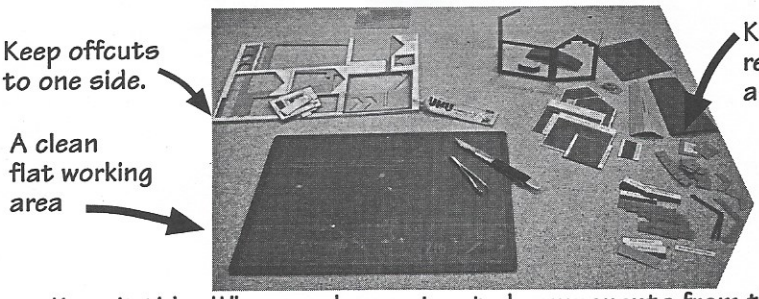
PO242 00 TUNNEL ENTRANCE

SHEET 1

To construct this kit you will need the following:

1. A Modellers knife.
2. A pair of sharp pointed scissors.
3. A steel ruler.
4. Glue - UHU Clear Adhesive or Bostik Clear Adhesive are best. Make sure you get the tubes with the narrow nozzle for easy application.
5. A cutting surface - a sheet of card or a cutting mat.
6. Tweezers to hold the smaller components

Your Work Surface



Keep it tidy. When you have extracted components from the sheet, place them neatly to one side, FACE UP so you don't loose them. TAKE CARE WITH EXTRA SMALL COMPONENTS PLACE MULTIPLES IN PILES TOGETHER. DON'T THROW ANYTHING OUT. Offcuts can come in handy for bracing etc. and it also reduces the risk of accidentally throwing anything away.

NOTE: If you are using UHU clear 20ml tubes, you will need two of them to build this kit.

READ THROUGH ALL THE INSTRUCTIONS BEFORE YOU START. This is complex kit that requires particular attention to fine details.

Each component is fastened to the sheet by means of a score line. These are cut lines that have only gone about three quarters of the way through the card.
To detach each component from the sheet, locate the score line that is holding it in place (these are clearly marked with blue arrows) and carefully run the point of your knife along the scoreline and the item will come seamlessly away. CAUTION - be very careful when running the point of your knife along these score lines. It is easy to run out of the groove and cut something you shouldn't.

CHECK LIST This kit pack should contain the following:

- 2 x SHEET A - Tunnel Mouth printed components.
- 2 x GREY Sheet '1' with main tunnel strengthener.
- 2 x GREY Sheets '2' with various strengtheners.
- 2 x SHEET B - Tunnel inner walls.
- 1 x A3 INSTRUCTION SHEET 1 (this sheet).

GREY CARD SHEET '1'

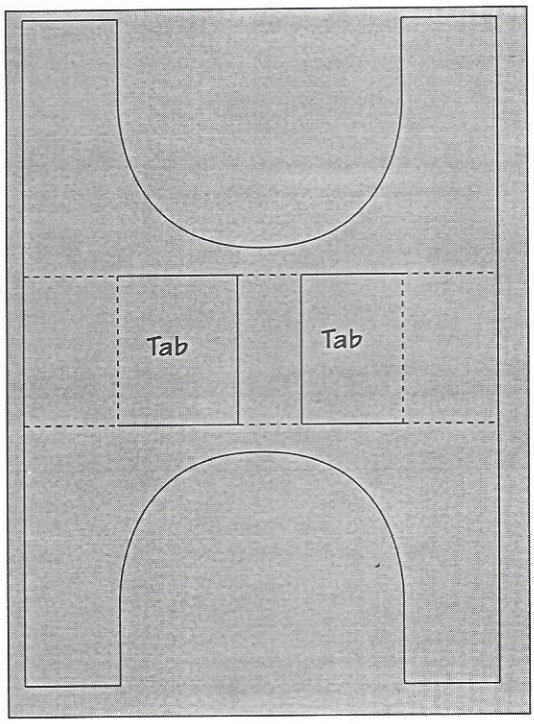
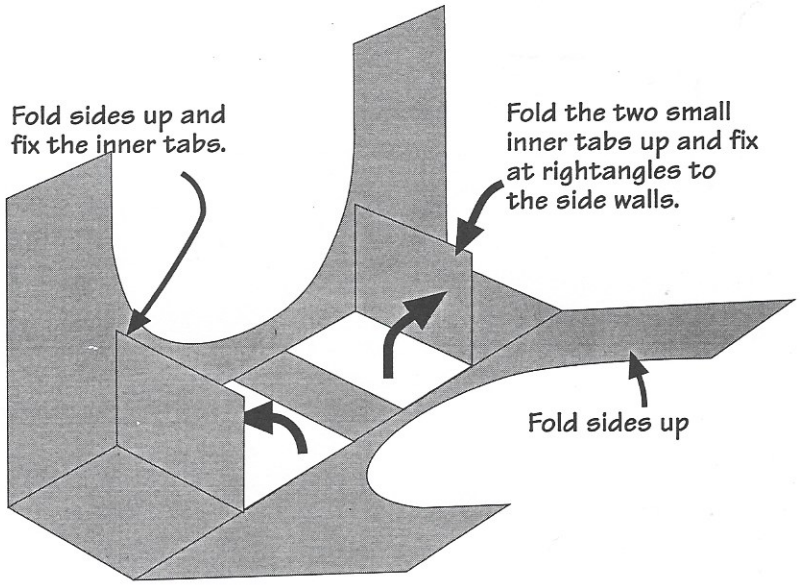


Fig. 1. GREY CARD '1' INNER ARCH FORMER.

There are two identical inner arch formers, one for each tunnel entrance. These fold and glue to form a rigid inner chassis to hold the whole structure together.



Start with the inner arch formers.
The two tabs fold up at rightangles to the base (top when its turned over later on). Put spots of glue on the edges of the tabs and fold up and fix the side walls to them, hold until fast.

GREY CARD SHEET '2'

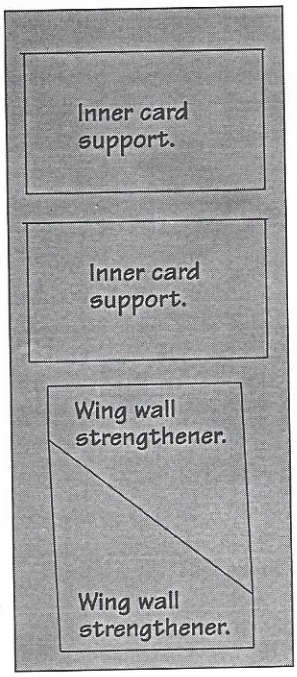


Fig. 2.

Fix the two inner support cards (located on grey sheet '2') so they fit flush to the tunnel sides.

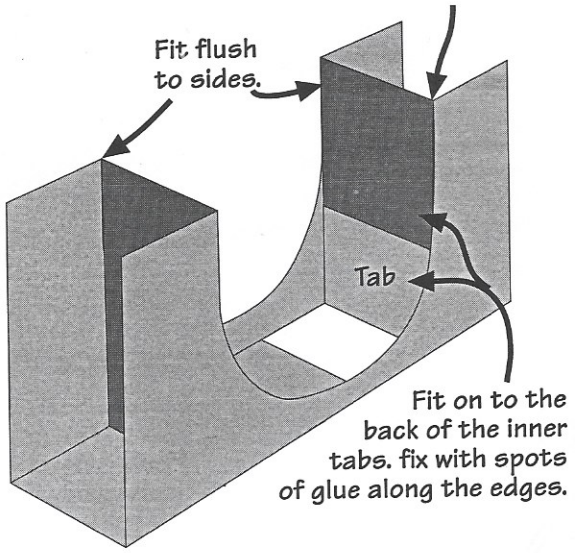


Fig. 3

This looks
Cut along
Next, fold

Stone side
down on su

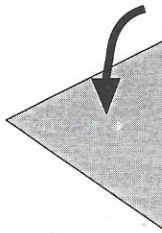
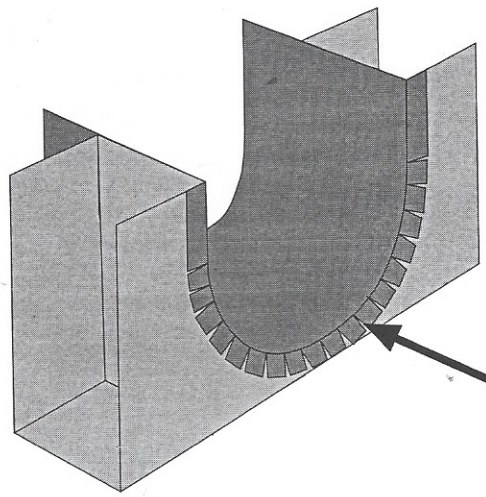


Fig. 5. FITTING THE ARCHED INNER ROOF & WALL SECTION.



Turn the arched brick roof over and push down inside the strengthener unit.
DON'T GLUE YET
This is so you can see how it fits with the tabs folded over the outside of the side wall.

Fig. 6. APPLY

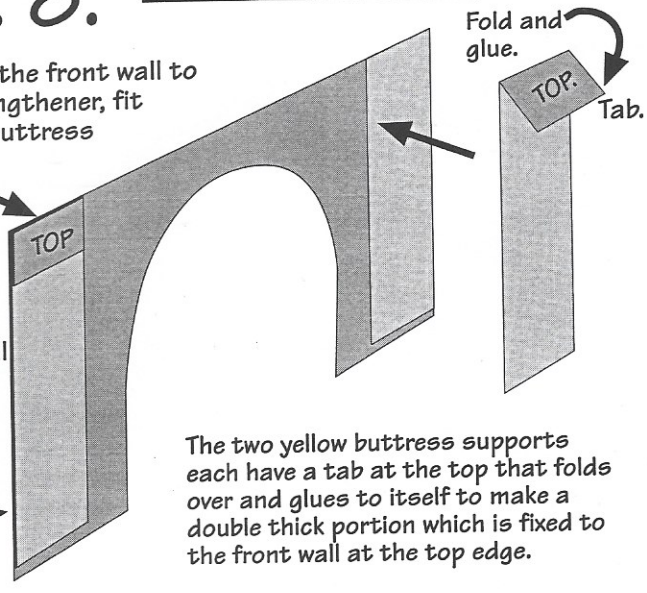
Lift the arch out and apply th

Spots of glue along the edges of the arch formers.

Fig. 8. THE FRONT WALL.

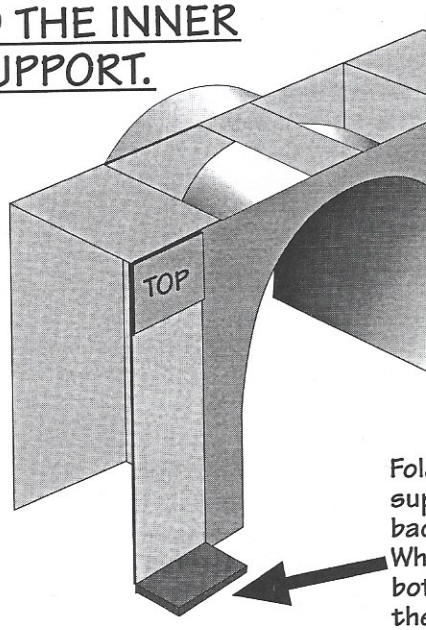
Before fitting the front wall to the main strengthener, fit the two long buttress supports.

Fix the supports to the front wall flush to the sides and the top.



The two yellow buttress supports each have a tab at the top that folds over and glues to itself to make a double thick portion which is fixed to the front wall at the top edge.

Fig. 9. FIX THE FRONT WALL TO THE INNER SUPPORT.



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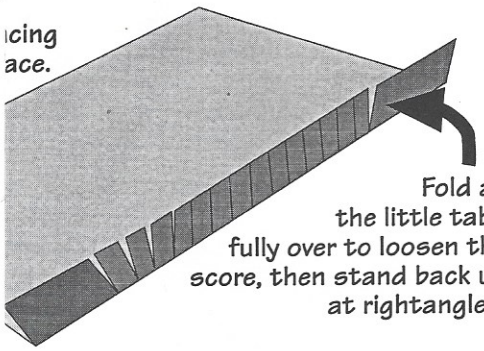
ARCHED INNER ROOF & WALL SECTION (SHEET 'B'). Fig. 4.

is though it could be difficult, but it's not - BUT BE CAREFUL.
he back edge of the inner wall to release from the sheet.
ack all the little grey tabs along the edge.

Curve the card into an arch, and you will see how the grey tabs fan out and stand up at rightangles.



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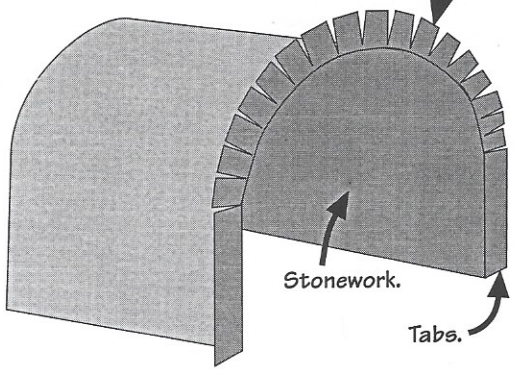
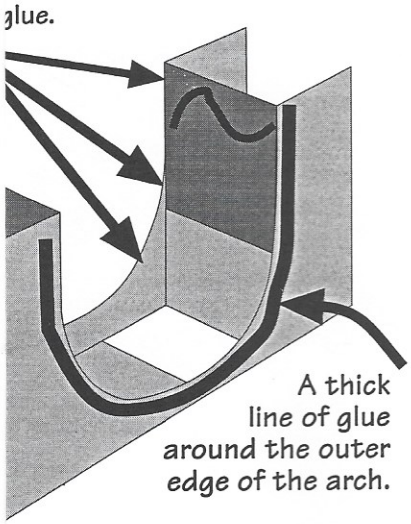
Fold all the little tabs fully over to loosen the score, then stand back up at rightangles.



THE GLUE.

glue.



A thick line of glue around the outer edge of the arch.

Fig. 7. FIT THE ARCH BACK IN.

Before the glue has a chance to dry, drop the arch back in so it sits in the same position that you had it in Fig. 5. then push the arch against the formers and fold the tabs on to the glue. Keep pressing all edges and tabs until the glue has set.

The stonework must be pressed against all the arch formers.

THE BACK EDGE OF THE INNER WALLS STICKS OUT PAST THE BACK EDGE OF THE INNER SUPPORT.

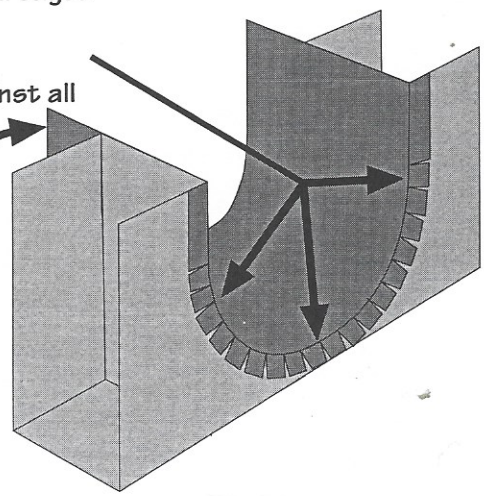


Fig. 10. FIX THE BUTTRESSES.

The front wall is glued to the inner support, make sure that all edges are flush. Hold fast until set so that no edges peel back leaving unsightly gaps.

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ts in half and glue back to
make double thickness.
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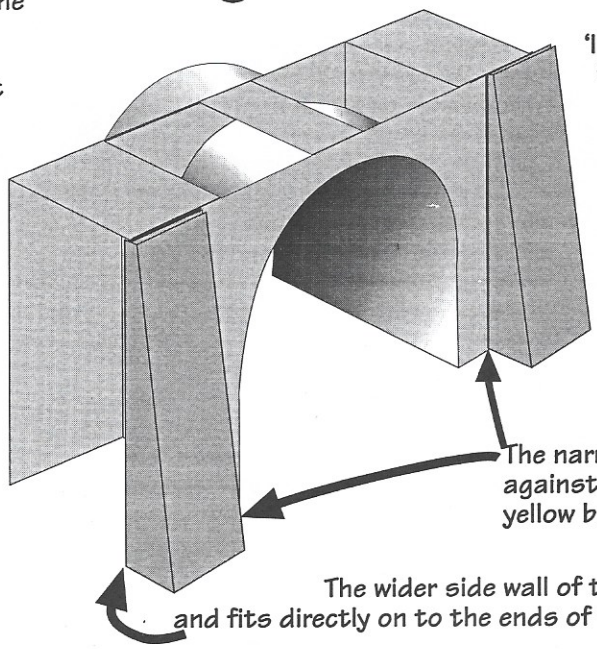
n of the front wall underneath
low buttress supports.



There are two buttresses, 'left buttress' and 'right buttress'. Study them carefully and you will notice that the side walls have different widths.

The buttress sides fold around and fit on the edges of the yellow buttress supports, with the wider buttress sides fixing on to the outer edges of the main structure.

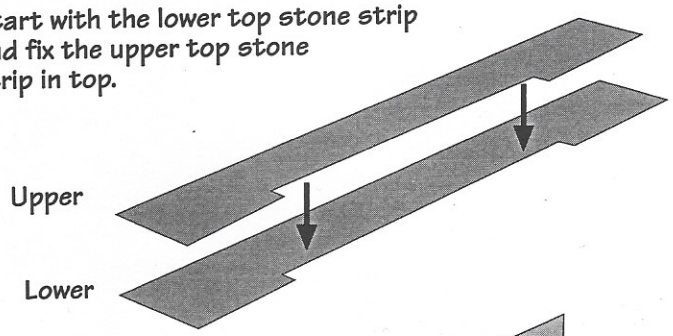
The narrow edge folds around and fits against the inner side of the yellow buttress support.

The wider side wall of this (left) buttress folds around and fits directly on to the ends of the front and strengthener wall.

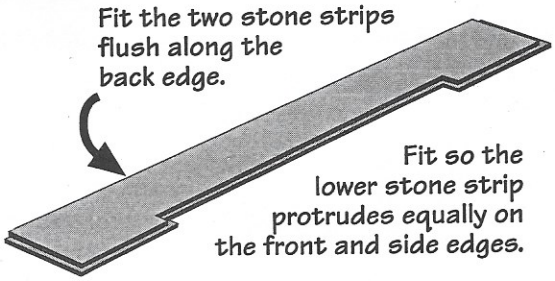
Fig. 11. THE TOP STONE SECTION.

The top of the tunnel has a stepped stone strip topped with a wall and top stones.

Start with the lower top stone strip and fix the upper top stone strip in top.

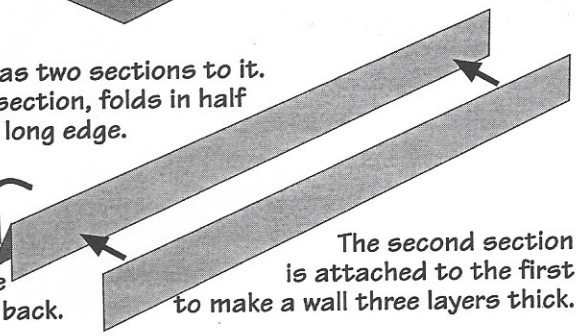


Fit the two stone strips flush along the back edge.



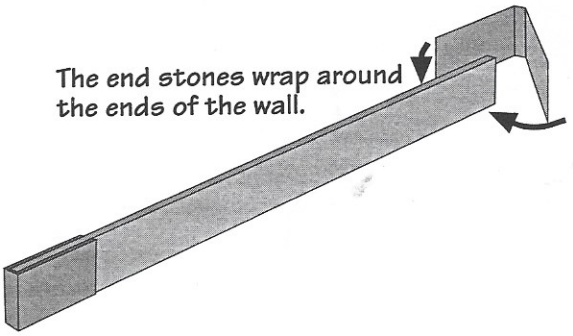
Fit so the lower stone strip protrudes equally on the front and side edges.

The wall has two sections to it. The first section, folds in half along the long edge.

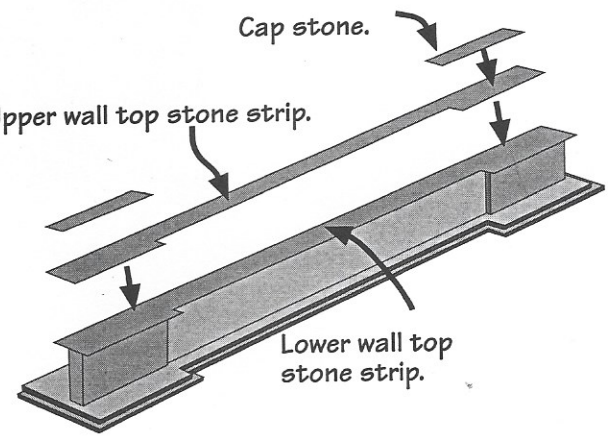


The second section is attached to the first to make a wall three layers thick.

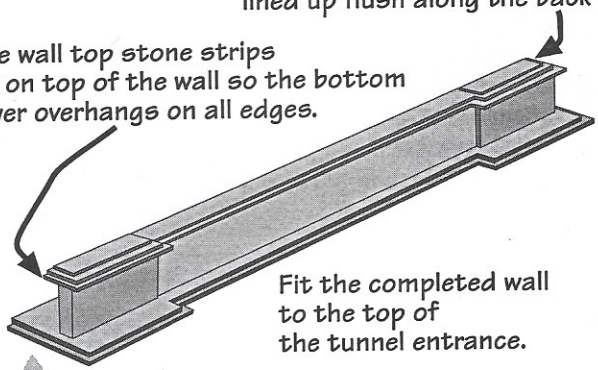
The end stones wrap around the ends of the wall.



The upper strip and cap stones are stepped back from the lower strip lined up flush along the back edge.



The wall top stone strips fit on top of the wall so the bottom layer overhangs on all edges.

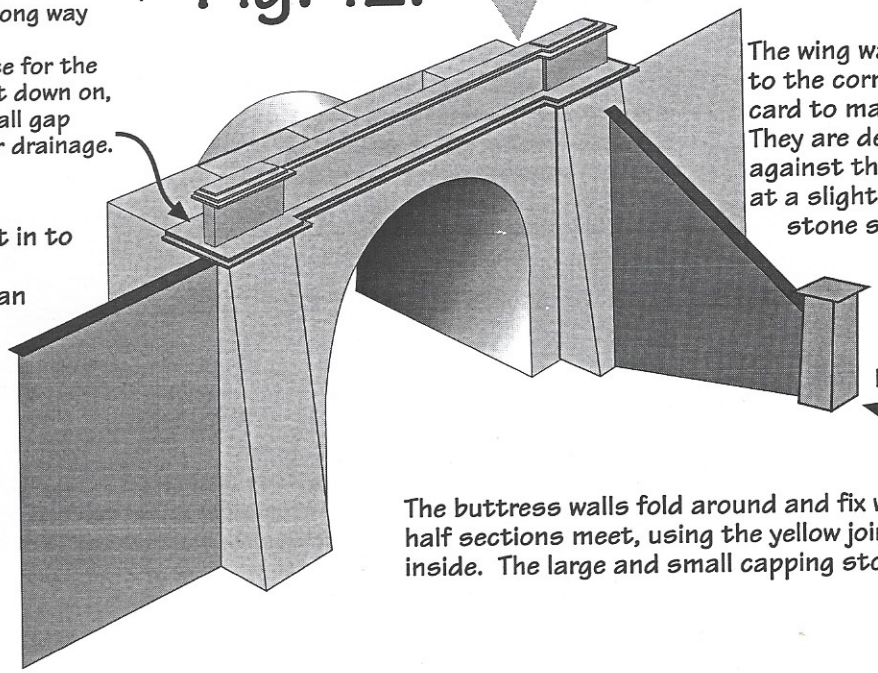


Fit the completed wall to the top of the tunnel entrance.

Fig. 12. SIDE AND WING WALLS.

Note that the lower stone strip sits back quite a long way behind the wall. This allows a space for the scenery to be built down on, and to leave a small gap behind the wall for drainage.

The side walls fit in to the ends of the structure and can be topped with cap stone strips cut to length.



The wing walls are glued to the corresponding grey card to make them thicker. They are designed to stand against the large buttresses at a slight angle. Cut the cap stone strips to fit.

The buttress walls fold around and fix where the two half sections meet, using the yellow joiner fitted inside. The large and small capping stones fit on top.