

# The Signal Box

Plans drawn and Designed by Jeff Howe ©



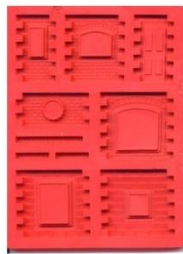
Please be aware that all measurements described in this build are taken from our model, you should check these with your model before making any cuts.



B1 Mould  
Cast Once



B2 Mould  
Cast Once



B4 Mould  
Cast Seven Times



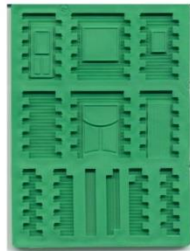
B5 Mould  
Cast Three Times



B6 Mould  
Cast Three Times



T1 Mould  
Cast two Times



T2 Mould  
Cast six Times



Victorian Roof Mould  
Cast Once

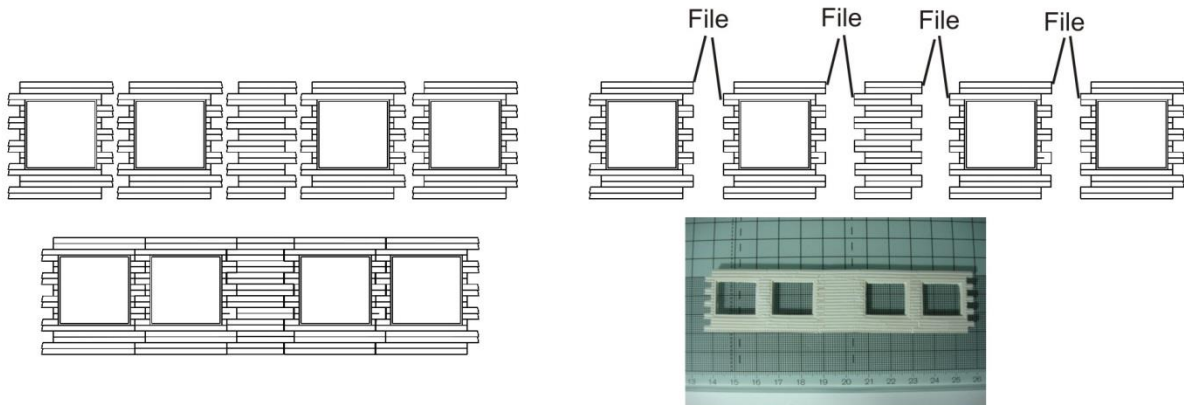


1 Set

**Track side wall**

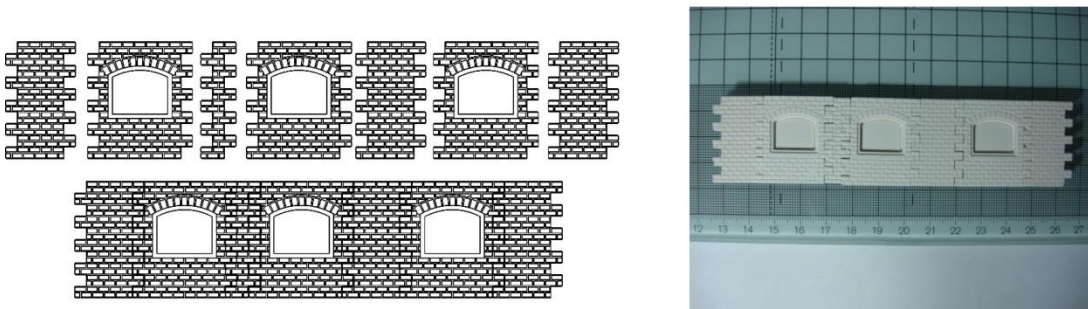
Upper Level.

Take four casts T2-79, and one cast T2-81. File the fingers flat on the casts where shown and glue together, filing the fingers will make the casts fit together better.



Lower Level.

Take three casts B4-157, three casts B5-140 and 1 cast B6-08 and glue together as shown. DO NOT KNOCK OUT THE WINDOW REVEALS.

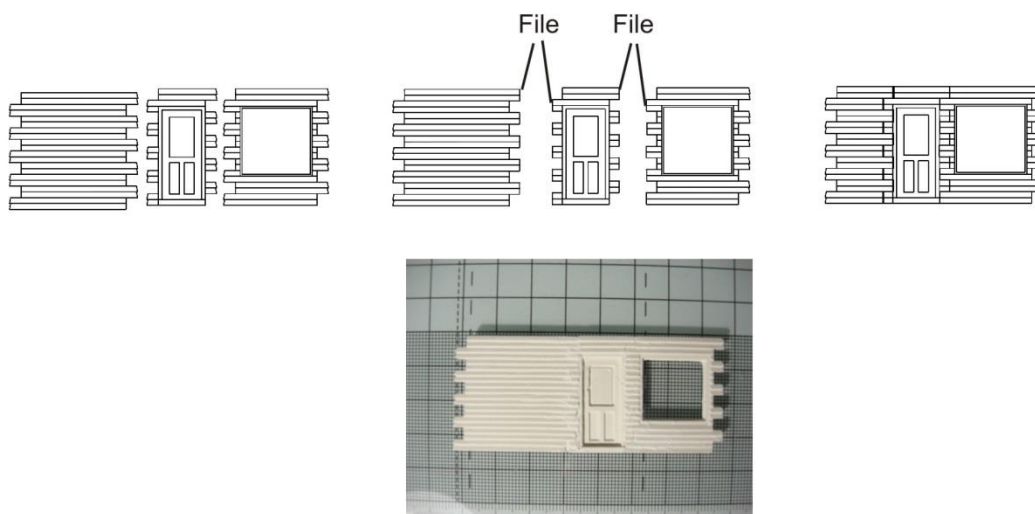


When this wall is dry place face down on work bench and glue three spare, damaged, or second grade casts over the back of the window reveals to add strength.

**Left side wall**

Upper Level.

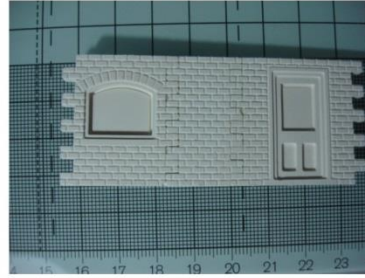
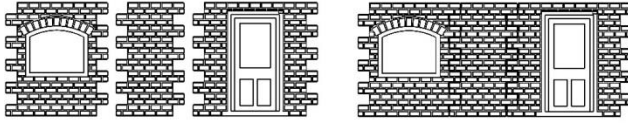
Take the cast shown below, file where shown and glue together



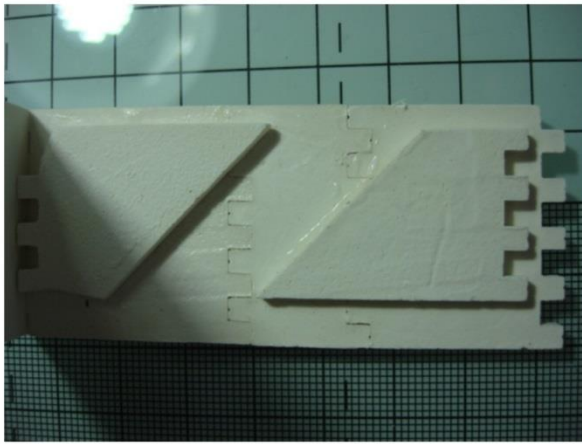


Lower Level.

Glue these casts together to form lower wall.



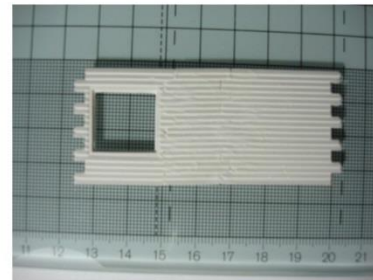
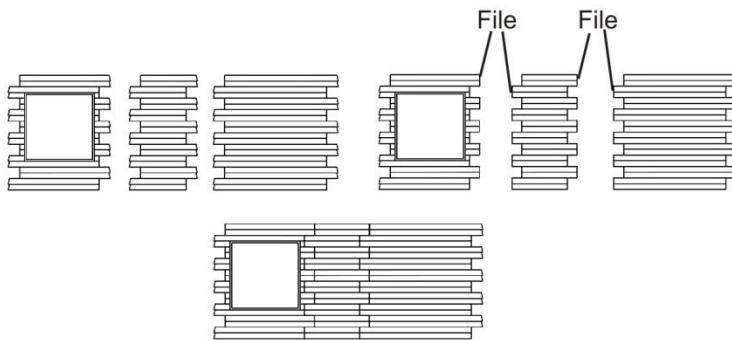
When dry turn over and glue 2 spare cast, 1 over the window reveal as before and the second behind the door, these need to have a flat edge along the top, and be positioned just below the top of the wall, the thickness of a cast down from the top edge, ( see photo), this will allow a floor to be glued in place later.



**Right hand wall**

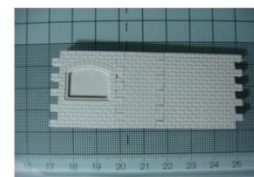
Upper Level

Take the casts shown, file the fingers as before and glue together.



Lower Level

Take the cast shown and glue together.  
DO NOT KNOCK OUT THE WINDOW REVEAL.

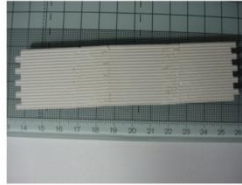
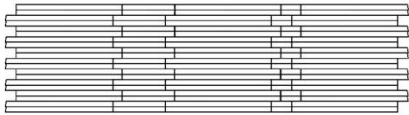
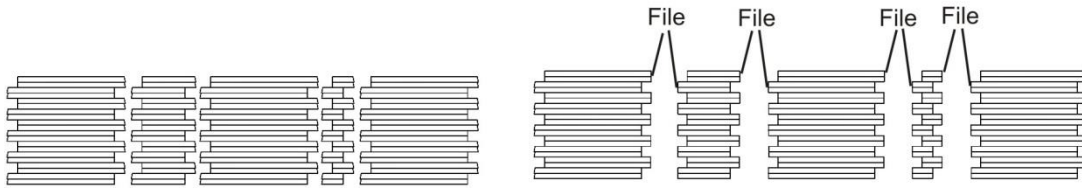


When dry turn over and glue a spare cast on the back of the window reveal as before.

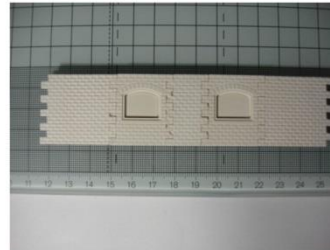
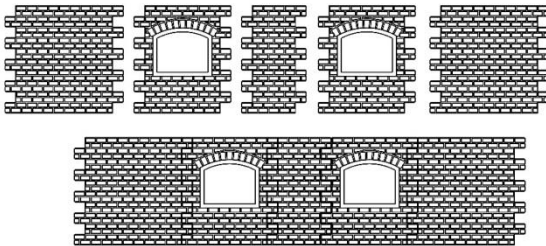
Designed by Jeff Howe

### Rear Wall

Upper Level.  
Take the cast below and file where shown and glue together.



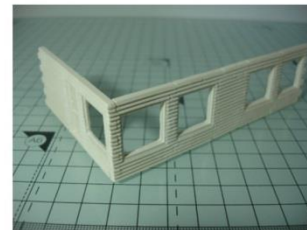
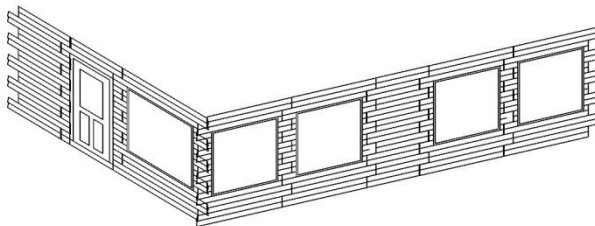
Lower Level.  
Take the cast below and glue together.



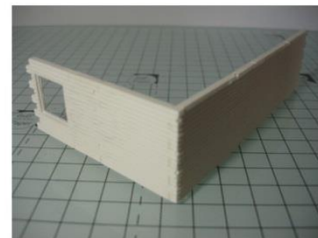
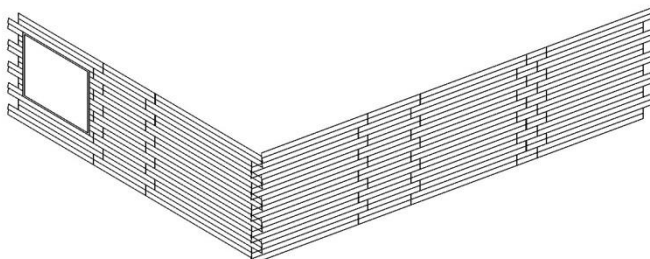
When these two sections are dry glue together.

When all walls are dry assembly can begin.

Take the front wall upper level and the left wall upper level and glue together.



Then take the rear wall upper level and the right hand wall and glue together.

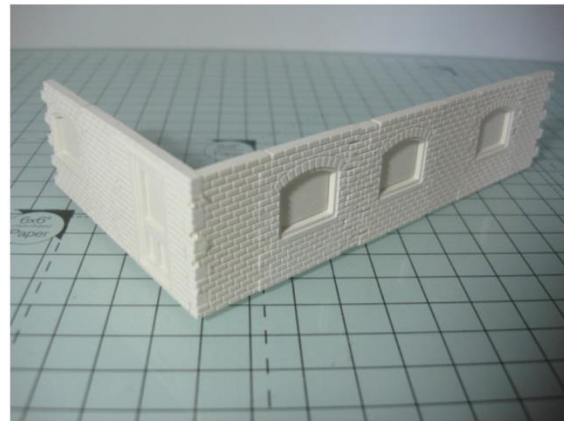


When dry glue these two sections together.

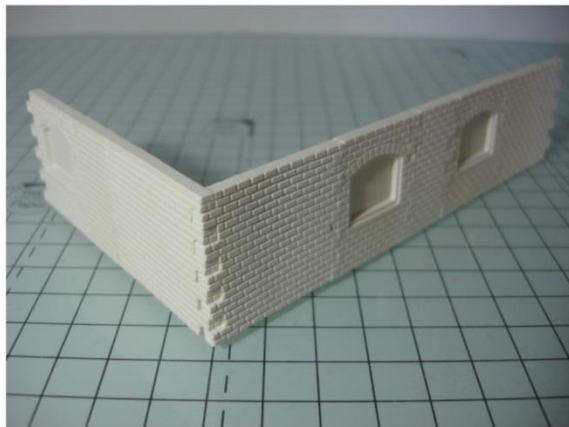


**Lower level.**

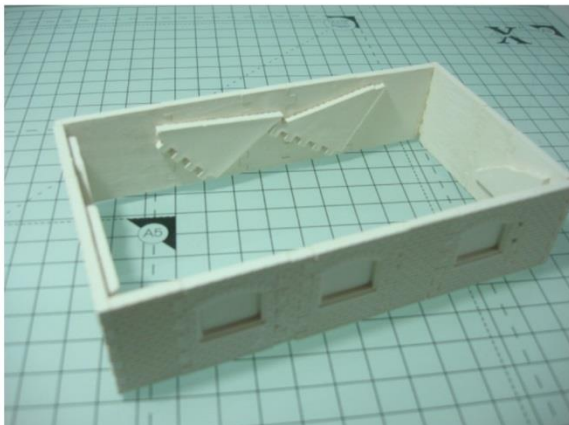
Take the front lower wall and glue to the left hand wall.



Then take the rear wall and glue to the right hand wall.



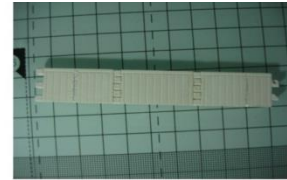
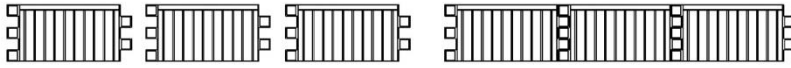
When these two sections are dry glue them together.



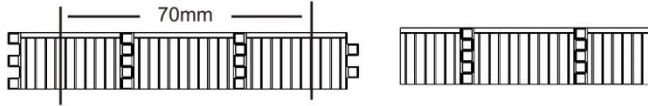


Designed by Jeff Howe

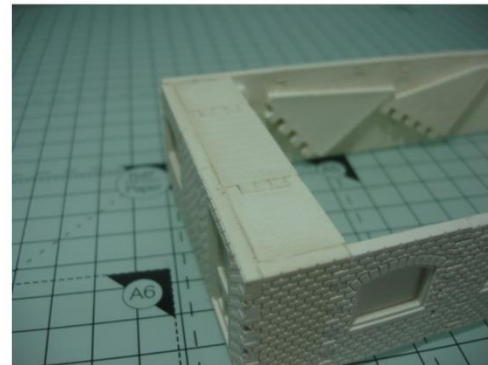
Now glue three casts S2-152 together



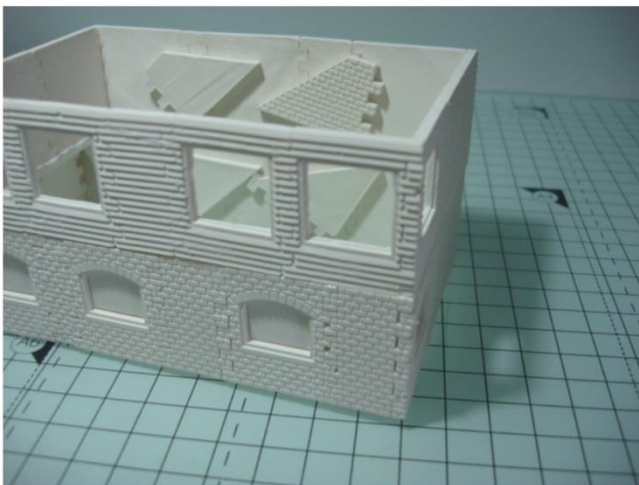
When dry cut where shown for balcony floor, check the length on your model before cutting.



This section can now be glued into the top of left hand end of the lower level. Ensure that the lengthwise mark is to the inner edge.



The two levels can be glued together. Make sure that the right hand end walls are flush, You will now see that the upper level is shorter, this is to allow for the balcony on that end.( See Photo).

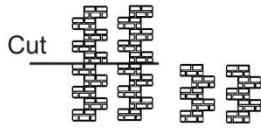


At this stage it is a good idea to glue some scrap or broken casts across the joint between upper and lower levels, this will help to strengthen the joint, BE CAREFUL not to get too close to the window openings if you plan to add acetate at a later date.

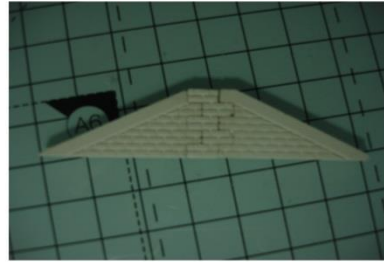
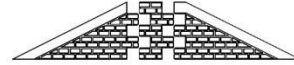
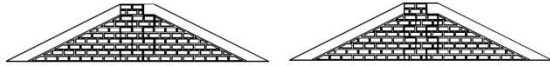


**Roof Construction.**

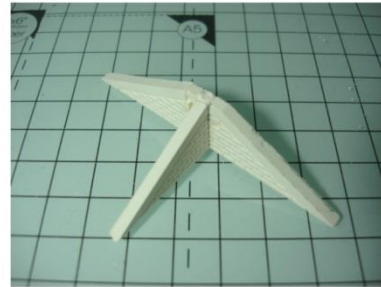
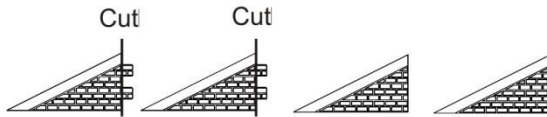
Take 2 casts B5-143 and 2 casts B5-145 and 2 casts B6-08.  
Cut the B6-08 where shown, if you have broken B6-08 that fit you can use these pieces.



Take 1 of the cut pieces and glue between 1 B5-143 and 1 B5-145.  
Do this twice to produce two pieces

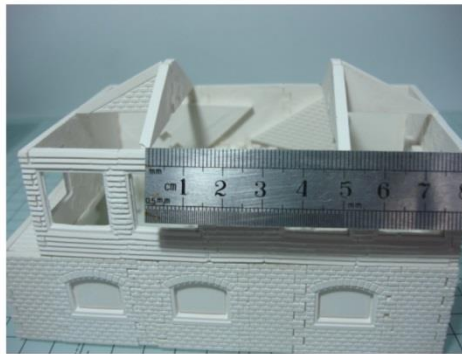


Now take two cast B5-143 and cut of the fingers where shown

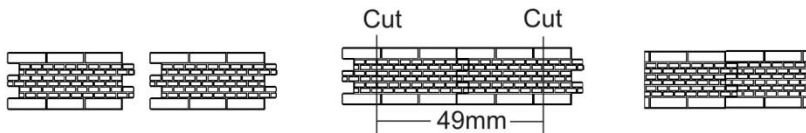


Take 1 of these cut pieces and glue to centre of the B6-06 cut cast at right angles to form a "T" shape, do this for both pieces, these will make roof supports.

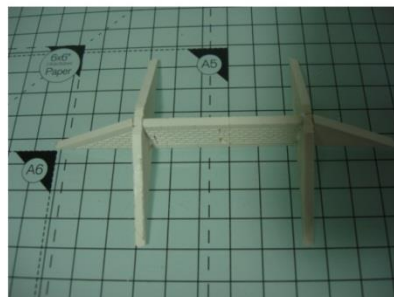
When dry place on the building at both ends and measure the gap between them it should be 49mm.



Now take two B5-133, glue together.



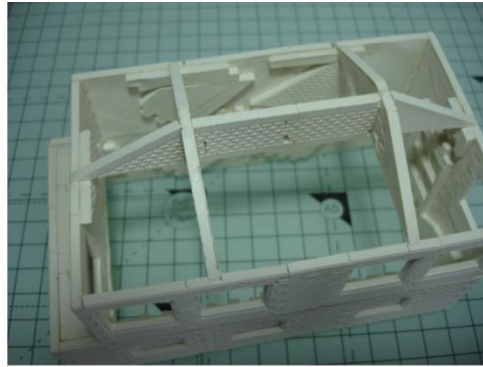
When dry cut to the correct length and glue in the centre of the two "T" pieces to form a support for the roof.



Designed by Jeff Howe

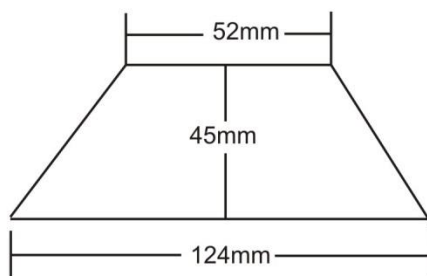
July 2014

When the roof support is dry glue it to the top of the building, trying to get it as central as possible, you may want to add some extra small pieces to the inside top of the walls where the arms rest for more support, this is not critical as when the roof is complete it will rest on each other, this piece is really only an aid to building, and should not carry any weight when the model is finished.

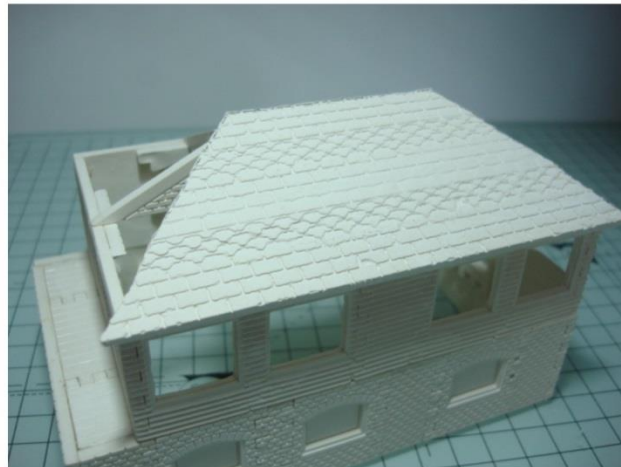


Now make a template out of card as per diagram, use this template to cut two pieces from the roof mould for the front and back.

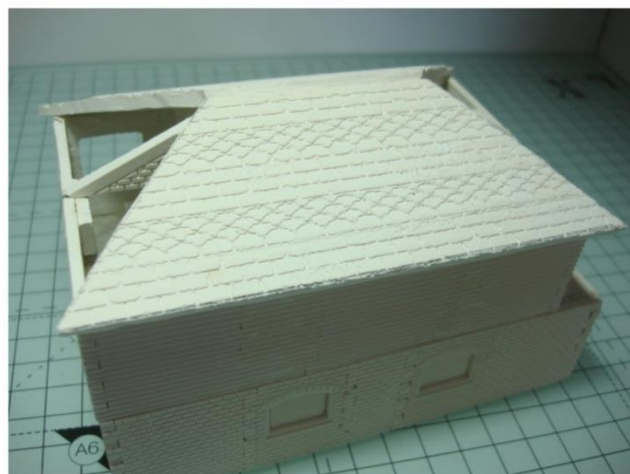
Remember always cut outside the line then sand to fit your building.



Now glue one piece to the front elevation.



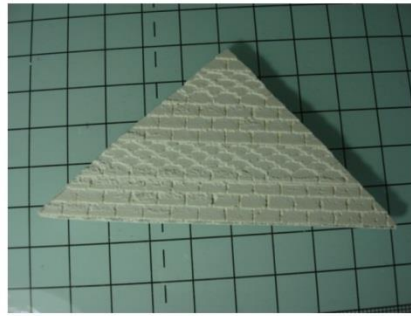
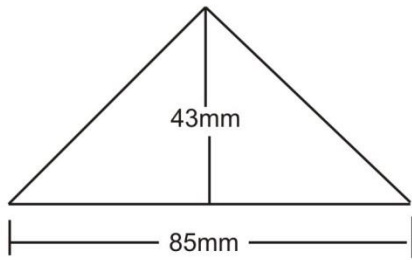
And one piece to the rear elevation.



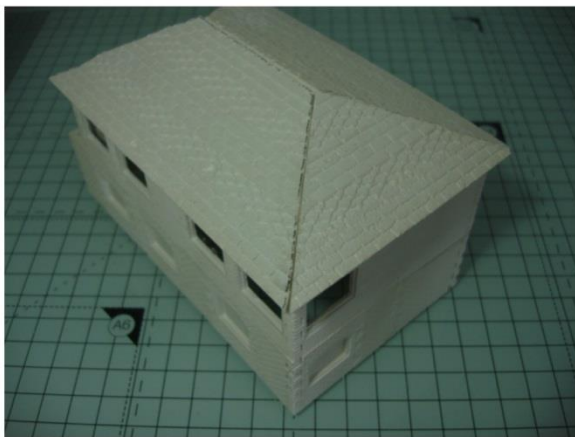


Designed by Jeff Howe

Now make a template for the end roof sections again two are required.

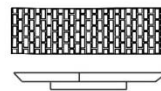
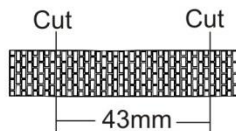
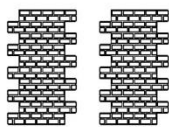


Cut out of the roof mould, being careful to make sure the tile pattern matches. Glue in place on both ends of the building.

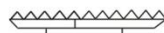


### Stairs and Balcony

The stairs need to be built in sections and then fixed together. Take two cast B5-140 and cut off the fingers on both sides, then glue together end to end. Another can be glued on the back across the joint for strength. When dry cut to length as shown. Retain the offcut. Then chamfer the end edges as shown to approx 45 Degrees.



Now take six cast B6-07 and cut into 11 lengths each 13mm long. Then carefully glue onto the brick side of the castings.



Designed by Jeff Howe

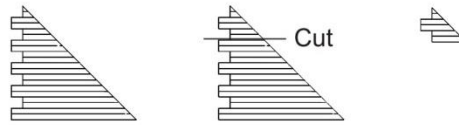
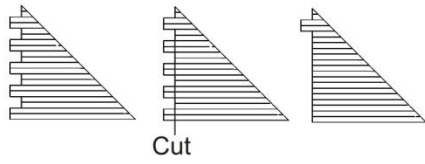
Sides of the stairs.

Left hand side wall

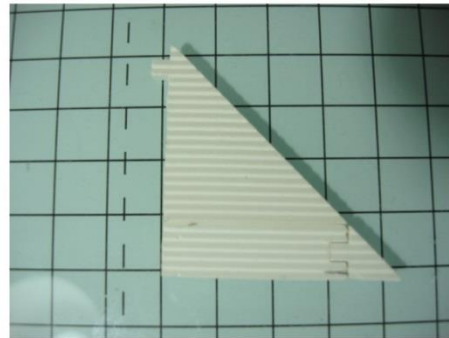
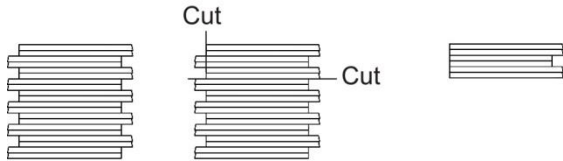
Take 2 casts T1-94 and 1 cast T1-91.

Cut the fingers off 1 of the T1-94 as shown.

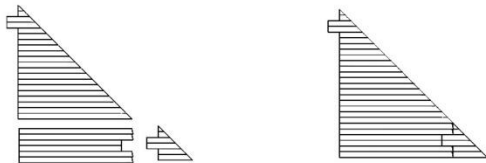
Then take the second T1-94 and cut where shown.



Now take cast T1-91 and cut where shown.



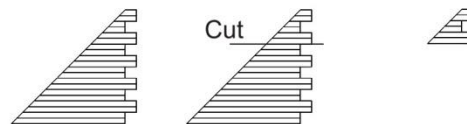
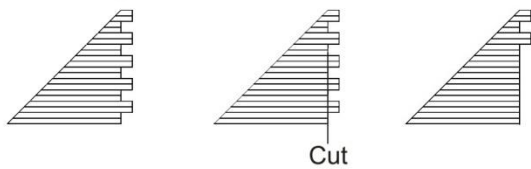
Now take the three cut pieces and glue together.



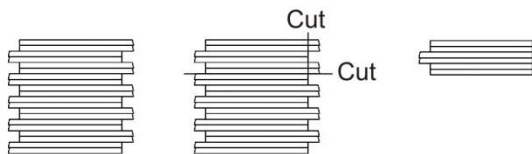
Repeat the procedure for the Right hand side wall,  
Using casts T1-92 and T1-91

Cut the fingers off 1 cast T1-92 as shown.

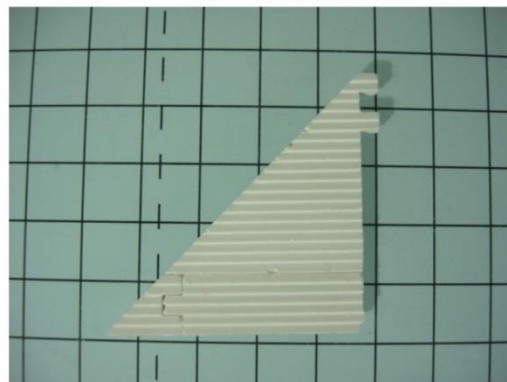
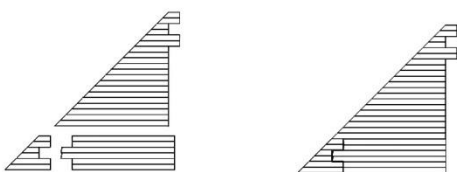
Then cut the second cast T1-92 as shown.



Now take cast T1-91 and cut where shown.



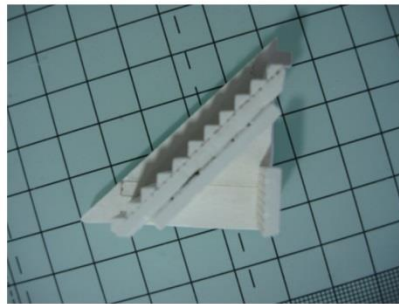
Now take the three cut pieces and assemble as shown.



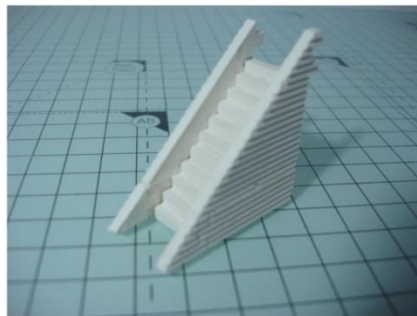
**Assembling the Stairs.**

Take the left hand side wall and place in position against the left hand wall of the signal box in line with the upper door, make a mark on the inside of the stair wall level with the balcony floor, this is where the stairs are to fit.

Now take the stairs and carefully glue in place, on the left hand wall, the top being on the mark just made and the bottom level with the bottom edge of the wall. Also add the offcut from the stair case (B5-140) to the upright rear edge, this will add strength and also stop the two side walls from leaning inwards.



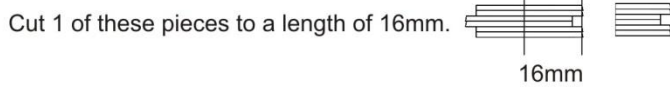
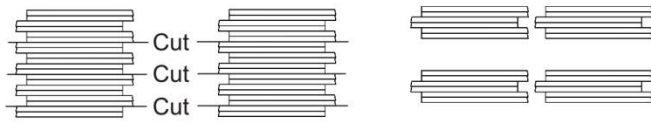
When dry glue the right hand wall to the stairs being careful to make sure all walls are square.



Do not glue to the building at this stage.

**The Balcony.**

Take two cast T1-91 and cut 4 pieces as shown.



Now take the small cut piece, one of the longer cut pieces and the stair assembly, glue the small piece to the longer piece and then onto the balcony rear corner and the staircase to the longer piece and the building at the same time, the stairs should line up with the upper door.





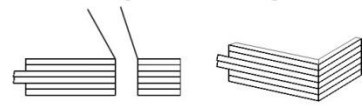
Designed by Jeff Howe

Other end of balcony.

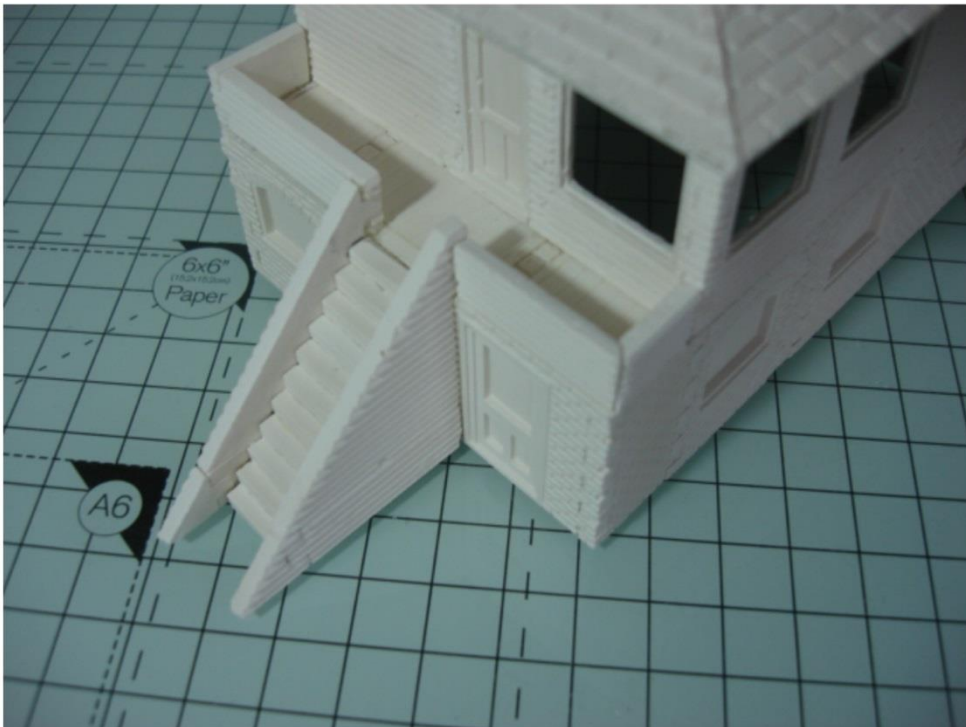
Take the other two cut pieces and cut again as shown.



Bevel these two edges to 45 degrees



Now glue these two pieces on the front end of the balcony.



Designed by Jeff Howe

July 2014

Now take the roof ridge tiles and cut 5 pieces to the correct length.  
Glue to the roof ridge line.



### **Finishing.**

The final step is to paint the model in your colours.  
Add acetate in the windows, gutters and down-pipes if required.



Plans by Jeff Howe ©