How to make workable 12th scale

These frames are a mixture of 3D printed parts and regular strip wood. These directions are complete and there is a link to download the STL files needed to print some parts.

As mentioned on my video, local libraries often have computers and 3D printers you can use for a very low fee.

The parts of the window sashes and the outside frame are detailed here.

The frames fit a standard 12th scale window opening of 12.7cm or 5" high and 6.3 cm or 2 ½" wide.

One window consists of 2 window frames with clear acetate panes that slide up and down channels in two side jambs, a head beam and a sill. Extra adornment is a piece of moulding and a capping piece.

There is also a 3D file for a complete frame for inside the house which includes a sill.

To assemble the window frames and jambs:

1. glue the two halves of each window frame together making sure the recess on one side face each other. This is the slot that the clear acetate will slide into. Then installing make sure this slot is on the top or secure the pane with a dot of PVA glue on the top.

2. Glue one still with the top and bottom pieces, leaving one side open.

3. After cutting pieces of acetate to size and sliding into the slots in the window frames, slide these windows into the grooves of the jambs. The larger window is on the top in the front groove and the lower window is in the back groove. They should overlap in the middle.

4. Now you can glue the other jamb in place making sure the window panes are in the right grooves.

5. Once all is dry, fit your completed window and glue into place.

I like this to be flush with the inside wall and extending out the front of the wall. This allows you to glue a complete window frame on the inside later.

For the wooden part you will need for the exterior framing:

2 x sides 2mm thick and 12mm wide. Cut lengths of 12.6 cm

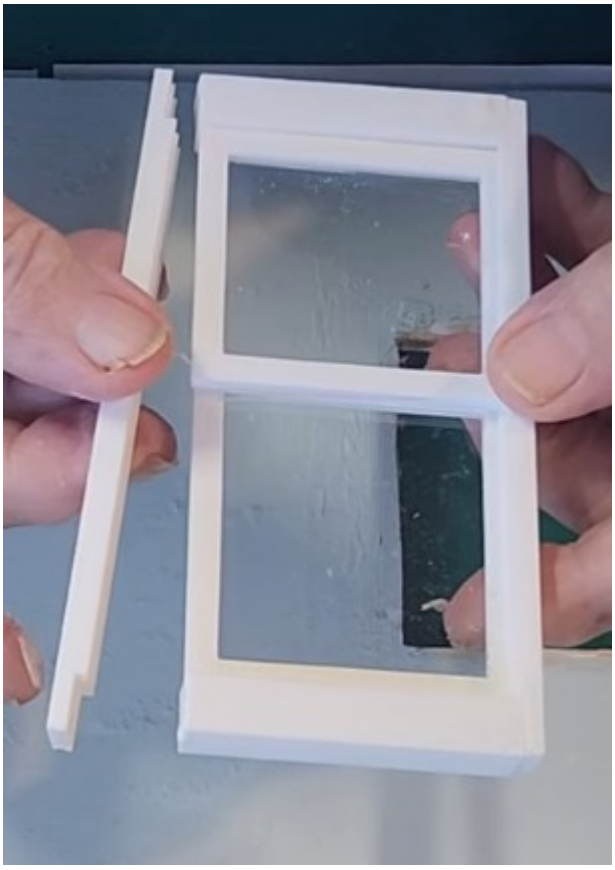
Sill: 5mm thick, 9cm wide and 12mm depth.

Top: 3 pieces.

1. Plain. 1 cm wide wood 2mm thick. Cut to a length of 5cm.
2. A piece of decorative moulding, 1 cm wide and 5 cm long which glues to the above.
3. Capping. 3mm thick strip of wood, 5 cm wide, 9.5 cm long that is glued across the top.

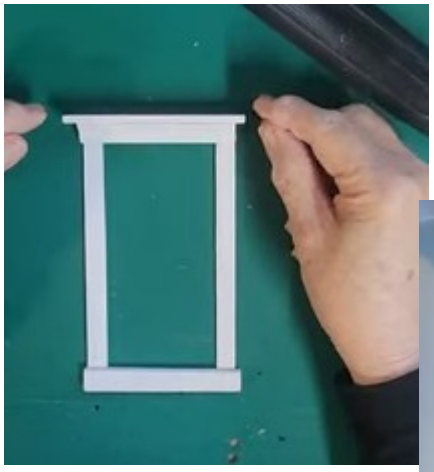
Optional: two thin strips of wood glued on the outer edges of the uprights as shown in image above.

Showing the window panes fitted into the pre-glued top and bottom pieces and one jamb. For gluing two pieces of 3D printed parts together use Superglue.



Below: fitting into the wall opening.

Assembly of outside wooden frame.



The benefit of the 3D printed internal frame and sash windows is that, as you don't have to paint them, they do not ever stick.