

PO302 & PO303

00 Scale Low Relief

Terraced House Fronts Kit

PLEASE READ THESE INSTRUCTIONS BEFORE YOU START TO BUILD.

It is important you familiarise yourself with all the components and building techniques.

PLEASE NOTE

These instructions show the construction of the Stone Style Terraced Houses PO303. The Red Brick version PO302 builds up in exactly the same way.

CHECKLIST.

- 2 x SHEET A. Printed components for Houses Front section.
- 1 x SHEET B. Printed Extra Bits (smaller sheet on thinner card).
- 1 x GREY SHEET C. Inner strengthening components.
- 1 x GLAZING SHEET.
- 1 x Sample sheet of our MO060 Individual Paving Slabs.
- 1 x INSTRUCTION BOOKLET (this one).

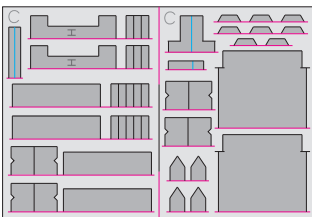
Kit components at a glance.

2 x SHEET A.



GREY SHEET C.

Inner strengthening components.



MO060.

Sample Paving.



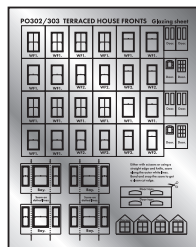
SHEET B.



SHEET B contains a selection of extra and optional components.

GLAZING SHEET.

Clear plastic windows.



1 Tools to build this kit.

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

1. A modellers knife. We find that a Swann Morton knife with 10a blade is the best tool for the job.
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 3)

INSTRUCTIONS

2 Glue.

We recommend using a combination of glue: **Speed Bond** is slightly slow drying, ideal for where a little positioning is required as you build.

Rocket Card Glue is an instant and fast drying glue, great for where you need stuff to stay just where you place it. Supplied with its own fine tip applicator.

Also UHU All Purpose solvent free.

This is the **best** glue for fixing the plastic glazing to the window frames.



3 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.

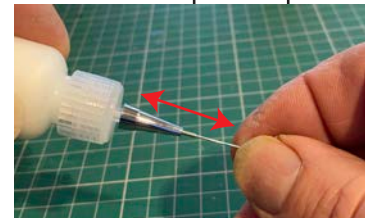
Speed Bond in an applicator was used to build most of this kit. UHU for fixing the glazing.



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

Care & Use of glue applicators

Always replace the pin if not using for more than a couple of minutes. The nozzle will block up from time to time, so simply tip the bottle up as shown here and push the pin inside, then vigorously push and pull the pin whilst squeezing the bottle at the same time. This allows the glue to moisten the dry glue in the nozzle.



If this doesn't help, then take the metal nozzle off and rod it out with the pin from the other end.

Speed Bond is a water based glue so running warm water over it as you go helps soften any hard glue in the nozzle.

ALWAYS store the bottles upside down when not in use. This keeps the glue moist around the nozzle end of the bottle.

This simple little holder was made using foam corner packaging (from a furniture flat pack kit). All types of foam or styrene packaging can easily be fashioned to make a holder like this one.



When using the bottles stick the pin into the foam for safe keeping. They are very easy to lose.

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

4 Extracting components from base sheets.

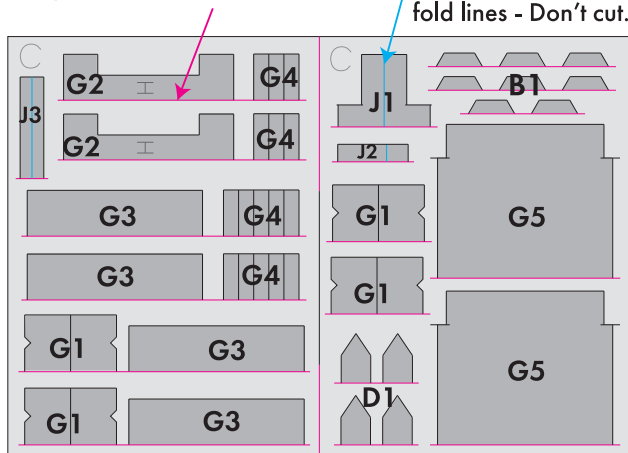
To stop the components falling off the base sheets, they are held secure with score lines (marked with blue arrows) that cut part way through the card.

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

5 GREY SHEET C Components.

RED lines indicate score rules you need to cut to release components from base sheet.

BLUE lines indicate fold lines - Don't cut.



Key.

G1. Inner side wall supports x 8.

G2. Inner base card x 2 (Marked 'H').

G3. Upper inner floors x 4.

G4. Inner chimney spacers.

There are 16 in total - 8 x for each house.

G5. Back walls x 2 - for both buildings.

D1. Dormer window bases x 4.

B1. Bay window inner braces x 8.

J1. & J2. Jig components to make perfect chimney spacers.

J3. Roof spacer jig for positioning Dormer windows.

6 OVERVIEW

There are two complete sets of house fronts in this kit. All the printed components for the main body of each house are contained on each sheet A.



It is best if you build each house separately to avoid getting in a muddle. From here on the instructions refer to building just one set of houses. Simply repeat for the next set.

However, if you do decide to extract all the components from all the sheets before you start to build the kit, keep them in a separate area or on a tray neatly piled and well away from your work space.

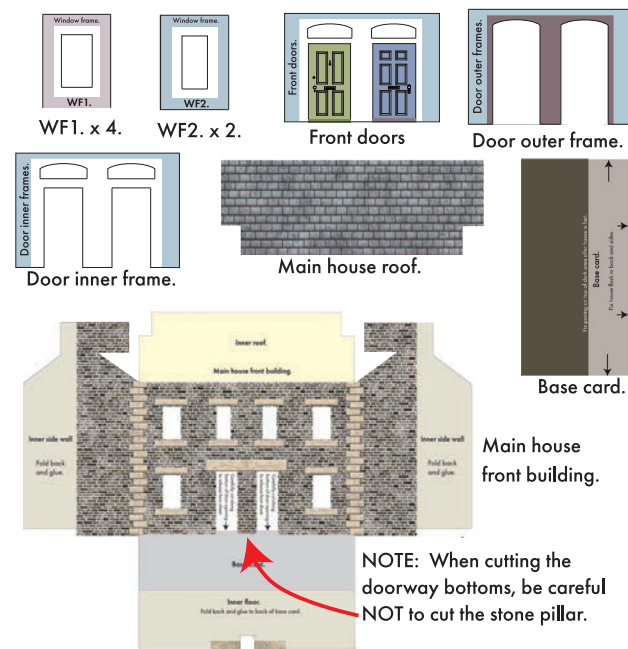
There are extra components such as chimney top stones and connection strips designed to aid connecting buildings either side by side or back to back.

Most of these you won't need but they are there just in case.

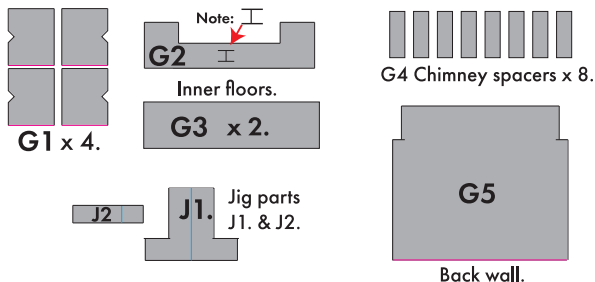
START BUILDING

1 The Main Building.

From **ONE SHEET A** extract:



From **GREY SHEET C** extract:



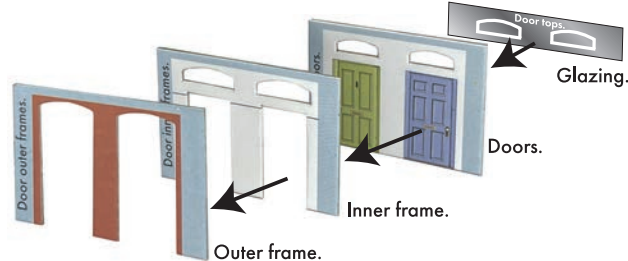
As you extract components, clean up any burred edges

2 The Doors.

Fit the glazing to the back of the door tops.

Then fix the doors to the back of the **INNER** frame.

Then fix to the back of the **OUTER** frame.



Turn outer frame around and glue face to face

with inner frame.

Like this.

This is an afterthought that makes the whole door unit look better when fitted into the building.

Put to one side until needed.

NOTE: There are Alternative doors on **SHEET B**.

Use these if you want something different, especially if you are building multiple kits and need a bit of variety.

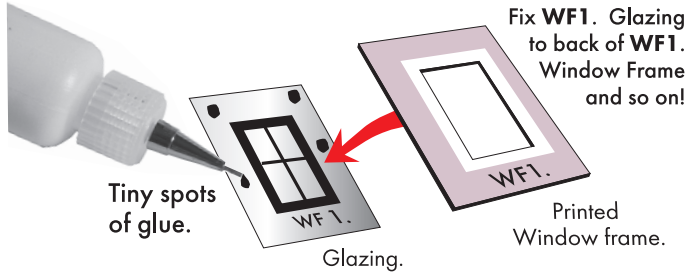
3 Windows.

Before any serious building work can start, we need to get the windows in place first.

Start by cutting out 4 x WF1. and 2 x WF2. pieces of clear glazing from the glazing sheet.

There are a few different styles for you to choose from.

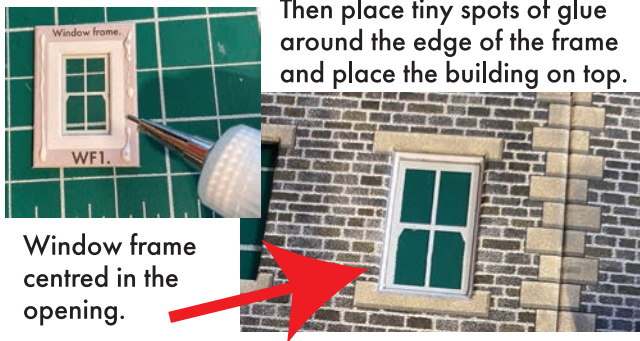
Each glazing has a corresponding window frame:



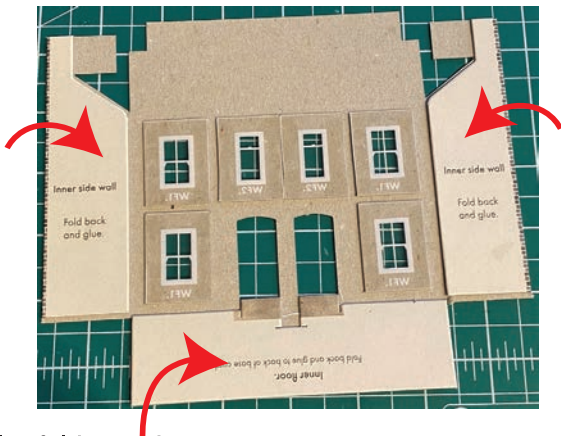
Using a fine tip applicator, place tiny spots of **UHU** glue on the edges of the glazing and then fix the window frame on top.

WARNING: Using other glues to fix glazings risks them popping out later.

See Glazing Hint in the next column.



Once all the windows are in place now is a good time to fit curtains and blinds (see BACK PAGE). Next fold over the two inner side walls and glue down.



Also fold over the inner floor and glue down. Make sure the door steps fit through the door openings when the front wall is folded up.

Like this.



GLAZING HINT

When fixing the glazing to the window frames, for a more permanent fix, rough up the surface of the edges around the window glazing with the point of your knife where it glues. A bit fiddly but it helps.

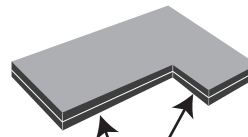
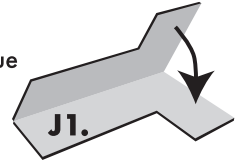
4 The Chimneys.

THE JIG and chimney spacers.

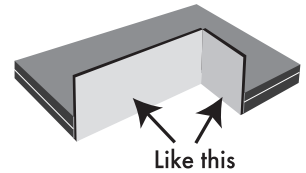
Especially designed for forming the layers of card that are glued together to form a solid block with all sides held at perfect right angles.

These blocks are then used inside the chimney stacks to hold them squarely in place.

Fold grey **J1.** in half and glue to make double thick.

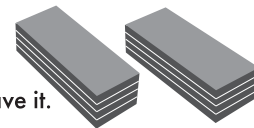
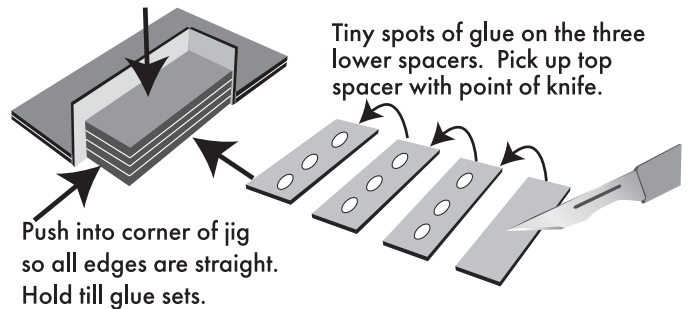


Then fit **J2.** folded at a right angle into the corner.



Like this

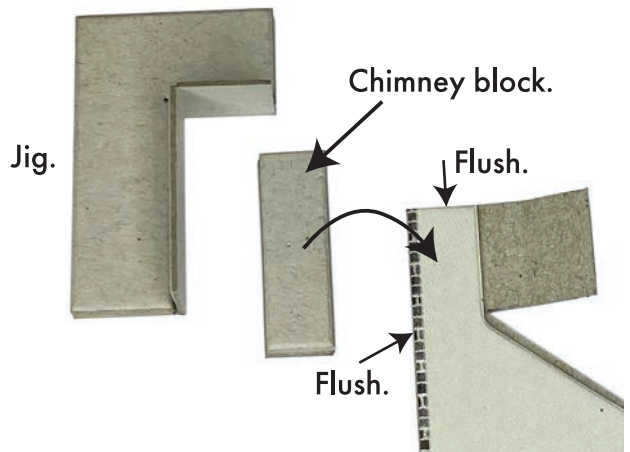
Each block is made using 4 x G4. spacers.

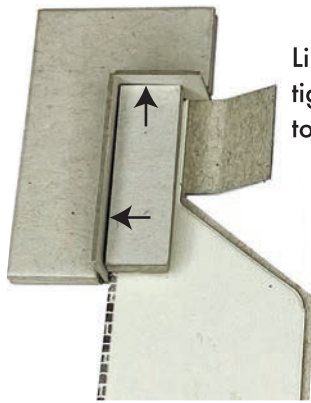


Two chimney spacer blocks.

And there you have it.

Now fix the chimney block to the inside wall flush to the top and back edge.



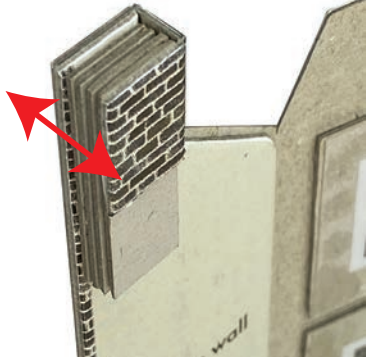


Like this. Use the jig held tight against top and back to keep flush.

Then fold the outer wall around against the jig.



Like this. Back and top edges perfectly square.



Thank goodness for the jig!

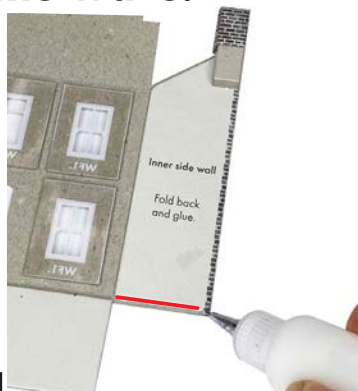


Now do the opposite chimney, the jig will be a little elongated on the top edge, but it works.

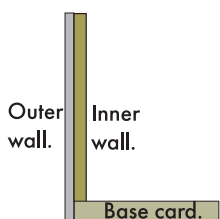
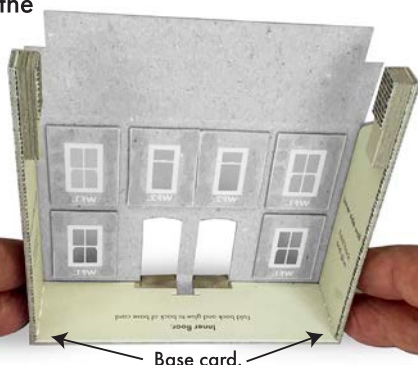
It's important that the chimneys are all squared up the same. They need to line up when the buildings are fastened together.

5 Assemble the walls.

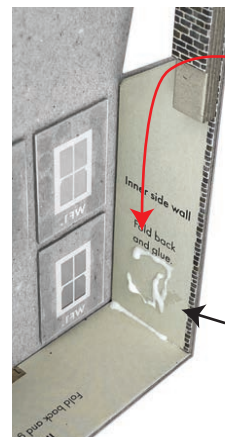
Place a thin strip of glue along the flange at the base of the side walls (shown here in red).



Fold the front wall up and the side walls around so that the ends of the base card fit into the flanged part of the side walls



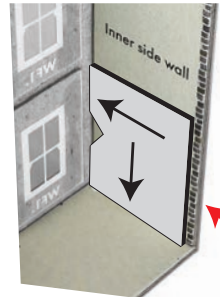
Stand on a flat surface as you do this hold until the glue sets.



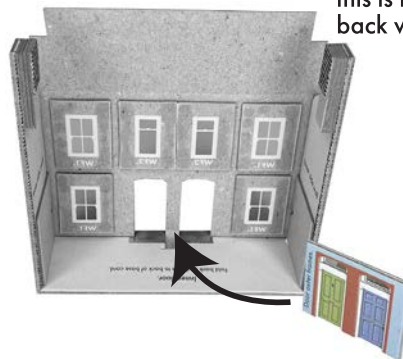
Place glue along the bottom joint and on the wall, then fix **G1**. grey side support to the wall. Push tight against front wall and down to base card.



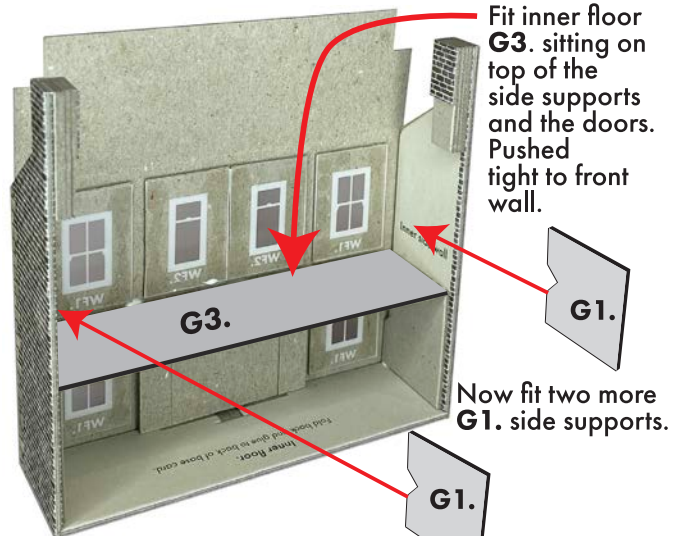
Fix a second **G1**. support to the opposite wall in exactly the same way.



Note the recess on the back edge this is to allow space for the back wall to fit in.



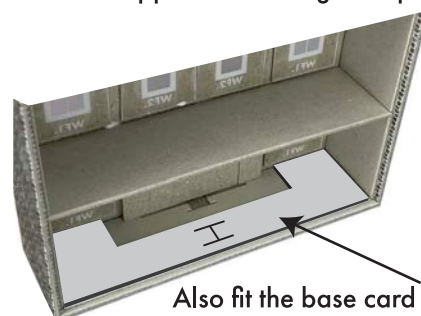
Fit the front doors.



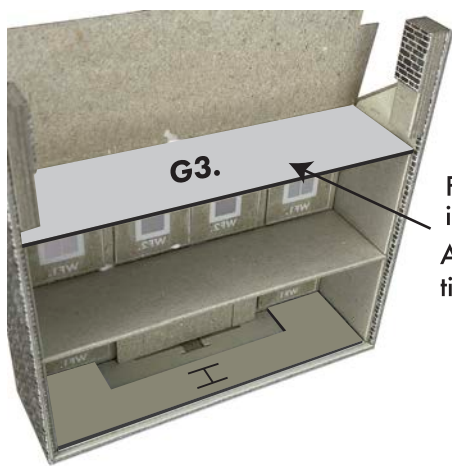
Fit inner floor **G3**. sitting on top of the side supports and the doors. Pushed tight to front wall.

Now fit two more **G1**. side supports.

Fit in exactly the same way as the lower supports but sitting on top of the **G3**. floor.

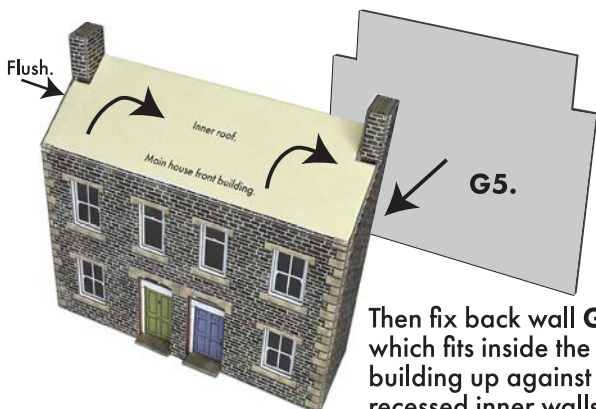


Also fit the base card **G2**. (marked 'H'). Again, push in tight to front wall.



Fit the second inner G3. floor
Again, push in tight to front wall.

Fold inner roof down inside building and fix sitting on top of the inner side walls & flush with outer wall tops.

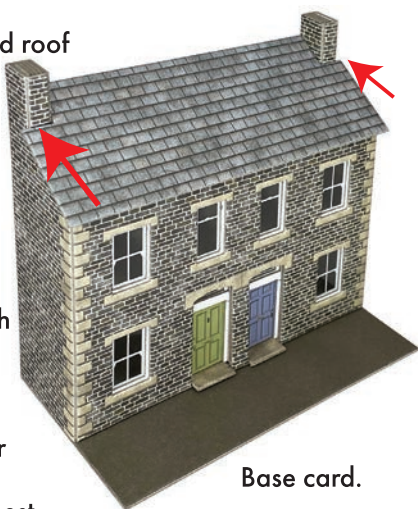


Then fix back wall G5. which fits inside the building up against the recessed inner walls and floors.

Warning

If you are joining buildings together side by side, don't fit the roof just yet. See 10 on page 11.

When fitting the tiled roof push up tight under the chimney stacks.



Then fit the base card with the back and side edges flush to the base of the building. This is important when fixing to other buildings. To get it exact it is best fitted with the building laid on its back.

Base card.

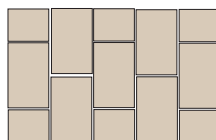
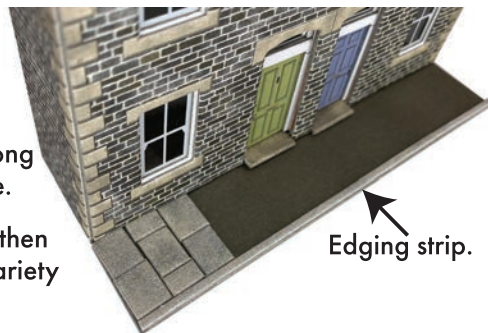
The main building is now complete and awaiting fitting of other components like paving, bay windows and the dormer windows on the roof.

6 Paving.

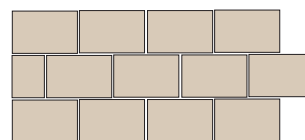
You have a choice of paving slabs. You can either cut out the solid strip of paving from sheet B. and stick it down all in one go. Or you can use our sample sheet of **MO060 Individual Paving Slabs**. Simply slice the edge that holds them to the base card and carefully stick them down onto the base card.

It is best to start with the edging strips fixed flush along the front edge.

The flags can then be laid in a variety of ways.



Like this.



Or like this.

Warning: The flags can vary a little in size so grade them as you go to avoid large gaps as you lay them. But it all adds to the rustic feel and appearance.

If you are joining buildings together side by side it is best to leave paving work till you have finished both buildings and fixed them together.

7 Bay Windows.

FOR EACH WINDOW YOU WILL NEED:
From **SHEET A**.

Roof sections
3 sizes.



Bay window
backdrop.



Bay Glazing.



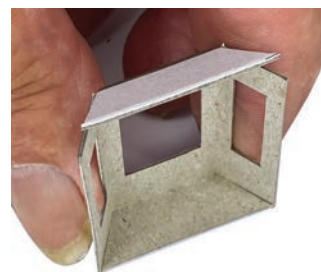
From **GREY SHEET C**.

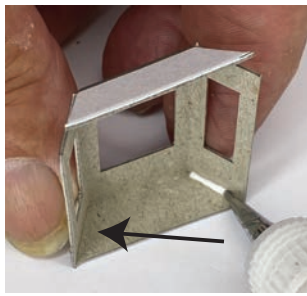
2 x Bay window inner braces B1.



Stand on a flat surface.

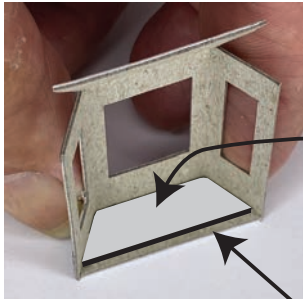
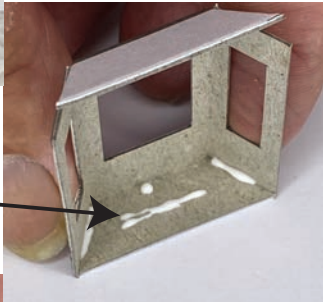
Bend the four score lines on the bay window unit to loosen them up.





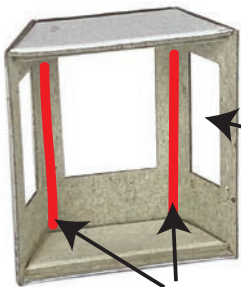
Hold the side walls against the base and then place tiny strips of glue along the joints at the bottom.

Keep hold of the unit as you place more glue as shown.

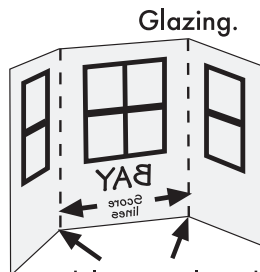


Then place a grey brace B1. Into the base like this and pushed up against the front and side walls. This leaves a recessed flange along the back edge for the backdrop card to sit on.

Hold gently until the glue has set then turn over and fix the top in exactly the same way.

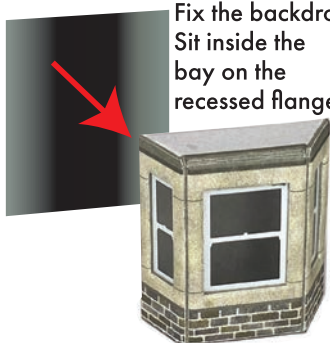


Tiny strips of glue (shown in red) is all you need to fix the glazing inside.



Lightly score along the dotted lines and bend the sides to same angle as bay window.

Fix the backdrop. Sit inside the bay on the recessed flanges.



Fit the roof sections one on top of the other after fixing to building.

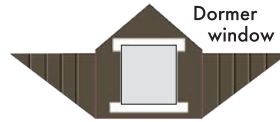


DON'T fit the bay windows to the building until after laying the paving.

8 Dormer Windows.

FOR EACH WINDOW YOU WILL NEED:

From SHEET A.



Dormer window



Dormer ridge tile strip.



Dormer roof.

From GREY SHEET C.

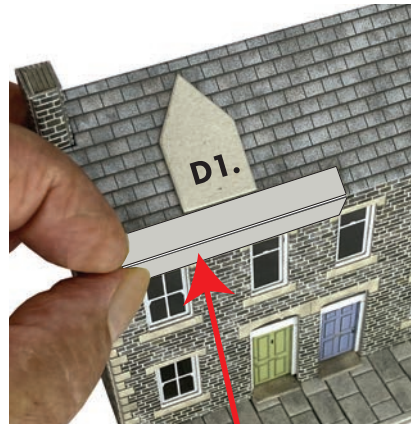


Dormer roof spacer Jig. J3.



D1.

Dormer window base.



Spacer Jig. J3.

Fold the spacer jig along the score line over the roof end.

Place the dormer window base against it as shown and fix to roof.

Position between the two windows below, like this.



Fix the glazing to the dormer window.



Then fold the sides around the base.

Fix to sides of the base with tiny spots of glue.

Finally fit the roof

NOTE: There are a couple of alternative dormer windows on SHEET D.

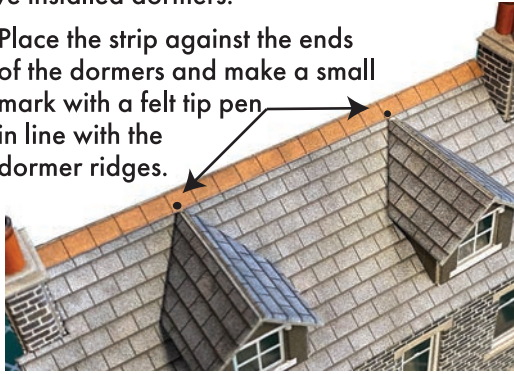


9 Ridge Tiles.

The long ridge tile strip is designed for use on whole buildings where roofs run front and back. With this low relief kit only half of the strip is visible. Fold the other half over the back of the building.

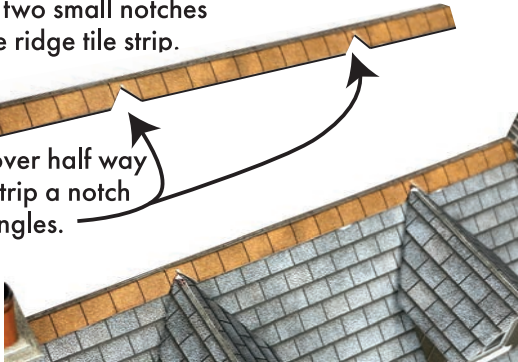
But first you have to make a small modification if you have installed dormers.

Place the strip against the ends of the dormers and make a small mark with a felt tip pen in line with the dormer ridges.



Now cut two small notches out of the ridge tile strip.

Cut just over half way into the strip a notch at 45° angles.



Then fix to the roof with the notches fitting neatly around the points of the dormer roofs

The dormer ridge tile strips now sit over the top as shown here.



10 Fixing Buildings Together.

When joining side by side, this is best done with the buildings laid on their backs.



Stand up and fit the paving.



If you are fitting the paving strips fit the longer strip first to cover over the joint in the base cards.

When fitting the roofs you need to trim a bit off each where they meet in the middle.

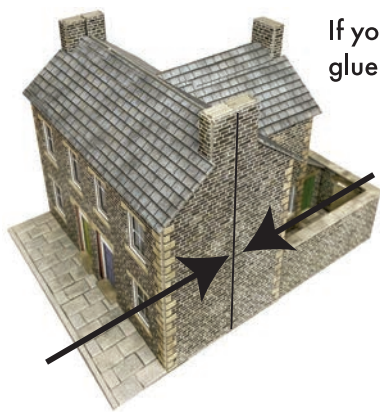
Use the roof joiner strip to cover any gaps



There is also a joining strip to cover the joint between buildings.

The red brick strip looks good. However, the stone strip doesn't work well and to be honest the stone buildings don't really need it, so chuck it away!

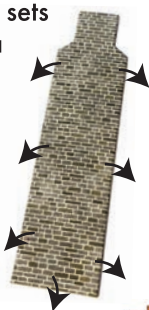
But if you want to cover the joint, you can easily fashion something from the side wall joiner which is surplus.



If you are fixing the house fronts to our **PO304/305 Terraced House Backs** kit, glue them back to back with all edges flush.

Hold tight until glue sets whilst standing on a flat surface

To cover over any gaps, there is a side wall joiner in the shape of a chimney breast.



Before fitting, bend over all edges a little to curve the card slightly. This helps to stop the edges of the card curling outwards after fitting

ALSO AVAILABLE

PO304 Low Relief Terraced House Backs in Red Brick

Two complete sets of house backs with back yards



PO300 Terraced houses in Red Brick



Also available in Stone finish **PO305**



PO301 Terraced houses in Stone finish

PO306 Low Relief Shop Fronts Red Brick



Stone finish **PO307**

11 Chimney Pots.

This job can seem a little tedious but well worth the effort. It's a job best done whilst watching TV, listening to the radio or even a podcast!

Cut out the terracotta coloured strips (below) roll each one tightly around a metal rod to form a cylindrical shape.

Drill bits, nails or even small screw drivers (like this one right) which is 3.6 mm diameter are just right for the job.

They need to be between 3 to 4mm. diameter for OO scale.



Roll up tight and keep rolling until the paper is fully curled around.

Then unroll the end back out just enough to smear with a little glue, then roll back up and hold tight until the glue has set.

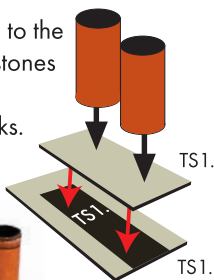
Keep edges straight.

Make all the pots in one go.

Mount the pots on to the chimney capping stones before fixing to the main chimney stacks.



Paint tops black to hide white card edges.

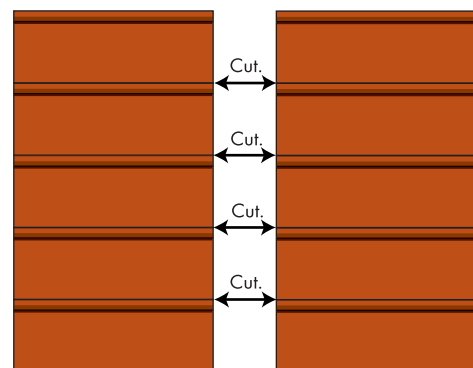


TS1. for single stacks.



TS2. where houses join.

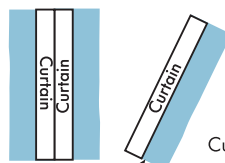
Capping stones TS3. & TS4. are for use where buildings are fixed together back to back.



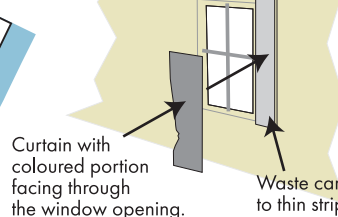
12 Curtains.

After you have fitted the glazings, if you require curtains now is the time to fit them.

To fit curtains fix a small strip of waste card down each side of the window and attach the curtains either side so that a little strip shows through the window, the waste card will space the curtain back from the glazing.



Cut each curtain to shape.



Waste card cut to thin strip.

