

# PN155 N Scale

## WORKERS COTTAGES

### CHECK LIST

This kit should contain the following:

- 2 x SHEET A. Printed building parts.
- 1 x SHEET B. Laser cut window frames.
- 1 x SHEET C. Folded thick card with two sets of inner grey card strengthening parts.
- 1 x GLAZING sheet.
- 1 x Ridge tiles card.
- 2 x INSTRUCTION SHEETS.

### 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 below.*
6. A cutting surface - a sheet of card or cutting mat.
7. Fine point tweezers.
8. Water colour paints and a very fine brush for painting edges and corners.

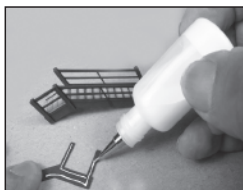
### METCALFE

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.



## INSTRUCTION SHEET 1

### GLUES

UHU Solvent Free All Purpose Adhesive Glue

Works superbly well in our fine glue applicators. Dries quickly, but allows time for positioning of kit parts as described further on in the instructions.

Also Deluxe Materials 'SPEEDBOND'  
A fast drying PVA.  
see [www.deluxematerials.com](http://www.deluxematerials.com)

### GETTING STARTED

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

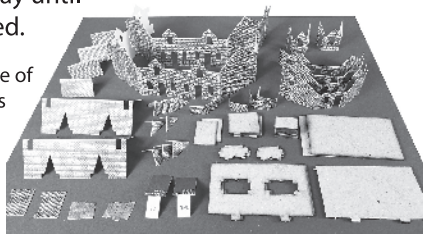
To stop the components from falling off the sheets, they are held secure with score lines. These are cuts that only go about 75% of the way through the card.

To release them run the point of your knife along these score lines and they will come seamlessly away. These score lines are marked with blue arrows: **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.

Example of builders yard.



Only extract the components from the sheets as instructed. Read on about the windows, doors and the grey strengtheners first.

WINDOWS & DOORS.

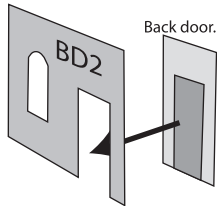
Start by cutting out all the clear plastic glazing parts. Place them on a piece of dark or black card so they can be seen. Like this.



Now extract all the window and door frames from sheet 'B' and the 12 doors from both sheets 'A'.

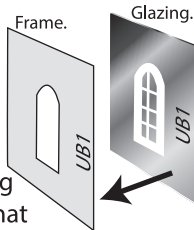
Lay them neatly out like this so you don't lose them.

Next, start by fitting all the doors to their matching door frames ie. 'Back doors' fit to the back of 'BD1 & 2' 'Shed doors' to 'SD1 & 2' 'Porch doors' to 'PC1 & 2'.

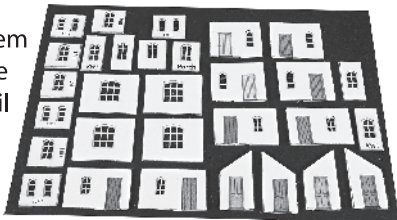


NOW THE WINDOWS.

Now fit each glazing to its corresponding window frame. Fit with the matt printed side of the plastic facing through the opening in the frame. Position so that it sits centred in the opening. When fast, check for any plastic edges sticking out past the outer edges of the card frame and trim off with scissors so all edges are flush. NOTE: You will need to trim some of the shed window glazings to get them to fit against the doors.



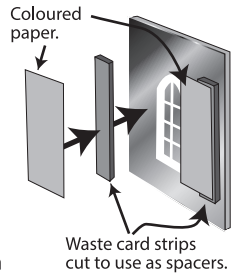
Place them all on the card until needed.



CURTAINS.

If you have the patience to fit these they are best fitted to the backs of the window units now, before they go into the buildings.

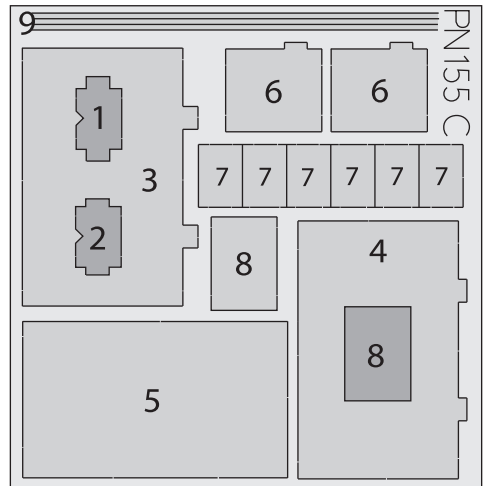
All you need are some pieces of coloured paper (cut out of, say, an old magazine) Cut to tiny strips, just big enough to be seen down the sides of the windows when viewed from outside. space them back from the glazing with tiny strips of waste card.



Be careful with upper windows see Fig.3.

PLAIN GREY STRENGTHENING CARD

These cards contain the bits that fit inside the kit to strengthen and hold it together. They are described here with numbers and a key below. To make sure you don't get them mixed up it is best if you just write these numbers on the components before you extract them.



Key to components:

- 1. Porch lower base.
- 2. Porch upper base.
- 3. House lower base.
- 4. House upper base.
- 5. House 1st. floor.
- 6. Shed base cards.
- 7. Chimney stack inner spacers.
- 8. Shed back wall joiner.
- 9. Barge board spacer strips.

## FILL YOUR BUILDERS YARD.

Now is the time to cut out all the remaining components from sheets A and C and place them neatly in the builders yard. See front page.

Leave the tiny laser cut components on sheet B where they are until needed.

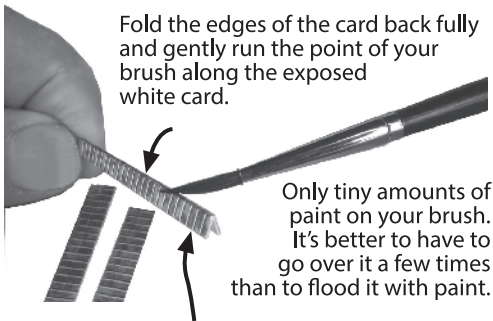
Keep your builders yard separate from the card the doors and windows are stored on.

## PAINTING CORNERS & EDGES.

The white card that shows on the corners and edges of things like the main buildings and chimney stacks is best painted. It is best painted before you construct the kit.

All you need is a simple set of child's water colour paints and a fine brush.

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



Paint the outer edges too.

Before the paint dries, run your finger along the edge to rub the colour into the absorbent white card.

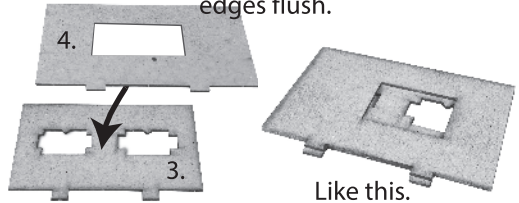
Then wipe away any paint that has run onto the printed surface before it dries.

Remember, you only need to just slightly tint the card with a little colour. **DON'T** paint a thick solid line down the edges, you will only make it look worse.

## NOW LETS START BUILDING

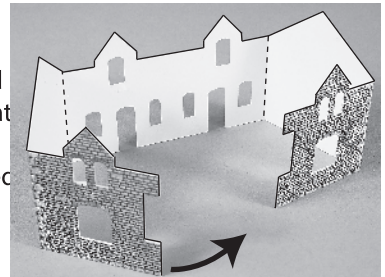
### Fig.1. HOUSE BASE CARDS.

Fix the upper base card on top of the lower (no's 3 & 4 on grey card) keep all outer edges flush.

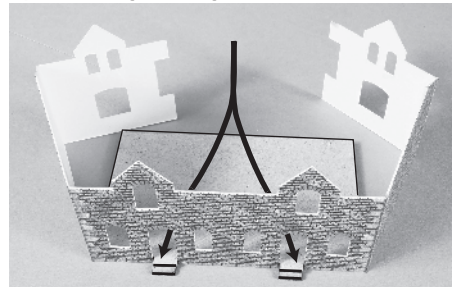


### Fig.2. HOUSE OUTER WALLS.

The outer walls fold all around meeting at the front butt ended together.

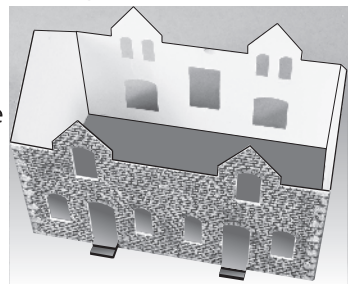


Fit the base into the building with the two steps sticking through the two back doors.

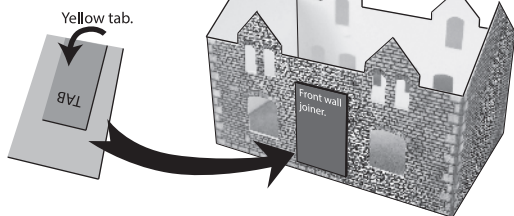


Put tiny spots of glue around the edges of the base to hold the walls in place as you fold them around until the two front walls meet butt ended together.

Keep on a flat surface, the bottom edges of the walls and the base should all be flush.

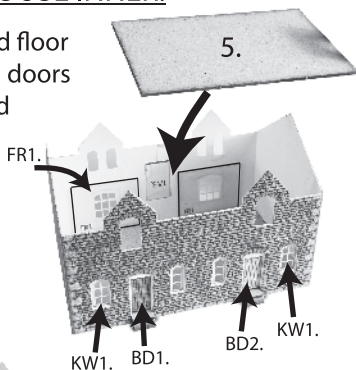


Now take the front wall joiner and fold the yellow tab over and glue down to the back then fit the yellow tab into the hole in the front wall.



**Fig.3. HOUSE INNER.**

Fit the ground floor windows and doors FR1. KW1. and BD1. & 2.

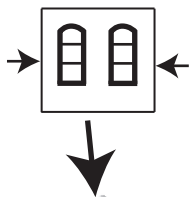


Now fit inner 1st. floor (no. 5. on grey sheet) so it sits down on top of the windows and doors.

**UPPER WINDOWS.**

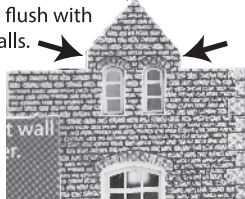
Next fit the upper windows UF1. & BF1.

It is VERY IMPORTANT when fitting these upper window frames that the sides do not stick out past the sides of the outer walls.



Must be flush with outer walls.

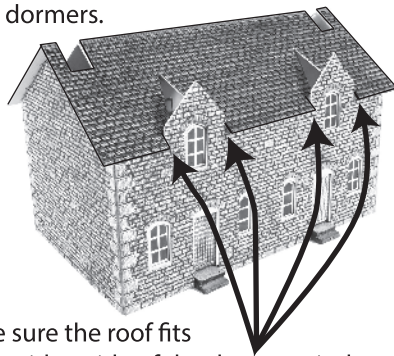
Test first and cut off any overhang.



The roof is a very tight fit down either side and any obstacle will stop it fitting correctly.

**Fig.4. THE ROOF.**

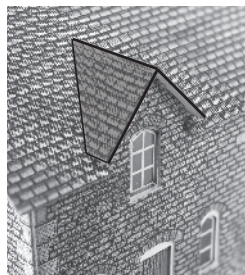
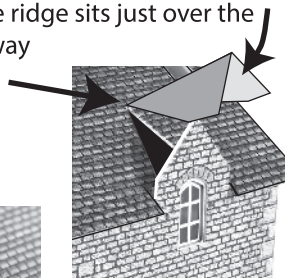
Now fit the roof making sure it is seated down fully on all the house walls, especially down each side of the four dormers.



Make sure the roof fits down either side of the dormer windows and is sitting on the wall tops.

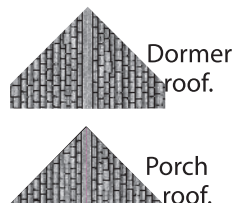
NOTE: If you fitted curtains to the dormer windows, you may need to trim a bit of the roof back to get it to fit, but be careful.

Fit the four dormer roofs. Each fits so the pointed end of the ridge sits just over the point in the cut away part of main roof.



Place tiny spots of glue just under the edge that sits on the roof, and also on the dormer wall top. Hold gently until fast.

Be careful you don't mix up the dormer roofs with the porch roofs.

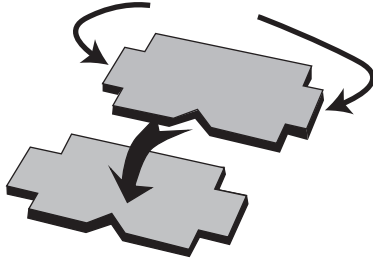




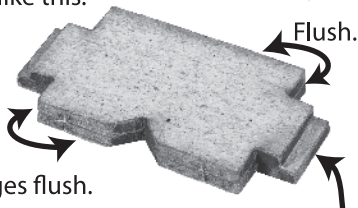
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Fig.5. THE PORCH.

The two tiny base cards (no's. 1 & 2 on plain grey card) fit one on top of the other. The upper piece has slightly shorter steps at either end

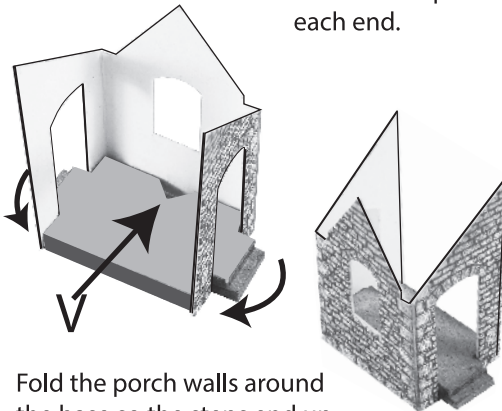


so that when they are fitted together they look like this.



These edges flush.

With two steps at each end.

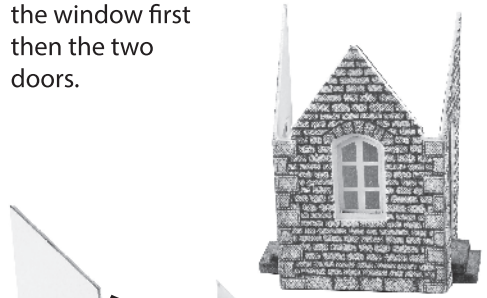


Fold the porch walls around the base so the steps end up sticking through the door openings.

Make sure the 'V' in the side of the base is sitting inside the porch against the front wall.

## INSTRUCTION SHEET 2

When the base is fast, attach the window first then the two doors.



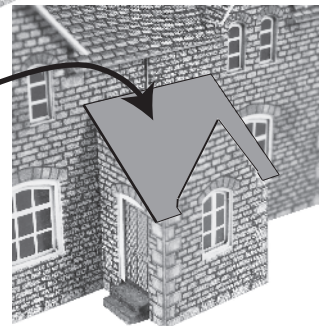
Like this.

Then attach the porch to the front of the house.



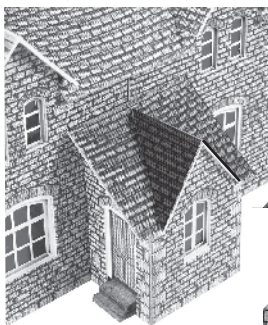
It sits either side of the grey front wall joiner.

Now fit the roof.



## Fig.5. THE PORCH cont'd.

Finally fit the tiny pointed centre gable roof.



Note: The porch roof is a slightly different shape from the dormers.

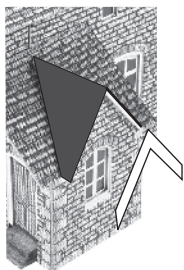


Porch roof.



Dormer roof.

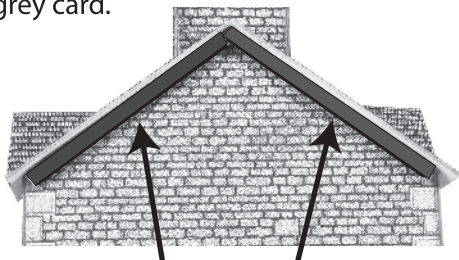
ANOTHER NOTE: There is a slightly longer roof for the porch which allows the fitting of a barge board. This is located on sheet 'A' but needs cutting out by hand and scoring on the dotted centre score line.



See Fig.6. for fitting the bargeboards.

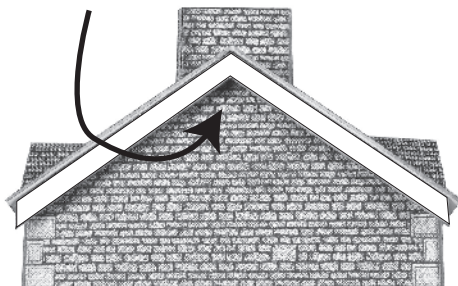
## Fig.6. BARGE BOARDS.

The barge boards are located on sheet 'A'. To space them out from the gable walls there are thin card strips on the plain grey card marked 9. on grey card.



Cut the strips to length and attach to the gable wall up under the roof overhang.

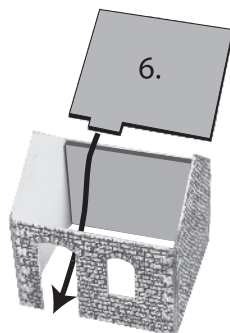
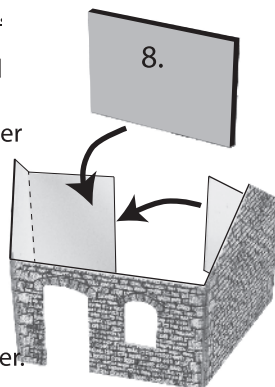
Fit the barge board on top of the spacers and sitting up under the roof.



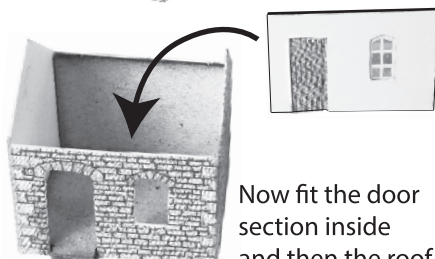
Depending on overhang, you may find the grey card spacers too thick, in which case cut thinner spacers out of waste white card.

## Fig.7. SHEDS.

The shed walls fold around and meet butt-ended together on the back wall. The back wall joiner (no. 8. on grey card) then fits behind the joined walls and holds them together.



Now sit the base card (no. 6. on grey card) inside the shed with the door step sticking through the door.



Now fit the door section inside and then the roof.

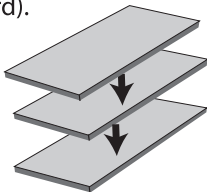
SHEDS Cont'd.

Fit the barge boards and ridge tiles (as described overleaf) then go on and build the other three sheds. There's one for each house

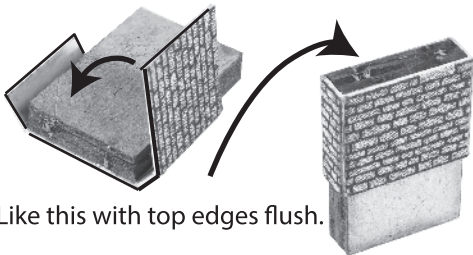


**Fig.8. CHIMNEY STACKS.**

Starting with the chimney stack inner spacers (no. 7 on grey card). Take 3 of the spacers and glue them together to form a solid block keeping all edges square and flush.



Wrap the chimney stack around

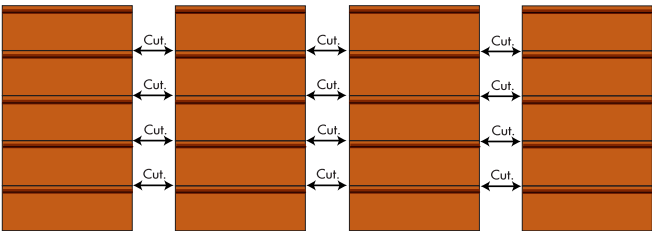


Like this with top edges flush.

**Fig.9. CHIMNEY POTS.**

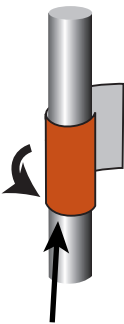
Fiddly but well worth the effort. The chimney pots make a world of difference to your finished model, with results much nicer than anything made from plastic.

Cut the terracotta coloured strips below into pieces and then carefully make each pot as described in next column. Roll tightly around a metal rod to form a cylindrical shape. Drill bits, nails or those tiny screw drivers used to repair things like your glasses can be used for this job. They just need to be no more than 2mm. in diameter.



**CHIMNEY POTS Continued.**

Curl the strip slightly first by dragging it over the edge of your worktop underneath your thumb



Keep the edges straight.

Then roll the strip of pre curled paper around the metal rod. A drill bit is best used: for N scale 2mm. diameter.

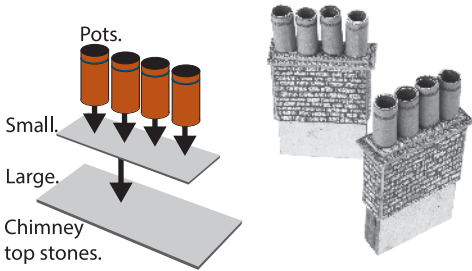
Roll up tight and keep rolling until the paper is fully curled around.

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

Make all the pots. you need sixteen for a proper job.



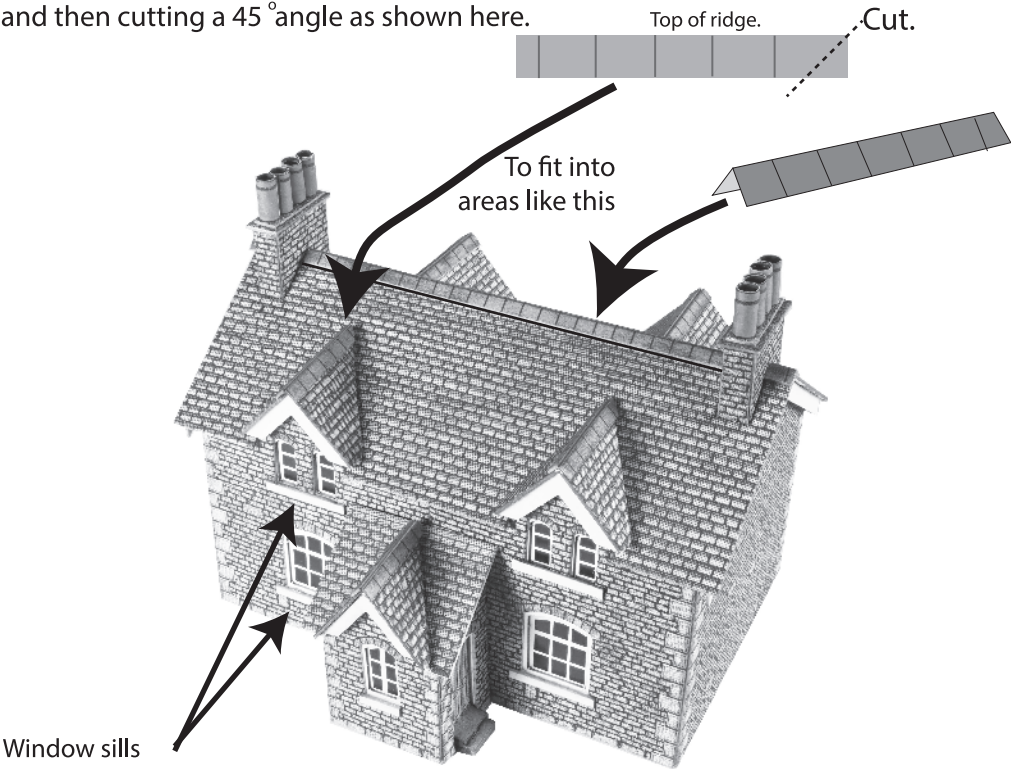
Mount the pots on to the chimney capping stones before fixing to the main chimney stacks.



# Fig.10.    THE RIDGE TILES & WINDOW SILLS.

If anything finishes the roof tops off perfectly, it's the ridge tile strips.  
Paint the scorelines down the centre and the edges of the card before you fit them, as described earlier.

Cut the angles to fit where the roof ridges meet.  
This is easy done by folding the ridge strip in half and then cutting a 45 °angle as shown here.



Window sills  
located on sheet 'B'  
fix to the bottom edges of all the windows.  
Only the tiniest spots of glue applied the back and  
put into place with tweezers. Then a final slide into position before the glue sets.

For each house there are  
4 x long sills for the front  
lower and upper windows.  
8 x medium sills for the back  
windows and the two sheds.  
and 1 x short sill for the porch.