

PN142 N Gauge TUNNEL ENTRANCE (Double Track) INSTRUCTIONS

CHECK LIST

This kit pack should contain the following:

- 2 x SHEET A - Tunnel Mouth printed components.
- 2 x GREY Sheets with tunnel inner strengtheners.
- 2 x SHEET B - Tunnel inner walls.
- 1 x SHEET C - Capping Stone Strips
- 1 x A3 INSTRUCTION SHEET 1 (this sheet).

To build this kit you will need a few basic tools:

1. A modellers knife.
2. A cutting surface - A cutting mat or thick card will do.
3. A sharp pair of scissors
4. A steel ruler.
5. Fine point tweezers.
6. METCALFE Ultra Fine Tip Glue Bottles (see opposite).

Glue.

Speed Bond is slightly slow drying, ideal for where a little positioning is required as you build.

Also **UHU** All Purpose solvent free.



All tools & Glues available at: www.metcalfe-models.com

Ultra Fine Tip Glue Applicators.

An absolute 'must' when building this kit. When used with **Speed Bond** or **UHU** perfect amounts of glue can be applied to very precise areas without any mess.

Speed Bond in an applicator was used to build most of this kit.

UHU for fixing the glazing.

A METCALFE product supplied in packs of 3
Product code MT907 Glue not included



Extracting components from base sheets.

To stop the components falling off the base sheets, they are held secure with score lines (marked with blue arrows) that cut about 75% of the way through the card. →

To release them run the point of your knife along these score lines and they will come seamlessly away.

WARNING, Cut with care to reduce the risk of the blade running out of the score and cutting the component.

READ THROUGH ALL THE INSTRUCTIONS BEFORE YOU START.

Fig. 1. GREY CARDS.

There are two identical thick plain grey cards. These contain the inner strengthening formers that hold the structure together.

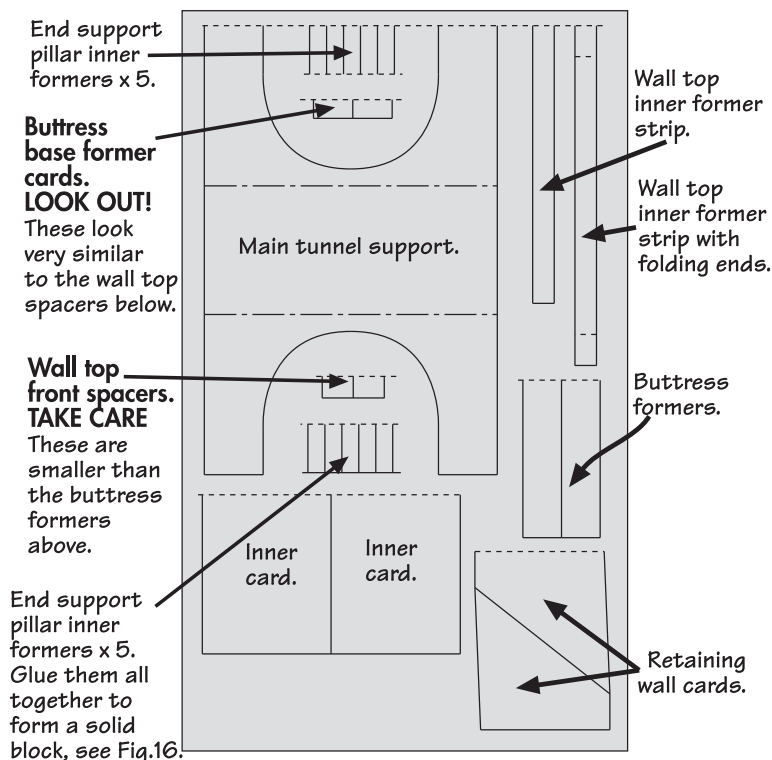
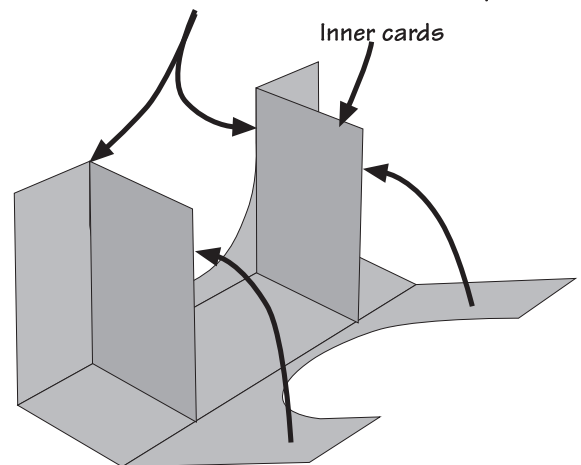


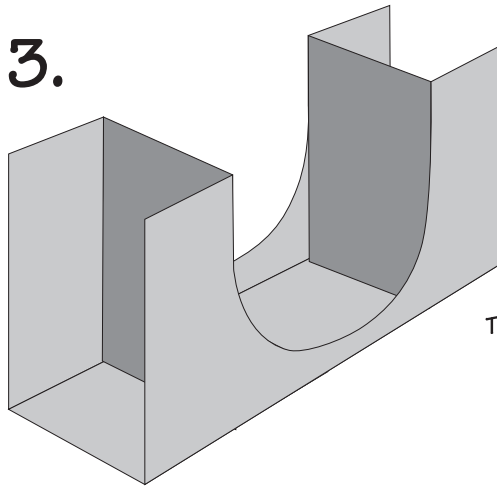
Fig. 2. MAIN TUNNEL SUPPORT.

Fit the inner cards so that their edges are flush up against the edges of the tunnel openings.



Fold the main tunnel support side sections up against the two inner support cards.

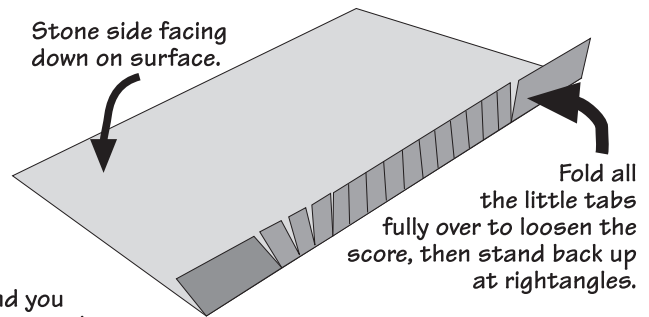
Fig. 3.



This is how the tunnel support should now look. This is upside down of course!

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

This looks as though it could be difficult, but it's not - BUT BE CAREFUL. Cut along the back edge of the inner wall to release from the sheet. Next, fold back 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.

Fig. 5.

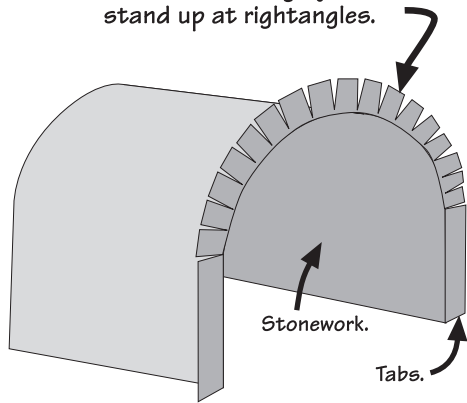
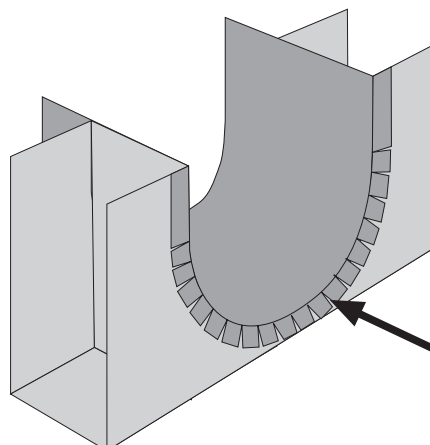


Fig. 6. FITTING THE ARCHED INNER ROOF & WALL SECTION.



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 fold over the outside of the side wall.

Fig. 7. APPLY THE GLUE.

Lift the arch out and apply the glue.

Spots of glue along the edges of the arch formers.

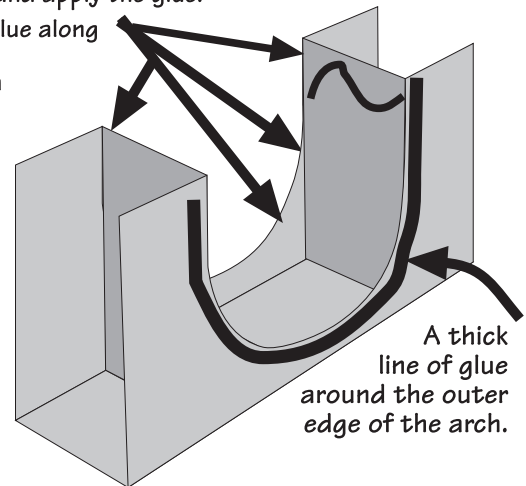


Fig. 8. FIT THE ARCH BACK IN.

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. 6. 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 edges of the archway.

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

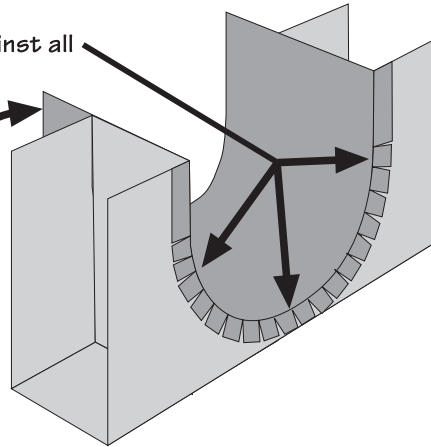


Fig. 9. THE FRONT WALL.

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

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

The two plain grey buttress formers fit on to the yellow parts of the front wall.

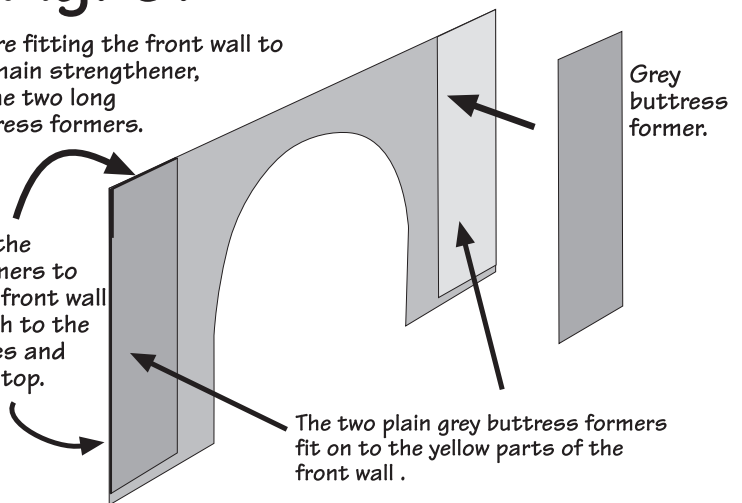


Fig. 10.
**FIX THE FRONT WALL
TO THE INNER
SUPPORT.**

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.

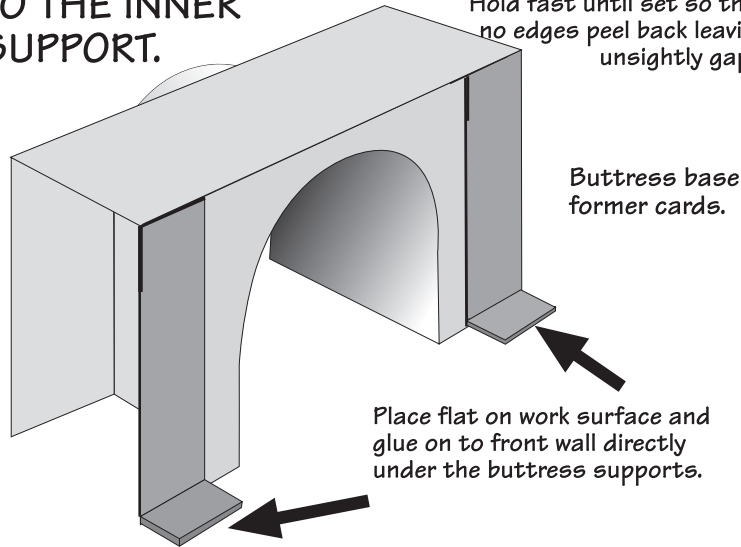


Fig. 11. FIX THE BUTTRESSES.

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 grey buttress supports, with the wider buttress sides fixing on to the outer edges of the main structure.

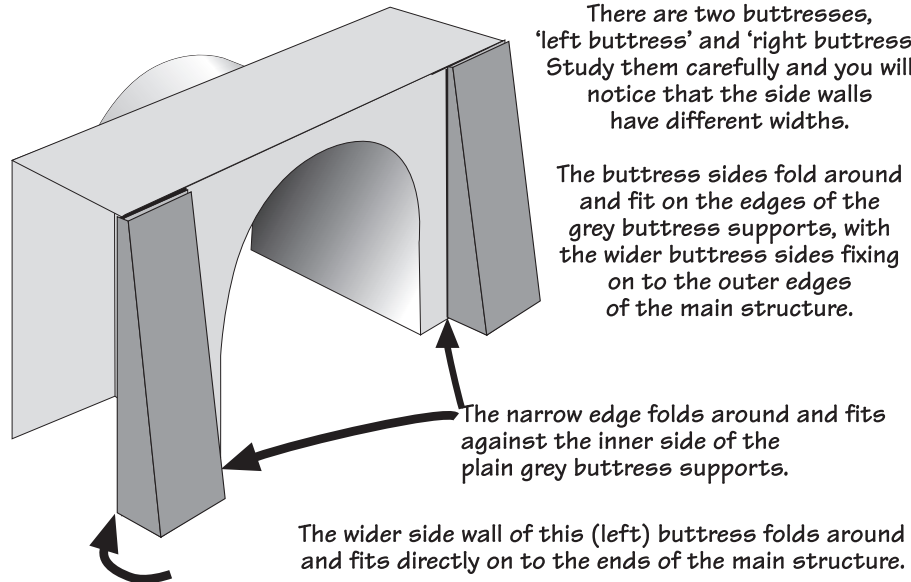
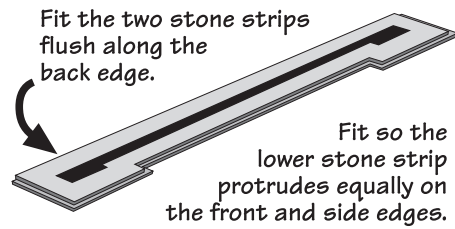
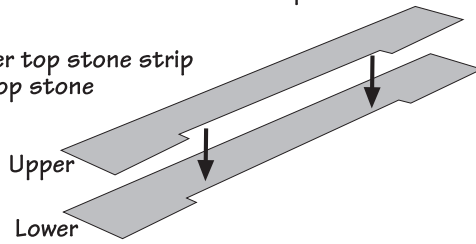


Fig. 12. THE TOP WALL SECTION.

The top of the tunnel has a stepped stone strip which acts as the base for the stone wall that sits on top of it.

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

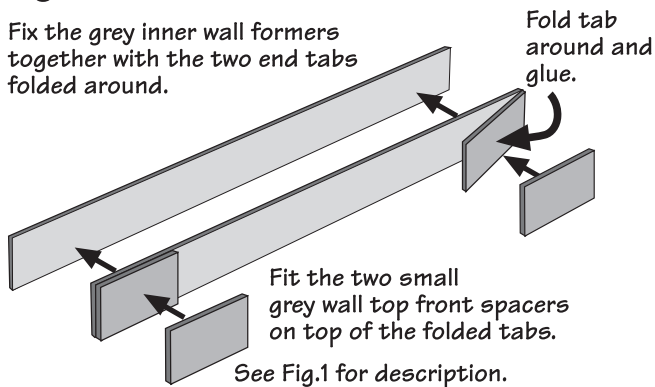


Fit the two stone strips flush along the back edge.

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

Fig. 13. WALL INNER FORMERS

Fix the grey inner wall formers together with the two end tabs folded around.



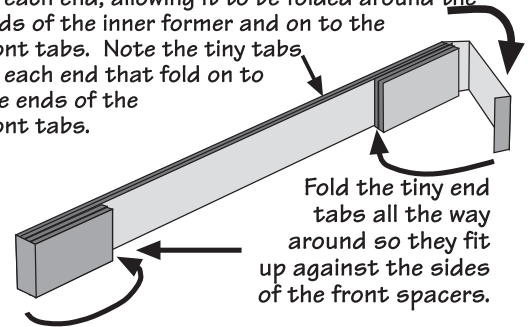
Fold tab around and glue.

Fit the two small grey wall top front spacers on top of the folded tabs.

See Fig.1 for description.

Fig. 14. WALL BACK

The printed wall back section has three scorelines at each end, allowing it to be folded around the ends of the inner former and on to the front tabs. Note the tiny tabs at each end that fold on to the ends of the front tabs.



Fold the tiny end tabs all the way around so they fit up against the sides of the front spacers.

WALL FRONT

The top wall front section is fitted in to the recess between the two ends.

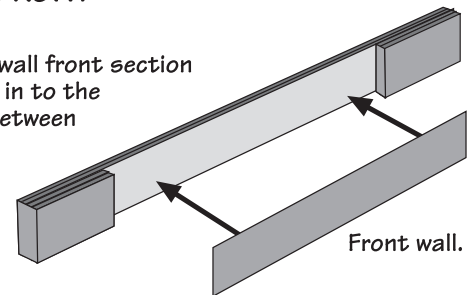
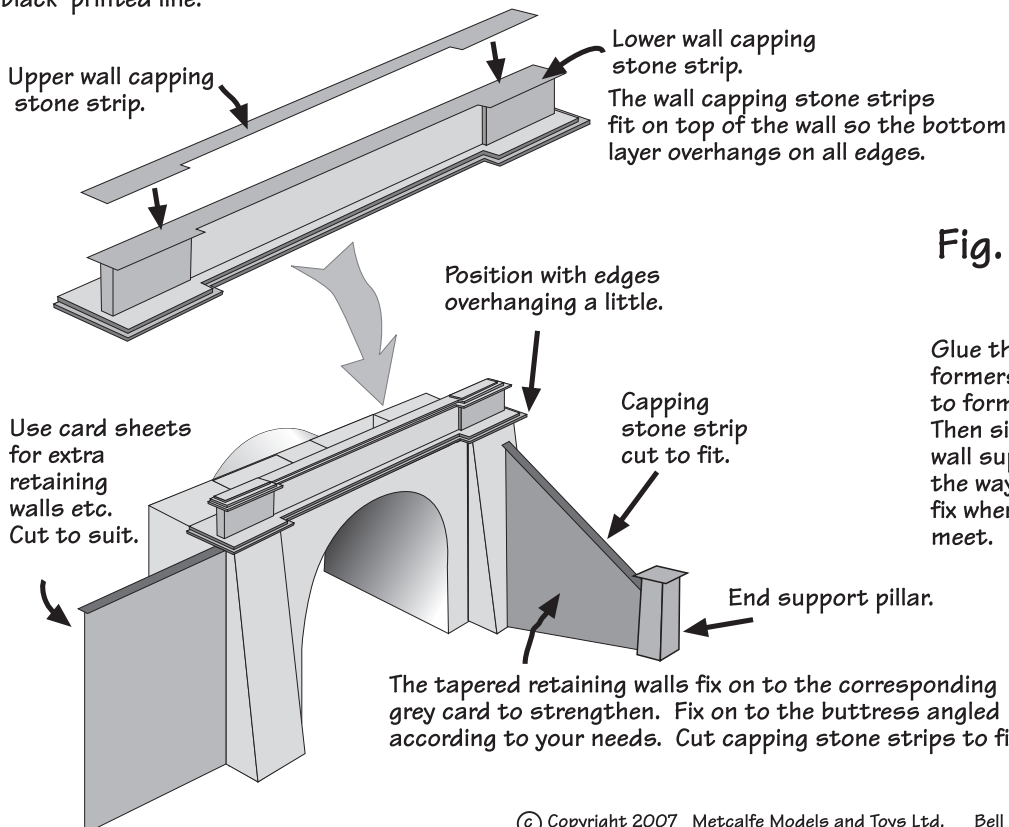


Fig. 15. FIX THE WALL ON TO THE TOP STONE STRIP

The tunnel top stone strip (Fig. 12.) sits on top of the tunnel entrance and the wall fits on top positioned on the black printed line.



Lower wall capping stone strip.

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

Position with edges overhanging a little.

Capping stone strip cut to fit.

End support pillar.

The tapered retaining walls fix on to the corresponding grey card to strengthen. Fix on to the buttress angled according to your needs. Cut capping stone strips to fit on top

Fig. 16. RETAINING WALL END SUPPORTS.

Glue the five grey formers together to form a solid block. Then simply wrap the wall support card all the way around and fix where the ends meet.

