Bf Bayrischzell

Bayrischzell Station

Assembly Instructions

V1.0, May 2026





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1 Introduction

1.1 About the building

Bayrischzell is a popular tourist destination in the German Alps, and there is railway branch line connecting the town with Munich. Bayrischzell station is the final stop of the branch. The station building is built in typical wooden alpine style, like all other buildings around. Many small railway station in the Alps are built in a similar style – in Germany, Austria, Switzerland and Italy.

The model shows the state of the station building from a couple of years ago, it has since been remodeled. In particular, the arcade on the northeastern corner has been closed with solid walls. I liked the old arcade construction better so I modeled the older state of the building.

The model will be a good fit for model railways with a mountain / alpine theme, be it for standard gauge or narrow gauge railways. I constructed the model as part of a challenge in a modeler`s forum and I used images from the internet as the only plans.

1.2 Preparations for assembly

Tools you will need: a cutter and maybe a small file for cutting and finishing the parts that come off the printer. Make sure that you remove all access plastic, adhesion brims and other unwanted residues from the printing process. Tweezers may be helpful for installing some small part. You may also have to rework pins/holes for connecting parts due to the small scale. And you will need glue for plastic models.

1.3 About the model

The model is in H0 model railway scale (1:87) and has about 200 parts that need to be assembled. I designed it using Tinkercad and have printed my copies on a Bambu Lab X1C printer using PLA filament. The joints and part fittings are designed with tolerances of 0,2mm, which should give a good fit – not too tight, not too loose. You may have to cut and file some edges after print.

Enjoy.

2 Files and Parts

The model is divided into multiple files that can be printed separately (see below). This gives you a lot of flexibility in your choice of filament color for different parts when printing. Most files should print fine without support or brims.

Filename	Contains	Suggested Color	# Parts
Base plate			
Bf Bayrischzell Base Plate (1).stl	Western side of the base plate	Gray	1
Bf Bayrischzell Base Plate (2).stl	Eastern side oft he base plate	Gray	1
White walls and window frames			
Bf Bayrischzell White (3).stl	Northern wall plus parts of the shed	White	3
Bf Bayrischzell White (4).stl	Window and door frames	White	25
Bf Bayrischzell White (5).stl	Octagonal bay (print with support)	White	1
Bf Bayrischzell White (9).stl	Southern wall plus parts of the shed	White	4
Bf Bayrischzell White (13).stl	Eastern and western wall, protruding section of southern wall	White	3
Wooden walls and parts			
Bf Bayrischzell Dark Brown (2).stl	Southern wall including staircase	Dark brown	7
Bf Bayrischzell Dark Brown (3).stl	Western wall	Dark brown	5
Bf Bayrischzell Dark Brown (4).stl	Northern wall	Dark brown	7
Bf Bayrischzell Dark Brown.stl	Eastern wall, shed and arcade	Dark brown	7
Bf Bayrischzell Light Brown (1).stl	Roof ends, doors, staircase parts	Light brown	11
Roof			
Bf Bayrischzell Roof (1).stl	Shed roof (south)	Red/brown	1
Bf Bayrischzell Roof (2).stl	Shed roof (north)	Red/brown	1
Bf Bayrischzell Roof (3).stl	Northern roof (triangular)	Red/brown	1
Bf Bayrischzell Roof (5).stl	Northern roof (triangular)	Red/brown	1
Bf Bayrischzell Roof (6).stl	Northern roof (main section)	Red/brown	1
Bf Bayrischzell Roof (7).stl	Southern roof	Red/brown	1
Bf Bayrischzell Roof.stl	Rooftops	Red/brown	4
Miscellaneous parts			
Bf Bayrischzell Black (1).stl	Chimney parts, black mailbox	Black	13
Bf Bayrischzell Brick.stl	Chimney walls	Red	4
Bf Bayrischzell Copper.stl	Gutters and drains	Copper or silver	13
Bf Bayrischzell Gray.stl	Wall foundation, doors, window sills	Gray	28
Bf Bayrischzell Red.stl	Window shutters, doors	Red	51
Bf Bayrischzell Yellow.stl	Yellow mail box	Yellow	1
Other files			
Bf Bayrischzell Base Plate.3mf	Project file for BambuLab printers, includes all of the above files with colors preselected		

3 Base plate assembly

The base plate is divided into two parts to fit onto standard size printer beds (Figure 1). They will be held in place by T-shaped connectors. Stick and glue the two parts together (Figure 2).

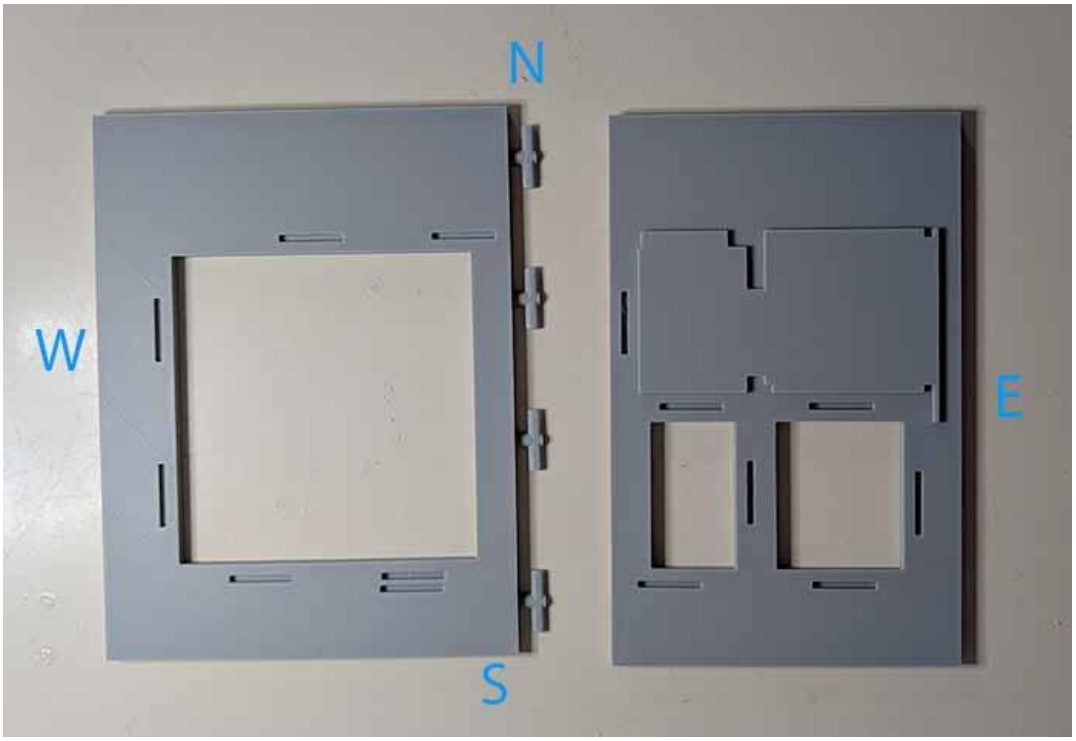

Figure 1 Base plate parts and directions of the building

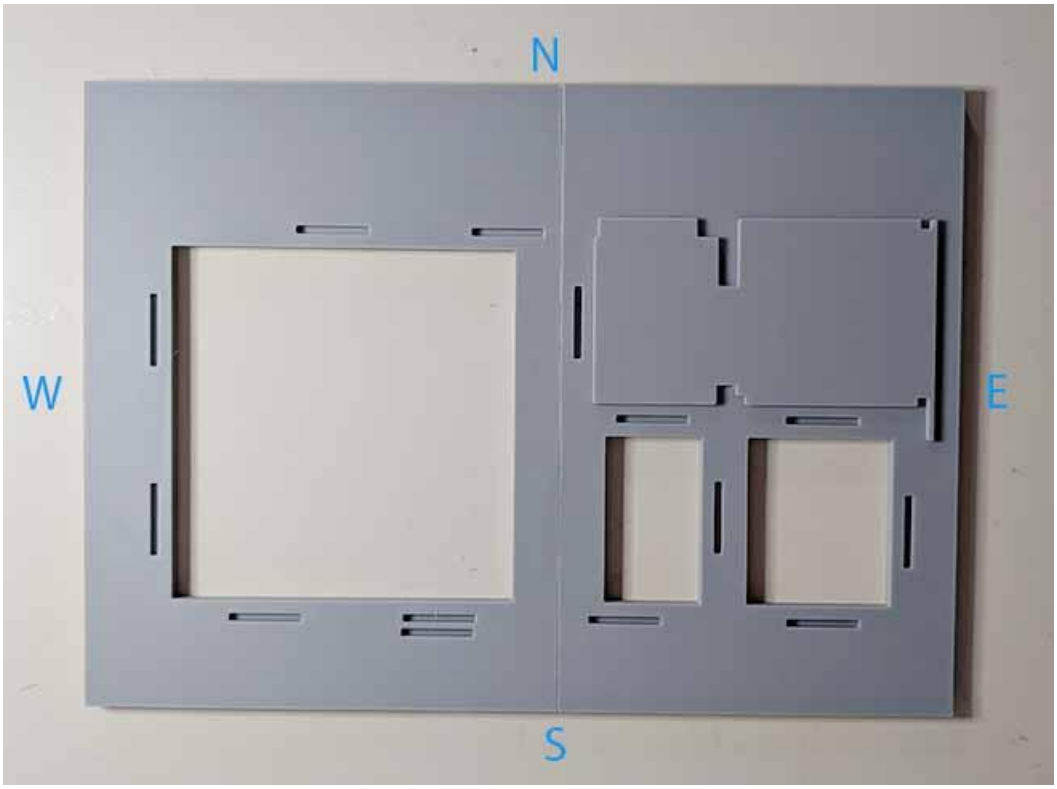

Figure 2 Base plate after assembly

Figure 2 shows the overall orientation of the station building with directions north, east south and west. These directions will be used as references throughout this assembly guide.

4 Preassembly of wall segments

4.1 Preassembly of western wall segments

The parts for the western wall are shown in Figure 3. Preassemble the wall segments as follows:

1. Glue the white window frames and the gray door into the corresponding holes from the back side of the wall
2. Glue the gray window sills into the window opening on the ground floor (white wall).
3. Glue the window shutters left and right on the ground floor and the upper floor.

The result is shown in Figure 5.



Figure 3 Western wall parts ready for preassembly

Note that the upper floor and ground floor shutters have different back sides (Figure 4). The ground floor shutters have a small grove on the backside that will fit onto the corresponding pins left and right on the white walls. The upper floor shutters have no such groves and will partly overlap, as the distance between two windows is shorter than two shutter widths.

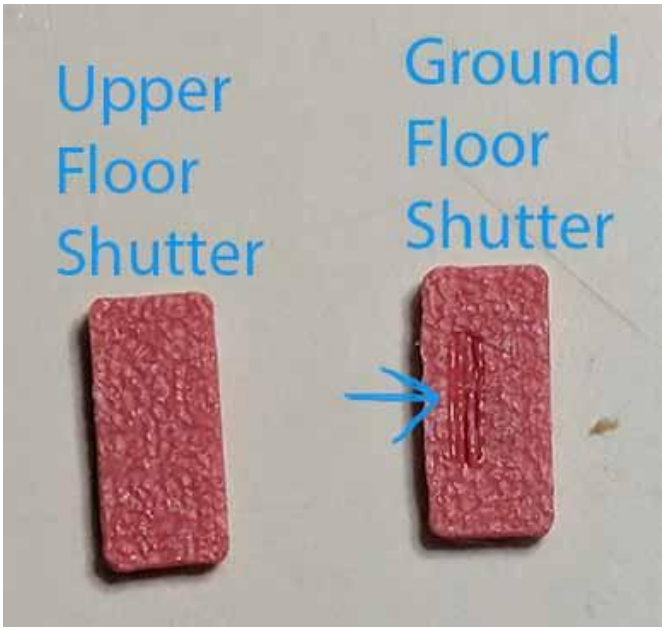

Figure 4 Difference between ground and upper floor shutters



Figure 5 Western wall segments after preassembly

4.2 Preassembly of southern wall segments

The parts for the southern wall are shown in Figure 6. Preassemble the wall segments as follows:

1. Glue the white window / door frames into the corresponding holes from the back side of the walls
2. Glue the gray window sills into the window opening on the ground floor (white wall).
3. Glue the brown doors on the upper floor into the white door frames of the upper floor.
4. Glue the red window shutters left and right on the ground floor and the upper floor. Again, watch for difference between upper and ground floor shutters, Figure 4. On the upper floor there are two small windows which will need only one shutter each.
5. Glue the brown door into the door opening of the wooden staircase

The result is shown in Figure 7.

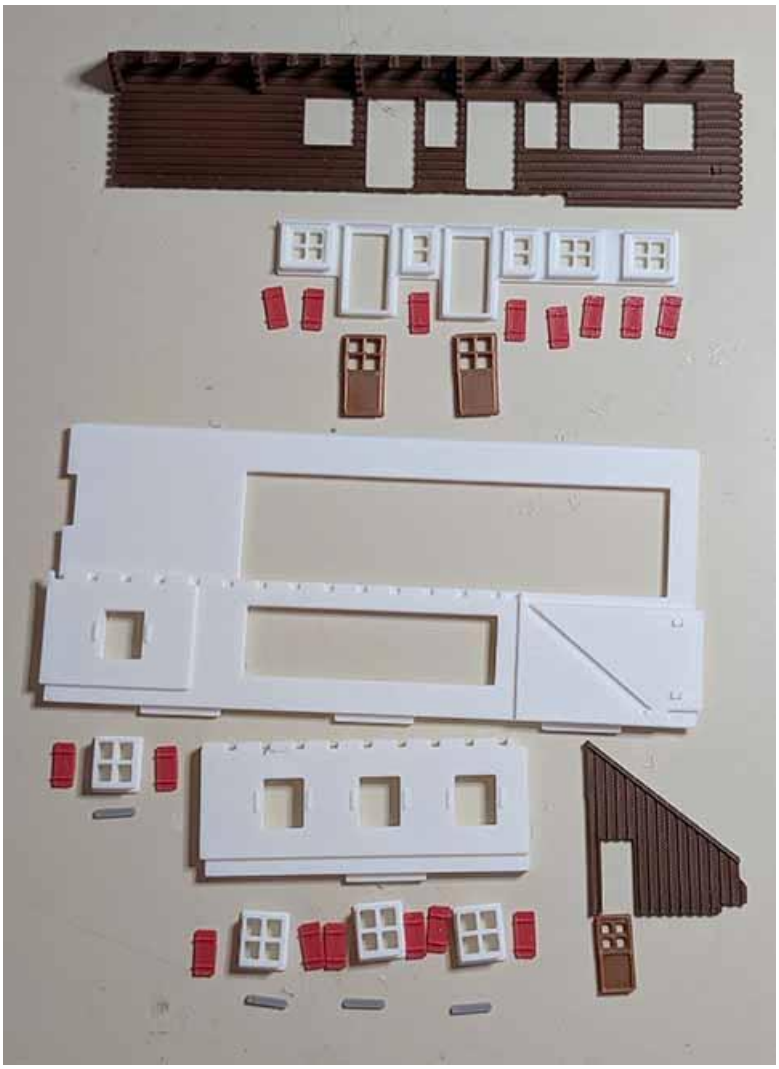

Figure 6 Southern wall parts ready for preassembly

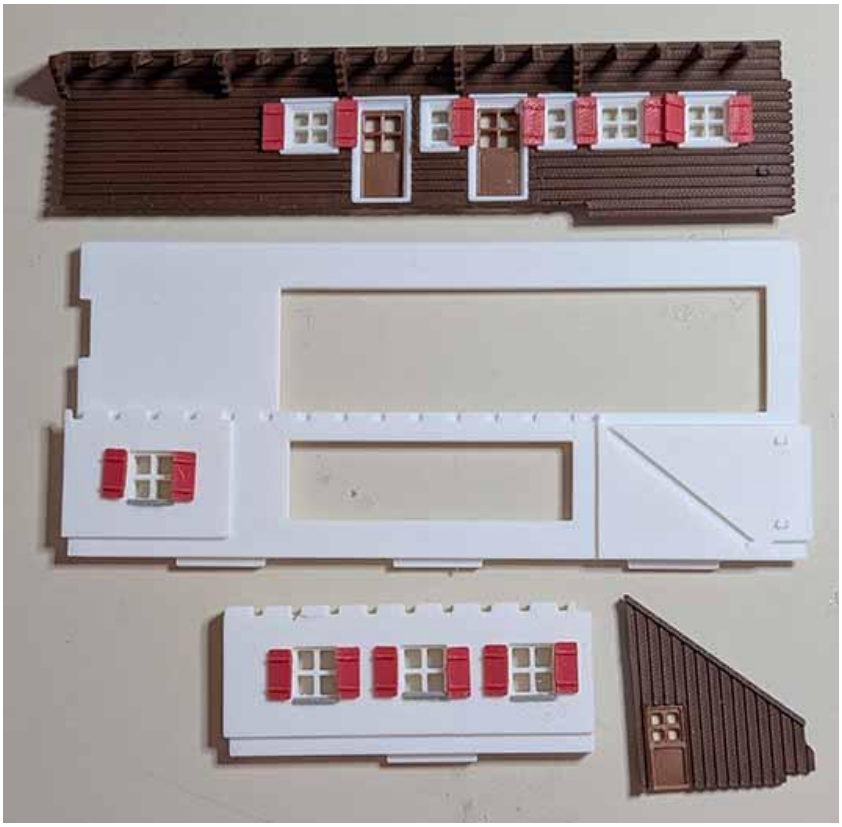

Figure 7 Southern wall segments after preassembly

4.3 Preassembly of northern wall segments

The parts for the northern wall are shown in Figure 8. Preassemble the wall segments as follows:

1. Glue the white window / door frames into the corresponding holes from the back side of the walls
2. Glue the gray and red door into the door frames of the ground floor
3. Glue the gray window sills into the window opening on the ground floor (white wall).
4. Glue the brown doors on the upper floor into the white door frames of the upper floor.
5. Glue the red window shutters left and right on the upper floor. There are no window shutters on the ground floor for the northern wall.
6. Glue the little black mailbox into the opening next to the gray door in the octagonal bay.

The result is shown in Figure 9.



Figure 8 Northern wall parts ready for preassembly



Figure 9 Northern wall segments after preassembly

4.4 Preassembly of eastern wall segments

The parts for the eastern wall are shown in Figure 10. Only the upper floor segment (brown) will need preassembly as follows:

1. Glue the white window frames into the corresponding holes from the back side of the walls
2. Glue the red window shutters left and right – only one shutter per window.

The result is shown in Figure 11.



Figure 10 Eastern wall parts ready for preassembly



Figure 11 Eastern wall segments after preassembly

4.5 Preassembly of shed walls

The parts for the shed walls are shown in Figure 12. Preassemble the wall segments as follows:

1. Glue the white window / door frames into the corresponding holes from the back side of the walls
2. Glue the red doors into the door frames of the ground floor
3. Glue the gray window sills into the window opening on the ground floor (white wall).
4. Glue the red window shutters left and right on the upper floor. There are no window shutters on the ground floor for the northern wall.
5. Glue the little yellow mailbox into the opening next to the right door in the eastern wall of the shed.

The result is shown in Figure 9.



Figure 12 Shed wall parts ready for preassembly



Figure 13 Shed wall segments after preassembly

5 Ground floor assembly (white wall segments)

5.1 Assembly of white ground floor walls

The ground floor wall segments are laid out ready for assembly in Figure 14.

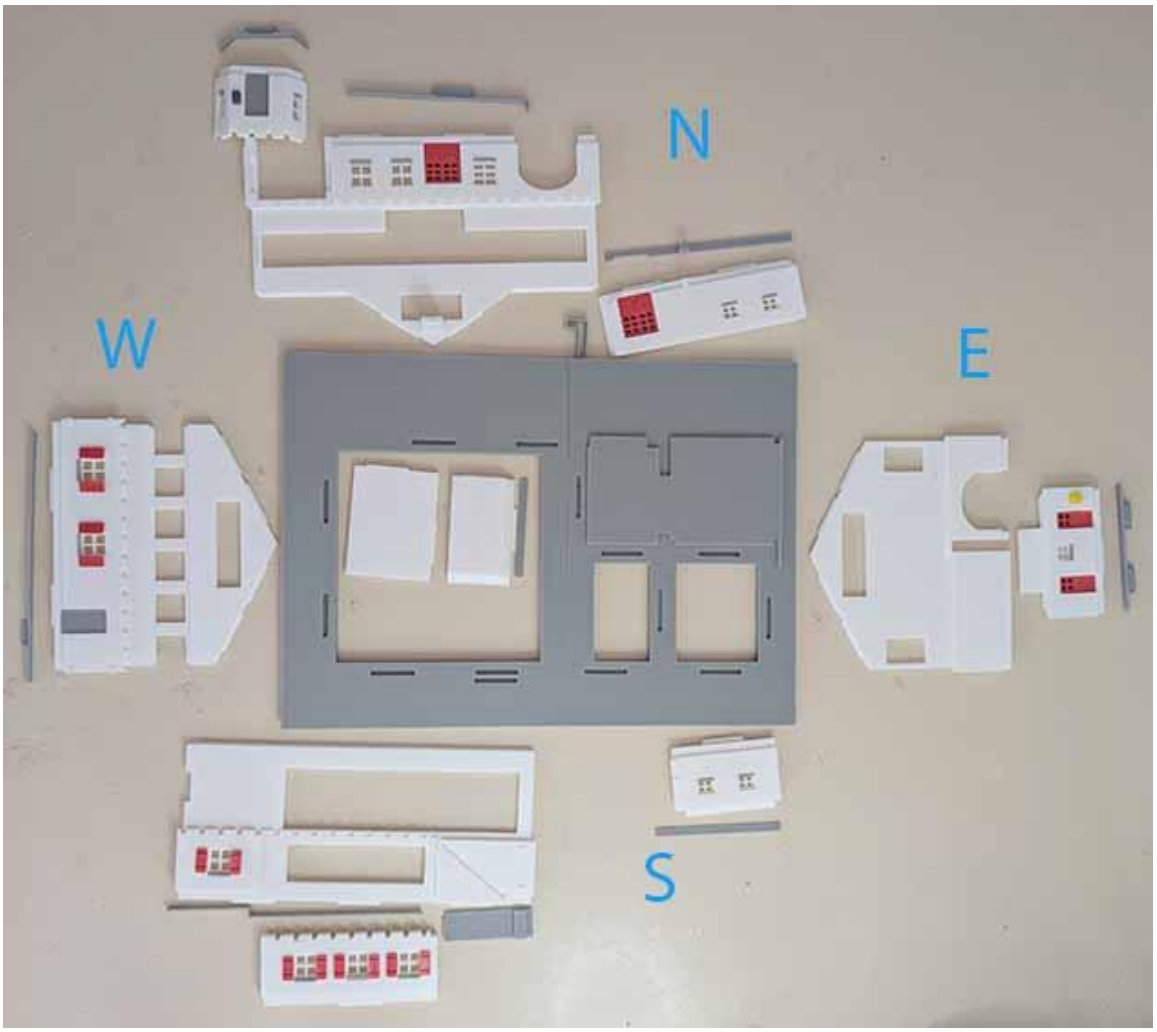

Figure 14 White ground floor wall segments ready for assembly, check NESW orientation of ground plate and parts

Assemble as follows:

1. Glue the matching gray foundation stone band onto each wall segment
2. Glue the wall segments into the corresponding slots in the base plate, segment by segment
3. Glue the gray staircase foundation onto the base plate on the southern wall
4. Glue the arcade ceiling onto the arcade walls on the northern side of the building

Note the following:

- The northern shed wall and the eastern wall of the main building are intersecting. Install the northern shed wall first, then slide the eastern main building wall over the shed wall
- There is an L-shaped foundation stone which wraps around the arcade pillar in the north-east corner of the main building. The arcade pillar is part of both the northern and eastern wall. Glue the foundation stone onto the base plate first, then install the northern and eastern wall into the L-shaped opening.

The result should look as shown in Figure 15 and Figure 16.



Figure 15 White ground floor walls installed, view from northwest (left) and southwest (right)

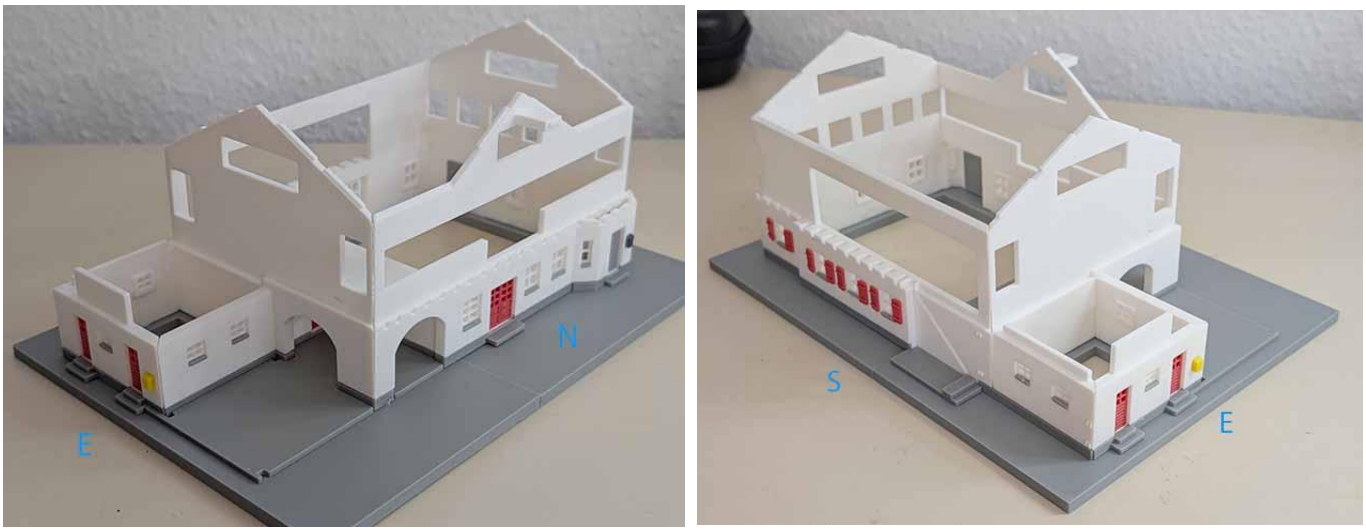

Figure 16 White ground floor walls installed, view from northeast (left) and southeast (right)

5.2 Assembly of wooden staircase and arcade

The staircase on the south wall is assembled as in Figure 17:

1. Glue the short wall onto the south wall
2. Glue the smooth staircase cover to the short wall and the bottom stairs
3. Add the long triangular wall onto the foundation
4. Insert the staircase on top of the staircase cover

The result is shown in Figure 17 (right).

Next, install the wooden arcade cover in the northeast corner of the station (Figure 18). Glue the vertical cover posts into the corresponding holes in the base plate.

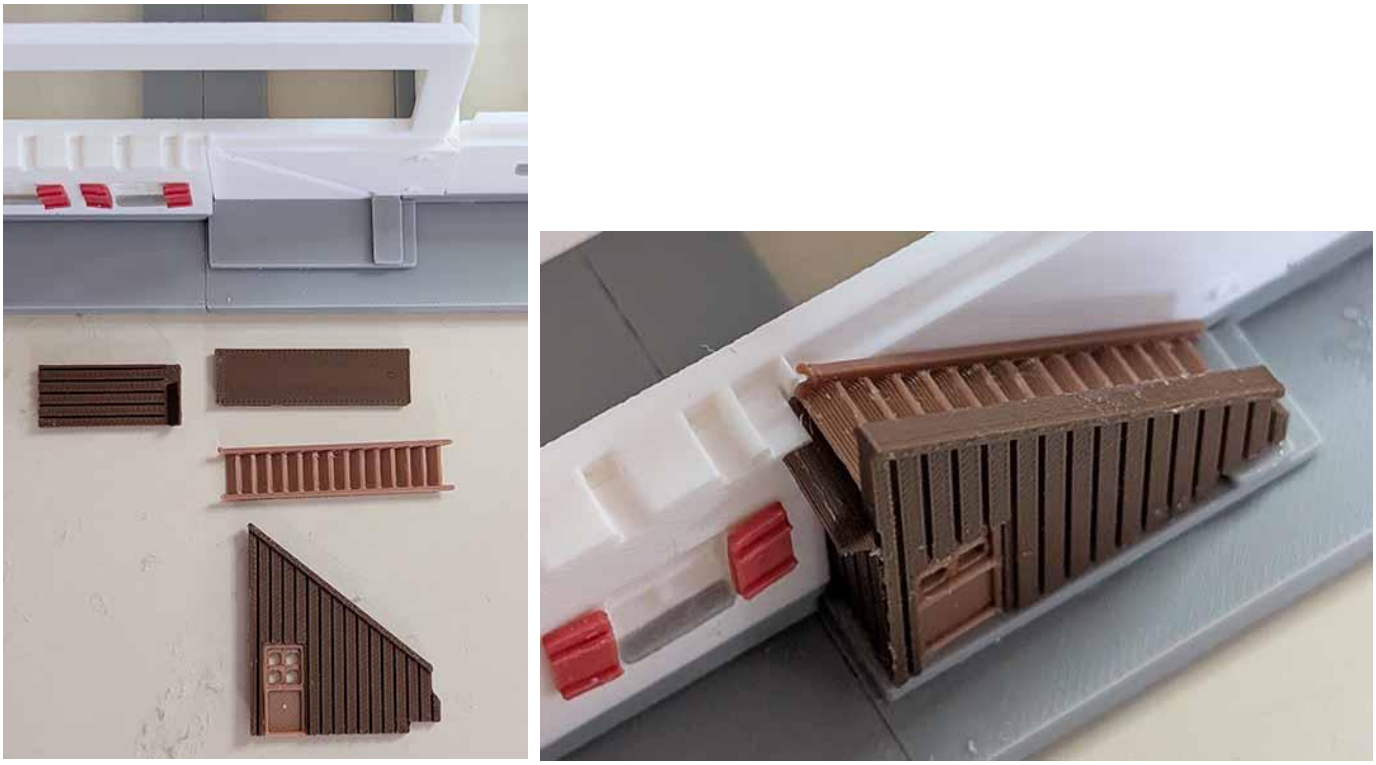

Figure 17 Staircase on south wall ready for assembly (left) and fully assembled (right)

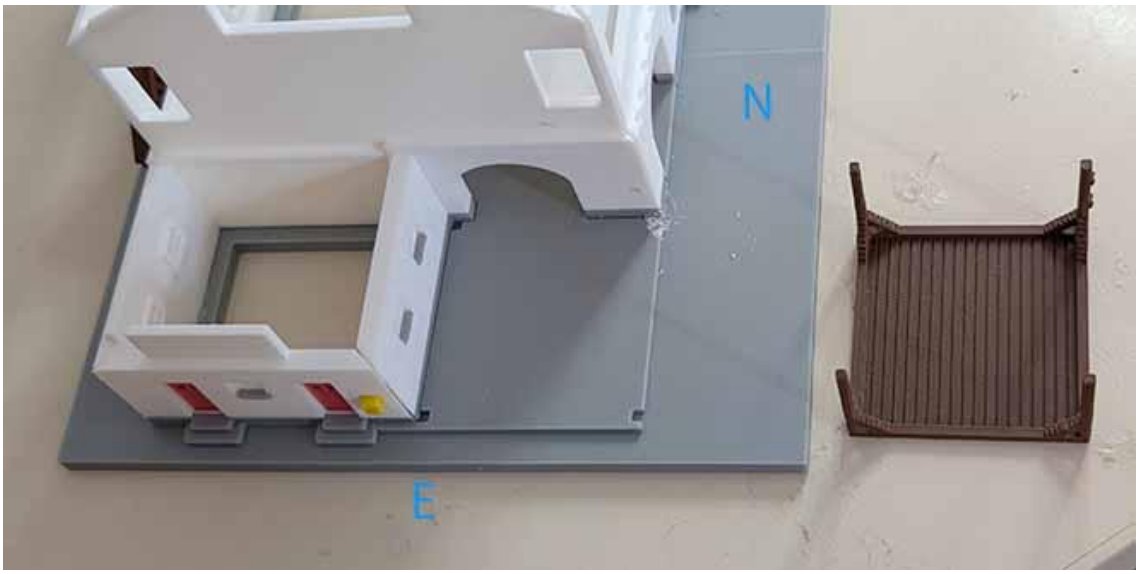

Figure 18 Wooden arcade cover ready for installation

6 Upper floor assembly (wooden wall segments)

6.1 Assembly of wall segments and balcony on the main building

The wall segments and balcony parts ready for assembly are shown in Figure 19. Assemble as follows:

1. Glue the wall segments onto the corresponding white wall segment. Work your way around the building until all four walls are in place.
2. Glue the comb-shaped balcony supports into the square holes in the south, west and north walls
3. Glue the balcony floor onto the corresponding supports (south, west and north)

The result is shown in Figure 20.

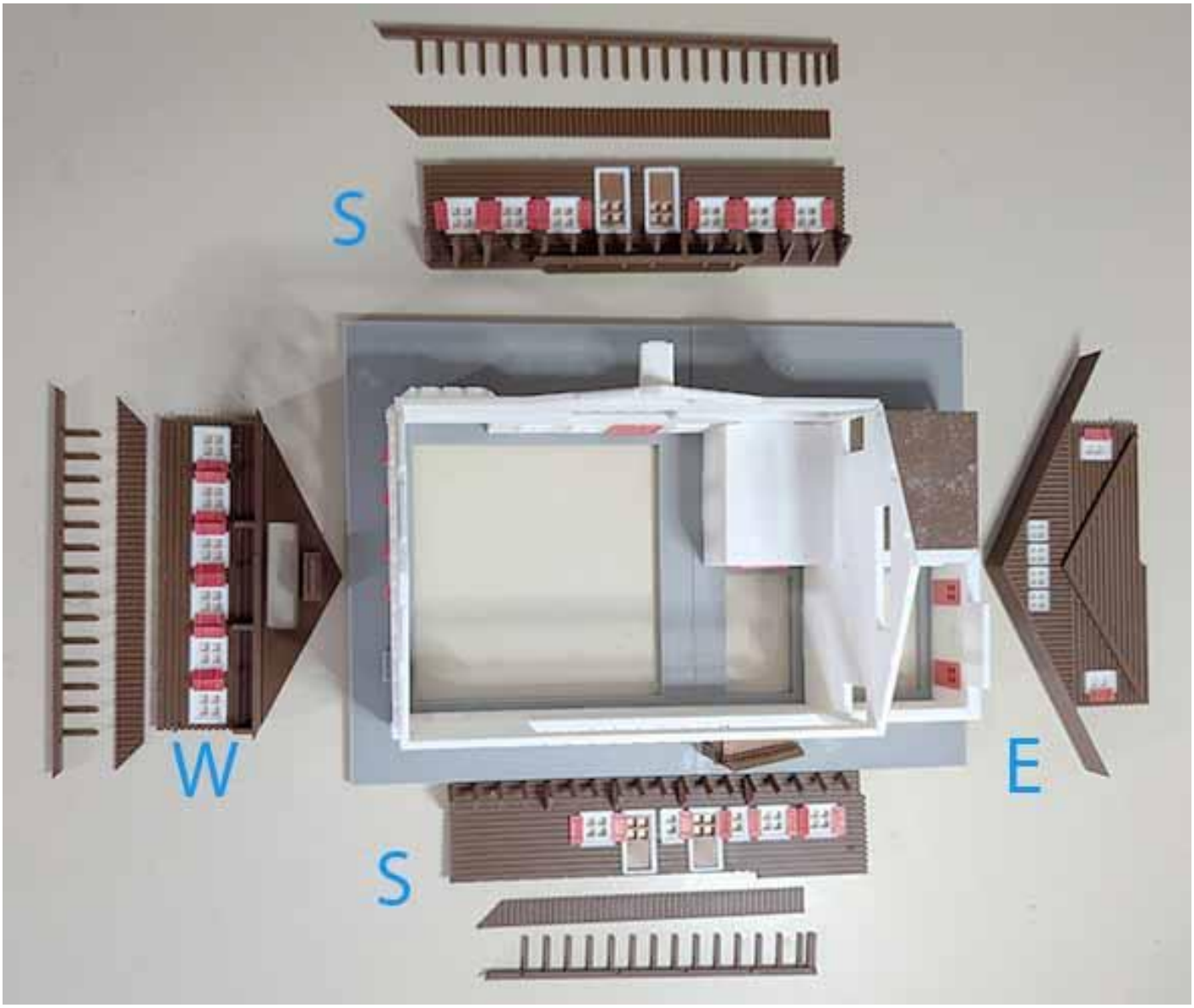

Figure 19 Wooden wall segments of main building and balcony parts ready for assembly



Figure 20 Wooden wall segments and balcony after assembly, view from northwest (left) and southeast (right)

6.2 Assembly of balustrade and protruding top level walls

The balustrade parts and protruding top level walls are shown in Figure 21. Assemble as follows:

1. Glue the balustrade parts on the south and west side onto the balcony supports. There are small square holes in the balcony supports where the balustrade posts will fit.
2. Glue the balustrade and protruding top level part onto the balcony support on the north side.
3. Glue the short end balustrade on the north side onto the wall and the balustrade.
4. Glue the protruding top level wall on the west side onto the holders and on top of the balustrade posts

The result should look as in Figure 22 and Figure 23.

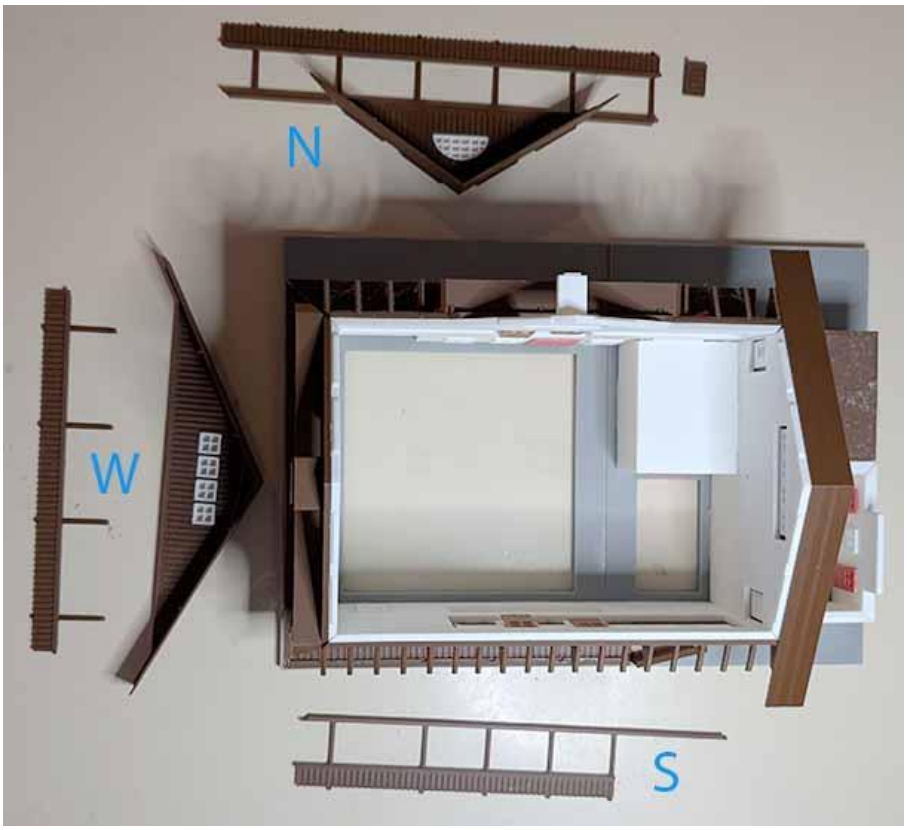

Figure 21 Balustrade parts and protruding top level walls ready for assembly



Figure 22 Balustrade and protruding top level walls after assembly, view from north (left) and south (right)



Figure 23 Balustrade and protruding top level walls after assembly, view from west

6.3 Assembly of upper floor for the shed

Assembly of the upper floor of the shed on the east side of the building is shown in Figure 24.

1. Glue the small posts onto the south wall of the shed and onto the wooden arcade cover (north). The thin end of the post should be facing outward (east)
2. Glue the east wall segment onto the shed, over the small posts

The result will look as in Figure 24 (right).



Figure 24 Upper floor of the shed ready for assembly (left) and after assembly (right)

7 Roof assembly

7.1 Assembly of roof structure

The parts of the roof are shown in Figure 25.

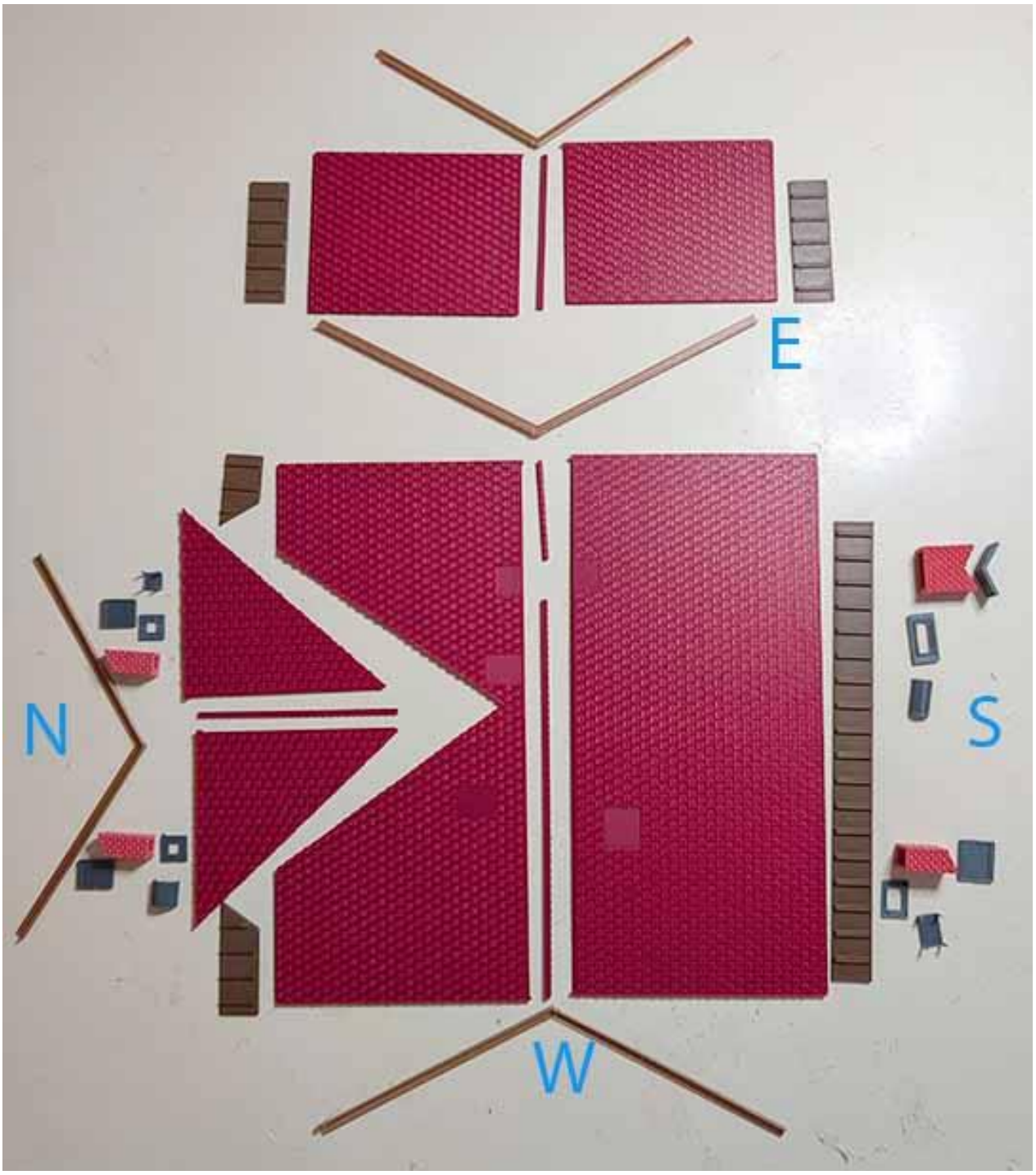

Figure 25 Roof parts layed out for assembly

Assemble as follows:

1. Glue the large tiled roof plates onto the building walls. There are groves on the underside of the plates which will fit onto the corresponding pins on the walls. Start with the shed, then continue with the two large plates for the main building and finally add the thriangular plates on the north side.
2. Glue the light brown roof ends over the roof plates west, east (main building and shed) and north

3. Glue the wooden planks onto the underside of the roof plates where the roof extends over the balustrade: on long plank south, two short planks for the shed and two short planks cut at 45 degrees on the outer ends of the north roof
4. Glue the four chimneys onto the roof. The chimneys have different sizes and shapes. First install the black base sheet, then the brick chimney column, then the black rim onto the column and finally the matching cover (dome-shaped or table-like)
5. Finally, glue the top center tile row onto the top of the roof sections where the tiled plates meet.

The result will look as shown in Figure 26.

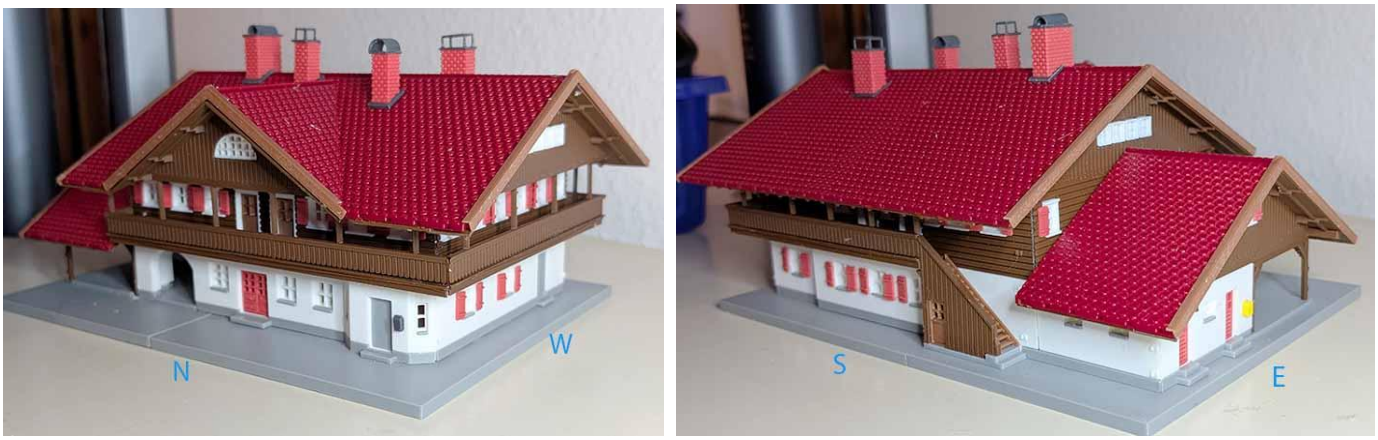

Figure 26 Roof after assembly, view from northwest (left) and southeast (right)

7.2 Assembly of rain gutters

The rain gutters are the final parts for the building and are shown in Figure 27.

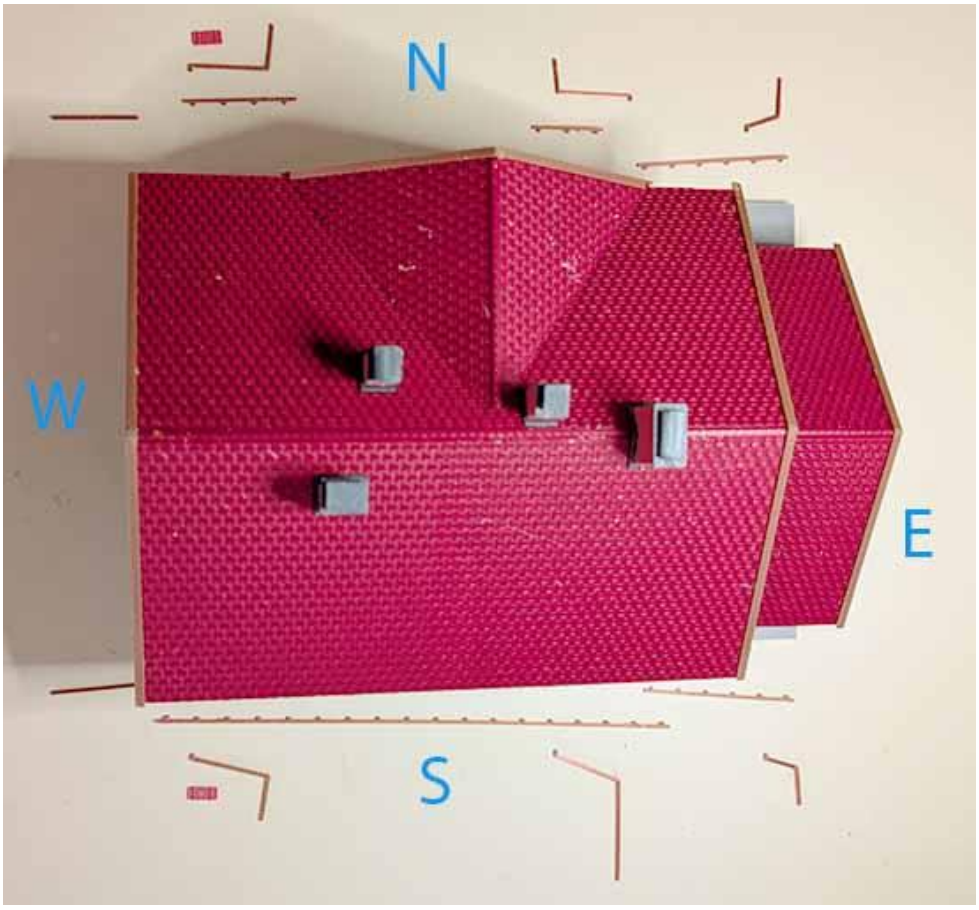

Figure 27 Copper rain gutters laid out for assembly

Assemble as follows:

1. Glue the horizontal gutters into the little holes at the lower end of the roof plates: one long gutter south, two medium length gutters for the shed and two short gutters on the north roof, left and right
2. Glue the vertical pipes into the tiny semicircular holders on the walls: two pipes at the east end of the shed, one long pipe down to the bottom on the south roof, one short pipe on the north roof onto the shed roof and two divided pipes at the corners of the western wall (the angled part connects the horizontal gutter with the balcony, the straight column leads from the balcony downwards to the ground).
3. Install the two missing window shutters over the pipes, left and right on the upper floor on the western wall.

8 Final result

Congratulations. You finished the model assembly. The final result is shown in



Figure 28 Bayrischzell station fully assembled, north and south side



Figure 29 Bayrischzell station fully assembled, west and east side



Figure 30 Bayrischzell station fully assembled, view form northwest and southwest



Figure 31 Bayrischzell station fully assembled, view form northeast and southeast



Figure 32 Bayrischzell station fully assembled, view form northeast and southeast



Figure 33 Bayrischzell station fully assembled, view form northwest and southwest