

# PN913 & PN937

## Double Track Engine Shed

### INSTRUCTIONS

NOTE: The photographs shown throughout these instructions are of the stone engine shed. The brick version fits together in exactly the same way.

#### CHECK LIST

This kit should contain the following:

- 1 x SHEET **A** - Gable walls and roofs.
- 1 x SHEET **B** - Side walls/chimneys etc.
- 2 x Grey Card Strengtheners (see page 2).
- 1 x GLAZING SHEET.
- 1 x Grey card laser cut roof trusses.
- 1 x INSTRUCTION BOOKLET
- 1 x Ridge tile sheet.

#### READ THROUGH ALL THE INSTRUCTIONS BEFORE YOU START.

**This is a complex kit that requires particular attention to detail, so proceed with care!**

To construct this kit you will need the following:

- 1. A modellers knife.
- 2. A pair of sharp scissors.
- 3. A steel ruler.
- 4. Glue - See glues.
- 5. Ultra Fine Tip Glue Applicator, see above.
- 6. A cutting surface - a sheet of card or cutting mat will do.
- 7. Fine point tweezers.
- 8. A magnifying glass on a stand is helpful for fitting tiny components.
- 9. Watercolour paints and fine brush.
- 10. Bulldog clips or clothes pegs are good for clamping whilst glue sets.

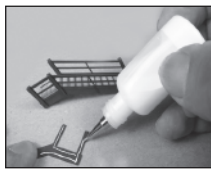
#### GLUES

UHU Solvent Free All Purpose Adhesive.  
Also SPEEDBOND by Deluxe Materials.  
see [www.deluxematerials.com](http://www.deluxematerials.com)  
Both work in our Ultra Fine Tip Applicators.

#### METCALFE

### Ultra Fine Glue Tip Bottles.

These bottles are essential for gluing the smaller components in this kit. Tiny strips and spots of glue can be accurately laid down with precision.



### GETTING STARTED

#### 1 EXTRACTING COMPONENTS FROM THE BASE SHEETS.

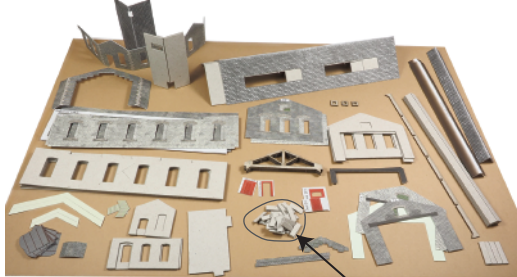
To stop the components from falling off the printed sheets, they are held secure with score lines (marked with blue arrows) that cut about 75% of the way through the card.

To release components run the point of a knife along these scores and they will come away. **WARNING**, Cut with care using a knife that is not too sharp, this will reduce the risk of the blade running off the score and cutting the components.

#### 2 MAKE YOUR 'BUILDERS YARD'.

As you extract the components from the base sheets they need to be kept away from your working area on a thick piece of card or a tray until needed.

Any components without descriptions printed on them (especially the plain grey ones) are best marked by writing on the back as you extract them, just to be sure they don't get lost.



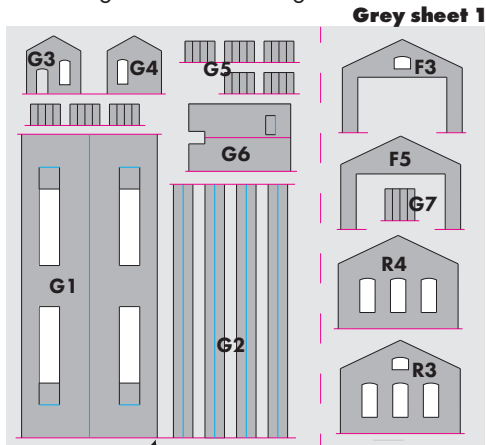
Keep multiple small items piled together within a marked area. Count them out as you extract them, it is easy to lose track if you're not organised.

Make sure you identify and understand each item before extracting from base sheet.



### 3 Grey Card Strengtheners.

These are the plain card pieces that fit inside the kit to strengthen and hold it rigid.

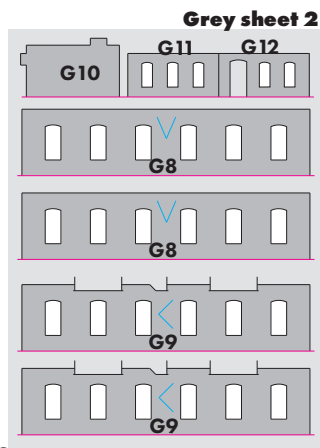


Grey sheet 1

Red lines indicate score rules you need to cut to release components from base sheet.  
Blue lines are fold lines - Don't cut.

Key:

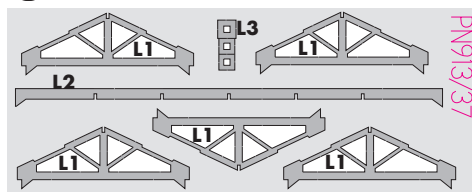
- F3.** Inner front gable wall with vent hole.
- F5.** Inner front gable wall.
- R3.** Inner rear gable wall with vent hole.
- R4.** Inner rear gable wall.
- G1.** Inner shed roof.
- G2.** Roof top vent spacers x 4.
- G3.** Workshop inner gable with doorway.
- G4.** Workshop inner end gable.
- G5.** Shed roof chimney spacers (8 sets of 4).
- G6.** Workshop inner roof.
- G7.** Workshop chimney spacers x 4.



Grey sheet 2

- G8.** Inner side walls marked with a V.
- G9.** Inner side walls marked with a <.
- G10.** Workshop base.
- G11. & 12.** Workshop inner side walls.

### 4 Grey Laser Cut.



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- L1.** Roof trusses x 5.
- L2.** Ridge beam.
- L3.** Workshop chimney top stones x 3.  
These are very small, don't loose them.

### 5 Painting Corners & Edges.

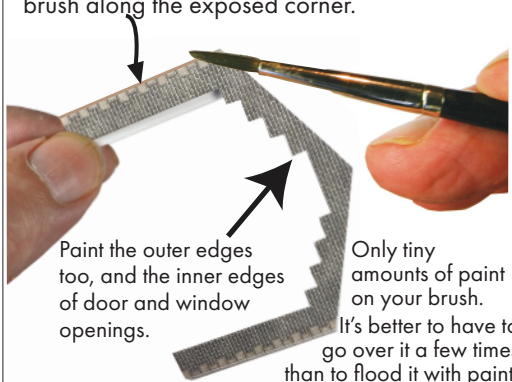
The white card that shows on the corners and edges is best painted before you build the kit. It is well worth the small amount of work needed to do this, and makes a world of difference to the finished look of your model.

All you need is a simple set of water colour paints and a fine brush. We use these Rowney paints and the lid is used for mixing the colours.

Mix your colour with lots and lots of water, approx. 1 part paint to 5 parts water or more.  
**TEST ON WASTE CARD FIRST UNTIL YOU HAVE THE CORRECT SHADE & COLOUR.**



Fold the edges of the card back fully and gently run the end of your brush along the exposed corner.



Paint the outer edges too, and the inner edges of door and window openings.

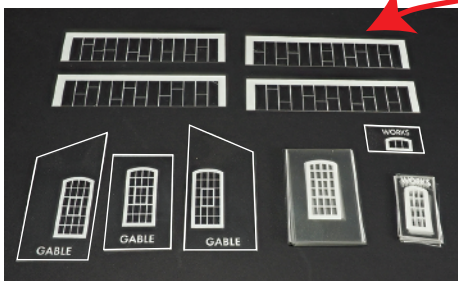
Only tiny amounts of paint on your brush.  
It's better to have to go over it a few times than to flood it with paint.

**NOTE:** Painting edges and corners is best done before you start to assemble the kit.

## 6 Glazing.

Cut out the glazing along the white marked lines.

Store in your builders yard until needed.



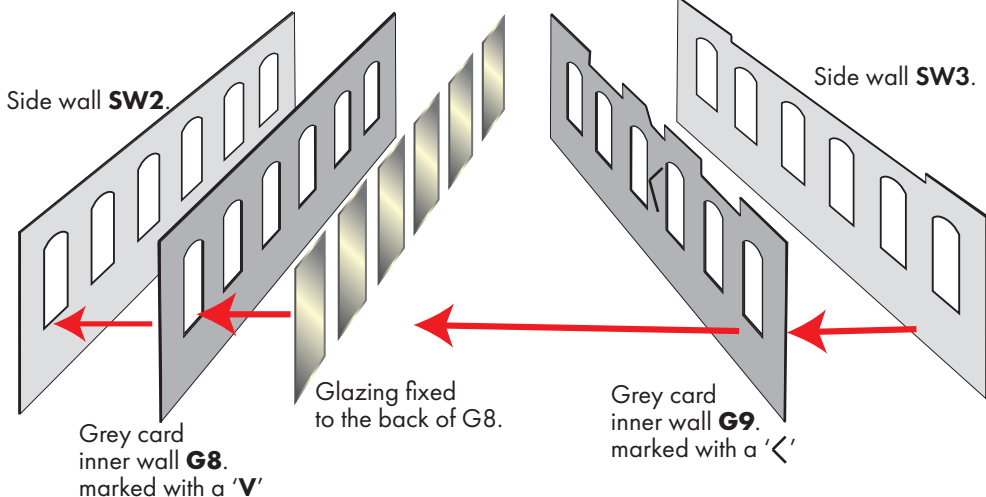
These long roof windows need to be cut accurately so use a rule and knife. Cut flush to the edges of the white markings.



Also cut flush to the ends of the thin white lines

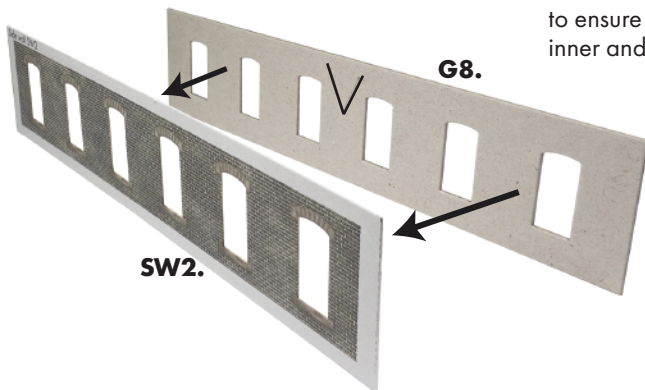
## 7 Side Walls for the Shed.

Each wall section is made up with four layers of card laminated together with the glazing sandwiched in the centre to form a thick and rigid wall.



### A. Outer Wall.

Starting with the outer part of the wall, glue grey card **G8.** to the back of side wall **SW2.**



Hold vertical as you align the sheets together. Make sure all the windows are aligned flush. This is best done with your thumbs through the end windows pulling outwards and downwards to ensure all windows line up between inner and outer walls.

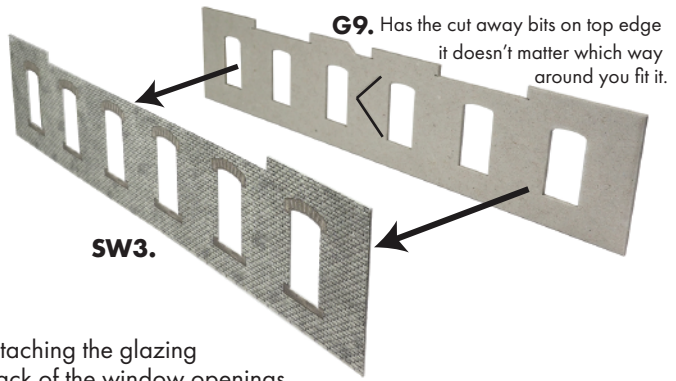
Hold for a while until the glue has started to set, then place under weights for a few minutes to hold flat (a couple of large books do the job). The longer they are left for the glue to dry the better, and the less likely the card will warp.

**TAKE GREAT CARE** when placing weights on top of the card. Any movement may cause the layers of card to slip out of alignment.

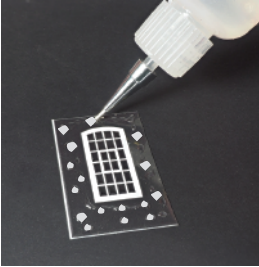
## B. Inner Wall.

Glue grey card **G9** to the back of side wall **SW3**.

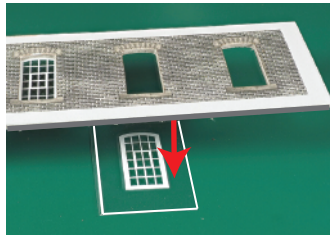
This fits together exactly the same as the outer wall.



## C. Fit the Glazing.



When attaching the glazing to the back of the window openings, it is easier if you apply the glue to the glazing. Place on work surface with the matt printed side facing upwards, then place tiny spots of glue all over the plastic around the printed part as shown.



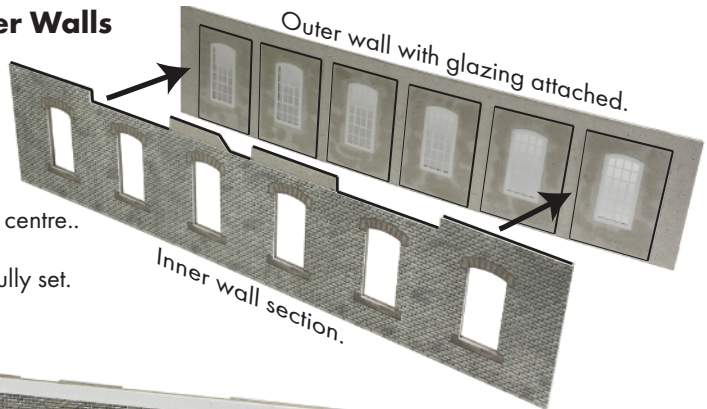
Carefully line them up within the openings so they are centred .



Fit the glazings to the back of the openings in the OUTER wall.

## D. Fix Outer & Inner Walls Together.

Once the glazing is fast fix the two halves of the wall together with the glazing sandwiched in the centre.. Line up all edges flush. Place under weights until fully set.



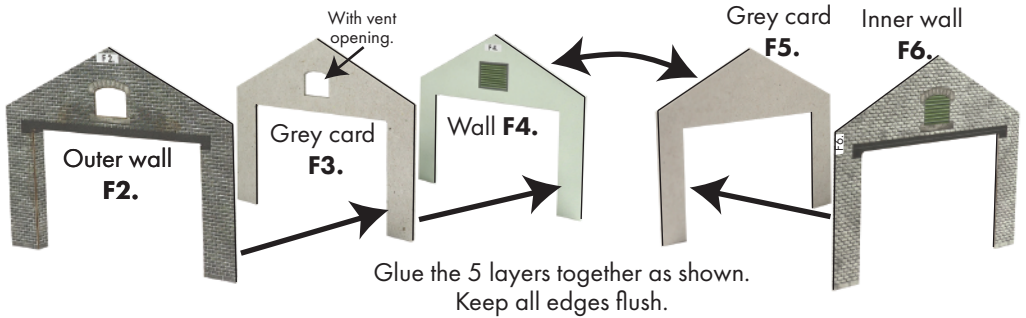
Finally fix the outer side wall **SW1** on to the surface of outer wall marked **SW2**.

You now have one complete side wall. Repeat the process with the other side wall components to give you two identical walls.



## 8 Gable Walls.

We will start with the open doorway (front) gable  
This is made up of 5 layers of card



And there we have it!

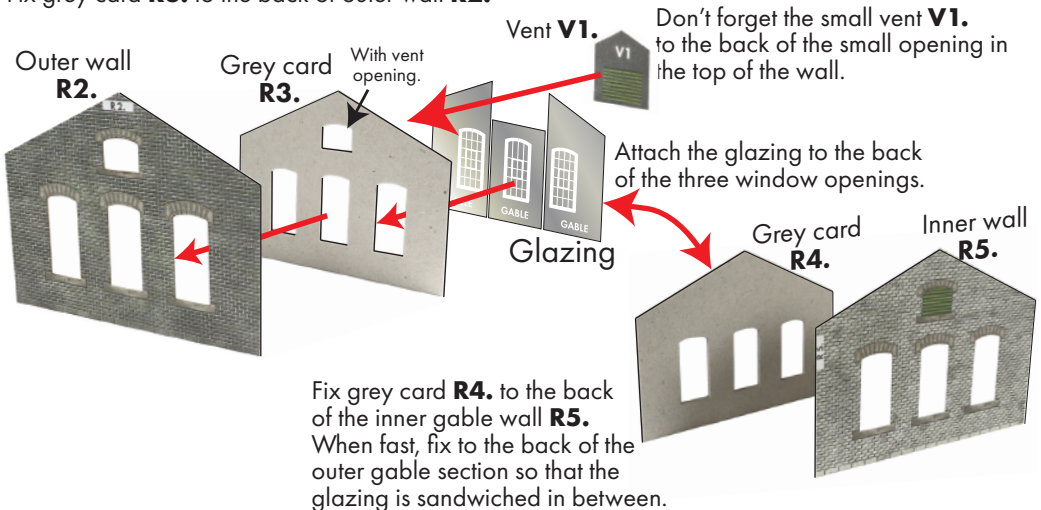
A nice sturdy gable wall.

Just the door sides to fold back and glue



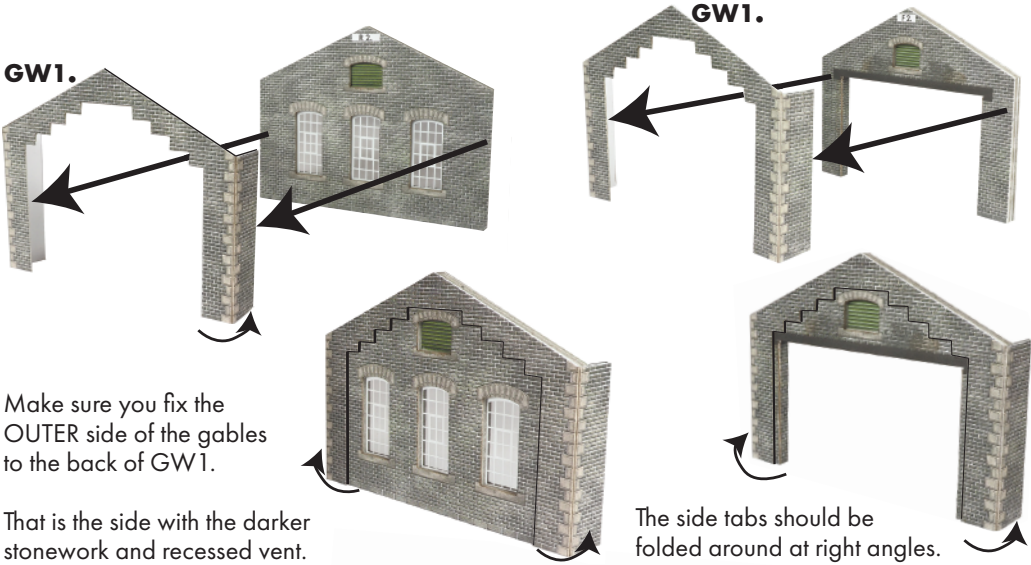
Next up is the rear gable wall, which is made up of 4 layers of card with the glazing in centre.

Fix grey card **R3.** to the back of outer wall **R2.**

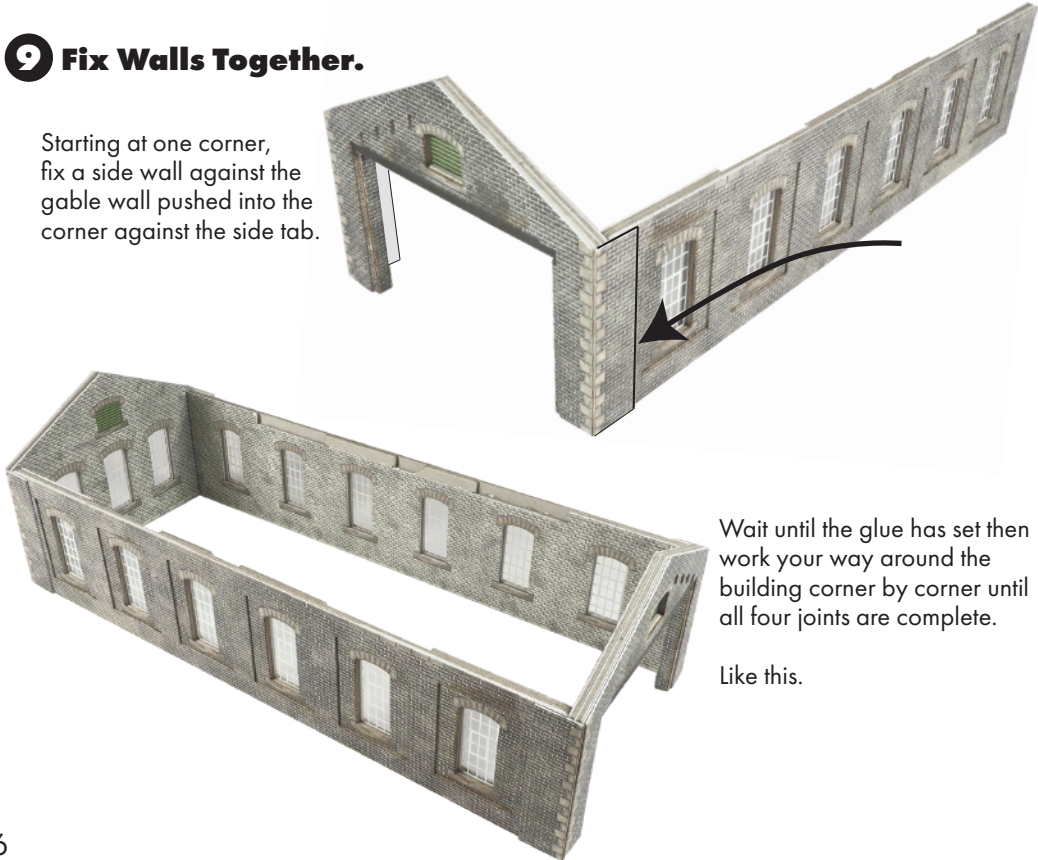


KEEP ALL CARD EDGES FLUSH WHEN GLUING THEM TOGETHER.

The last part of each gable is to fit the outer wall **GW1**.

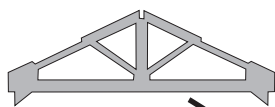


## 9 Fix Walls Together.

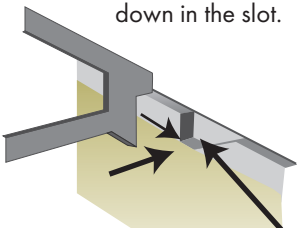


## 10 Roof Trusses.

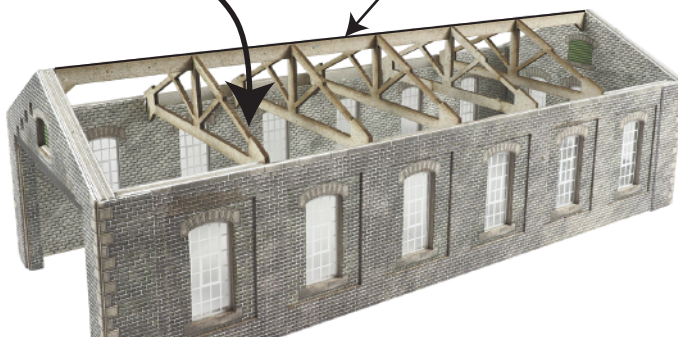
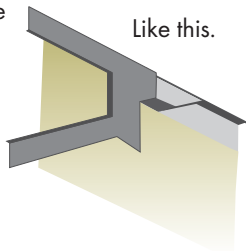
The 5 trusses sit down on top of the inner walls.



The end of the truss sits down in the slot.



Push up against the vertical part of the slots to hold the truss upright.



Once the trusses are in place and fast fit the ridge beam. This has slots along the bottom edge that correspond with the slots in the top of each truss. Make sure each one is seated down fully so that the top edge of the ridge beam lines up level with the peaks of each gable.

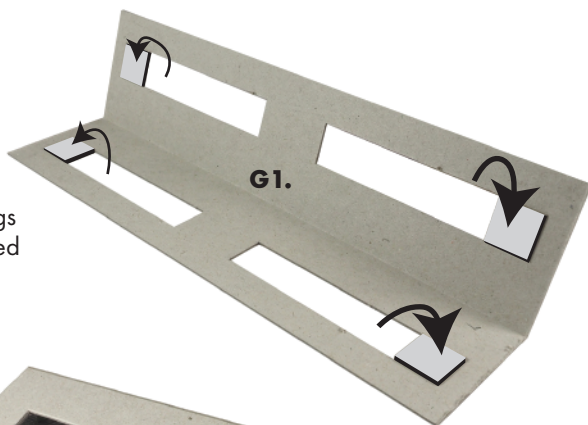
## 11 Fit the Roof.

Start with the inner roof **G1**.

This plain grey roof sits directly on top of the building. The printed roof is then fixed over it later.

Fold back the 4 tabs in the window openings and glue down. Make sure they are squared up along the fold line.

Turn over and fit onto the building. The four tabs act as guides to hold the roof in position so that the ends overhang equally on each gable.

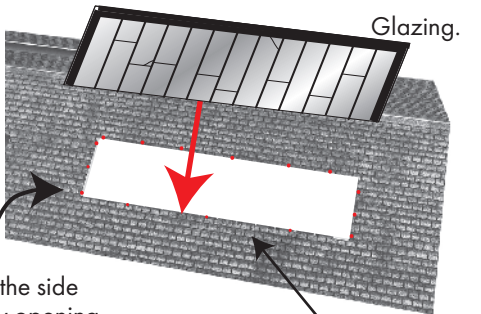


Test first without glue so that you understand which parts of the walls and trusses to apply your adhesive.



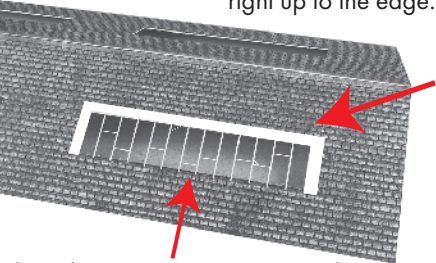
Before you fit the roof to the building, it's a good idea to deal with the four roof lights. They are much easier to fit at this stage.

The glazing fits directly on top of the roof and it is quite a tricky operation so take care. The glazing overlaps the edges of the opening by only a couple of millimetres (if that).



Place tiny spots of glue around the side and upper edges of the window opening right up to the edge.

Then just a few even tinier spots along the bottom edge.



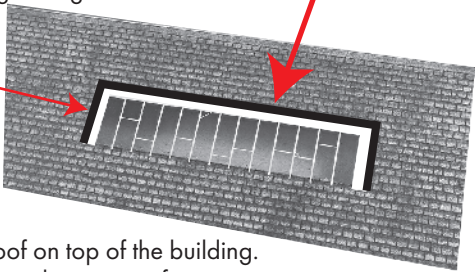
Carefully fix the glazing over the opening as shown here .



Fit the upper frame which sits directly on top of the glazing hiding its edges.

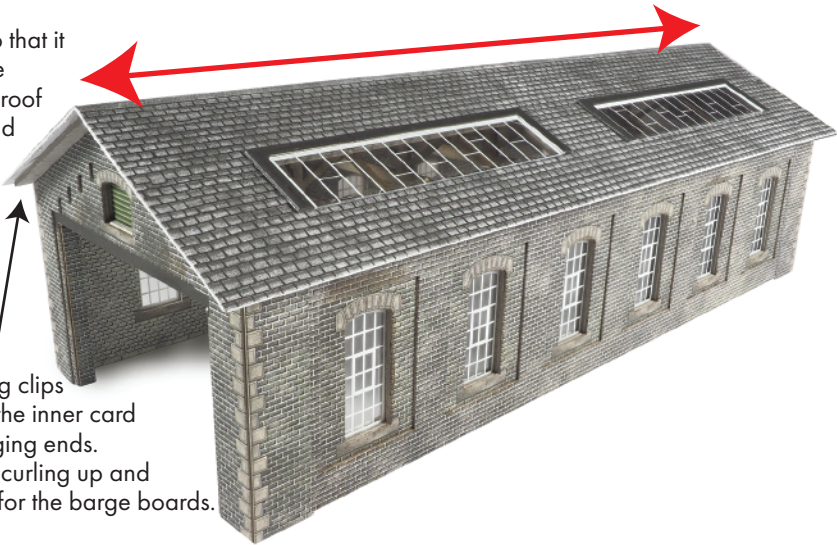
This edge sitting just 1 mm. over the edge of the opening.

Don't forget to paint the edges of the card with black paint before you fit.



Once all roof windows are fixed and fast, fit the roof on top of the building. Make sure it is fixed with lots of spots of glue all over the grey roof and close to the edges to avoid the roof curling up later.

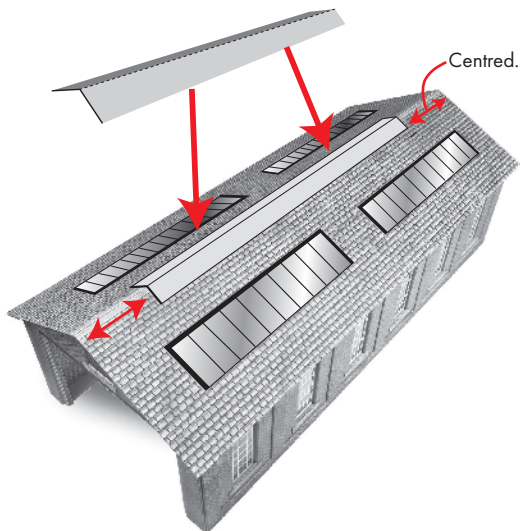
Position the roof so that it overhangs past the edges of the inner roof equally at each end



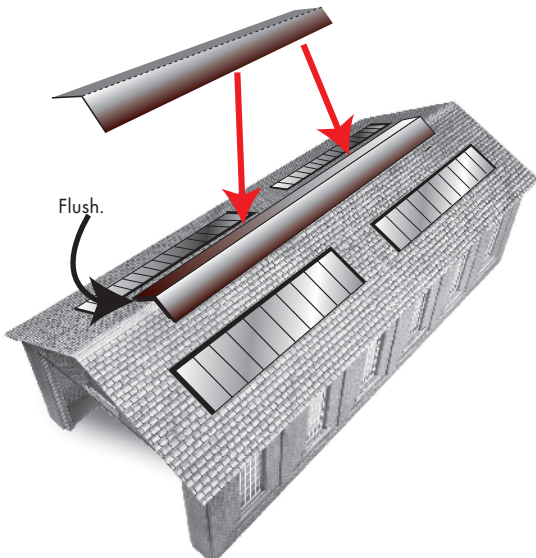
Using your bulldog clips clamp the roof to the inner card on these overhanging ends. This stops the roof curling up and allows a better fit for the barge boards.

## 12 Centre Roof Vent

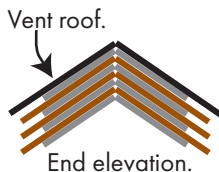
This louvred effect vent builds up along the central ridge and is made with layers of card. Start with the grey strips **G2**. Fold along the centre score line, then fix to the roof in the centre of the building



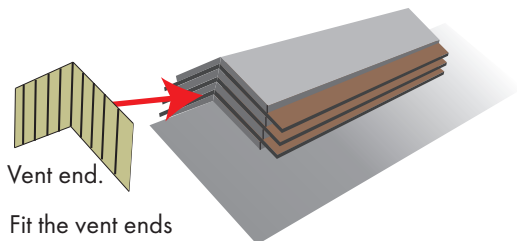
Next place a printed centre roof vent directly on top with the ends lined up flush with the grey card.



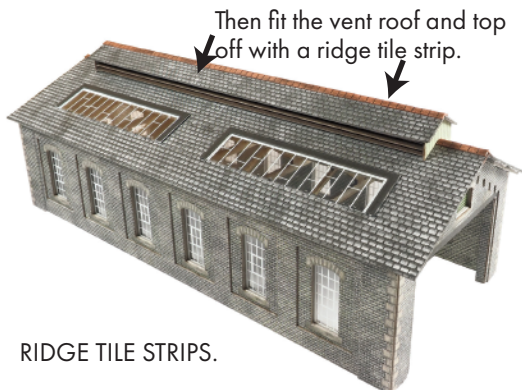
Repeat with more layers of grey cards and printed centre roof vents until the roof vent is the height shown in next diagram.



The finished vent should contain four layers of grey cards and three of the printed cards before the ends and roof go on.



Fit the vent ends which may need to be trimmed down a little if they seem too high.



### RIDGE TILE STRIPS.

Fold the ridge tile strips in half longways and paint the white card edges before fitting.



Note: You may need to loosen up the centre score line a bit by very lightly running your knife along it.

## 13 Roof Chimneys.

This is the very fiddly and tedious part!

There are 8 tiny chimneys that fit along the main roof. It is not essential to use them as many sheds didn't have them.

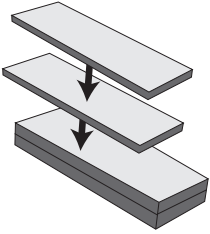
But if you insist, then here goes:-

**A.** Paint all edges and corners of each and every chimney with a light grey paint. Test on waste card first. Then paint the top half of the inside with black paint.



## Roof Chimneys cont'd.

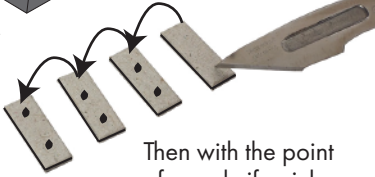
- B.** Remember the 32 tiny grey chimney spacers code number **G5**. that you should still have in a neat pile in your builders yard?



Now is the time to count them out into groups of 4.

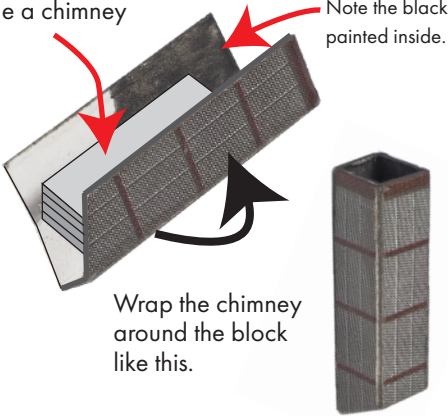
Glue 4 of them together to form a solid block with all edges lined up flush.

An easy way to do this is to lay out 4 like this with two spots of glue on 3 of the cards.



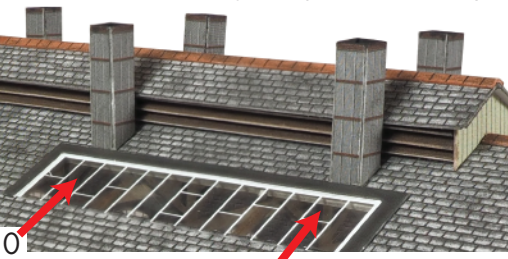
Then with the point of your knife pick up the end card and pop it on top of the next card and so on.

Then place the little block you have just made inside a chimney



Wrap the chimney around the block like this.

Place between the roof lights and vent. Position each one above the second pane from the end of each roof light to space them evenly.



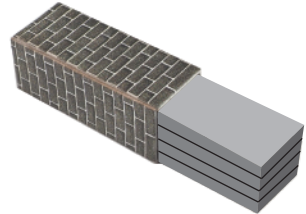
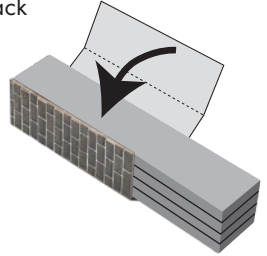
## 14 Workshop Chimney.

Whilst we are in chimney making mode, you may as well make this simple little stack.

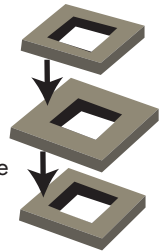
Take the 4 x **G7**. plain grey chimney spacers and glue them together in a block with all edges squared up (just as you did with the others opposite).

Wrap the chimney stack around the block.

Top edge flush with the inner block.



With tiny spots of glue fix the three chimney capping stones L3. one on top of the other.



Put the larger stone in the middle and line them all up via the holes in the centre.

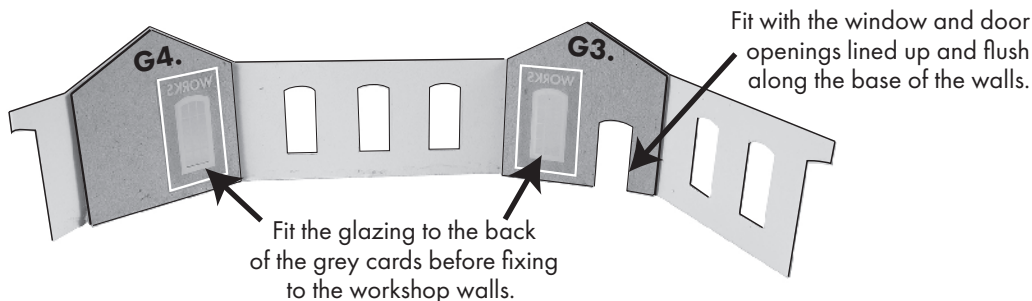
Fix the capping stone to the top of the chimney stack like this.



It is now ready to drop down into the hole in the workshop roof.

# 15 Workshop.

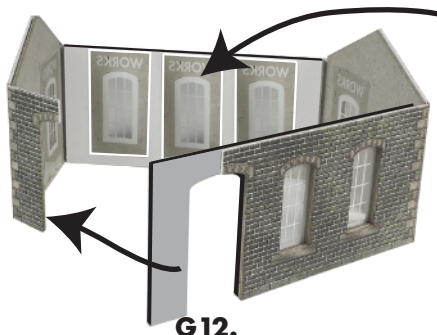
Start by fitting the two inner gable walls **G3.** & **G4.**



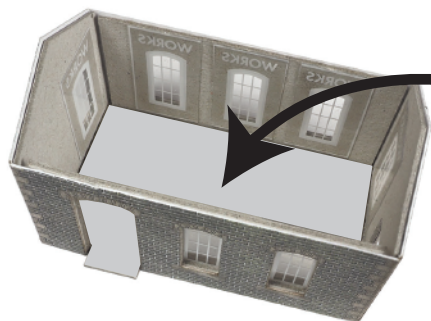
Next fit the inner side walls **G11.** & **G12.**

**G12.** Fit the glazing. Then attach to the side wall, windows and half doorway lined up.

Fold the wall around so the two half doorways meet bringing the building together.



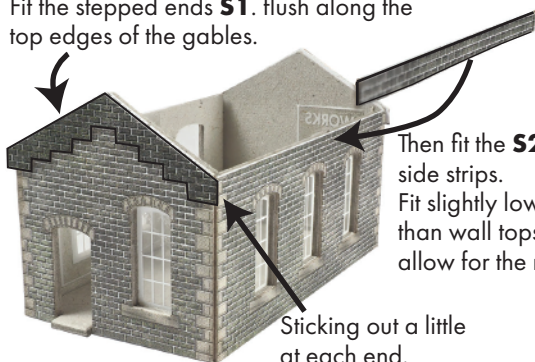
**G11.** Fix glazings then attach to the side wall. Line up the window openings.



Push the floor **G10.** down inside and fix in place with spots of glue placed around the edges like this.



**Workshop upper stone facing** fits around the top edges of the building. Fit the stepped ends **S1.** flush along the top edges of the gables.

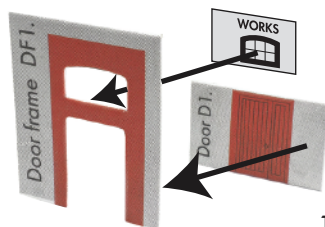


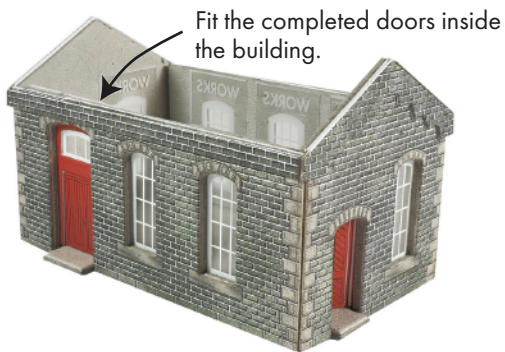
Then fit the **S2.** side strips. Fit slightly lower than wall tops to allow for the roof.

Sticking out a little at each end.

## DOORS.

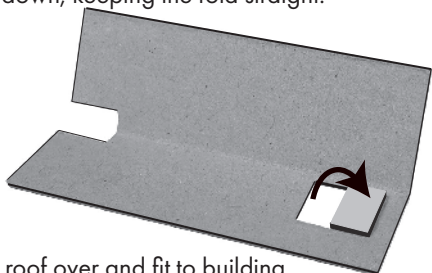
Fit doors to corresponding frames also glazing to frame **DF1.**





## ROOF.

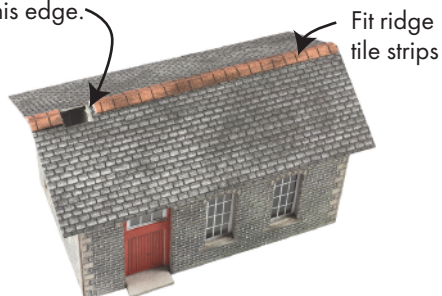
Grey inner roof **G6**. Fold the small tab over and glue down, keeping the fold straight.



Turn roof over and fit to building using the tab as a guide to keep the overhang on each gable equal.

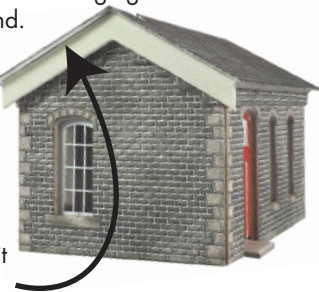


Fix the printed roof so that the edges of the chimney openings line up on this edge.

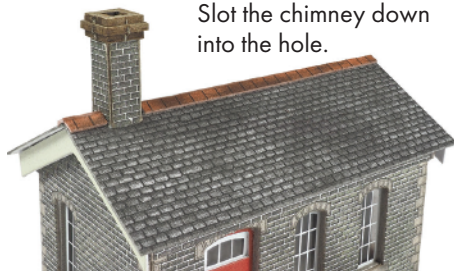


The roof should be overhanging equally at each end. Now you can fit the barge boards.

Fit up underneath the overhanging roof and onto the ends of the inner roof which space it out from the walls.



Slot the chimney down into the hole.



And that's the workshop finished.

The last job is to fit the barge boards to the shed which fit in just the same way as the workshop.

