



Korber Models
Scale Model Railroad Structures

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Model 927 O Scale Signal Tower
1930's America Prototype

Instructions

Compiled by: Rich Redmond

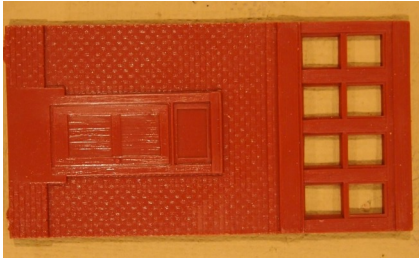
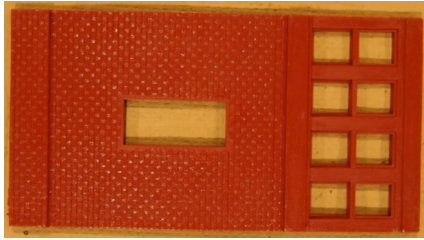
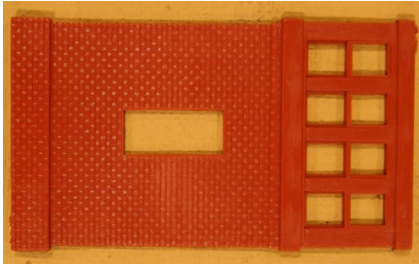
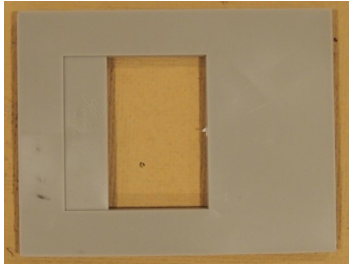
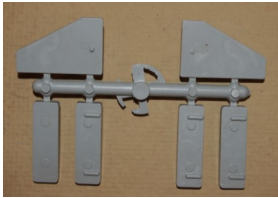
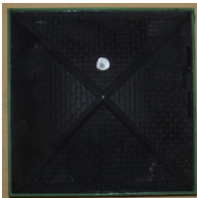
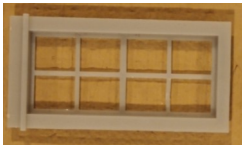


Introduction

Congratulations, you have purchased the Korber Models #927 Signal Tower. This structure represents thousands of buildings that could be seen along the tracks all across the nation. You can follow the simple, step by step instructions outlined in this document to easily assemble this great looking addition to your layout.

Before you start you may want to read through the instructions to get a feel for the things you will be doing, and the basic order in which they will be done. You are on your way to adding a centerpiece to your layout, so let's get started!

Parts list & Templates – (What's in the box)

Take a few minutes to locate all the parts in the box to make sure you have all the pieces you will need and that the quantities are right. If you are missing anything, please contact us so we can get you any of the missing items.

Qty	Description	Qty	
1	Front Wall with Door 	1	Back Wall with Window 
2	Side Wall with Window 	1	Base Foundation 
1	Injection Molded Steps 	1	Roof section and Roof Frame (Black and green Pieces) 
3	Injection molded windows 4x4 	1	Smokestack molded parts (3 pieces each) 
1	Smokestack wooden dowel 5/16" by 3" 	1	Sheet of clear plastic "Window Glass"

Materials needed – (What else might I need that is not included)

The Korber 927 Signal Tower, like any kit, requires a few additional items to complete the construction. We have included a list here, including some color and brand suggestions based on our experience; however you may use any product that fits the function. Please also note that some items are listed as options such that they either make assembly simpler, or are needed only for optional steps

Flat paint, choice of colors, for doors, windows, trim
“Red” automotive primer spray paint to cover all molded brick surfaces such as Krylon Ruddy Brown
Antique white craft paint for cement lines
Light grey or cement color paint for cement foundation
RustOleum camouflage flat spray paints work well for painting window frames, gutters and doors

Small paint brushes
Paper towels or soft cloth rags
Cyanoacrylate (CA) glue. Also known as Super Glue, Gorilla™ super glue works well
CA glue accelerator (optional) (turns any CA glue into quick set glue (optional)
Medium grit sandpaper or emery board
Testor’s Dull-cote™ (optional)
Small clamps (optional)
Flat black or grimy black spray paint (optional)

1 - Parts preparation & painting

Look over all the molded parts and remove any flashing that might be left on them. Flashing is the thin pieces of the molding material that may be left in widow openings and along edges in the molded parts. This can quickly be removed with a razor type knife, a small file, or an emery board.

The parts in the kit can be assembled in the color they come in or optionally you can paint them to the final colors you select, it is much easier to do this step before you assemble them. All the wall sections come colored in a brick red, however many modelers find a light coat of flat red auto primer spray paint gives not only a great look, but also makes it easier to add the mortar color lines to the walls later on. You can also do this by spraying the brick colored walls in Dull-cote without painting. In a well ventilated area (outside is good) apply a coat to the brick wall sections.

Use a similar process for the window frames, and door in your choice of colors.

Option

An optional step that adds a great deal of realism to any model of a brick building is to add the mortar lines to contrast with the red brick color. The ability to lay the wall sections on a flat surface, when done prior to assembly, makes this detail step simpler. There are several ways to do this, including use of water based paint (Antique White or Light Grey latex well diluted with water until the consistency is as thin as milk), some commercially available products, and the use of light spackling compound to fill mortar joints. In all of these approaches the general concept is to spread the white product you are using over the brick walls, filling in the mortar line groves in the wall section, and then removing the excess from the top of the bricks. We will walk through the water based paint method.



One simple method we have used is to dilute some water based antique white or light grey craft paint to create a soupy like consistency.

- Cover entire wall section with diluted white paint, letting it settle and collect in the mortar lines
- Wait a few seconds and lightly wipe off excess paint using a slightly damp paper towel or soft cloth until paint is removed from the brick surface, but not the mortar joints
- Keep flat and let dry before moving so the paint in the joints does not run
- To remove haze from brick surface, apply a thin layer of Dull-Cote and wipe gently
- It may require several applications to achieve the mortar line that you want
- A finish light coat of Polly Scale Grimy Black done with an air brush will tone down the grey wash and give it an aged look. (Apply lightly and highlight the area where you would expect dirt to collect flat black spray paint can also be used

The good news with this option is that if you don't like it, the paint is water based, so you can get it wet, remove it, and start over. Once dry, this area should be washed using a mix of either watered down black paint, or alcohol and India ink. The purpose of the wash is to settle the black color in the groves/joints around the rocks and give definition. The wash should not be so dark as to overpower the cement/light grey color.

2 - Assembly & Install windows

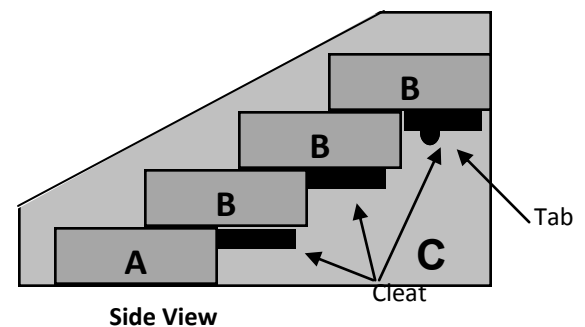
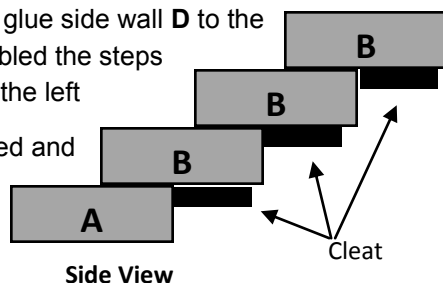
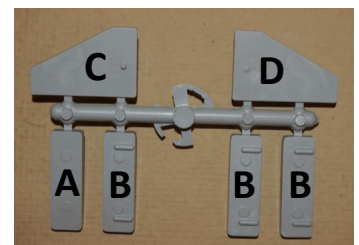
The windows are made from injection molded plastic and will have a clear plastic sheet stock applied over the opening from the inside of the model to form a finished window.

- Carefully remove any flashing from the window frames
- If the window frames have not been painted, and if you would like to do so, paint them now and let them dry before moving to the next step
- Place the walls to which you want to add windows brick side up on a flat surface
- The windows are designed to overlay the window opening from the front, or outside of the building, and will not fit inside the window opening if installed from the back
- Apply a small amount of glue around the edge of the frame and insert over the openings on the wall pieces
- Let the glued windows dry before moving the wall sections to a vertical position to avoid glue running or the windows falling out
- Prepare to cut and glue small pieces of window material over the back of each window. Consider the following two window detailing option for the windows:
- If you want the window panes to have a hazed affect, lightly sand the window material until you've achieved desired haze affect prior to cutting into small window pieces
- You may also detail the windows with shades by covering the top portion of the window material with masking tape
- Cut window materials to fit over the back of each window – glue in place

3 - Assembly of Steps

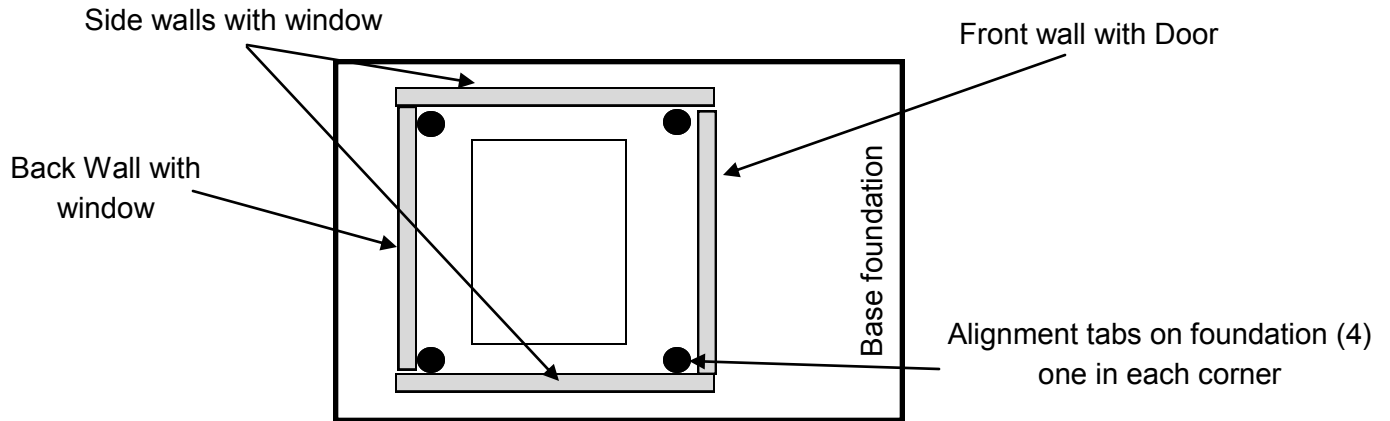
The steps come in a single injected molded sprue that holds 6 parts including, **(A)** 1 step with no cleats on the bottom, **(B)** 3 steps with cleats on the bottom, **(C)** a left side wall and **(D)** right side wall. These parts are glued together to form a set of cement steps with side walls.

- Remove all the parts from the sprue and trim any remaining tabs
- Place a small amount of glue on the cleat side of part B and stack it on top of part A using the cleats to align the depth of the step
- Repeat using the other two B parts in the same manner to create a series of four steps as shown in the figure to the left
- Once the glue dries on the steps, glue the side walls on each side of the steps. Starting with side wall C align the top step **B** to rest flush with the back of the step wall, and rest on the small tab molded into the wall. The bottom **A** step will be flush with the bottom side of the side wall
- Repeat the same process to glue side wall **D** to the step assembly. Once assembled the steps should look like the photo to the left
- Once the steps are assembled and the glue has dried, the piece should be painted a cement color and left to dry



4 - Assembly of Main Structure

The assembly of the main structure is based on making a simple square shaped structure when viewed from the top. There are four walls, the front side with a door, and back side with a window, and two identical side walls both with windows. Below is a top view drawing of the relationship of the wall sections and the base foundation.



Placement of brick walls

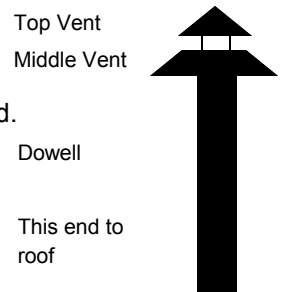
- Some sanding may be necessary. Rough up edges only where you need to glue
- Take one sidewall and the front wall and line them up to make a right angle. The use of a small square is helpful. The side wall should overlay the edge of the front wall. Glue the two wall sections together, using the base as a template. You will note the side walls have small tabs in the back of the wall to assist in alignment.
- Repeat the last step but using the back wall section and the side wall already attached to the front wall. Again using the base foundation as a template, and a small square as needed to keep straight.
- Finally attach the remaining side way to both the back wall and front wall to complete the square box structure
- Optionally use clamps as necessary to hold pieces together

5 - Install roof

The roof has two parts, the green roof base which also forms the gutters, and the pointed roof top with molded shingles. These pieces nestle together such that the pointed black roof nestles in to the green roof base. First dry fit, then glue the two pieces together.

Once assembled, the roof section attaches to the top of the previously assemble main structure by gluing it to the top of the four walls. There is a small ridge on the green roof base that fits with in the four walls of the main structure to help with alignment to keep the roof squared and centered.

Finally assemble the roof top smoke stack. This part is made from two of the three plastic smoke stack detail parts, you will not use the larger piece of the three, and the small round wood dowel, which may need to be painted black. The smaller two pieces nestle together, and are attached at one end of the wood dowel as shown in the diagram to the right. The other end of the wood dowel is glued into the round indentation in the roof section



6 - Final Detailing – Weathering

Your Korber #927 Signal Tower is now assembled and ready for placement on the layout. You may wish to provide some additional weathering before you install it as a building next to the tracks would be a heavily used structure with a layer of soot, and would rarely look brand new.

To add a weathered look, spray the entire model with flat black from a distance. This will give a sooty look to the building. Once done you can spray the completed structure with Dullcote to remove any gloss or shine.

If you choose not to detail the inside of your structure, or light it, an effective and quick way to make a good looking background building is to cover the widows with black construction paper from the inside. This creates a dark building look that is more desirable than the view in to an otherwise empty shell of a building.