

Small Highland Station Waiting Room

TT120 (1:120) laser-cut kit - StarPrint 3D

1 mm MDF | resin chimney stack, ridge and hips | clear glazing

You need: a scalpel, a fine sanding stick, PVA or wood glue, thin CA or canopy glue, tweezers.

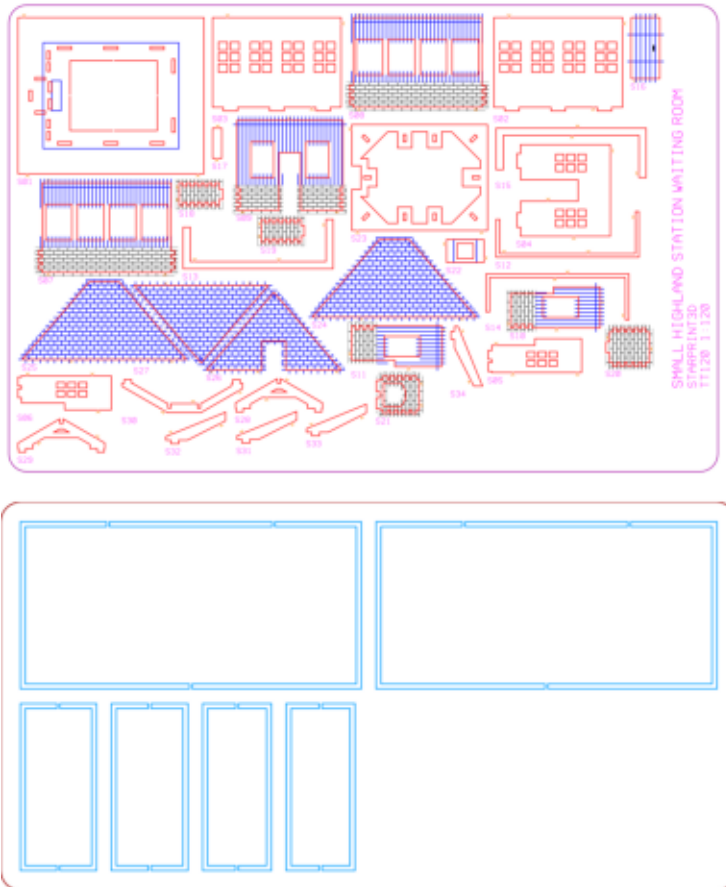
In the kit: one sheet of 1 mm MDF, a clear glazing card (6 panes) and the resin set (chimney stack with pots, ridge, 4 hips).

Stage A: glazing, chimney base, walls (steps 1-8)

Stage B: sills, roof frame, roof, resin details, chimney (steps 9-16)

The joints are a tight press fit: dry-fit before gluing.

What is in the kit

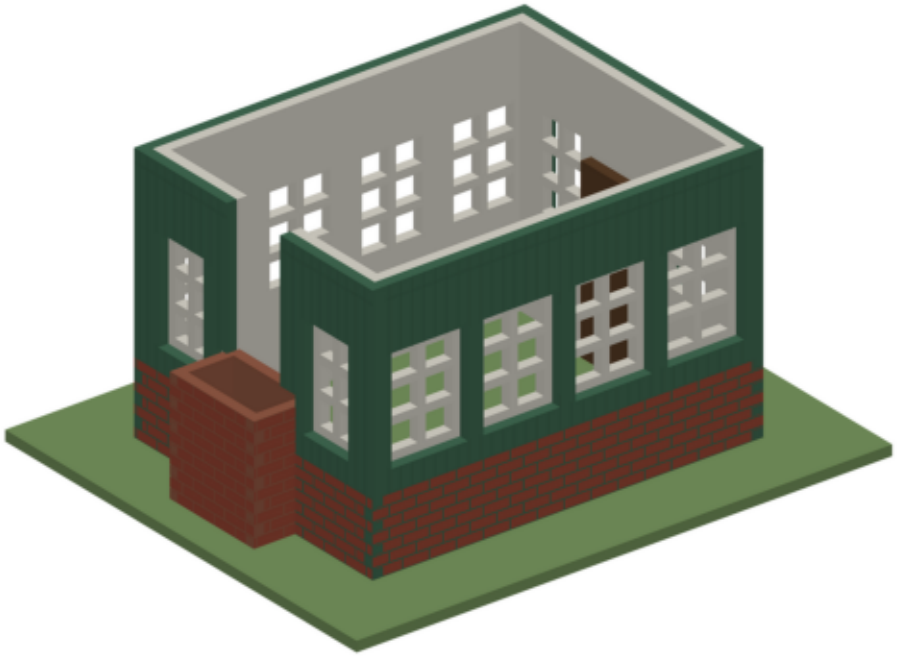


Top: one sheet of 1 mm MDF with all 34 laser parts, each engraved with its number (S01 to S34); the steps use these numbers. Below: the clear glazing card, 0.25 mm PETG, panes G01 to G06.

Resin set: the one-piece chimney stack with its two pots, the ridge with its finials, and 4 hip strips.

Free each part with a sharp scalpel: cut the small uncut bridges where the small orange chevrons point (the chevrons are on the waste side). Sand the nub flush.

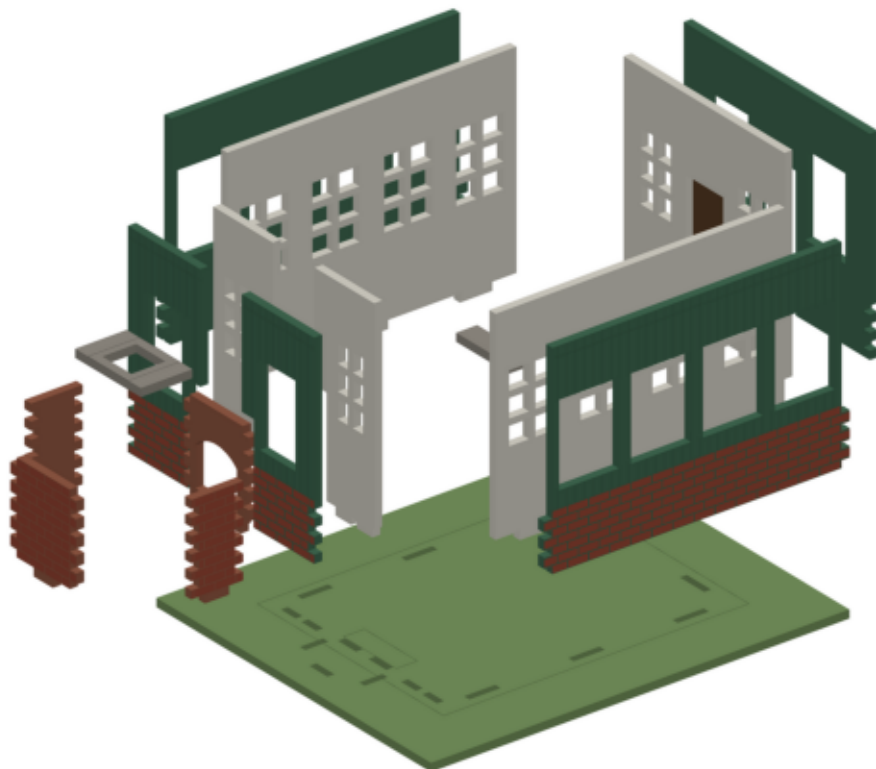
Before you start: 1 mm MDF and tight joints



- The ENGRAVED face (brick, boards, slates, part numbers) is always the OUTSIDE.
- The joints are a deliberate PRESS FIT. The brick corner combs are one brick course per finger and slightly oversize; the floor tabs are a snug push. Dry-fit every joint first. Push, don't force: if a finger will not go, take ONE light stroke of a sanding stick off it and try again.
- Glue: PVA or wood glue, used sparingly (too much water swells MDF). Thin CA or canopy glue for the resin parts and the glazing (CA fogs the film, so dab only on solid margins).
- Test-fit before gluing. Let each stage set before the next.

Stage A: structure (exploded)

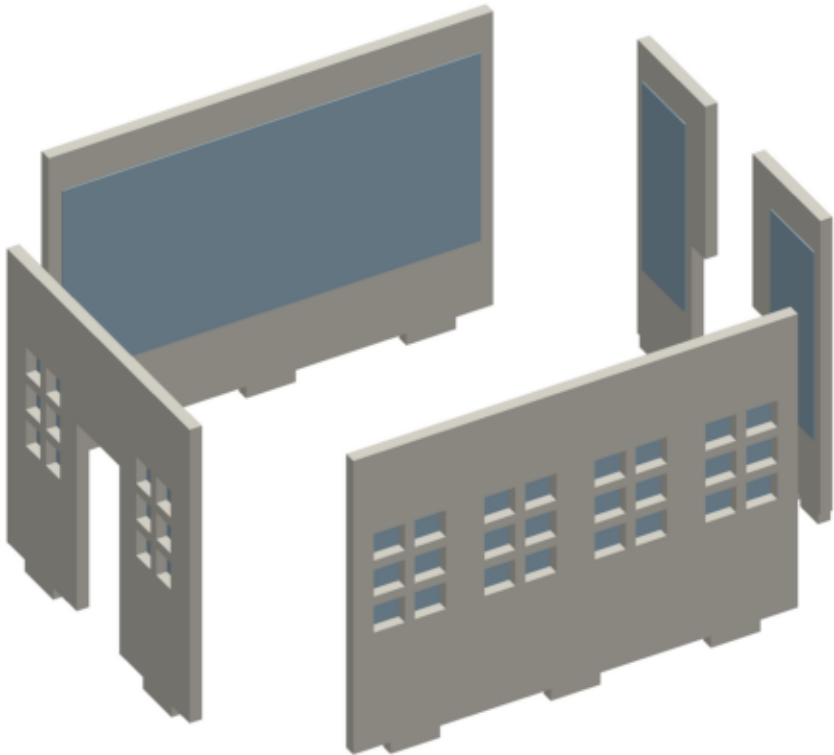
Stage A



Glazing first (step 1, sheets flat), then the hearth, chimney base and step plate on the floor (step 2), then the walls (steps 3-8).

Step 1: glaze the inner sheets (flat, before assembly)

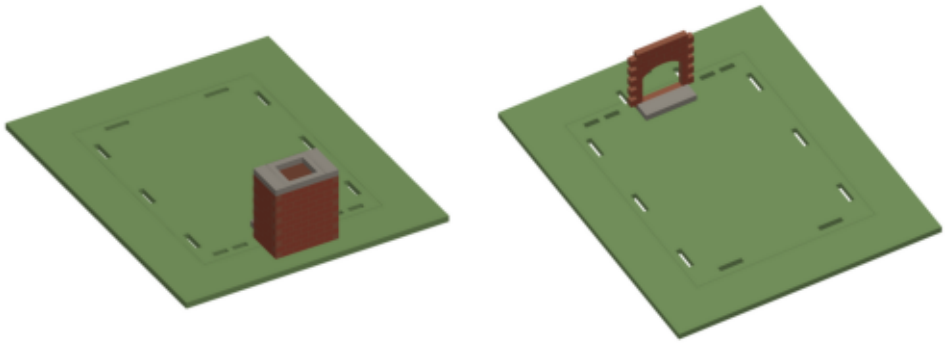
Stage A



Do this FIRST, with the inner (glazing-bar) sheets lying flat. Lay each pane on the INSIDE face (the plain face, not engraved), so the bars sit outside the glass: G01 on S02, G02 on S03, G03 on S04, G04 on S04, G05 on S05, G06 on S06. The panes are 16 mm tall and run about 3 mm above and below the window openings: glue only in those solid margins. The long panes G01/G02 (33.70 mm) are centred on the wall and stop just short of the corners, so the end inner sheets still fit between the long ones.

Step 2: hearth, chimney base and step plate (before the walls)

Stage A

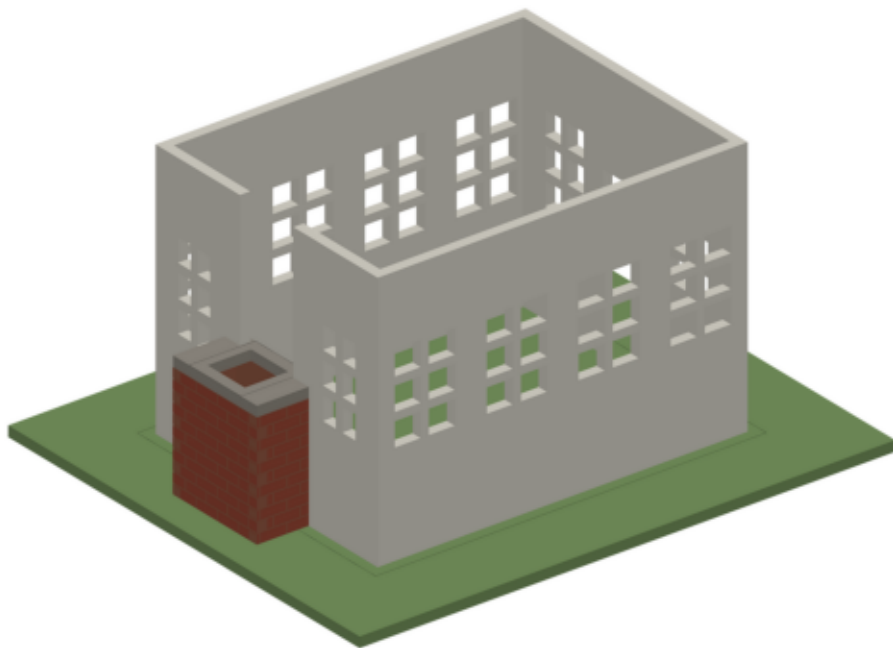


Build the wide chimney base on the bare floor plate, while you can reach all round it. First glue hearth plate S17 flat on floor plate S01, on the scored outline at the west end (right-hand view). Then the base: front and back panels S18, S19, outside panel S20 and inside panel S21 (fireplace arch, facing the room). The brick combs interlock course by course (tight: walk them together a course at a time); tab it into the floor so the hearth sits in front of the fireplace.

Glue step plate S22 flat on top of the base. Keep its rectangular hole CLEAR of glue: the resin chimney stack keys into it at the very end.

Step 3: inner sheets into the floor

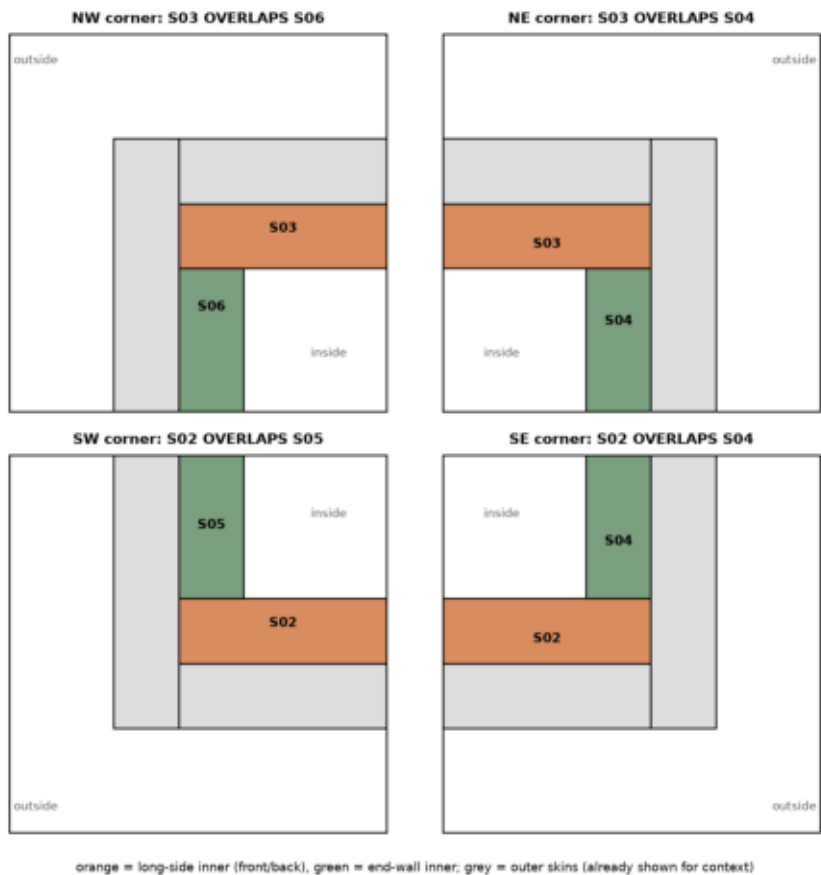
Stage A



Push the tabs on the glazed inner sheets S02, S03, S04, S05, S06 into the slots in floor plate S01. The two west sheets S05, S06 end against the sides of the chimney base. The slots are a snug push fit. Glue them.

Step 4: inner corners - which piece overlaps

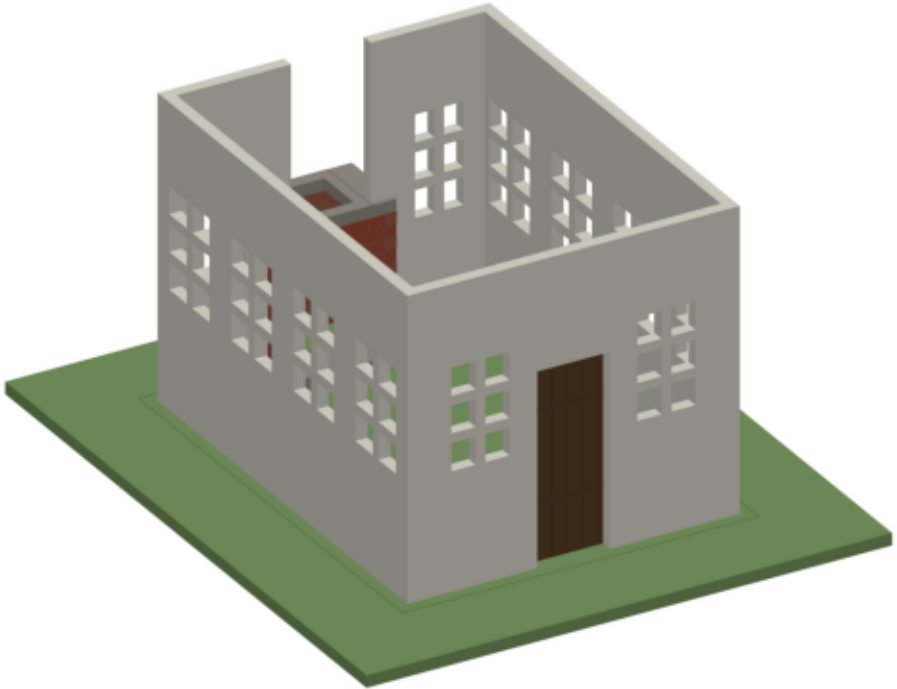
Stage A



Plan close-up of each corner, looking down. At ALL FOUR corners the long-side inner sheet (front or back) runs past and covers the END of the end-wall inner sheet; the end inner fits between the two long inners. The whole inner joint is later hidden behind the outer skins.

Step 5: door

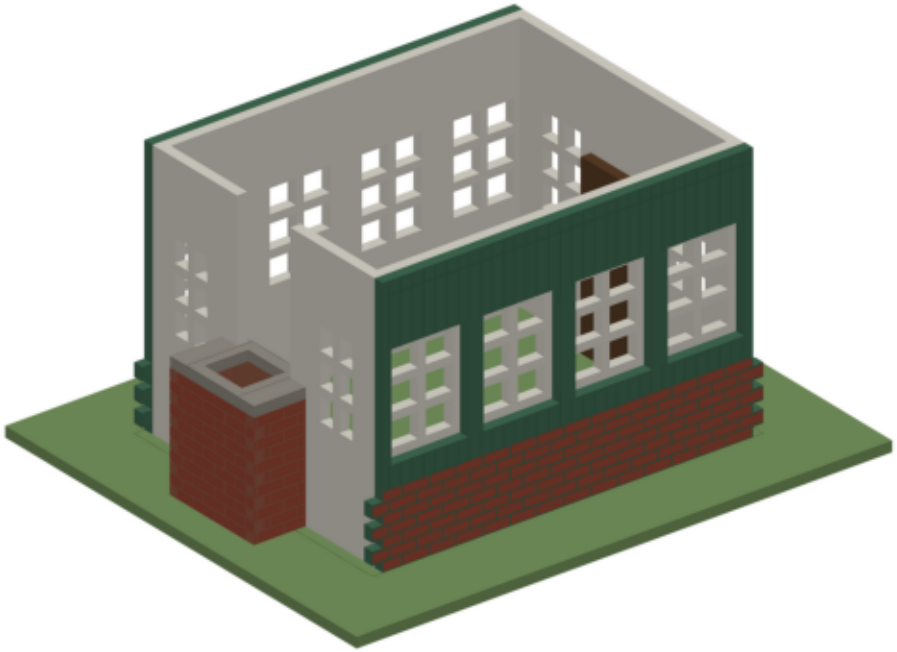
Stage A



Glue door leaf S16 behind the door opening, on the INSIDE face of the east end inner sheet S04.

Step 6: long outer skins

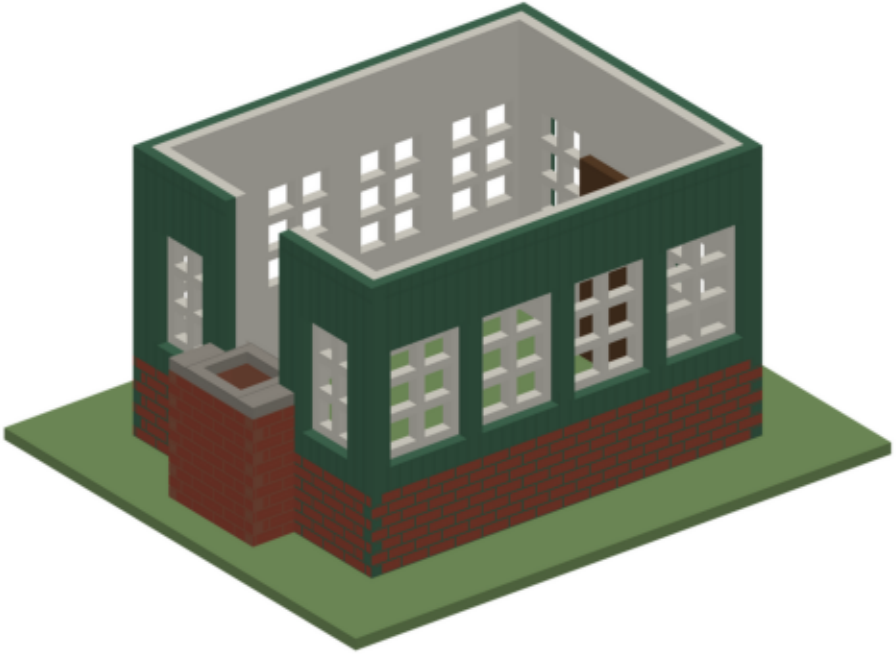
Stage A



Glue the front and back outer skins S07, S08 flat onto the long inner sheets S02, S03, bottom edge on the floor plate, brick plinth at the bottom facing out. Dry-fit the end skins (step 7) at the same time so the corner combs line up before the glue grabs.

Step 7: end outer skins

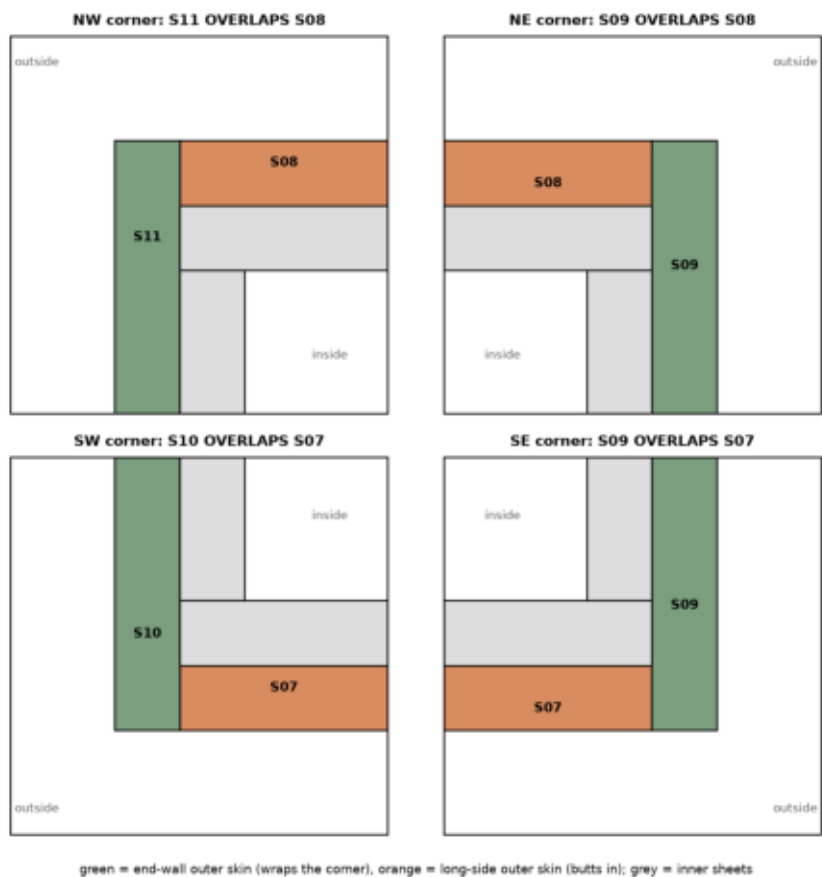
Stage A



Glue the end outer skins S09, S10, S11 on last. The brick combs at the bottom interlock with the long outer skins, one brick course per finger. They are tight on purpose: start the bottom finger, then press along the corner. The courses should line up all the way round.

Step 8: outer corners - which piece overlaps

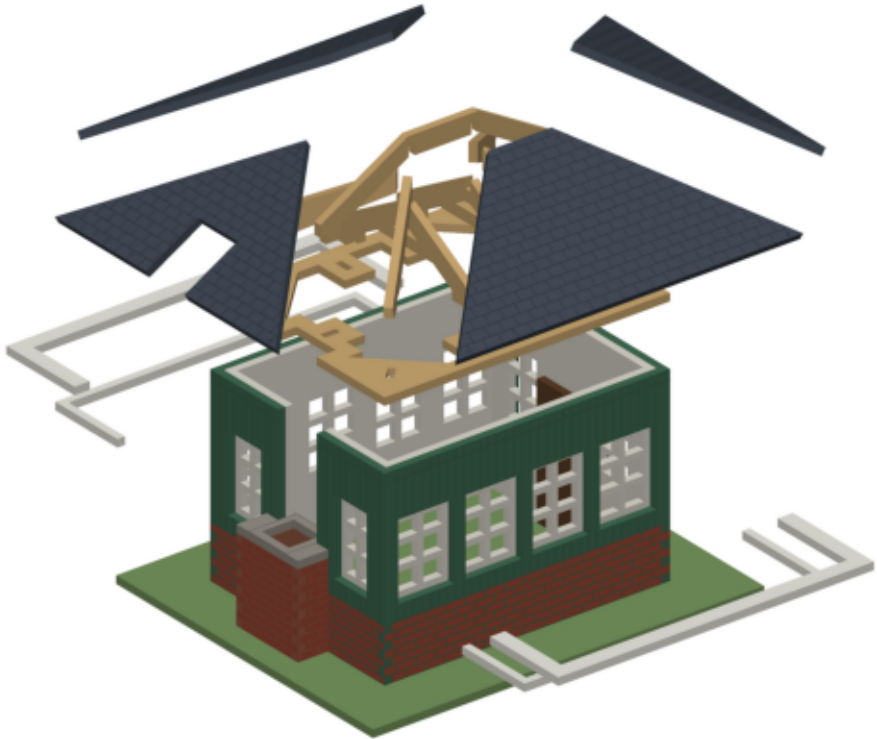
Stage A



Plan close-up of each corner above the brick. At ALL FOUR corners the END-wall outer skin runs the full depth and covers the end of the long-side outer skin, which stops 1.00 mm short (timber butt joint). In the brick plinth below, the corner is the comb joint.

Stage B: sills, roof frame and roof (exploded)

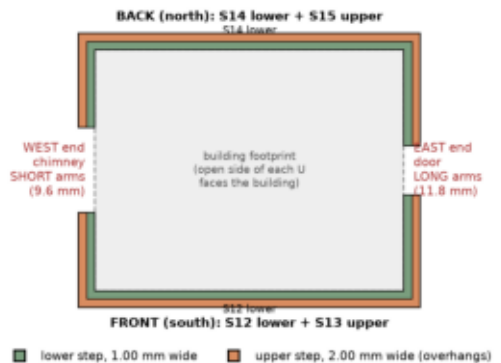
Stage B



Sills (they go on the OUTSIDE of the walls), wall plate, roof frame and roof fit onto the finished structure (steps 9-14). The resin ridge, hips and chimney stack go on last (steps 15-16).

Step 9: lower sills

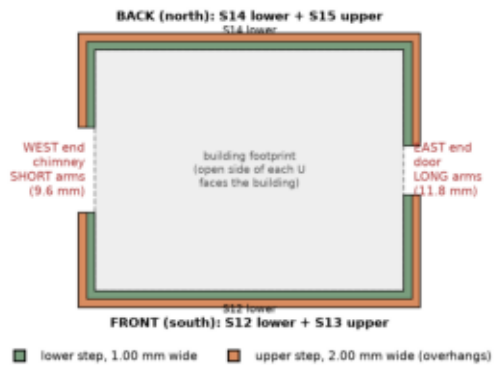
Stage B



Glue the lower sill plates S12, S14 (front S12, back S14) flat on the top of the brick plinth, on the OUTSIDE of the walls. They wrap round the corners and stop at the door and the chimney. ONE WAY ROUND ONLY: each U has a SHORT arm (9.6 mm, WEST/chimney end) and a LONG arm (11.8 mm, EAST/door end). The open side of the U faces the building. If the long arm is at the chimney end, turn the plate over. Dry-fit before gluing.

Step 10: upper sills

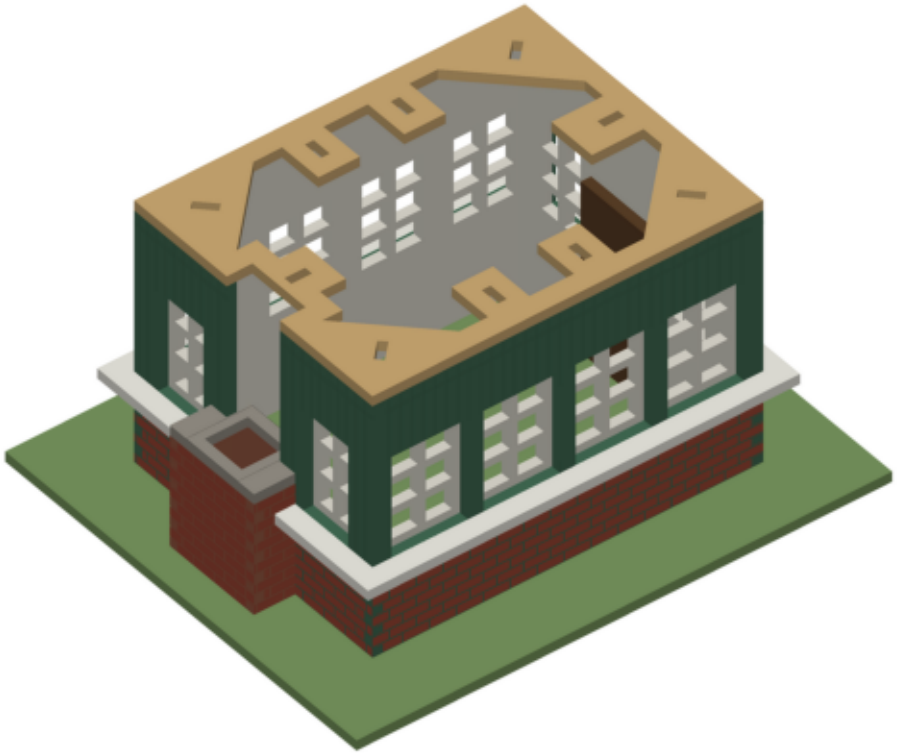
Stage B



Glue the upper sill plates S13, S15 (front S13 on S12, back S15 on S14) on top of the lower ones, inner edge flush with the wall; the wider top step overhangs outwards. Same rule: SHORT arm to the chimney, LONG arm to the door.

Step 11: wall plate

Stage B



Glue the one-piece wall plate S23 flat on top of the walls, outer edge flush with the wall faces; the triangles (gussets) sit in the corners. At the chimney end the U-shaped collar goes round the space where the resin stack will drop in: keep that opening clear of glue.

Step 12: roof frame - ridge piece, cross-rafters, hips

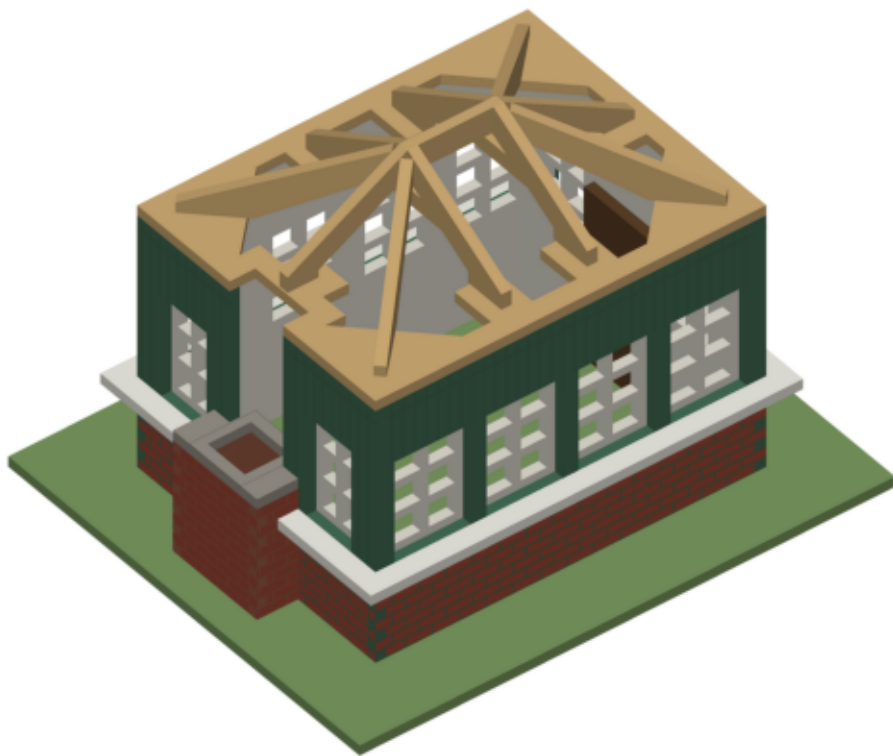
Stage B



1. Ridge piece S30 (ridge + sloping end rafters): push its two foot tabs into the end pads of S23.
2. Cross-rafter sets S28, S29: foot tabs into the side pads; the slot at the top drops over the ridge piece (half-lap) - this squares the frame.
3. Hip rafters S31, S32, S33, S34: tab into the diagonal slot in each corner gusset; the top end butts into the corner where the cross-rafter set crosses the ridge piece.

Step 13: roof frame assembled

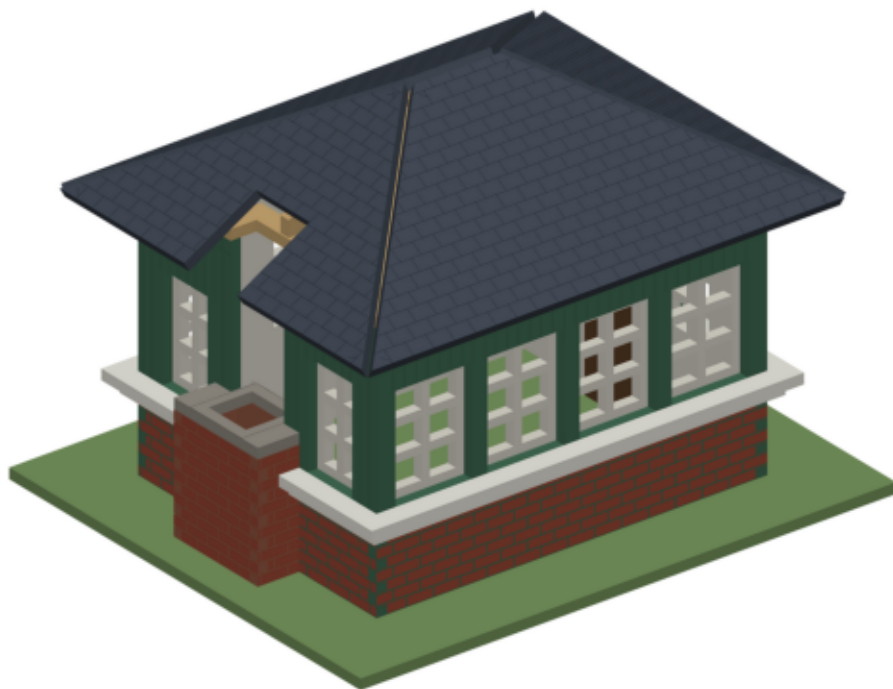
Stage B



Check S28, S29 stand upright and S30 is level, then glue all the joints. Nothing goes below the wall tops, so the inside stays clear for lights.

Step 14: roof panels

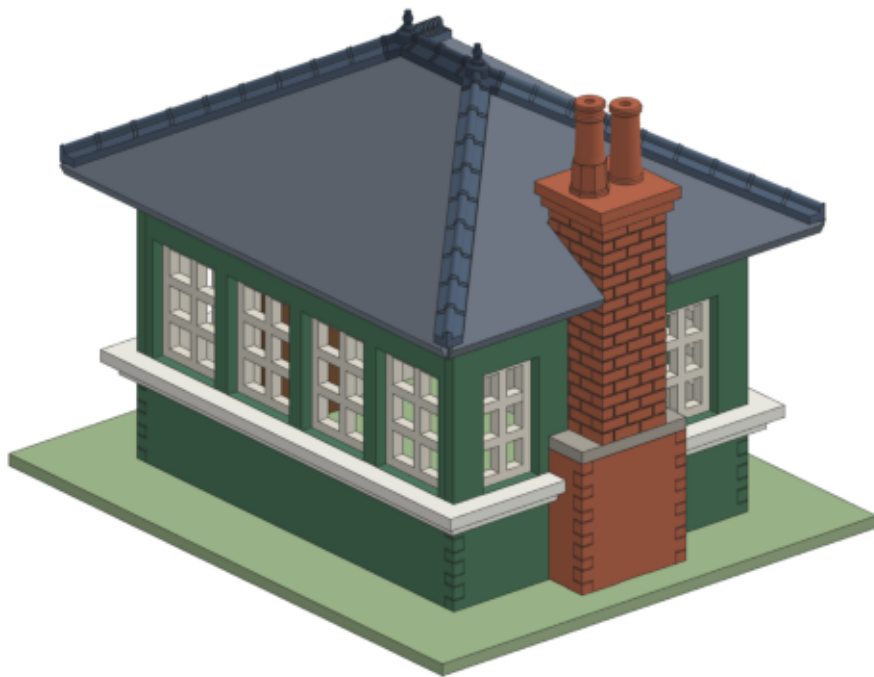
Stage B



Glue the roof panels S24, S25, S26, S27 onto the wall plate and roof frame. The open notch in the west hip panel S26 sits over the chimney position: line its edges up with the wall-plate collar below. The hip and ridge edges meet with a small gap that the resin strips cover.

Step 15: resin ridge and hips

Stage B



Glue the four resin hip strips over the hip joints, tips at the eaves corners, then the one-piece ridge (with the finials) along the ridge so its ends cover the tops of the hips. Small dabs of CA or canopy glue.

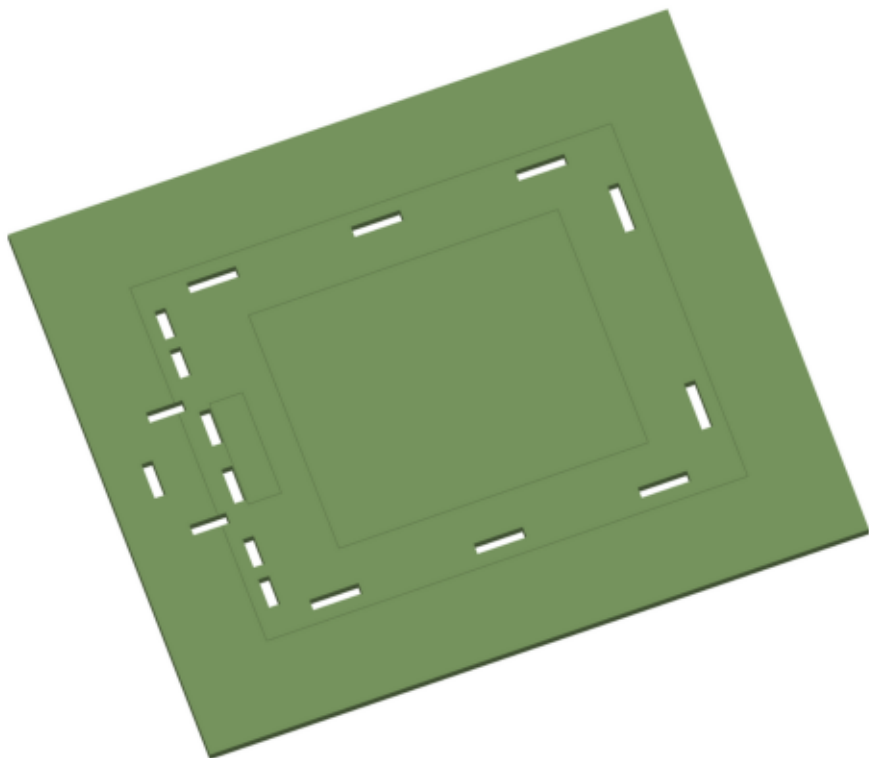
Step 16: drop in the chimney stack (last)

Stage B



Lower the resin stack straight down through the notch in the west hip panel and the wall-plate collar until its spigot drops into the hole in step plate S22. The spigot is keyed: it only goes in with the two pots in line with the ridge. Check it sits square and its outer face lines up with the roof edge, then run a little glue round the shoulder.

Optional: open floor (lights / furniture)



Floor plate S01 has a knock-out panel held by 4 small uncut bridges (one on each side). Leave it in, or snip the bridges from below with a scalpel to open the floor for lighting or interior detail. It can be refitted with a strip of tape.