

PLEASE

Read through the instructions and familiarise yourself with the kit components before you start any building.

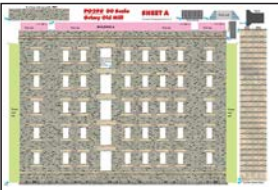
CHECKLIST.

- 1 x SHEET A Printed components
- 1 x SHEET B Printed components.
- 1 x SHEET C Printed components.
- 1 x SHEET D Printed components.
- 1 x SHEET E Printed components.
- 1 x GREY SHEET F Inner strengthening components.
- 1 x GREY SHEET G Inner strengthening components.
- 1 x GREY SHEET H Inner strengthening components.
- 2 x GLAZING SHEETS (A & B).
- 1 x INSTRUCTION BOOKLET (this one).

Kit components at a glance.

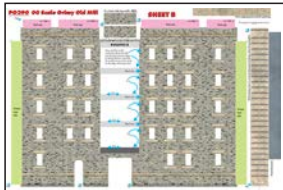
SHEET A.

Printed components for building A.



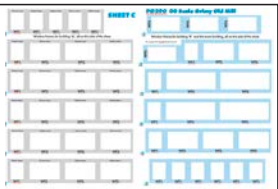
SHEET B.

Printed components for building B.



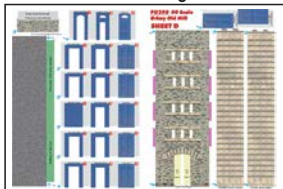
SHEET C.

Printed window frames.



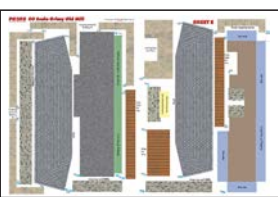
SHEET D.

Printed tower building & doors.



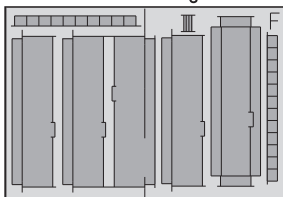
SHEET E.

Printed roofs and other bits.



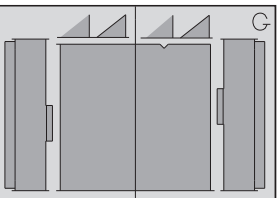
GREY SHEET F.

Inner floors for building A etc.



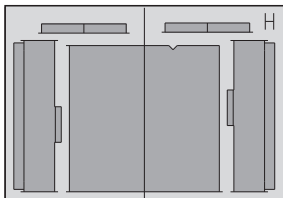
GREY SHEET G.

Inner floors and back walls.



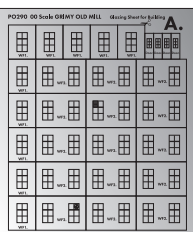
GREY SHEET H.

Inner floors and back walls.



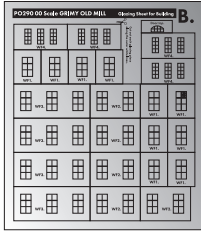
GLAZING SHEET A.

All windows for building A.



GLAZING SHEET B.

All windows for building B. and the tower.



1 Tools to build this kit.

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. Something to clamp surfaces together, Bulldog clips are good for this job.
6. METCALFE Ultra Fine Tip Glue Bottles (see 3)

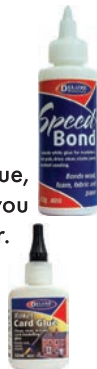
2 Glue.

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

All tools & Glues available at: [www.metcalfeamodels.com](http://www.metcalfeamodels.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 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.

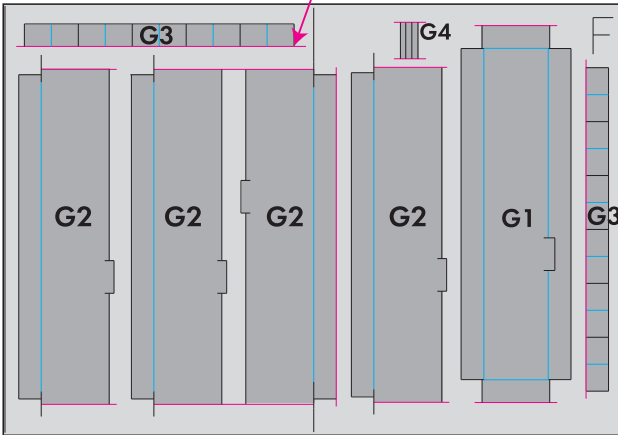


## 5 Plain Grey Card Sheets

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

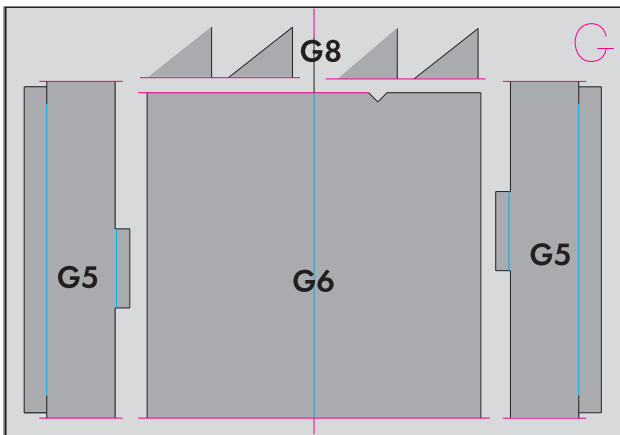
**BLUE** lines indicate fold lines - Don't cut.

### GREY SHEET F.



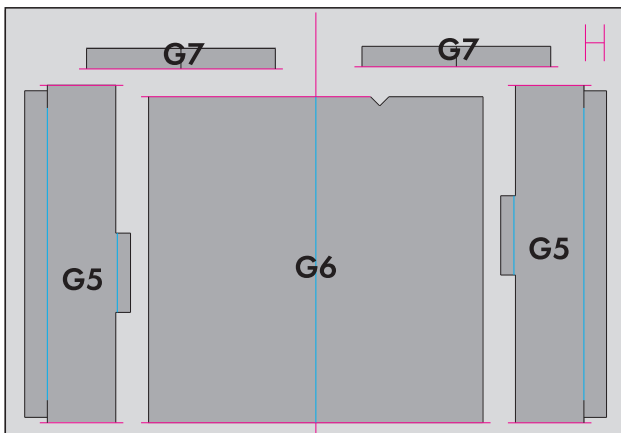
- Key.**
- G1. Building A inner ground floor.
  - G2. Building A inner upper floors x 4.
  - G3. Corner braces for both buildings x 11.
  - G4. Hoist spacers x 3.

### GREY SHEET G.



- Key.**
- G5. Building B upper floors x 4.
  - G6. Back walls x 2.
  - G7. Tower inner braces x 4.
  - G8. Triangular roof supports x 4.

### GREY SHEET H.



## START BUILDING

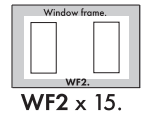
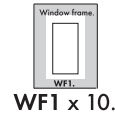
### 1 The Windows.

Before any serious building work can start, we need to get all the windows in place first. That way you reduce the risk of losing small parts.

#### SHEET 'C'.

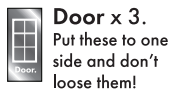
Cut the sheet in half and extract all the window frames from the left side highlighted with grey surrounds.

You should have:



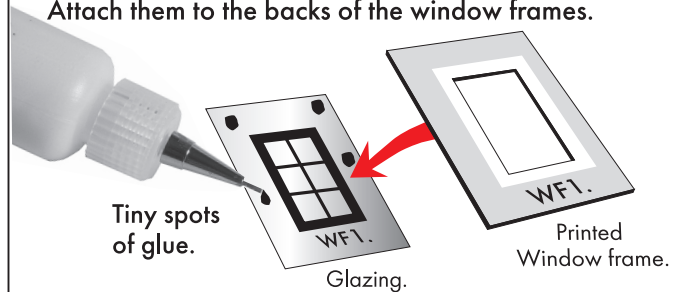
Now take glazing sheet 'A' and cut out all the windows. Score along the outer white lines with a ruler and knife then bend the plastic to separate them.

You will have:



Door x 3.  
Put these to one side and don't lose them!

Each window frame has a corresponding glazing. Attach them to the backs of the window frames.



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

#### CAREFULLY Extract BUILDING 'A' From SHEET 'A'

Also extract all the other bits and place them somewhere safe until needed - **DON'T LOOSE THEM!**



Keep the hoist bits on the sheet like this.

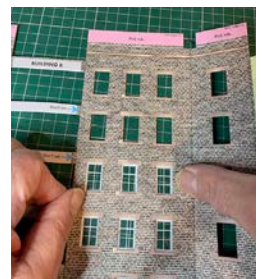
Push out all the window and doorway openings and clean up any burred edges.

Attach all the windows to the backs of the openings

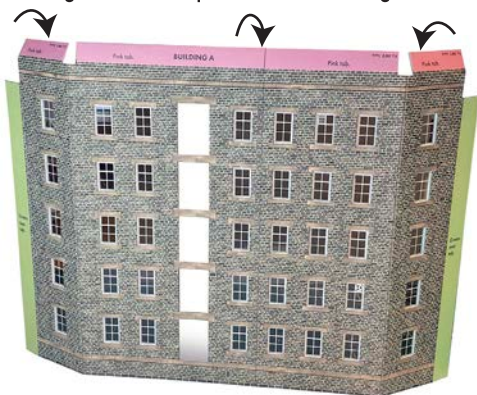
**REMEMBER;** the single windows WF1. only fit to the openings on the end walls.

#### FIXING WINDOWS TO THE BUILDINGS.

Simply lay each window on your work surface and place tiny spots of glue on the grey/blue areas away from the openings then lower the building down and position windows frames centrally in each opening.



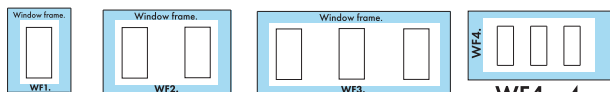
Fold over and glue back the pink tabs after fitting the windows



## SHEET 'C'.

Now from the other half of SHEET 'C' extract all the window frames highlighted with blue surrounds.

You will have:



WF1 x 10.

WF2 x 5.

WF3 x 4.

WF4 x 4.

Now take glazing sheet 'B' and cut out all the windows.

You will have:



WF1 x 10.

WF2 x 5.

WF3 x 4.

WF4 x 4.



Door top x 1.

Put this to one side with the others DON'T LOOSE IT.

Fix the glazings to their corresponding window frames.

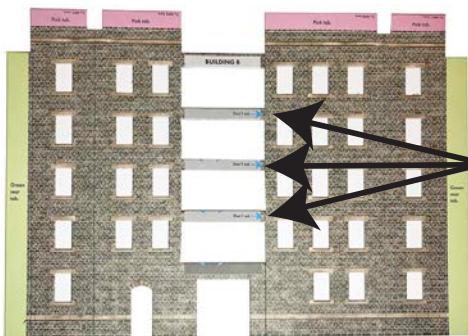
## CAREFULLY Extract BUILDING 'B' From SHEET 'B'

Also extract the joiner strips and the two inner walls, put these to one side until later.

Also on this sheet are roof joiners and a spare capping strip. Cut these out too and keep safe.

Take out the four door openings as instructed

**NOTE: This is a delicate job - go VERY carefully.**



Take care not to cut the grey strips holding the building together.

Attach all the windows to the backs of the openings as you did with the first building.

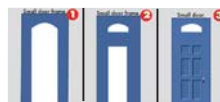
Then fold over the pink tabs along the top walls and glue back to make double thickness.

## Extract the TOWER BUILDING From SHEET 'D'

Fix the four WF4. windows and put the building to one side.

## 2 The Doors.

From SHEET 'D' extract:



Small door

+ door frames 1. & 2.



Hoist doors x 5 (two with windows).  
+ their matching door frames 1. & 2.

Assemble all the doors.



Fit the glazings to the back of the doors with openings.

Place glue on the grey bits around door 3 then stick door frame 2 on top and then place glue spots on the grey areas and stick door frame 1 on top of that. Keep all outer edges flush.



Like this.

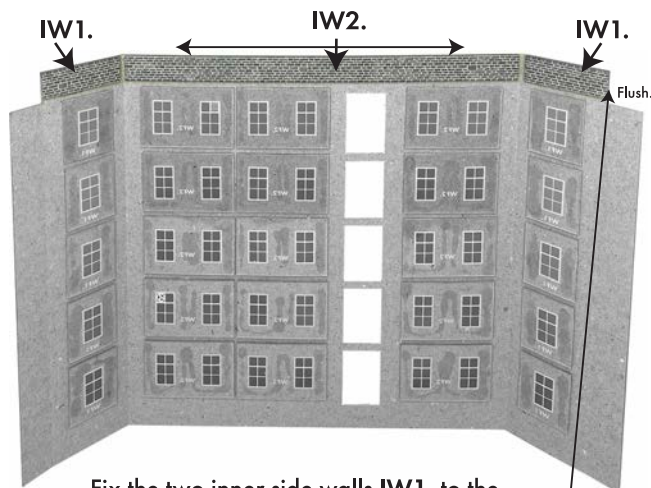


Keep all door safe until needed.

## 3 Building 'A'. This is the easy one!

Go back to sheet 'E' and extract the long inner wall IW2.

Fix it on to the long pink strip along the top of the building, flush along the top edge and centred so that the end walls can be folded at right angles without catching.



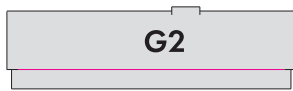
Fix the two inner side walls IW1. to the small pink tabs on the side walls.

Fit flush to top edges and the back edges.

From GREY SHEET 'F' extract:  Corner braces G3. x 4.



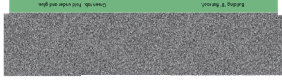
Inner ground floor x 1.



Inner upper floors x 4.

From SHEET 'D' extract:

Building 'A' flat roof.



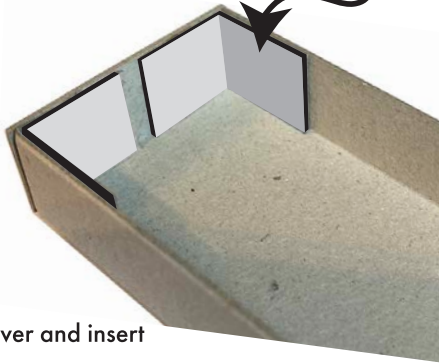
Now take the inner floor G1. and turn it over then fold up the four side tabs.

The shorter end tabs overlap the longer sides.

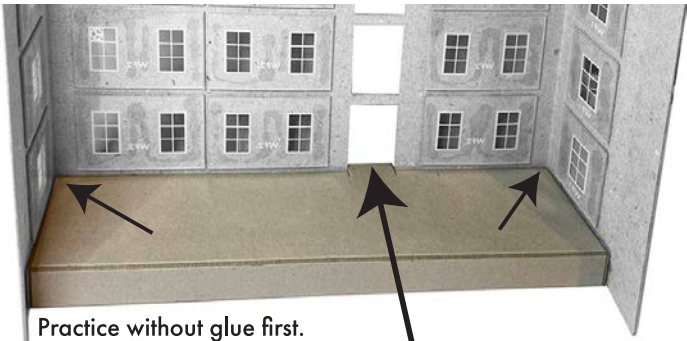


Fix the corners in place using four G3. corner braces.

Fix so all corners are squared up at right angles.



Turn the floor back over and insert into the building.



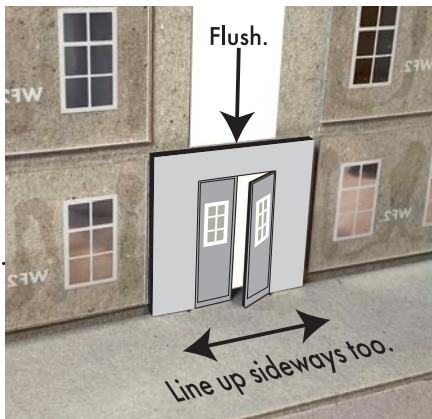
Practice without glue first.

When fitting push the door tab through the opening sitting down on the doorway bottom edge.

Fix to the front and side walls pushed tight into the corners.

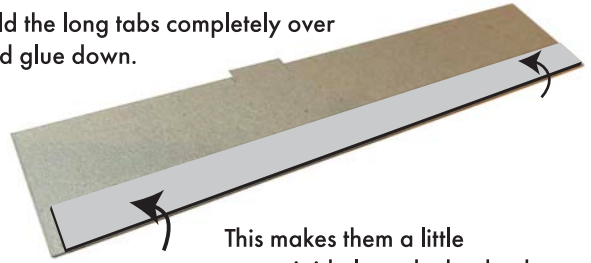
Now fix one of the doors to the back of the opening. Push down tight to the floor. The top edge should be flush to the base of the opening above.

Repeat this step as you fit each floor above.



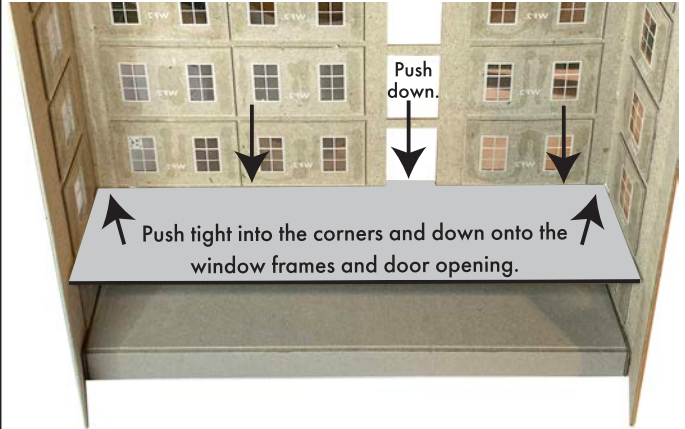
Next take the four inner upper floors G2. and turn over.

Fold the long tabs completely over and glue down.

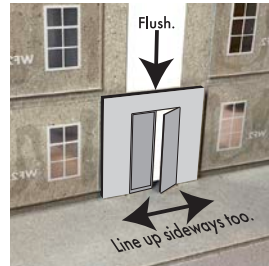


This makes them a little more rigid along the back edge.

Turn back over and fit the first floor



Each floor now sits on top of the window frames below. This may seem a bit of a fiddle, but if you practice a few times without glue first, there is less chance of cocking it up when you do it for real!



And once again, fit another door unit as you did below.

If the top of the door stand taller than the door bottom above, trim it down a little, otherwise the problem will continue on the floors above as you go.

The rest of the inner floors fit in the same way.

At each stage hold each floor as shown here until the glue has set. That way there is less chance of the floors below becoming dislodged when you fit the next floor above.....Patience is all you need!



Now fit the flat roof.

This fits to the underside of the inner wall tops.



Turning the building upside down is probably the best way to do this job.

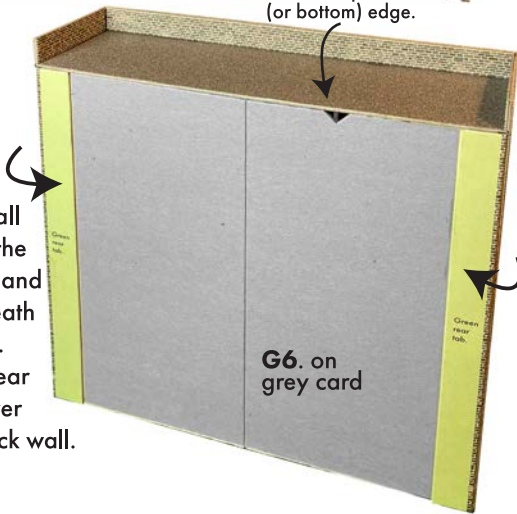
Roof.



Right side up again.  
And fit the back wall.

The small notch indicates top (or bottom) edge.

The back wall fits against the inner floors and sits underneath the flat roof. The green rear tabs fold over onto the back wall.



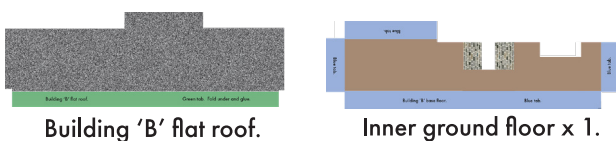
Job done, put to one side and lets crack on with building 'B'.

## 4 Building 'B'.

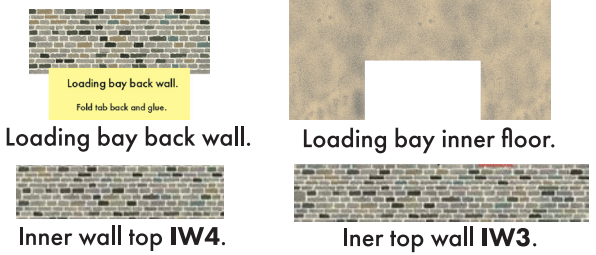
From GREY SHEETS 'G & H' extract:



From SHEET 'E' extract:



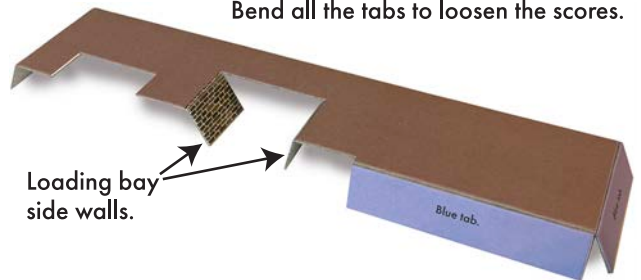
Also from SHEET 'E' extract:



Starting with the base floor.

This is similar to the one in building A. but has a few cut away areas to accommodate the loading bay area and the small side door.

Bend all the tabs to loosen the scores.



Loading bay side walls.

Blue tab.

Loading bay back wall.

Fold yellow tab back and glue.

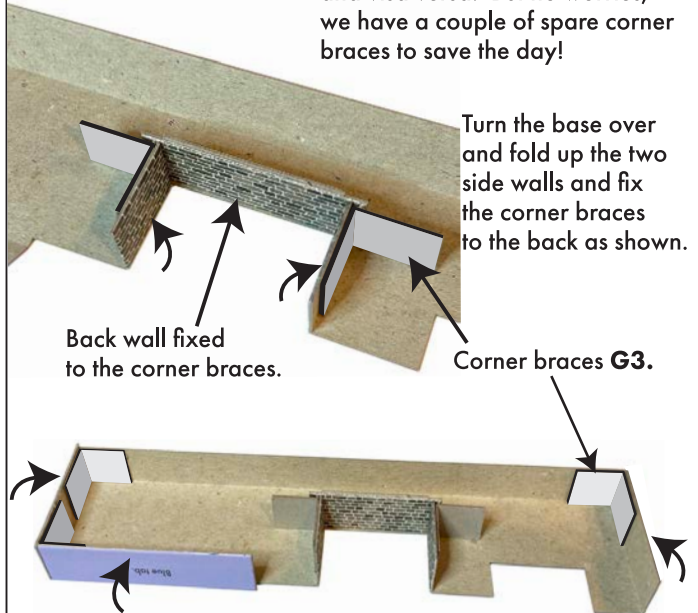
This where we have to admit to a tiny design malfunction. The yellow part shown here should be printed with wall effect and visa versa. But no worries, we have a couple of spare corner braces to save the day!



Turn the base over and fold up the two side walls and fix the corner braces to the back as shown.

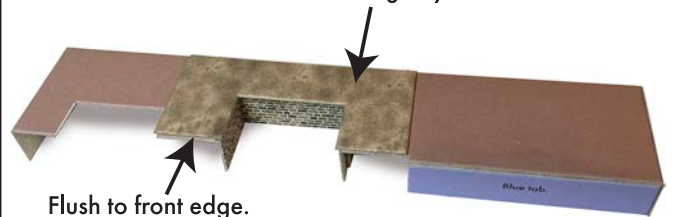
Back wall fixed to the corner braces.

Corner braces G3.



Now fold up the blue tabs and fix the corners with the braces.

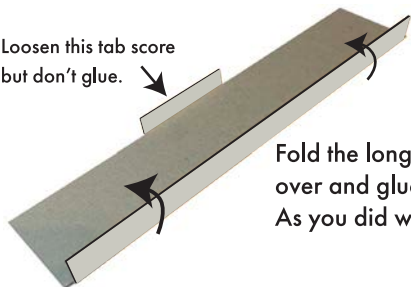
Turn back over and fix the loading bay inner floor.



Flush to front edge.

Take the four inner upper floors **G5**. and turn over.

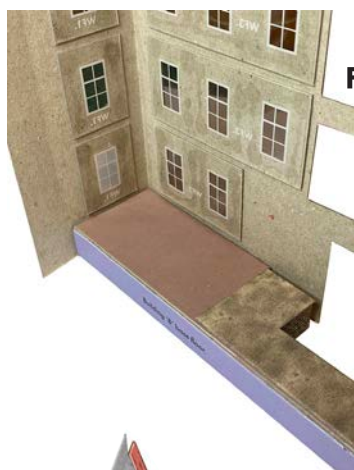
Loosen this tab score but don't glue.



Fold the long tabs completely over and glue down. As you did with building A.

## FIT THE SMALL DOOR

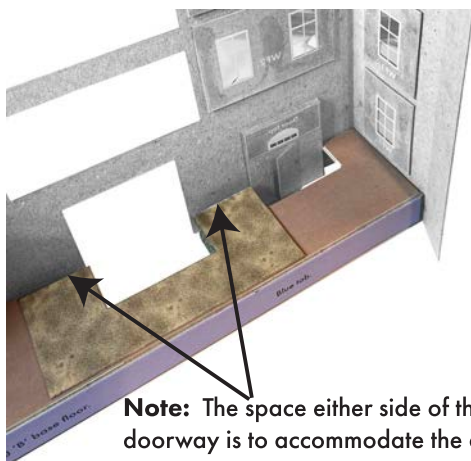
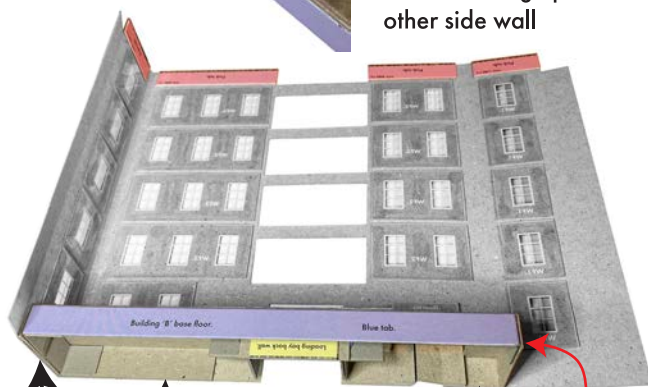
Fix it to the back of the opening and flush to the wall base. (very important).



## FIT THE BASE FLOOR.

Starting in the left hand corner fix the blue tabs to the back of the outer walls, absolutely **FLUSH** with the bottom edges.

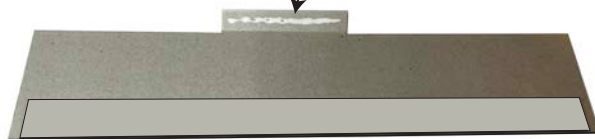
Fix the small tab on the right hand side and then lay flat on it's front before folding up the other side wall



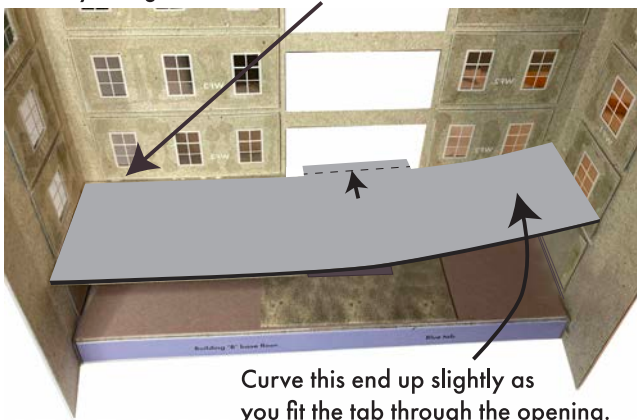
**Note:** The space either side of the doorway is to accommodate the doors later.

## FIT THE UPPER FLOORS.

Before you fit each floor into the building place a strip of glue on the underside of the small tab.

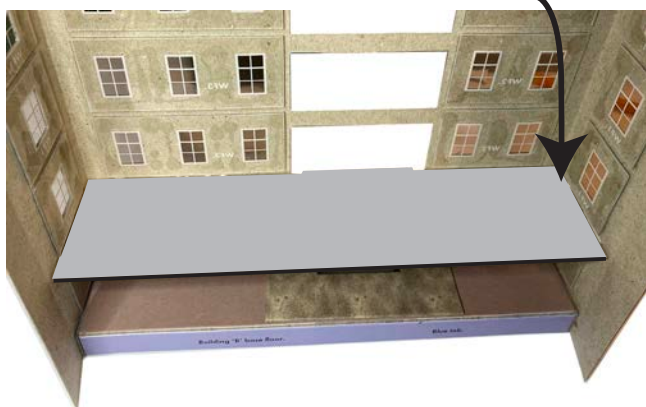


Flatten the tab back as you fit the floor on top of the window frames below. Start by fixing into this corner first.

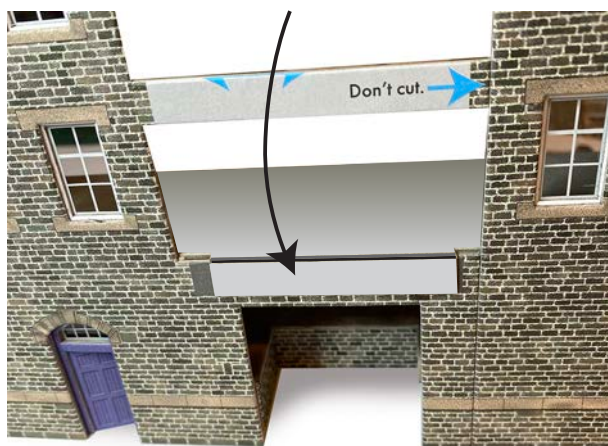


Curve this end up slightly as you fit the tab through the opening.

Then snap the floor down onto the window below.



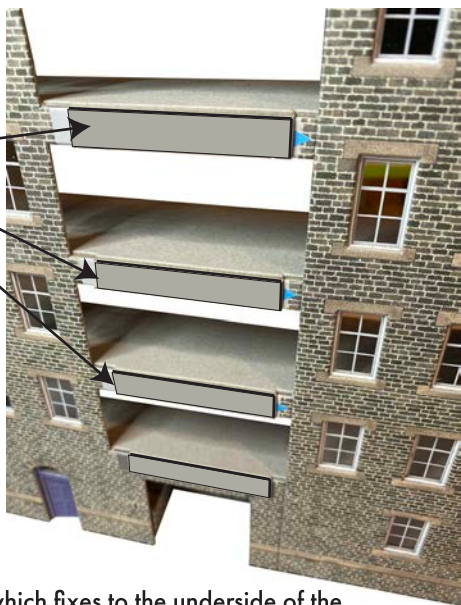
Then fold the tab over and fix the wall below.



the whole building is still a bit flimsy at this stage, but once tab has been folded down and fixed to the wall below, it will start to hold the structure more rigid.

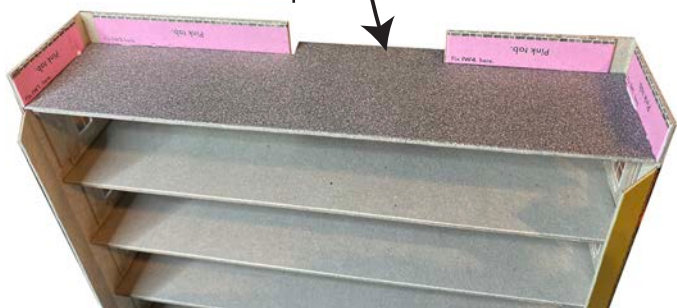
The floors above all fit the same way. Once fitted the whole building will be quite rigid.

Tabs holding the floors and the building rigid.

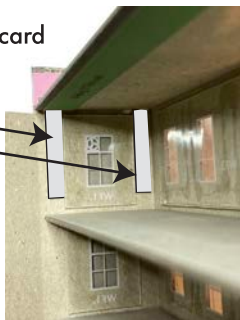


Next fit the roof, which fixes to the underside of the pink tabs as with the other building.

Protruding roof sitting on the wall top



**HINT:** Fix tiny pieces of waste card underneath the roof to hold it in place.



Fit the back wall as with building 'A'

And there you have it!

Ready and waiting for the tower.

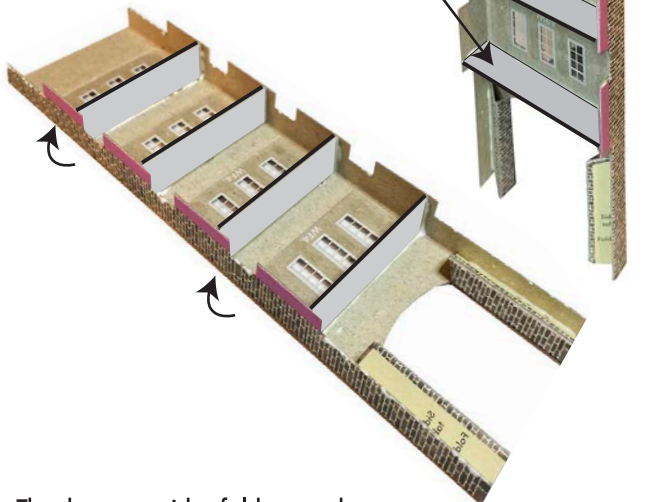


## 5 Tower Building

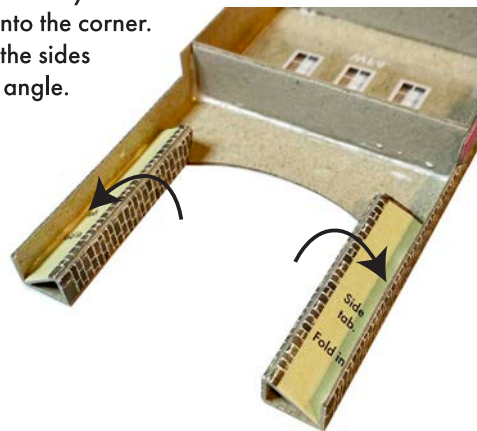
From GREY SHEET 'H' extract:

G7. Tower inner braces x 4

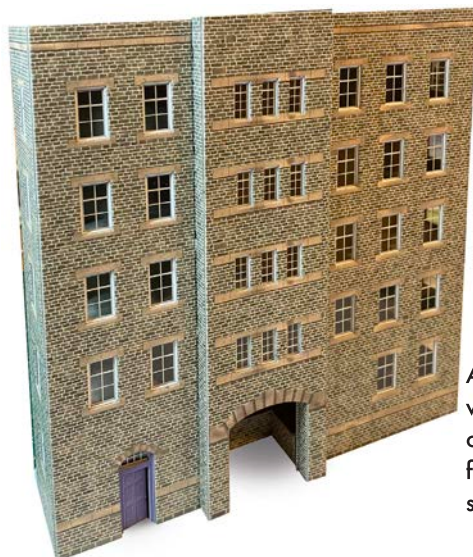
Fix the braces to the underside of the window frames at right angles. Then fold the side walls around.



The doorway sides fold around with the edge of the yellow tab pushed tight into the corner. This will hold the sides at the correct angle.



The tower slots into the front of building 'B'.



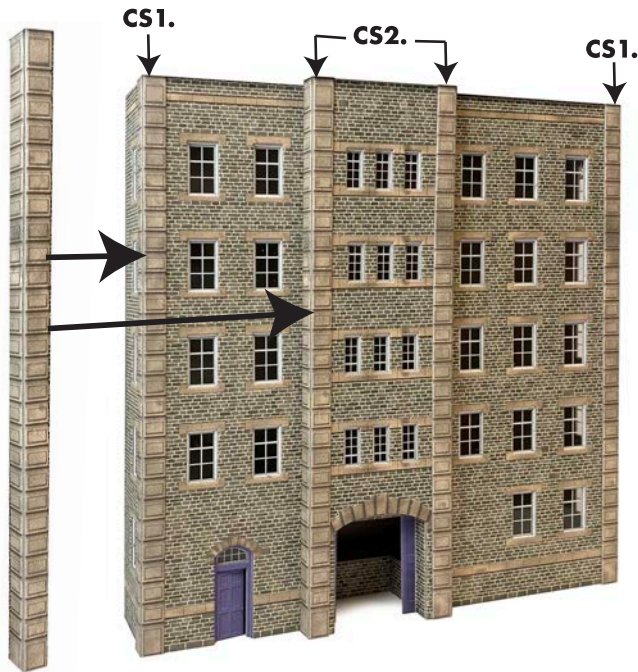
Fix with tiny spots of glue on the edges of the short recesses between the purple tabs.

Any small gaps will be covered over when you fit the corner stone strips.

CORNERSTONE STRIPS.

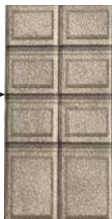
From SHEET 'D' extract: Corner stone strips CS1. x 2 & CS2. x 2.

CS1. cornerstone strips fit onto the corners of building 'B'. And the slightly longer CS2. strips fit the tower building



GET THEM THE RIGHT WAY UP.

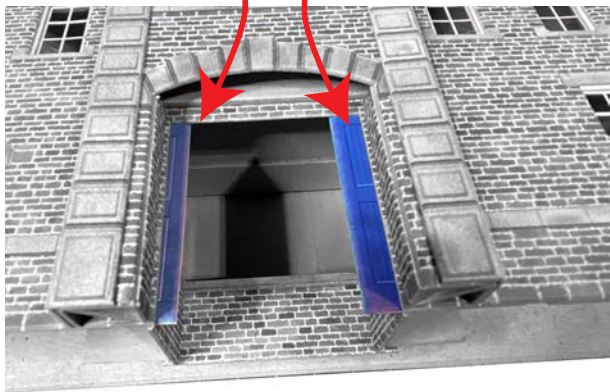
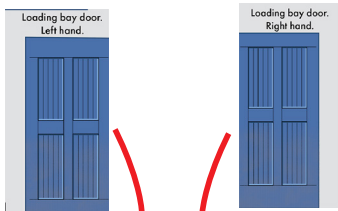
If you look closely at them you can see that the bottom edge of each stone is darker representing a shadow giving a relief effect.



And whilst you are at it, stick the other two cornerstone strips to building 'A'.

LOADING BAY DOORS.

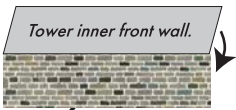
From SHEET 'D' extract: Loading bay doors x 2.



The right and left hand doors slot into the space behind the inner wall. Fit them in closed or part open position as you want them.

INNER TOP WALLS.

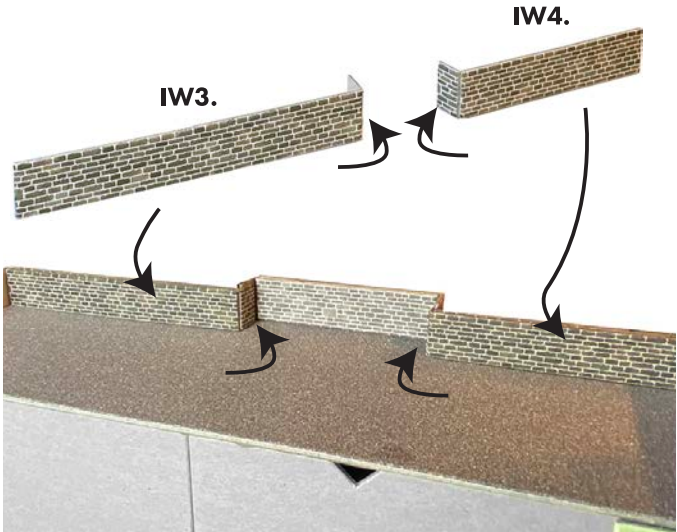
From SHEET 'D' extract:



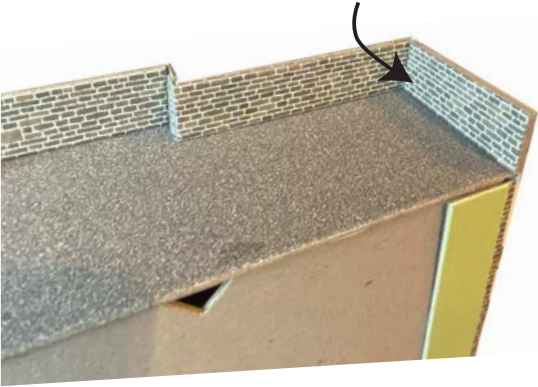
Fold in half and fix to the back of the tower top.



Fix the two front walls IW3. & IW4.

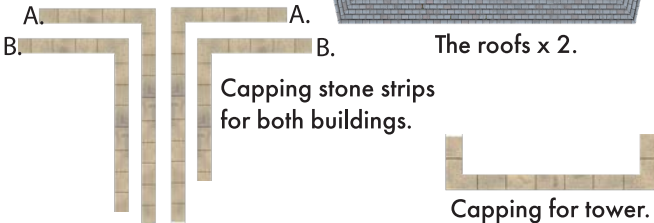


Now fit the two side walls IW2. at each end.



6 Fitting the roofs.

From SHEET 'E' extract:



From GREY SHEET 'G' extract:



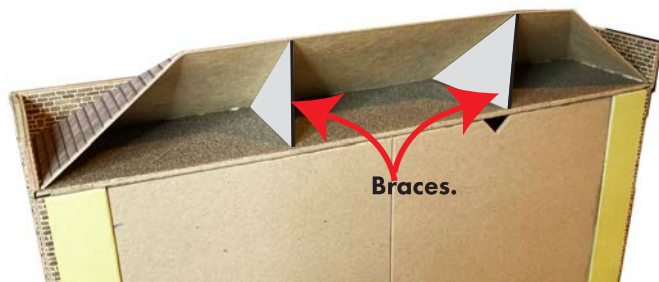
Place a strip of glue around the wall bottoms where they join the flat roof.



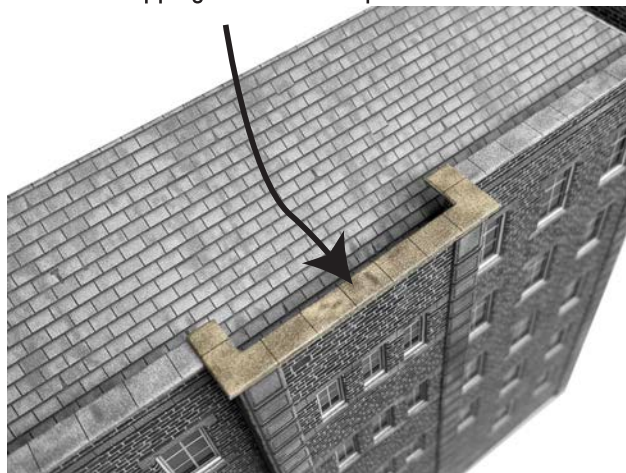
Fit the roof down onto the flat roof and pushed tightly into the corners.



Fix two of the roof braces underneath the roof to hold it up.  
**NOTE:** If you are fixing the buildings back to back don't fit them until you are about to do it. You may need to adjust the positions to get both roofs to same height along the ridge.

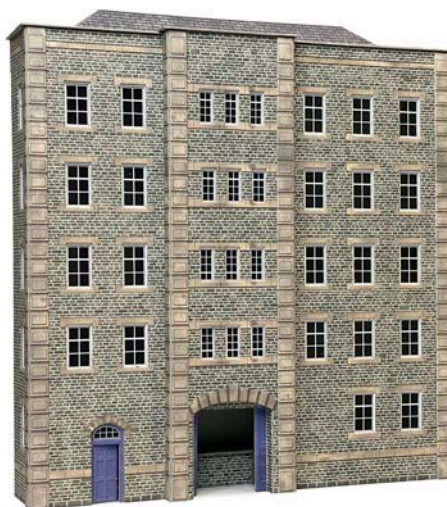


The tower capping stones sit on top.



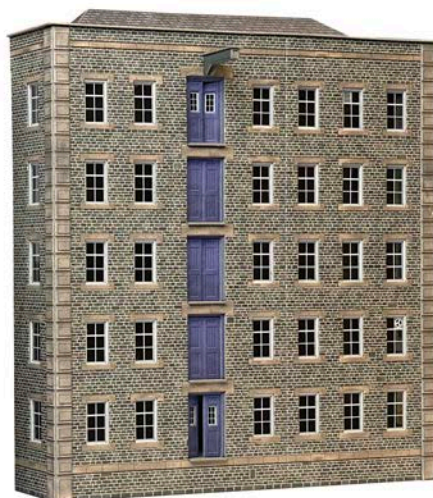
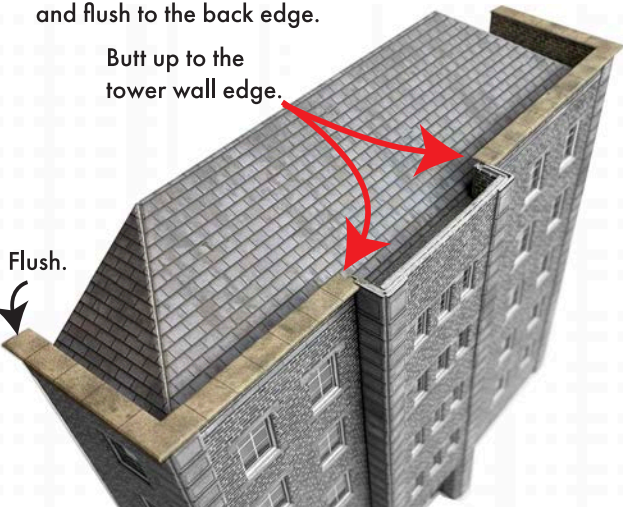
And finally the longer capping stones on to building 'A'.

There you have it! Two lovely low relief mills



Fix the wall capping stone strips. they overhang equally on each side of the wall and flush to the back edge.

Butt up to the tower wall edge.



## 7 The Hoist

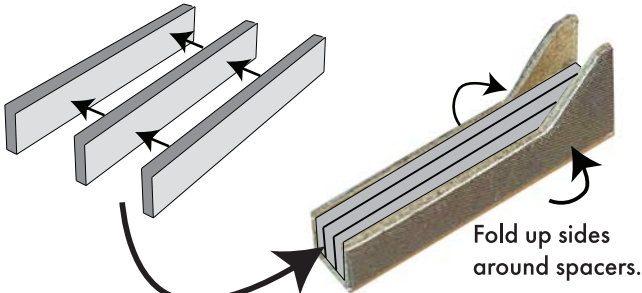
The hoist parts are on the corner of **SHEET 'A'**. Remember, you kept them safe hopefully. They are:



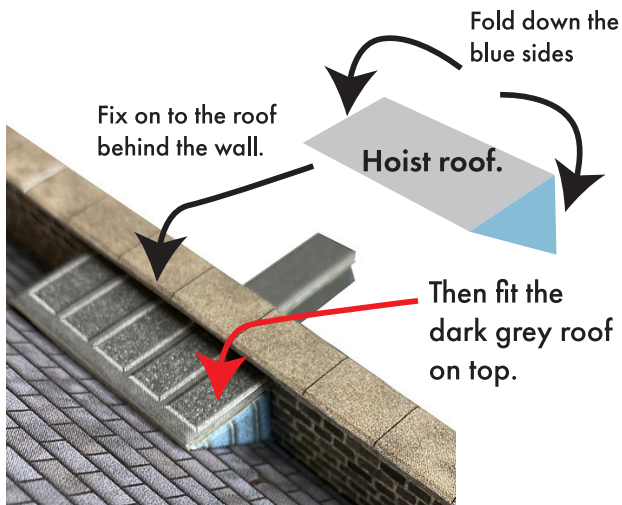
Also on **GREY SHEET 'F'**:



Fix the three spacers together and then sandwich them inside the hoist with its side edges folded around them.



When fully fast fit the hoist cover on top.



## 8 Fixing the Buildings Back to Back.

If you want a stand alone building it is easy to glue the buildings together.

Glue the green tabs and hold tight until the glue has set. It will have a tendency to try to spring apart so cover the gap with the long joiner strips, hold tight again until fast. These will help keep the walls tight together.

**HINT:** Do one side at a time. When the first side is fully set, open out the other side enough to get your glue nozzle in and spread glue down on the green tabs. Hold tight again.

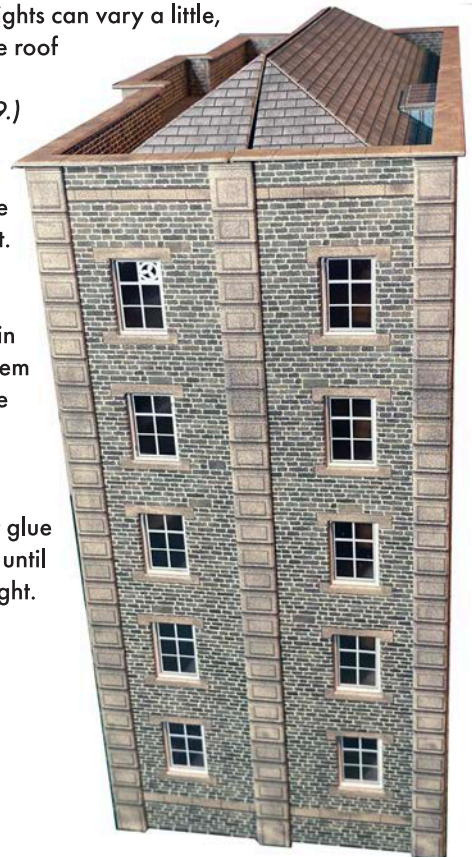
**But before you do this level up the roof ridges see below.**



The roof heights can vary a little, so, using the roof braces **G4**. (see page 9.) use them to get both ridges to the same height.

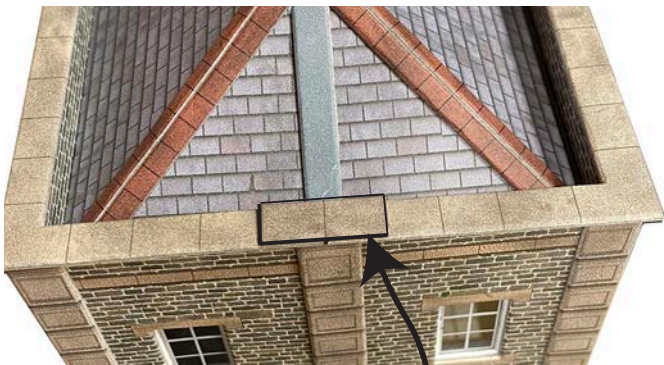
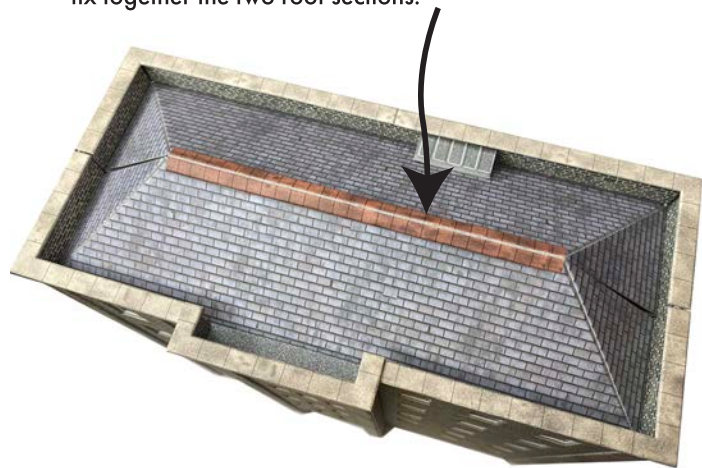
The further in you push them the taller the ridge and visa versa.

Test without glue a few times until you get it right.



Ridge tiles located on **SHEET 'E'**.

Fix the long ridge tile strip onto the roof top to cover and fix together the two roof sections.

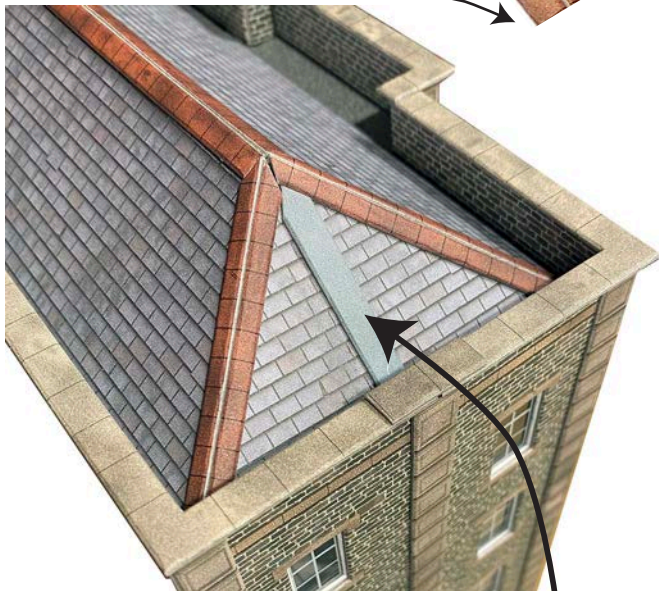


There is a small strip of capping stones.  
This can be cut up to cover over the joins along the wall tops.

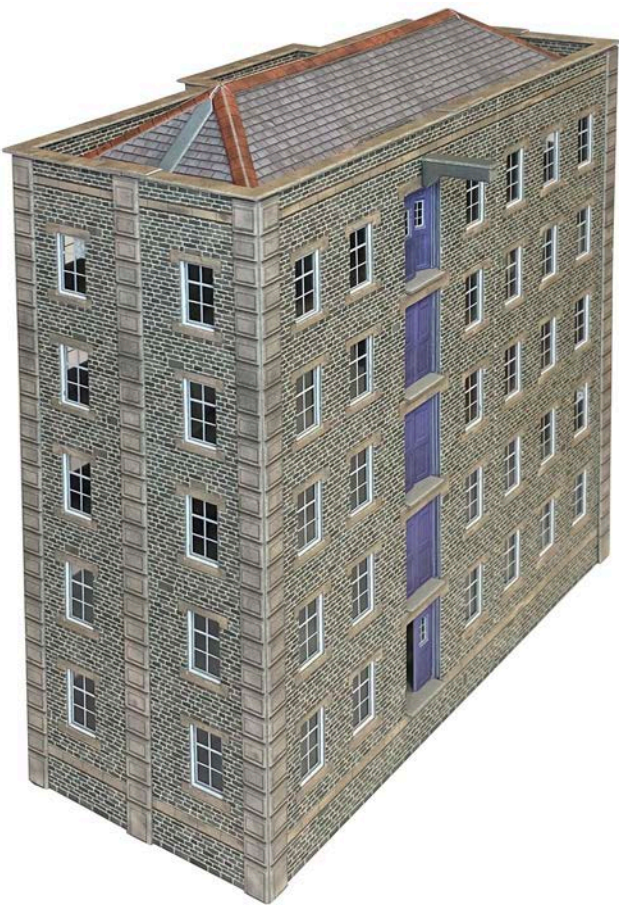
The short ridge tile strips need to be cut to shape to get them to fit on the hipped roof ridges.

Cut each side at 45°

You may need to trim a bit of this end to get it to fit.  
Test first without glue.



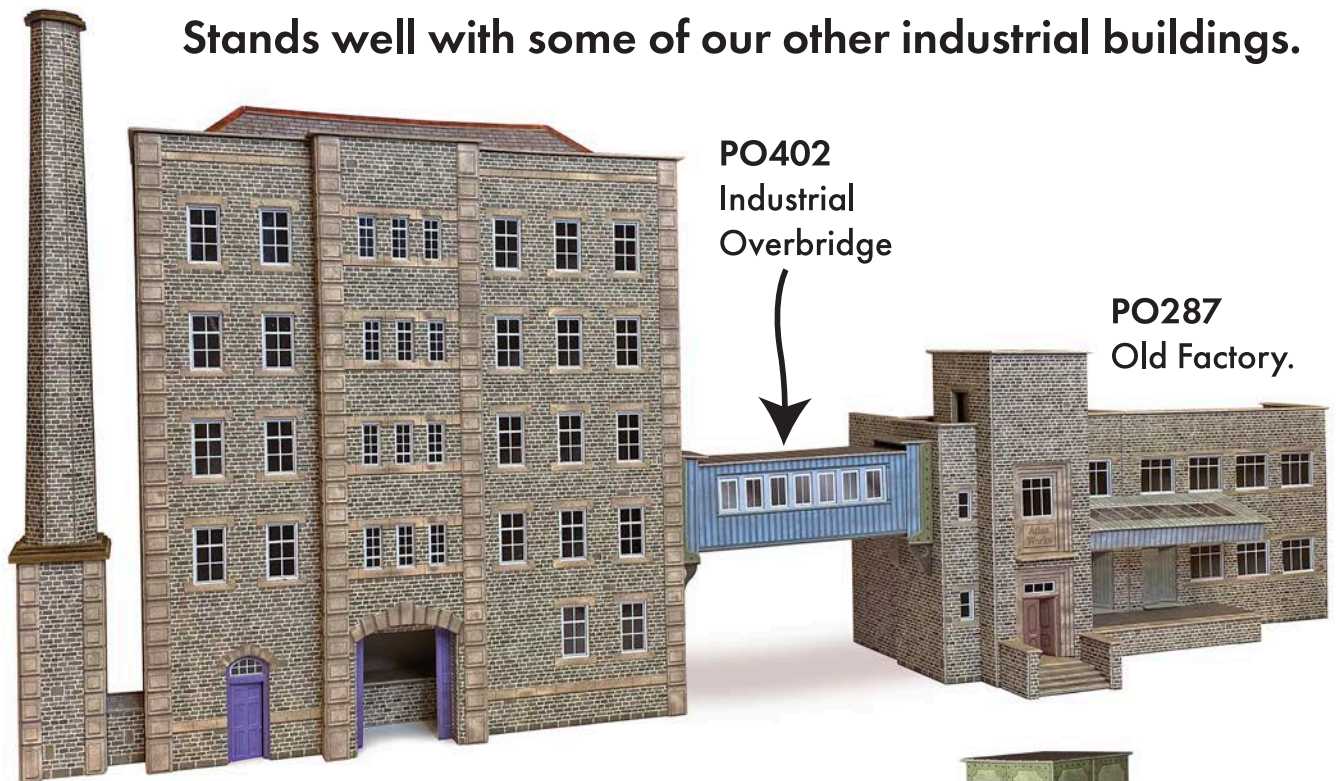
Finally, cut a small strip of roof joiner to fit over the gap in the roof slates.



What a beautiful old building.

It looks big, but has a relatively small foot print.

Stands well with some of our other industrial buildings.



PO402  
Industrial  
Overbridge

PO287  
Old Factory.

PO401  
Old Mill Chimney Stack.

For walls and customising your kits  
use our **M0059 Old Mill Stonework**  
A pack of 8 builder sheets, ideal  
for a whole host of jobs.



PO288  
Brewery  
Building.



PO283 Small Factory.



Stone and brick look good side by side.