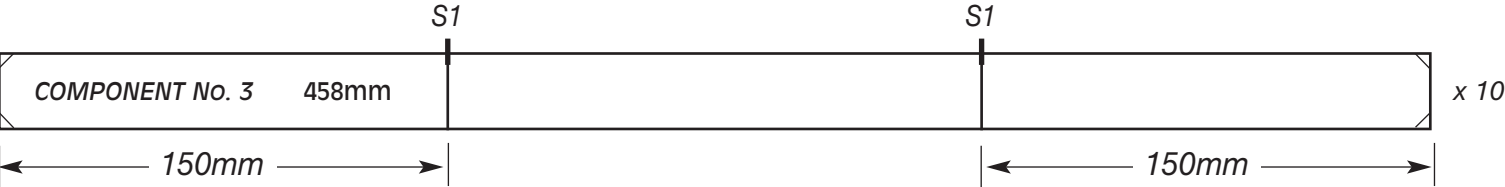
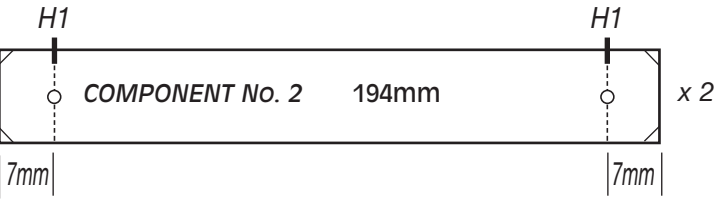
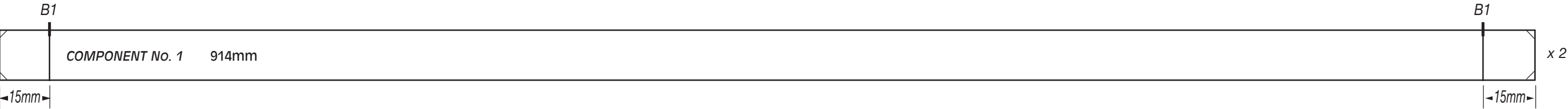
WALL CLOCK

DIFFICULTY RATING:	
EASY	
STRAIGHTFORWARD	
MORE COMPLEX	✓



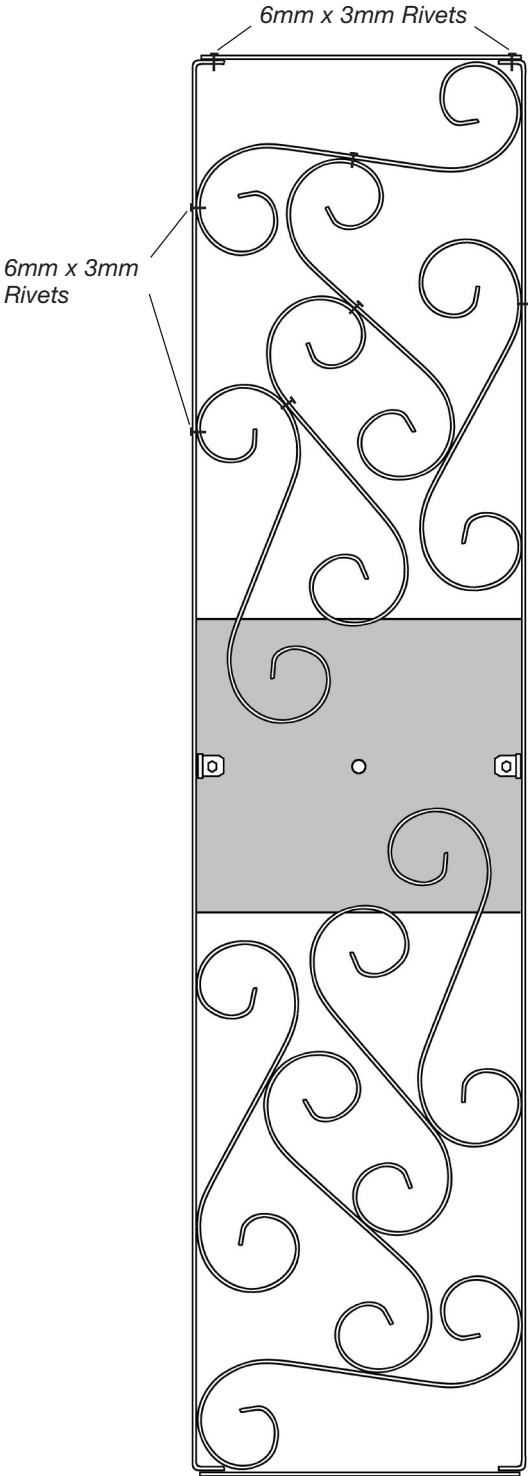
Design Pack: WALL CLOCK - DESIGN SHEET

NOT TO SCALE:



List of Materials Required:

- 3 x 914mm (3ft) Length of 12mm x 2mm Steel Strip [Re-Order Ref: MC034]
- 5 x 914mm (3ft) Length of 10mm x 1.6mm Steel Strip [Re-Order Ref: MC031]
- 24 x 6mm x 3mm Rivets [Re-Order Ref: MC50L]
- 1 x 14mm Spindle Quartz Clock Movement [Re-Order Ref: MC1240]
- 1 x Large Square Back Plate [Re-Order Ref: MC1266]
- 1 x 7" Chapter Ring Roman Numerals [Re-Order Ref: MC1246]
- 1 x Set of Hands 7" [Re-Order Ref: MC 1248]



EXAMPLE LAYOUT



DIAGRAM No. 1

