

PN931/2 N Scale SINGLE TRACK ENGINE SHED

READ THROUGH ALL THE INSTRUCTIONS BEFORE YOU START.

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 is our favourite.
5. Ultra Fine Tip Glue Applicator, *see right*.
6. A cutting surface - a sheet of card or a cutting mat.
7. Fine point tweezers to hold the smaller components.
8. Water colour paints and a very fine brush, for painting the edges and corners.
9. A large heavy book to use as a weight to press glued sheets together and stop card from warping.

GETTING STARTED

1 EXTRACTING COMPONENTS FROM SHEETS.

To stop the components from falling off the sheets, they are held secure with scorelines. These are cuts that only go about 75% of the way through the card.

To release them simply run the point of your knife along the scorelines and they will come seamlessly away.

These scorelines are indicated with blue arrows: →

WARNING, Cut with care using a knife that is not too sharp, this will reduce the risk of the blade running out of the score and cutting the kit components.

2 MAKE YOUR 'BUILDERS YARD'.

This is an area kept away from your working surface, where you store ALL components extracted from the base sheets until needed.

Use a piece of thick card or a tray to make your builders yard.

Cut out all the components from sheets A & B, the grey strengthener sheet and the dark brown laser cut sheet. Place inside your builders yard.

The smaller components on the light brown laser cut sheet are best extracted as you need them.



Your **WORKING** area should have a clean flat surface, and should only contain the kit parts you are actually working on.

EVERYTHING ELSE SHOULD BE KEPT NEATLY ARRANGED IN THE BUILDERS YARD, UNTIL NEEDED.

PLEASE NOTE: Don't throw anything away. Keep all offcuts and waste card in a box until the kit is finished, just in case you can't find anything. The chances are that it will be there.

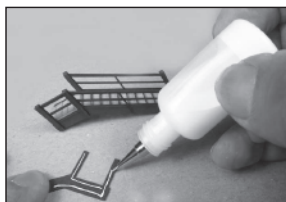
INSTRUCTION SHEET 1

CHECK LIST

This kit pack should contain the following:

- 1 x SHEET A - Walls, window frames and doors.
- 1 x SHEET B - Walls, chimneys and roof.
- 1 x PLAIN GREY CARD - Interior strengthening parts.
- 1 x Dark brown laser cut card with roof trusses.
- 1 x Light brown laser cut card with lintels & sills.
- 3 x INSTRUCTION SHEETS.
- 1 x Glazing sheet. 1 x Ridge tile sheet.

The **METCALFE Ultra Fine Tip Glue Bottles** are essential for gluing the smaller components in this kit.



Tiny strips or spots of glue can be accurately laid down with precision.



Always replace the pin after use and store the bottles upside down to keep the glue moist.

UHU All Purpose Adhesive Glue

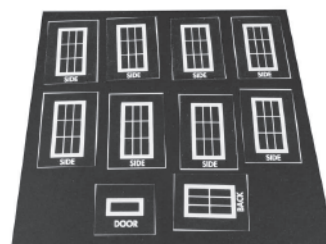
Is available in standard and solvent free. Both types are fine for use in our glue bottles, even though the instructions on the back of the packs warn against solvent based glues, we have tested the UHU solvent based glue and it works fine. The solvent free glue doesn't string as much, but can be a little harder to clean off if it drips onto unwanted areas.

Speed Bond by Deluxe Materials

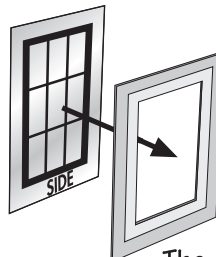
This is an excellent PVA. based glue that dries quickly, but also allows time to get parts into position. It has the added advantage that it dries clear leaving little evidence if it oozes out of joints etc. Used in our fine glue applicator bottles a 112g bottle lasts for ages. www.deluxematerials.com

GLAZING

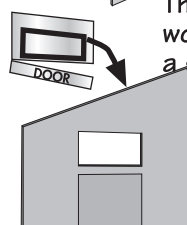
Cut out the glazing sheets along the outer white printed lines and place them on a separate piece of card or on small plate until needed.



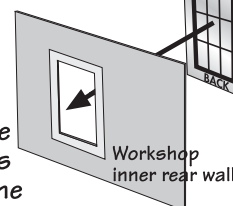
NOTE: The matt printed side of the glazing is the side that looks best facing through the window openings.



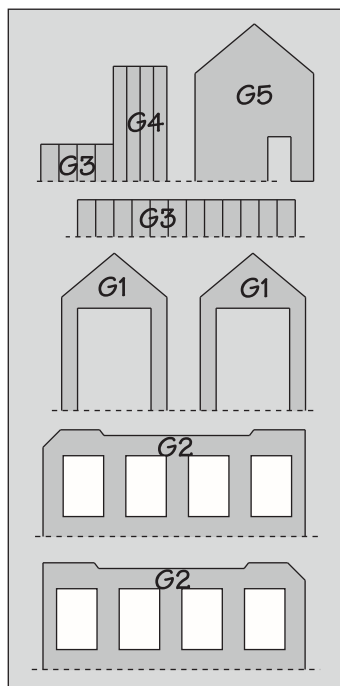
Attach the eight side windows to the backs of the window frames, and the back glazing to the workshop inner rear wall.



The glazing above the workshop door needs a strip cutting off the bottom edge if you want the door to open.



Place back in builders yard.



GREY CARD STRENGTHENERS

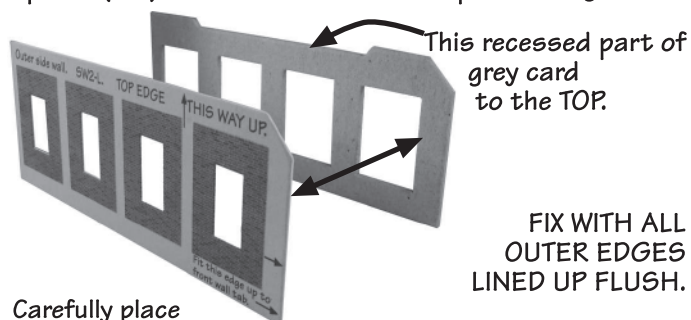
This sheet contains all the un-printed components that fit inside the building to strengthen and hold it together.

Here is the key to what each item is:

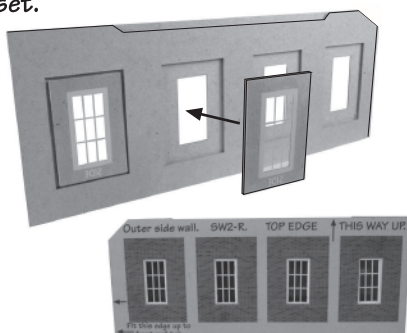
- G1. Inner front doorway gable spacers x 2.
- G2. Inner side wall spacers x 2.
- G3. Smoke vent inner spacers. Four sets of 4.
- G4. Workshop chimney inner spacers x 4
- G5 Inner rear wall.

Fig.1. SIDE WALLS.

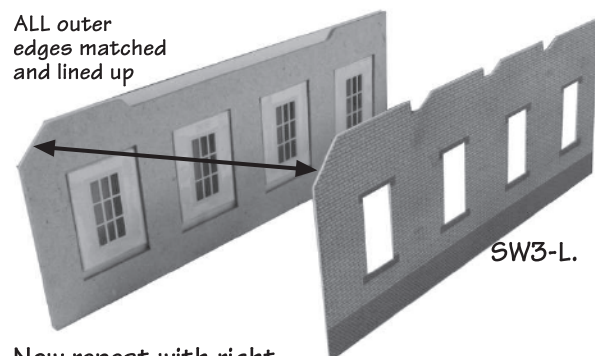
Take outer side wall SW2-L. and attach grey card inner spacer (G2) to the back of it. Line up outer edges flush.



Carefully place under a heavy book to hold flat until glue has set. Make sure outer edges of cards stay flush with one another. Then attach the four windows into the recessed sections in the back of the wall making sure that the frames are centered in the outer openings.



Finally, fit the inner side wall SW3-L. to the back, making sure all outer edges are absolutely flush.



Now repeat with right hand wall SW2-R and associated parts.

Fig.2. PAINTING CORNERS & EDGES.

Corners and edges look much better if they are painted to hide the white card that shows through. This is best done before you do any assembly. Start by folding the corner back fully and then run the point of a fine paintbrush along the edge allowing the paint to soak into the exposed card. Use water colour paints and water down quite a lot. Mix colours to match and always test on waste card first. It is best to make colours lighter, as they can easily be darkened by applying more paint.



Fig.3. FRONT GABLE WALL.

Take the two grey gable inner wall spacers (G1) and glue them together ALL EDGES FLUSH.

Then fix to the back of the gable wall FW1. Again all outer edges flush.

Now fold the two door side sections back and around to fasten to back of gable wall. Keep all corners at right angles so the edges are nice and squared up.

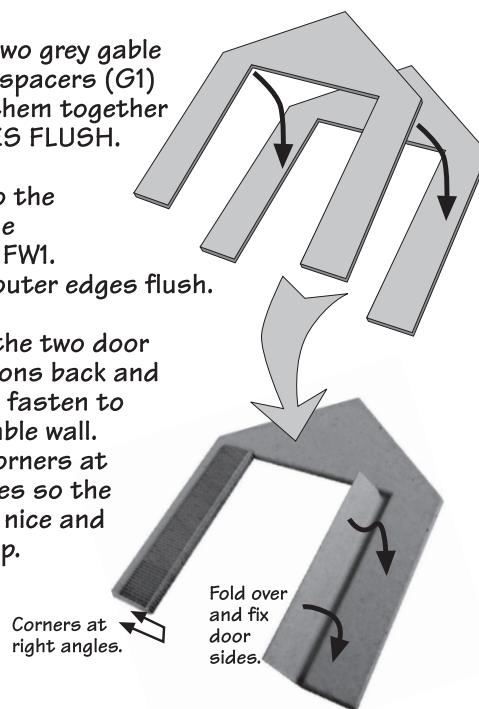


Fig.4. REAR GABLE WALL.

This is quite simple, glue rear walls RW1. and RW2. back to back with G5 plain grey card spacer sandwiched in between. all edges flush. .

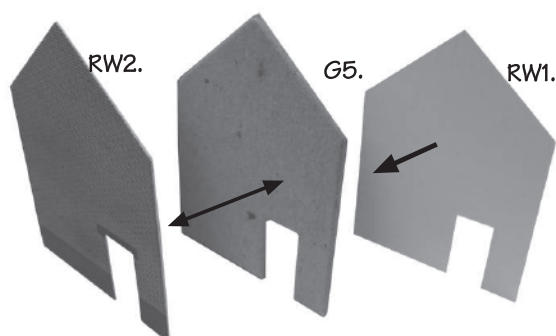


Fig.5. REAR GABLE WALL Cont.

Fix the workshop back wall RW3. to the rear wall RW1. so that the door faces through the opening.

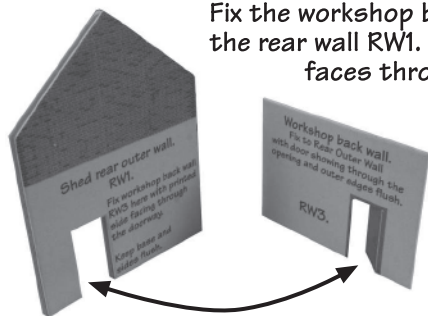


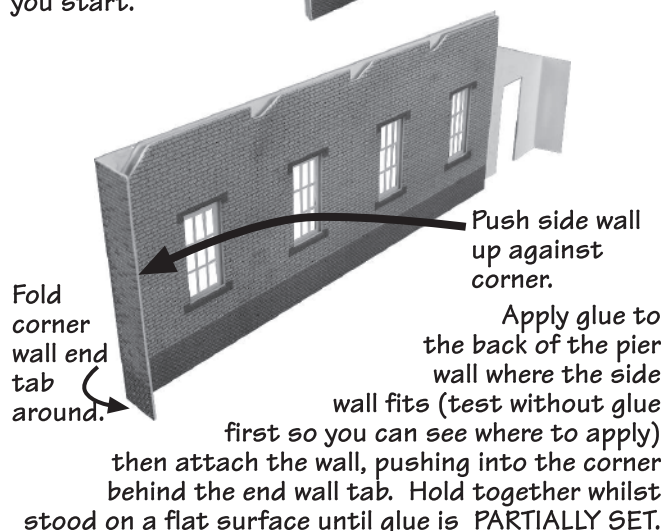
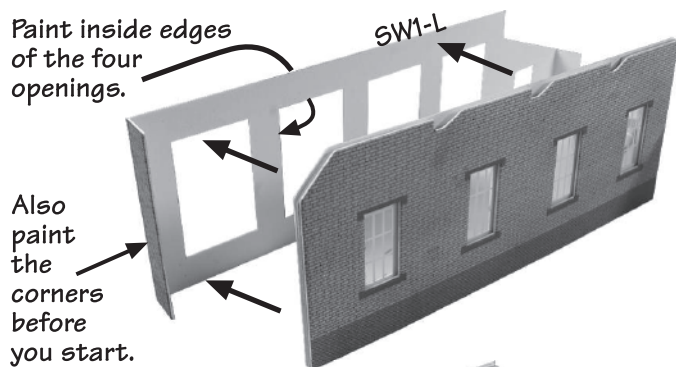
Fig.6. FIX SIDE WALLS TO OUTER WALLS.

The side walls you assembled in Fig.1. are now fixed to the back of the outer pier walls.

Starting with the left hand side wall SW1-L Fix wall SW2-L so the red brick side shows through the four openings in the outer wall

Paint inside edges of the four openings.

Also paint the corners before you start.



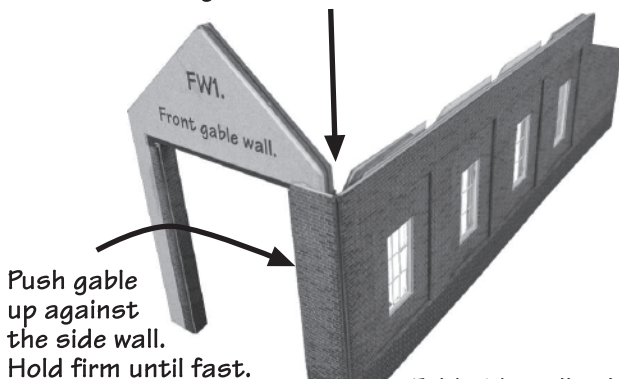
IMPORTANT

Then open out end tab and lay on a flat surface and weight down with a heavy book to hold it flat until the glue has fully set. If you don't do this, you risk the walls bending and warping out of shape, so please be patient, go make a cup of tea while you wait, you need to give it a good ten minutes to dry.

Now repeat with the other side wall.

Fig.7. ATTACH FRONT GABLE WALL.

The two complete side walls are now ready to be attached to the front gable you assembled in Fig. 3. Simply fold back the tab on the end of the side wall and attach the gable to the back of it.



Fold side wall tab back around to right angle

Now repeat with the other side wall.

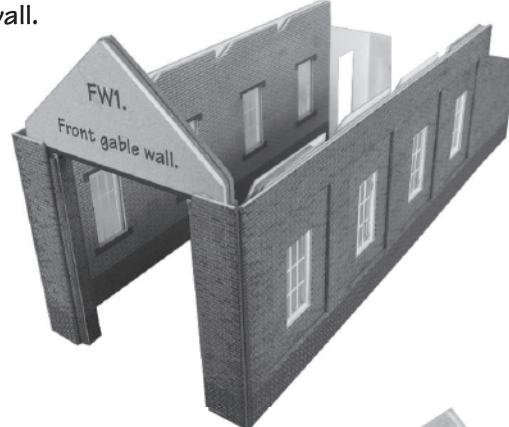
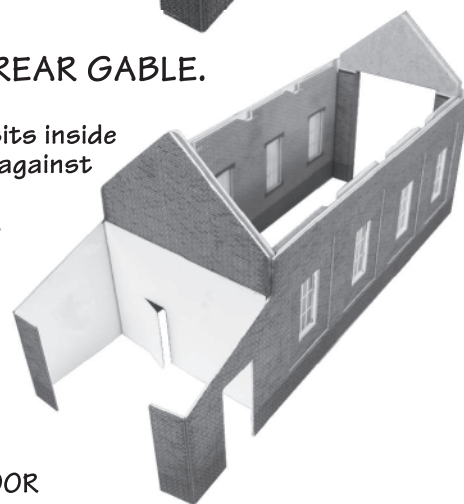


Fig.8. REAR GABLE.

The rear gable sits inside the building up against the ends of the inner side walls.



WORKSHOP DOOR

Fit the frame to the door then fix to inside workshop wall. The pictures say it all!

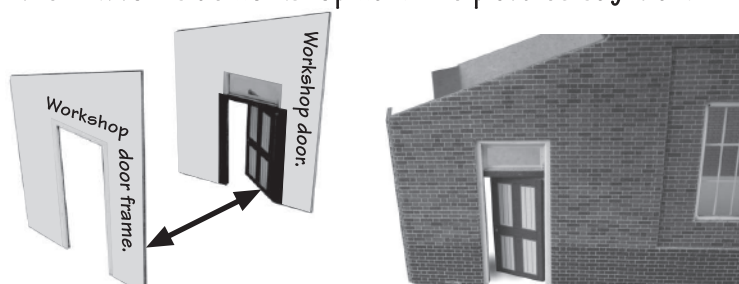
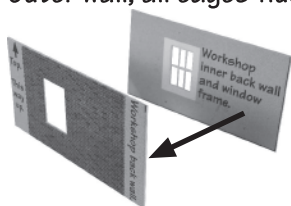


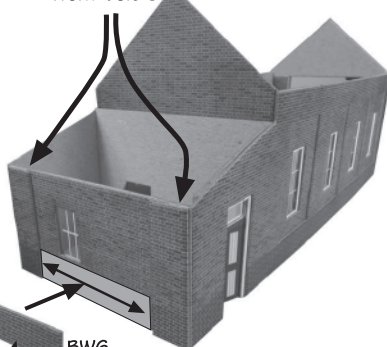
Fig.9. WORKSHOP BACK WALL.

Fit the inner rear wall with glazing to the back of the outer wall, all edges flush.



Fit the roof as shown, in picture below, with below with sides overhanging evenly.

Now fit the wall into the back of the workshop up against the two short wall tabs



BASE WALLS.

These small walls add a nice relief effect to the building. Start with rear wall BW6 which fits on the back wall in between the vertical wall end tabs. It may need trimming to fit.

The edges of the base walls are best painted BEFORE FITTING.

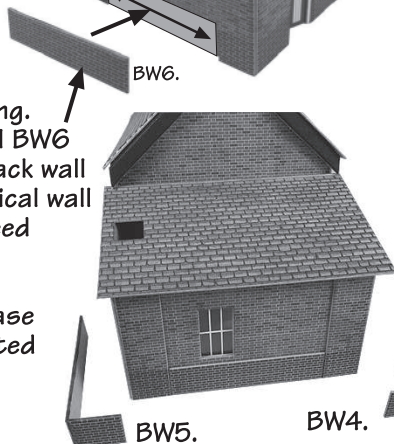
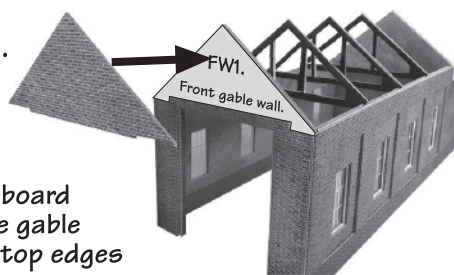


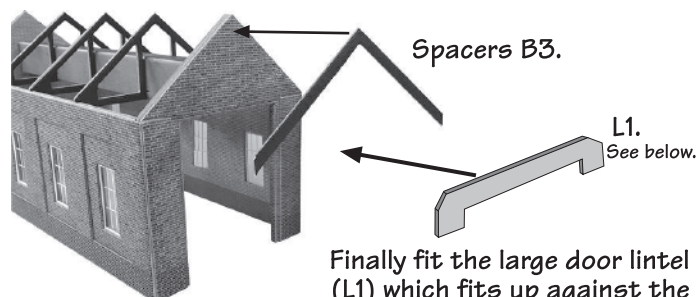
Fig.11. UPPER FRONT GABLE & BARGEBOARDS SPACERS.

The upper wall GW1. sits on top of the two side wall tabs and flush with wall tops.

Next, attach bargeboard spacer (B3) to the gable wall flush with the top edges of the gable wall. Repeat with the rear gable.

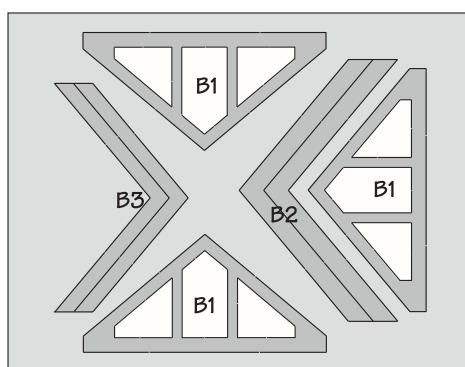


Don't fit the bargeboards yet



Finally fit the large door lintel (L1) which fits up against the underside of the bargeboard spacers and across the top of the big door. Fix with spots of glue.

DARK BROWN LASER CUT SHEET

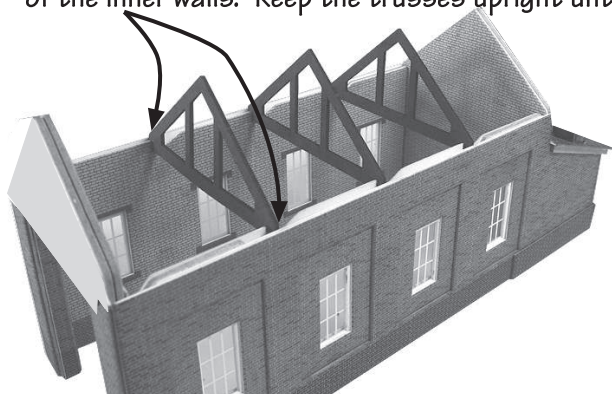


Key: B1. Roof truss x 3.
B2. Bargeboard x 2.
B3. Bargeboard spacer x 2.

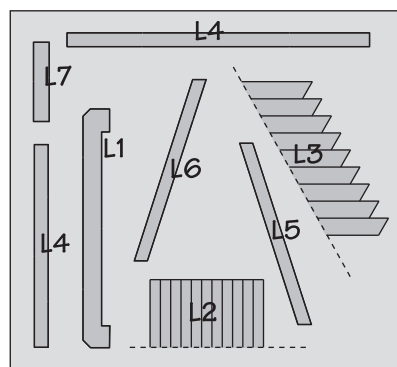
Carefully push the components out from the base sheet, they are held in place with tiny micro tabs that should snap when pressure is applied.

Fig.10. ROOF TRUSSES.

Sit the three trusses into the small slots in the top of the inner walls. Keep the trusses upright until set.



LIGHT BROWN LASER CUT SHEET



Key:
L1 Main door lintel.
L2 Window sills x 11
L3 Window lintels x 9
L4 Workshop upper stone strips.
L5 Workshop upper side strip left.
L6 Workshop upper side strip right.
L7 Workshop door lintel.

Dotted line = cut line to release tiny components. Only extract these when you are ready to use them.

Fig.12. FIT THE ROOF & BARGEBOARDS.

Fit the roof so that all four corners overhang equally, making sure the walls of the building are square.

Fit the bargeboards up under the roof overhang against the spacers.

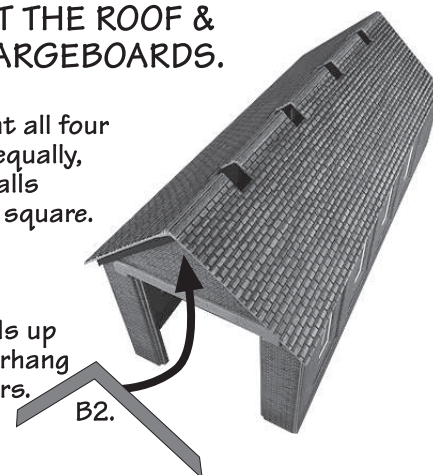


Fig.13. SHED CHIMNEYS.

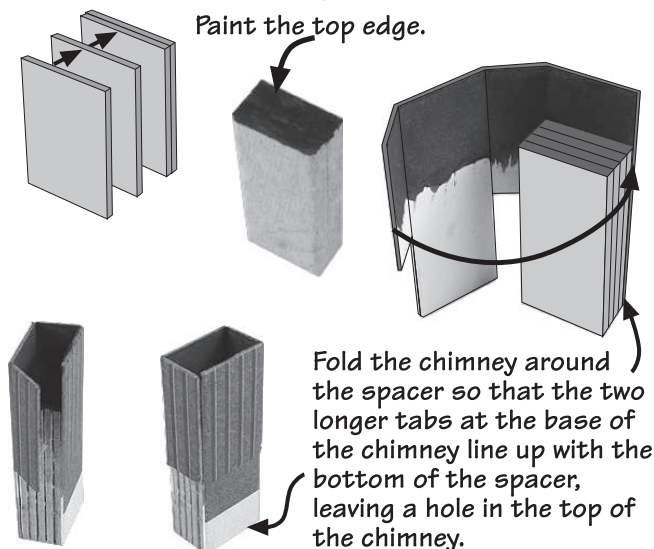
We will start with the four main chimneys on the shed roof.

Before you start to assemble them it is best if you paint the inside walls with black paint.

Also paint the edges and corners of the card with brown to match outer printed side.

You only need to paint about this far down.

Glue four of the small chimney spacers (G3) together to form a solid block. Make sure all edges line up flush so they are squared up at right angles.



Repeat with the three other chimneys and then slot each one into the holes in the main roof.

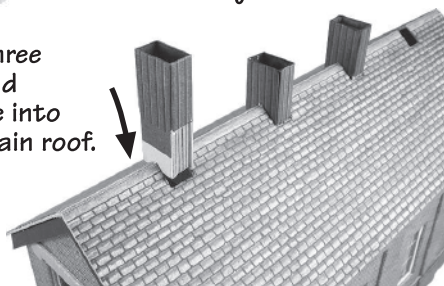


Fig.14. RIDGE TILES.

Cut the ridge tile strips down to correct lengths so they fit between the chimneys. Fold in half longways and paint the white card that shows along the score with matching paint.

Water the paint down quite a lot and test on waste card first. When painting, hold the strips with tweezers and run the point of a very fine brush along the exposed scoreline.

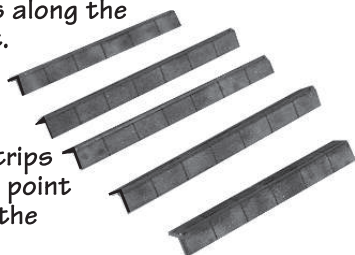


Fig.15. FIX THE RIDGE TILES.

The two shorter ridge tiles fit at each end of the roof with the three others sitting between the chimneys.

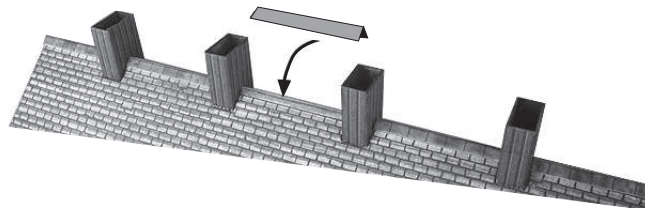
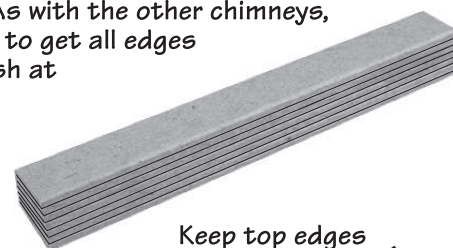


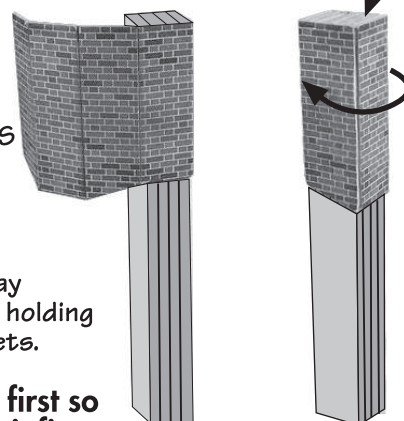
Fig.16. WORKSHOP CHIMNEY.

Glue the four long spacers (G4.) together to form a solid block. As with the other chimneys, it is important to get all edges squared up flush at right angles.



Keep top edges level with spacer.

Next, fix the shortest of the four chimney sides to the edge of the block SHOWING THE 4 CARD EDGES with the top edge flush with the end of the spacer.



Now wrap all the way around the spacer, holding tightly until glue sets.

Test without glue first so you can see how it fits.

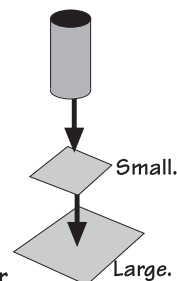
Fig. 17. CHIMNEY POTS.

Cut out one of the terracotta coloured strips below and roll tightly around a nail or drill bit (approx. 2mm. dia.)



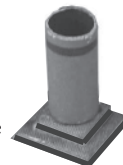
Roll up tight then unroll the end enough to smear with a little glue then roll back up and hold tight until fast.

Pot.



Glue the two chimney top stones together as shown with each one centred on the one below.

When fast, attach the chimney pot and set to one side to dry thoroughly before fitting to the chimney stack.



There are two pots in case you mess up.

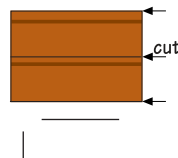


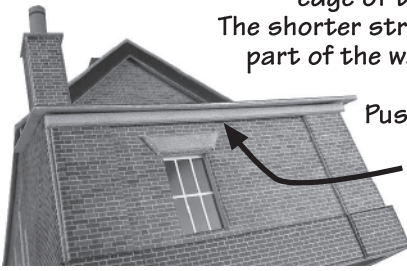
Fig.18. WORKSHOP EDGING STRIPS.

Located on the light brown laser cut sheet are two straight strips of card (L4.). These fit along the top edge of the rear workshop wall.

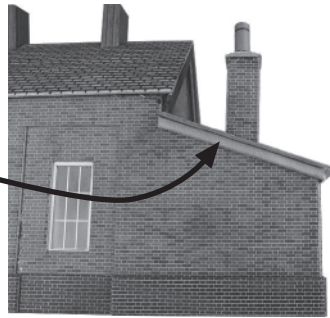
The shorter strip fits in the recessed part of the wall with the longer one sitting on top of it.

Push then up against the underside of the roof.

Fix with spots of glue and make sure the ends are flush to the side walls.



Next fit the two angled side strips (L5. & L6.) Fit up against underside of roof overhang as shown Repeat on other side.



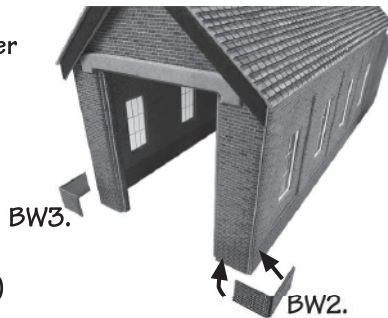
NOTE:

Chimney stack fitted down into the hole in the roof.

Fig.19. FIT THE BASE WALLS.

Do you remember how you fitted the base wall sections around the corners of the workshop walls in Fig. 9 ? Now is the time to fit the rest of them.

Carefully paint the upper and side edges of each wall before fitting. Then fit BW2. & 3. to the front and side corners as shown.



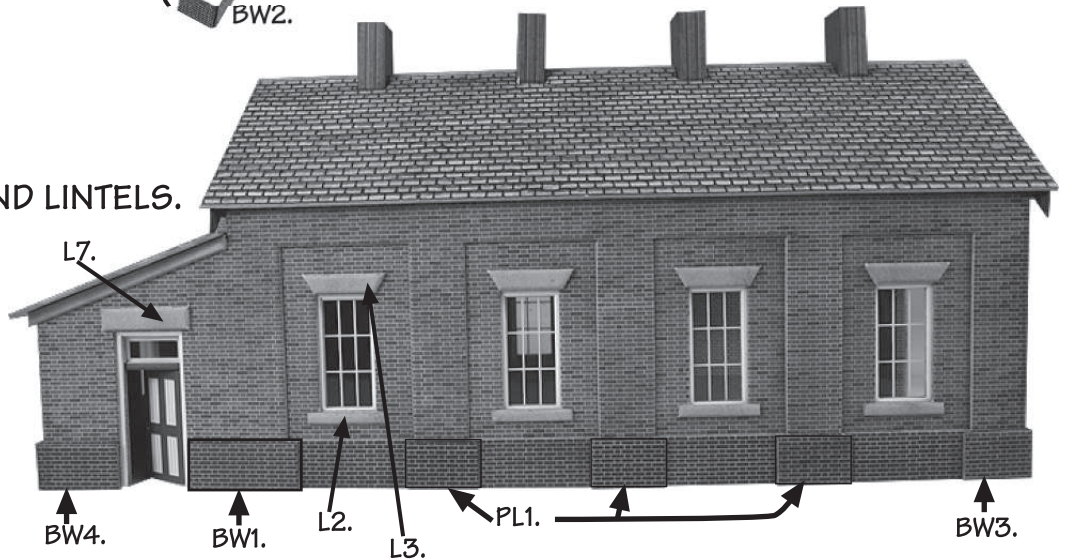
The six base walls (PL1.) each fit at the base of the three pillars on each side wall. See photo to your right.

Fig.20. SILLS AND LINTELS.

Extract from base sheet and fit as shown to all windows and the door.

Fix each with tiny spots of glue so you don't end up with excess glue oozing out past the lintel edges.

These are very small parts and must be treated with care. Time taken positioning them correctly will give your finished building a very realistic and pleasing look.



Paint roof edges with a grey paint and add a little to the lintel over the main door to give it a smoky look. (see photo above).

PLEASE NOTE:

The kit pictured in these instructions is the brick version. The stone version fits together in exactly the same way and all code numbers remain the same.

Fig.21. DOORS.

Fold each door in half and glue back to back to make double sided.



Fit the doors into the small recessed bit down the doorway sides and pushed up against the underside of the lintel in either open or closed position as required.

