

Korber Models

Scale Model Railroad Structures

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Model 107 HO Scale

General Light and Power Plant Instructions 32.5" L x 7"W x 16"H

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Introduction

Congratulations, you have purchased the Korber Models #107 General Light and Power Plant. The General Light and Power Plant is one of the classic Korber HO Scale kits that have been updated. This structure represents thousands of buildings whose back could be seen along the tracks all across the nation.



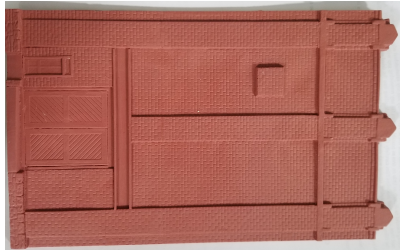

You can follow the simple, step by step instructions outlined in this document to easily assemble this great looking addition to your layout. We have covered not only the key required steps to build the building so you can get it on your layout the quickest, but have also included several optional steps to enhance the appearance. These enhancements are based on submissions from modelers just like you who have taken the Korber structures to the next level, and now by following a few extra steps you can achieve the same results.



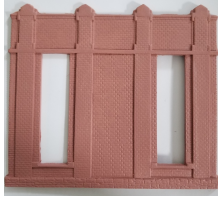










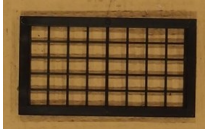





Before you start you may want to read through the instructions to get a feel for the things you will be doing, and the basic order in which they will be done. You are on your way to adding a centerpiece to your layout, so let's get started!







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. You may also want to spread these parts out so that you have a small separate stack of each part and make it easy to find each as you start the assembly process. If you are missing anything, please contact us so we can get you any of the missing items.

Qty	Description	Qty	Description
2	Main building long wall	1	Main Building Side wall with opening (Right)
			
1	Main Building Side wall with large doors (Left)	2	Main Building Upper Roof Profile, Long
			

Qty	Description	Qty	
2	Main Building Upper Roof Profile, Short 	1	Office Building Side Wall w/ GLP Logo and Door 
1	Office Building Side Wall wo/ Logo 	1	Office Building End Wall 
1	Office Building Partial End Wall 	1	Coal Shed Side Wall w/ Extended Foundation 
1	Coal Shed Side Wall wo/ Extended Foundation 	1	Coal Shed End Wall w/ Door 
1	Coal Shed End Wall 	1	Coal Shed Roof 
2	Coal Conveyor Side Walls 	1	Coal Conveyor Roof 
1	Coal Conveyor Bottom (roof with X) 	46	Injection molded windows (5x8) 
30	Injection molded window strips 1.25" 	3	Sheet of clear plastic "Window Glass"
1	Main Roof material 14 3/4" x 5 3/4" 	1	Upper Roof material 10 " x 3 1/2" 
1	Office Roof material 7 5/8" x 5 7/16" 	3	Chimneys (2 halves for each) 

Qty	Description	Qty	Description
6	10" 1/4x1/4 roof & corner supports 	8	8-3/4" 1/4x1/4 corner supports 
2	14 3/4" 1/4x1/4 roof supports 	4	3" 1/4x1/4 upper level corner support 

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

The Korber General Light and Power Plant, 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 and frame

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

We like the new Gorilla brand super glue because it is thicker than most super glues, and allows you to put it on a seam while holding the part in your hand, and will not run when you turn the seam on the side to put two pieces together. This glue is available in most retailers, including the larger home improvements stores

CA glue accelerator (optional) (turns any CA glue into quick set glue (optional))

Medium grit sandpaper or emery board

Testor's Dull-cote™ (optional)

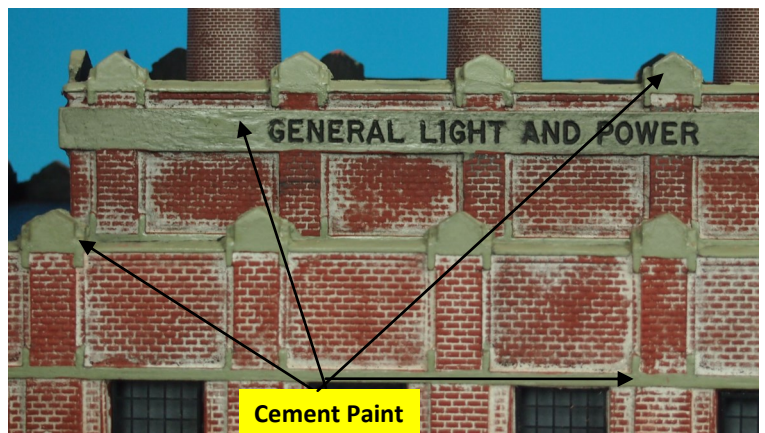
Small clamps (optional)

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 will need to be painted to the final colors you select, and 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. In a well ventilated area (outside is good) apply a coat to the inside (smooth side) of all the brick wall sections first; once dry, do the same to the other side. By painting the back side first you avoid any marks that might appear on the brick textured side.



Use a similar process for the window frames and doors. You may want to paint both of these types of pieces the same color to create a theme for your General Light and Power Plant.

The internal wooden pieces do not need to be painted as they are for structural support only.

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 grooves 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

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. Use the same process for the three large chimneys.

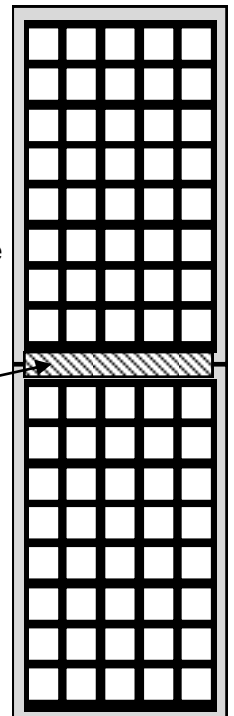
The foundation & cement frame are intended to represent a cement structure that is exposed, and should be painted a cement or light grey color prior to assembly. There are other cement details that also can be highlighted with the cement color you choose.

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 grooves/joints around the bricks and give definition. The wash should not be so dark as to overpower the cement/light grey color.

2 - Assembly & Install windows

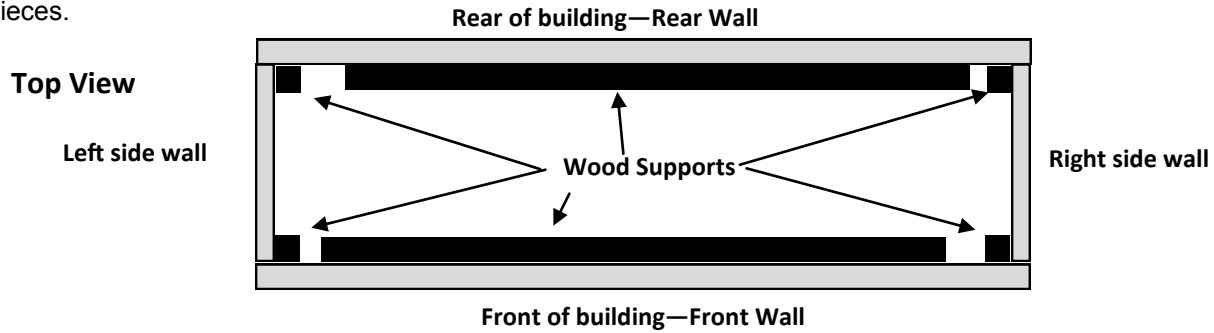
The windows are made from injection molded plastic and will have a clear plastic sheet stock applied over the opening from the inside of the model to simulate a finished window.

- Carefully remove any flashing from the window frames
- Each window frame on the office portion of this kit holds two of the injection molded windows which must be joined together on the ends using the provided small windows strip which is glued in place as shown in the diagram to the right. Repeat to make a total of 6 sets of windows
- Each window frame on the main portion of this kit holds six of the injection molded windows which must be joined together on the ends using the provided small windows strip which is glued in place as shown in the diagram to the right. Repeat to make a total of 12 sets of windows
- 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 down on a flat surface
- The windows are designed to overlay the window opening from the back, or inside of the building, and will not fit inside the window opening if installed from the front, dry fit the window assembly first, some sanding and trimming may be needed to have the multiple windows fit.
- Apply a small amount of glue around the edge of the frame and insert over the openings on the wall sections
- 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 clear plastic material over the back of each window.
- If you want the window panes to have a hazed affect, lightly sand the window material until you've achieved desired haze effect prior to cutting into small window pieces



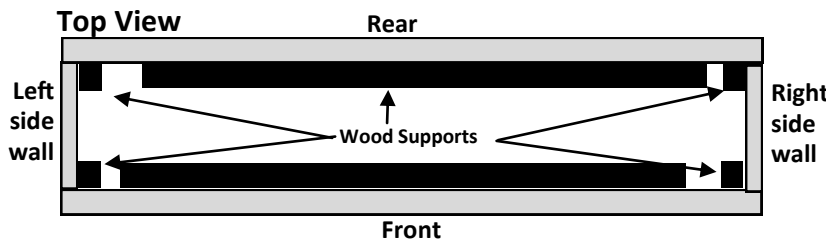
3 - Assembly of Main Structure

The assembly of the main structure is based on making a simple “box” shaped structure when viewed from the top. There are four walls, two long in the front and rear, and two narrower ones on each side. 1/4” square wood is used to add strength to the corners. Below is a top view drawing of the relationship of the wall sections and the wood support pieces.



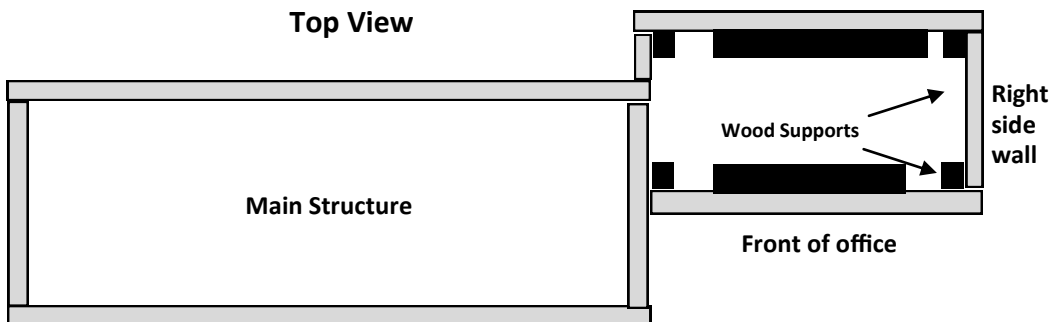
Placement of brick walls

- 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 front wall should overlay the edge of the side wall. Glue the two wall sections together, and add the 10” corner vertical wood support pieces in the corner to assist with strength and to create a solid right angle
- Some sanding may be necessary. Rough up edges only where you need to glue
- Repeat the last step but using the other sidewall, and finally repeat using the other back wall to complete the “box”
- Optionally use clamps as necessary to hold pieces together
- Glue one of the 14 3/4” long 1/4” square wood pieces on the inside center of the front wall going horizontally about 1/4” down from the top of the wall, this will support the roof
- Using the same steps as above to assemble the upper roof profile, reference the top view and photo below. Note the upper roof profile uses the 10” by 1/4” roof supports, and the 3” by 1/4” corner supports



4 - Assembly of Office Addition

The assembly of the office addition is similar to the last step, creating a “box” that attaches to the main structure. There are four walls, two (front and rear), one end wall (right side) and one narrower partial wall. Below is a top view drawing of the relationship of the wall sections and the wood support pieces.



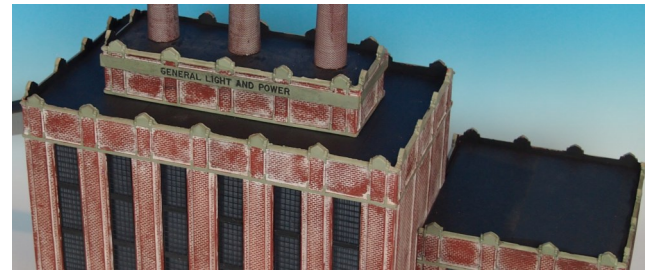
Placement of brick walls

- Take right sidewall and the front wall and line them up to make a right angle. The front wall should overlay the edge of the side wall. Glue the two wall sections together, and add the 5-3/8” corner vertical wood support pieces
- Repeat the last step but using the other rear wall, and finally repeat using the short side wall to complete the “box”, and add two of the same pieces 1/4” down from the top of the front and rear walls to support the roof

5 - Install roof

The #107 General Light and Power Plant has three rectangular flat roofs made from a black material. We will glue the piece to the wood structure 1/4" below the top of the four walls of the building.

- The black Main Roof material 14 3/4" x 5 3/4" is designed to fit inside the four walls and rest on the two wood roof support pieces. You can glue in this place.
- Place the previously construction upper roof profile in the center of the main roof . Glue in to place.
- The black Upper Roof material 10" x 3 1/2" fits inside the four walls and rest on the two wood roof support pieces of the upper roof profile section we just installed. You can glue in this place. Glue the three chimneys to the upper roof material we just installed, spacing them evenly across the upper roof.
- The black Office Roof material 7 5/8" x 5 7/16" fits inside the four walls and rest on the two wood roof support pieces. You can glue in this place.
- You may want to paint the upper inside section of the walls black to match the roof material.

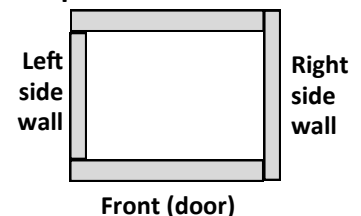


6 - Build Coal Shed and Conveyor

The coal shed is a four sided structure that glues together in a similar manner as the other wall sections. Use the diagram below as a guide.

- Glue the four walls together as shown in the diagram, align the corners to be square.
- The roof comes in one section, but needs to be scored to make two parts. Carefully score/cut the top of the roof along the molded seam to make two half's.
- Glue the two half's to the top of the angled sections on the walls just assembled.
- The coal conveyor has three parts, corrugated roof, and two "wood" sides. Carefully score with a knife and split these parts from each other as they come as one part. You may want to paint them your colors before the next step.
- Glue the side walls to the roof of the corrugated roof section being careful to match the angled ends such that they face the same way.
- The coal shed and conveyor attach to the main structure as seen in the photo to the right.

Top View



7 - Final Detailing – Weathering

Your Korber #107 General Light and Power Plant 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.