

Building Thongs Bridge station

GRAHAM SMITH concludes the description of his 4mm scale model of this interesting station building...



This view of the completed building shows the roof and canopy detail, the open-topped gents urinal with its screened door, and the tall elegant chimney stacks. The techniques described by Graham can be used in any of the main scales. This, and the other buildings at the station, will eventually be incorporated into a scale model layout of Thongs Bridge station.

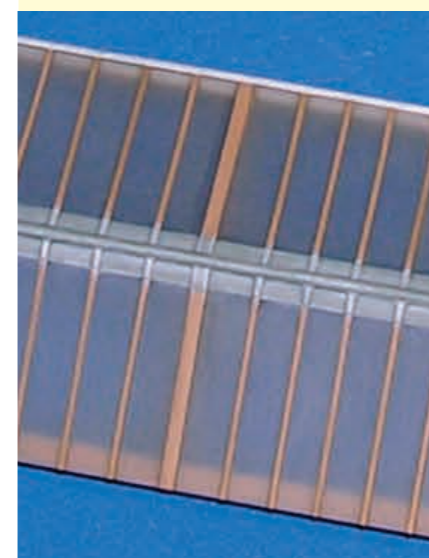
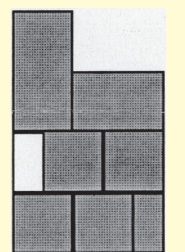
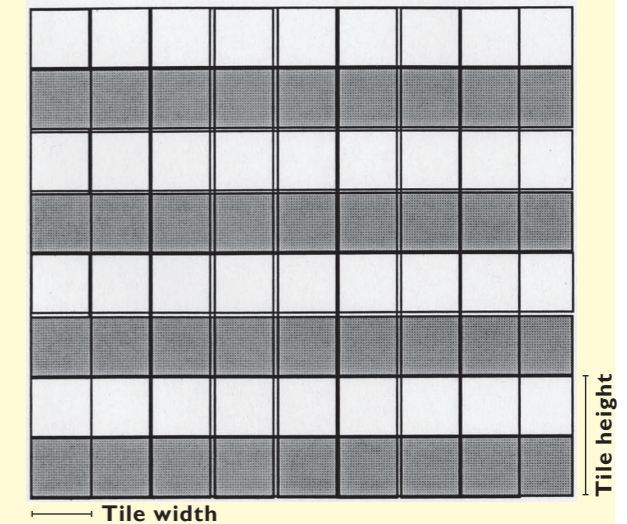
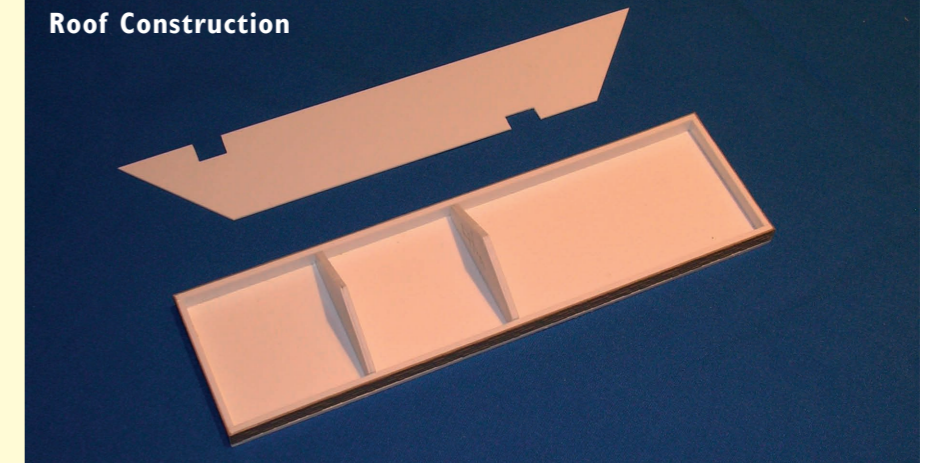
The roof was made up as a separate unit whose main components are:

- i. the roof tray
- ii. plastic sub roof pieces (30 thou)
- iii. roof profile formers

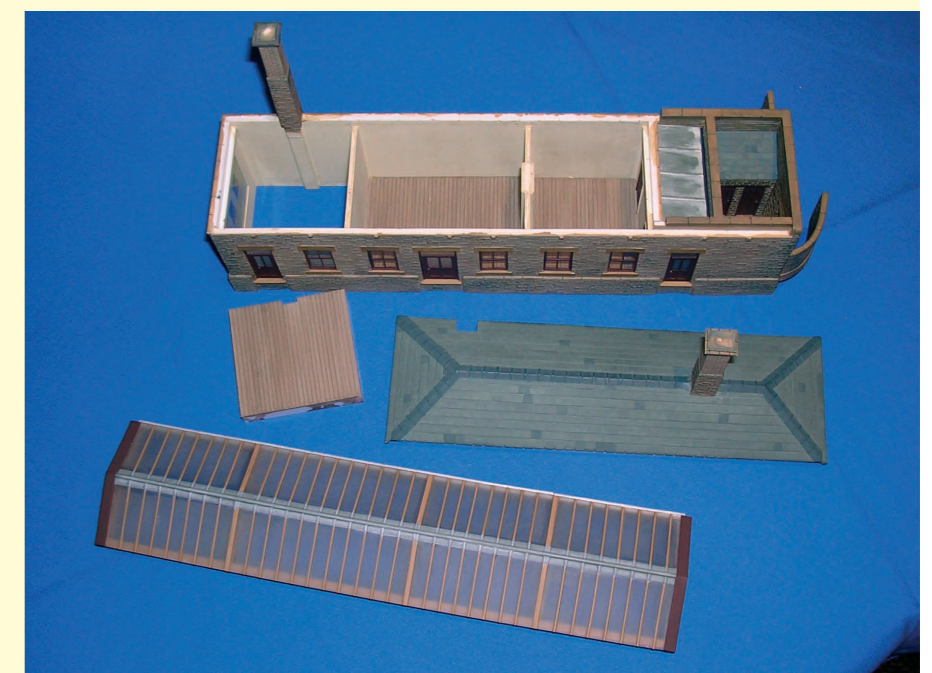
The basis of the structure is the roof tray which was made from 60 thou sheet and 60 thou strip covered with embossed stone. The tray was made to be a tight fit inside the building and sits on top of the partition walls. A small shelf attached to the inside end walls of the building supports the two ends of the tray. Roof profile formers, made from plastic card, fit tightly across the width of the tray and also at each end. A second chimney made slightly bigger but using the same methods and overlays as the first was glued to the base of the roof tray and to the side of a roof former for support. Cuts were made in the sub roof to enable it to fit around the chimney. Once satisfied with the fit, the sub roof was glued to the formers.

Photographs of Thongsbridge station show the roof to have only eight rows of large roof tiles on each side. This is not surprising considering the windswept location of the station. To achieve the correct look the tiles would have to be made from scratch. This actually proved to be remarkably easy! Simple calculations were made to work out the exact size of tile needed for the roof. Once these were determined a grid was drawn out on 10 thou plastic card. The spacing between the vertical lines being the tile width, and those between the horizontal lines being half the tile height. When the grid was completed every vertical line and every alternate horizontal line were lightly scribed using the OLFA scriber. Strips of double height tiles were removed and these were attached to the sub roof starting at the bottom. Layers of tiles were cut and glued in place with the bottom half of one strip overlapping the top half of the previous one. The un-scored horizontal line is a good guide for keeping the rows straight. As each part of the roof was completed the sides were trimmed with a sharp scalpel blade. Care was taken to line up the tile courses around the roof. Ridge tiles were made by using strips of 10 thou plastic card. The strips were scored, folded and glued in to position. Individual ridge tiles were defined by gluing 10 x 30 thou plastic strip at tile width intervals. The finished roof was then painted with individual tiles being picked out in Humbrol 77 Matt Blue and Humbrol 31 Matt Slate Grey. After allowing the paint to dry for a number of days the whole roof was given a thin wash of Humbrol 77 and 31 mixed. Further coats of thin wash were applied allowing each coat to dry thoroughly before the next one was applied.

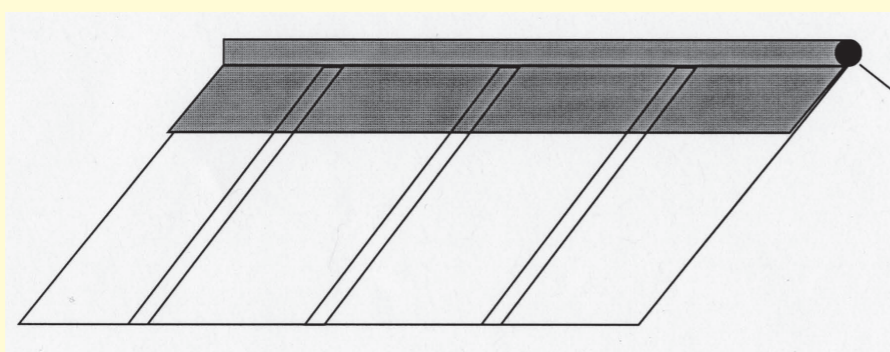
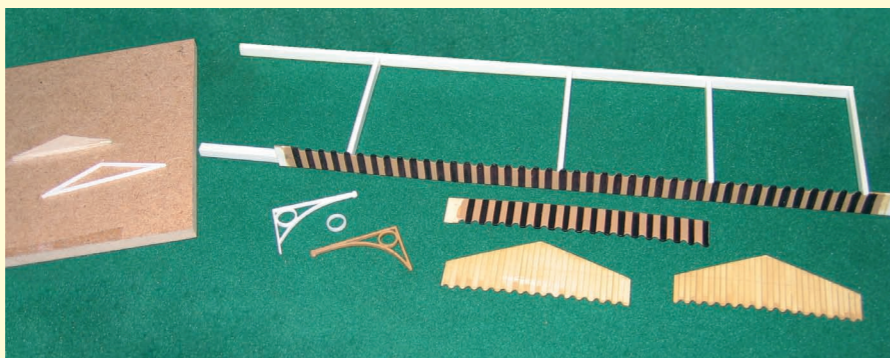
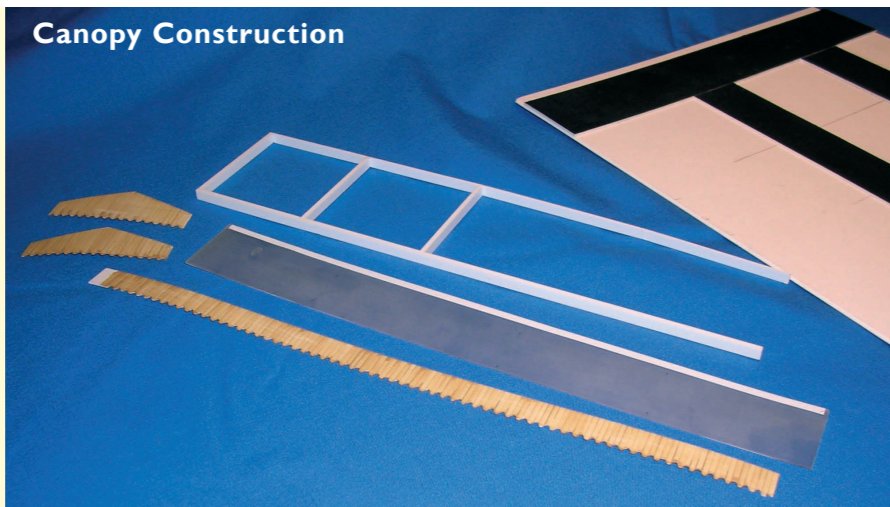
Roof Construction



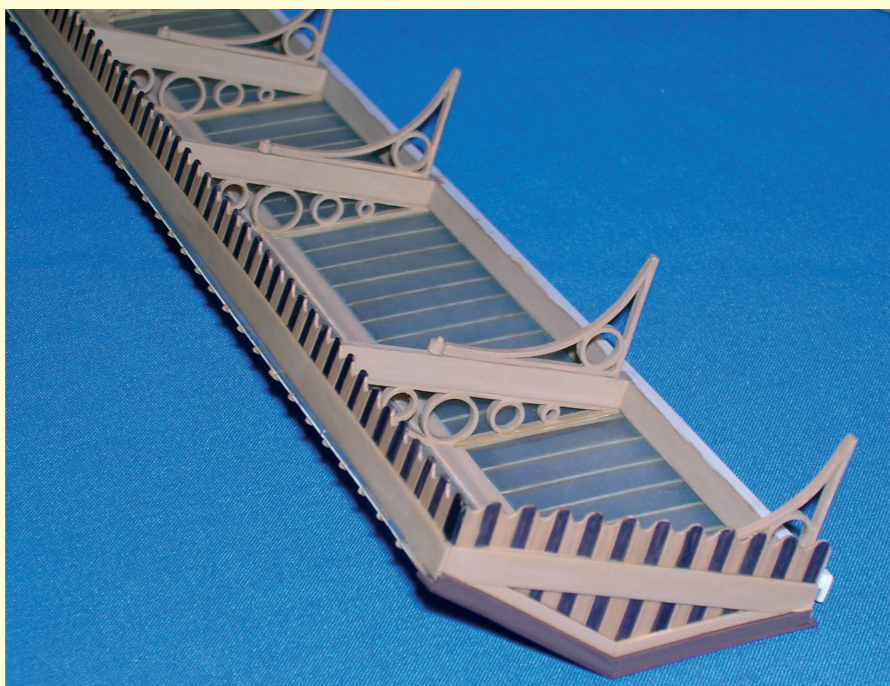
The finished roof. The partition walls and end support shelves can be clearly seen in the main building.



The last part of the model to be constructed was the glazed canopy. The photograph shows the simple framework around which the canopy was constructed. This framework is made up from various thicknesses of plastic strip from the Evergreen range. The photo also shows the simple cardboard jig which was used to hold the framework square whilst it was glued together.



Once completed, the glazed roof was attached to the canopy frame, being glued to the roof supports with Plastic Weld.



The canopy valance and two canopy ends were made from 30 thou plastic card and scribed at 2.5mm centres. The distinctive valance pattern was achieved by filing with a selection of needle files. (Not as fiddly as it might sound!) The valance and ends were initially painted in thinned Tamiya XF59 (Desert Yellow). Alternate boards were then picked out with Tamiya XF9 (Hull Red). The original scribing gives a good line to work to and it is not difficult to get a nice neat edge.

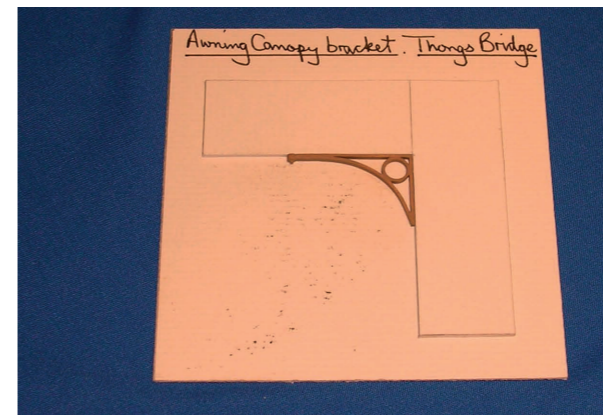
Once completely dry the valance and ends were attached to the canopy framework.

A start was made on the glazed roof by cutting two strips of 30thou clear plastic sheet. Both sides of each strip were then lightly rubbed with the finest of wet and dry paper. This produced a slightly opaque finish which I hoped would leave the finished canopy looking weathered and used. Along the top edge of each strip I glued a piece of 10 x 156 thou white plastic strip from the Evergreen range. This was to be the first stage in producing a reasonable representation of lead flashing.

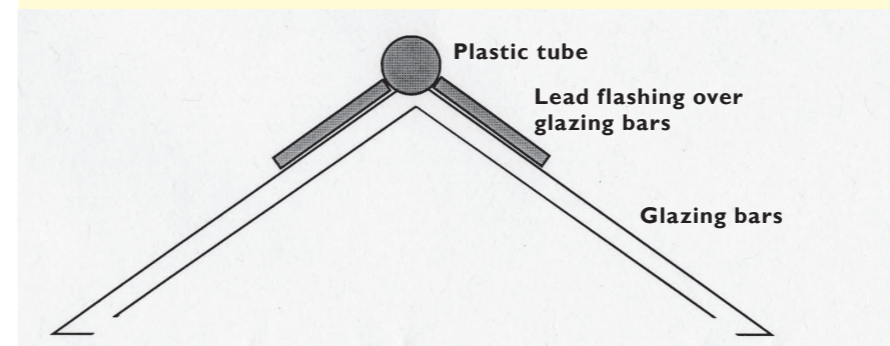
Glazing bars for the roof were made from 20 x 40 thou plastic, with 20 x 80 thou for the bars which covered the roof supports - see photo opposite. These were painted with Tamiya XF59 prior to attaching to the roof glazing. The glazing bars were attached to the roof but only to the white plastic strip. A further piece of unpainted plastic was then attached on top of the white strip in line with each glazing bar to produce a stepped effect.

The underside of the canopy showing the roof supports and the wall brackets. Both the roof supports and wall brackets were made from 30x 60 thou plastic from the Evergreen range. Construction took place using simple cardboard jigs. See photo overleaf!

Canopy Construction



The triangular canopy supports were infilled with plastic rings cut from various sizes of plastic tube. The wall brackets had a plastic ring placed centrally and glued to each of the three sides for added strength. The roof supports were glued to the cross members of the canopy frame. The wall brackets were the last parts to be added before the canopy was attached to the building. The previous photo also gives a very good view of the thick rear frame of the canopy which sat on top of the front wall of the main building.



Prior to making the canopy, I had two concerns about the glazing:
 i. Previous attempts to glue plastic strip to clear glazing had not proved very satisfactory, the strips coming away after a short time. Through trial and error I have found Plastic Weld to be the best adhesive in this situation.
 ii. I wanted a good representation of lead flashing on the top of the roof. Again previous attempts had not proved too convincing - well they didn't satisfy me! When the roof was secure a length of 3/32" plastic tubing, again from the Evergreen range, was attached on top across the length of the awning.



The unpainted top of the canopy was then painted with Humbrol matt 31 to give the impression of lead flashing. It was painted a number of times as I wanted to lose the sharp corners of the plastic by allowing the paint to build up around the plastic strips and the plastic tube. Because the bars are stepped painting them gives the impression that lead flashing has been moulded over the glazing bars. Dry brushing with matt white enhances the effect created. The wall brackets were now attached and painted. When completely dry the canopy was attached to the building. I was concerned that the glazing bars might come adrift so, once everything was attached to the building I gave the whole canopy a coat of matt varnish. So far nothing has moved.

Conclusion

Plastic card is a great medium to work with, easy to cut, glue and takes paint well. However the one great drawback is the real possibility of warping, which can occur up to a year later, so make sure everything is well braced.

Making this model accurately has been a

challenging project but the techniques used have been simple, straightforward and based on the tools and materials that all modellers would have in their tool box. I am sure accurate models of other prototypes could be made using these same simple techniques. Careful

planning and breaking the model down into small modules makes it easy to build a model that will satisfy you.

Having said all this I am pleased with the finished model, I think it captures the flavour of the original. Right, now what's the next project?