

Building a Simple 1:35 Scale Stone Block Ruin Part 1 (Ruin Design & Building the Base)

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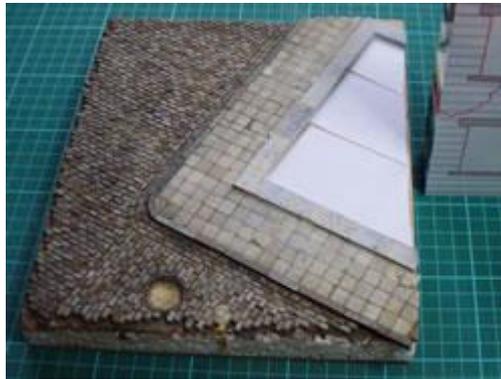
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The finished road and pavement.

In part 1 of this guide we will build the models base, the road, pavement and the base for the walls.

Moulds and Materials

To build the base we used the following moulds:

- 1:35 Scale 4" x 8" Setts (Cobblestones) Mould (1350005)
- 1:35 Scale 5" Curbstone Mould (1350007)
- 1:35 Scale 12" Paving Slabs Mould (1350013)
- 1:35 Scale Manhole Mould (1350019) (Optional)
- 1:35 Scale Stone Lintels and Sills (for 12mm walls) Mould (1350025)

The materials we used are as follows:

- 3 mm MDF
- 25 mm Polystyrene
- Solvent Free DIY grab adhesive.
- Hard casting plaster.
- Polyfilla Multi Purpose filler in a tube.
- Water resistant PVA glue.
- Black powder pigment.
- Yellow Ochre powder pigment.
- Van Dyck Brown powder pigment.

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Ruin Design

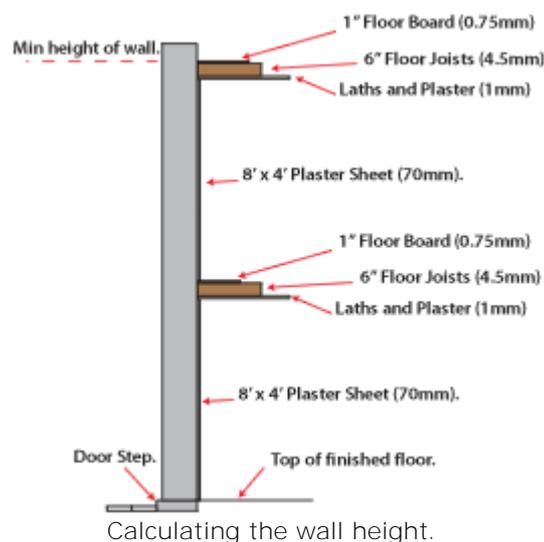
In part 2 of this guide will be building the walls of the ruin around children's plastic interlocking building blocks. The plastic blocks will help keep the walls straight and plumb.

It is a good idea to assemble the blocks before you start on the base as they will determine the exact length of the ruin's walls which intern may affect the size of the base required. It may also help you visualize your design.

Do not forget: the outside dimensions of the walls made with plastic blocks will be the inside dimensions of the finished walls. The finished walls will be two blocks thick which is approximately 12 mm.



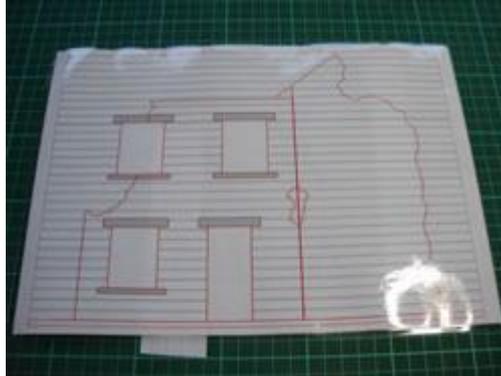
We assembled the plastic blocks on a plastic blocks base plate. When we were happy with the size and location we cut the plastic blocks base plate to size (using the plastic blocks base plate will help you attach it to your base in part 2 of this guide).



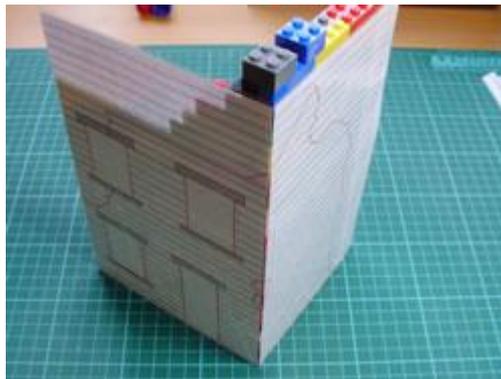
To calculate the wall height in 1:35 scale we:

1. First decided on the finished floor level (we used the top of the door step).
2. Added the height of a sheet of plaster made with the 8' x 4' Plaster Sheet Mould (approx 70mm).
3. Added the approx scale thickness of a lath and plaster ceiling (allow approx 1mm).

4. Added the scale thickness of a 6" floor joist (approx 4.5mm).
5. Added the scale thickness of 1" thick floor boards (approx 0.75mm).
6. We then multiplied this by 2 to give us the minimum height of the wall ($(70+1+4.5+0.75) \times 2 = 152.5$).
7. We decided to make the wall 155mm height from the top of door step.



We then printed out the design on paper and laminated it in plastic (although laminating the paper is not essential it helps keep it clean). The gray horizontal lines are there to give a visual aid in keeping the stone wall blocks level.



We then cut out the design and stuck it to the plastic blocks with double sided sticky tap.

Make sure the areas around the door and windows are stuck down well because in part 2 of this guide we will be attaching more plastic blocks with double sided tape to the outside. These will form the window and door openings. If these areas are not stuck down well the plastic blocks stuck to them may flex.

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Making the Base

To make the base we:

1. Cut a piece of 3 mm thick MDF to size.
2. Cut a piece of 25mm Polystyrene slightly bigger than the MDF.
3. Place the MDF on a flat surface.
4. Apply a solvent free grab adhesive to the MDF (Some adhesives with solvent will melt the Polystyrene).
5. Place the Polystyrene on top and press down.
6. Place some weights on top to hold the Polystyrene down.
7. Leave overnight to dry and trim around the MDF removing the excess Polystyrene. We used a fine toothed hand saw.
8. Sand the sawn edges of the Polystyrene with sand paper if required.

Bases made as above using MDF and Polystyrene seem to be very resilient to distortion. We have made large dioramas on bases like this and they have stayed flat. Another advantage of Polystyrene is that you can dig into it creating things like bomb craters.

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Casting the Parts

We used the scraping method (see beginners guide) to cast the paving slabs, curbstones, setts (cobble stones) door step and wall base.

We recommend colouring the plaster rather than trying to paint the individual cast parts.

- For the paving slabs we mixed a small amount of black powder pigment with the plaster to simulate concrete.
- For the curbstones and setts (cobblestones) we used a combination of two colours black and brown to colour the plaster. We varied the amount of black and brown with each mix.



Tip: Try adding Iron Powder to the plaster. The setts above have been cast with plaster coloured as above but with different amounts of iron powder added to the mix. The iron powder rusts causing a speckled brown effect (small amount of iron) or a dark brown patchy effect (larger amounts of iron). The longer they are kept damp the more intense the effect. Do not add too much iron as it can weaken the plaster. Like most modelling techniques you need to experiment.

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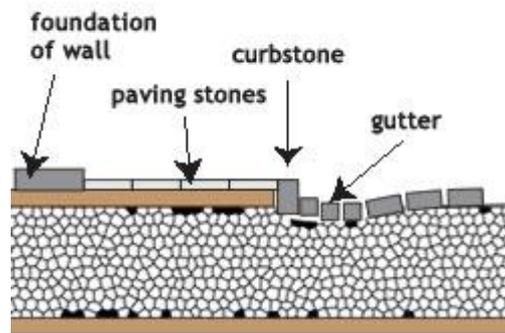
Preparing the Base

Before you start laying the pavement and road you need to do some ground work.

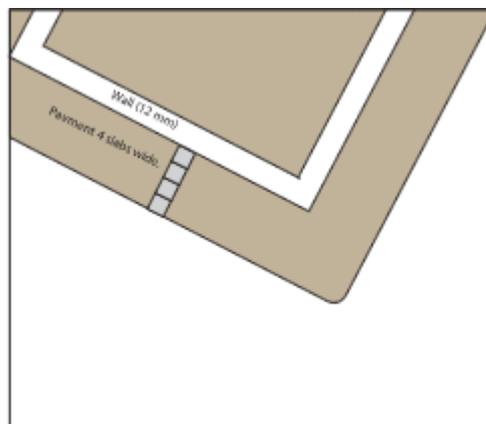


The top of the paving slabs need to be flush with the top of the curbstones as in the picture above.

How you do this is up to you but we used a piece of 3mm MDF stuck down with PVA glue. We then sanded the Polystyrene down until the curbstones were flush with the top of the paving stones. We also sanded a gully for the gutter. The sketch below may show it better.



Sketch showing paving stones flush with curbstone and road gutter.



The sketch above shows the shape of the 3mm MDF used to raise the area under the pavement and walls. Draw around the assembled plastic bricks and then add the width of the wall and paving slabs to get this shape. If you use the small wedge shaped corner curbstones don't forget to cut its shape out of the MDF.

We also added a camber to the road using filler straight from the tube. There is no need to make it really smooth as this type of road is seldom perfect.

Note: This is one single piece of MDF; the white area under the wall is just to highlight the wall.

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Laying the Pavement and Road



The paving slabs were stuck down using water resistant PVA wood glue (water proof would be better if you can get it). We used wood glue because it allows you more time to slide the slabs into place thus minimizing the gaps.

Note: Do not get any glue on top of the slabs as it will make the plaster less porous and resistant to weathering.

The base for the wall and the door step were made with the lintel and sills mould. The pieces were scored and then snapped to the desired length. We then stuck them down using diluted mortar coloured filler. This was applied with a small paint brush. Only paint on enough filler to stick one piece of wall base down at a time and then scrape away any excess filler with a cocktail stick before laying next piece.

Tip: Mix the filler in a disposable plastic cup and cover with a damp cloth to keep it from going hard.

The curbstones and setts were stuck down using the same method as the wall base but using gray coloured diluted filler. We did not fill the gaps between the curbstones or setts with the filler. In real life most of the gaps would be filled with accumulated dirt and not mortar. This is the reason we used gray coloured filler, we did not want any mortar coloured filler showing.

Tip: Do not make the road surface look too perfect. Real setts are not normally cemented down so over time and with heavy traffic they move and sink. Imagine the damage a heavy tank would do if it went over a pavement or turned sharply with one track locked on a cobblestone road. This is the beauty of using individual parts cast using plaster to build pavements and roads.

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Filling the Gaps in the Pavement and Road



To fill the gaps in the road and pavement we used dirt from the garden, you could even use dirt from the gaps in a real roads (not pleasant but at least it will be the right colour).

We:

1. Put the dirt through a fine sieve.
2. Mixed it with water.
3. Painted it onto the road and pavement then work it into the gaps.
4. Let it dry for a few minutes.
5. Brushed of the excess with an old tooth brush.
6. For a cleaner look. Let it dry then wipe over with a damp cloth.

The advantage of using real dirt is that even when dry it is water soluble. This means if you do not like the look you can try again.

Part 2 of this guide will cover building the walls.

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