

Steel Plate Bridge

4 Millimetre scale

This bridge was originally built of 210 gsm card from a stationery supplier and proved to be weight bearing. If the rails are fixed to the bridge deck it can hold a substantial weight.

If you wish to build in stronger (thicker) card then print out on paper first and glue the paper to the card.

This is the 4MM scale version. If you want a 7MM scale version you will either have to wait till I've done one or copy this out then enlarge by 1.75.

General tips and comments.

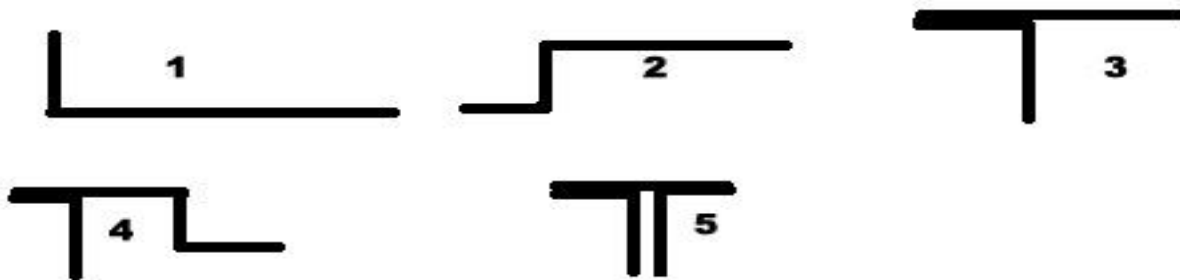
I find it better to leave the bits, particularly the smaller pieces, attached to the main card before assembly as it keeps them together and helps to prevent damage. Print out the sheet of parts on your chosen medium.

Colour all raw edges with a suitable marker pen or paint to prevent white lines showing on the completed model

- 1) Crease along the fold lines. These are shown by lines extending beyond the ends of the parts to be cut out.
- 2) Cut out and fold up and glue the parapet bases. This fold should look like a letter T with one side of the top bar longer than the other. The fold is as shown below. Please note that the Bridge Side butts against the last fold and Deck butts against the side. The Coloured side forms the outer angle to which the bridge plates would be welded/riveted/bolted to and the black section folds back underneath the base with the black side down. This leaves the uncoloured side of the bridge deck for you to cover with whatever balast or base coat you wish. This final fold is not shown.



- 3) Cut out and fold the Parapet Top rail. The fold is shown below. Note that there is a small gap for the top of the Bridge side to slot in to.



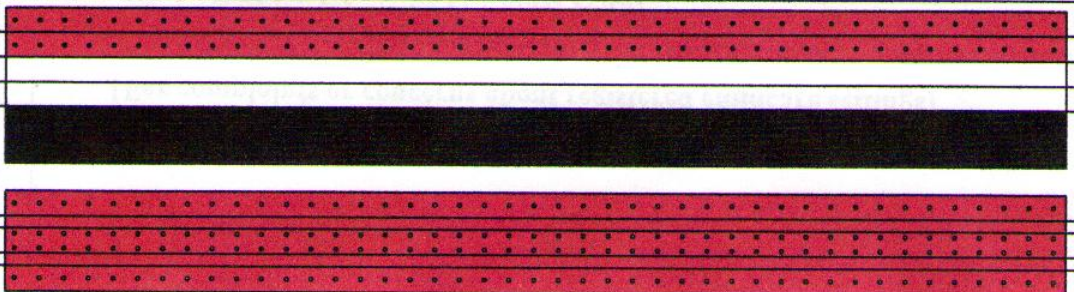
- 4) Cut out and fold the Bridge Side and glue together.
- 5) Cut out, fold and glue the Parapet Stantions. These are folded into a T section with the leg of the T being the central red coloured piece.
- 6) Assemble the sides of the bridge by glueing the Bridge Sides into the slot on the Parapet rail. Next glue the partially assembled Bridge Side to the white side of the Parapet Bases to complete the main part of the sides.
- 7) Glue the assembled Parapet Stantions in place on the black bars on the bridge sides. Glue them as near the underside of the Parapet Rail as you can.
- 8) Finally cut out the bridge deck and butt it black side down over the white inner edge of the Parapet Base rails. If you are using the light card you will be able to gently bend the rail to allow the deck to slip underneath the Parapet stantions. For heavier card you will need to notch the Bridge Deck to fit.

At this stage the bridge is strong and stable lengthways but will flex along the centreline. This will NOT happen when the ends of the bridge are secured to whatever supports you have chosen to place it over.

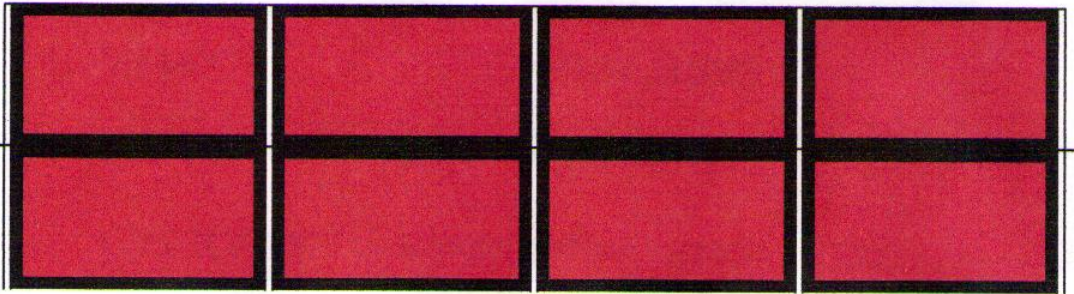


Parapet
Stations

Bridge Parapet Base and
parapert top.
See instructions
for fold sequence



Bridge Side.
Glue back to back



Bridge Deck.
Build black side DOWN.

