



# Korber Models

Scale Model Railroad Structures

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## Model 305 O Scale Sand House & Tower

### Instructions

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### Introduction

Congratulations, you have purchased the Korber Models #305 Sandhouse and Tower. The Sandhouse and Tower is one of the classic Korber O Scale kits. This structure represents a common feature of thousands of engine service areas seen along the tracks all across the nation.


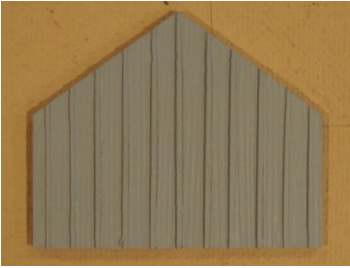
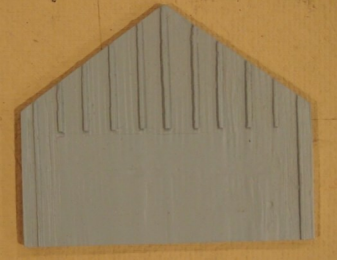
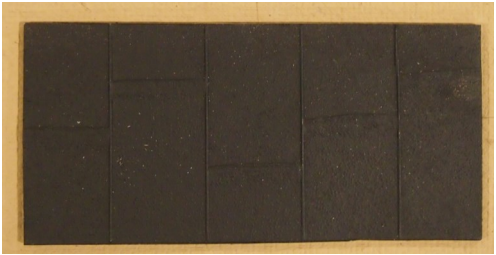

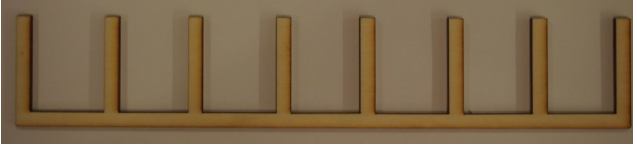
You can follow the simple, step by step instructions outlined in this document to easily assemble this great looking addition to your layout. We have covered not only the required key steps to build the building so you can get it on your layout the quickest, but have also included several optional steps 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.


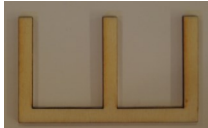
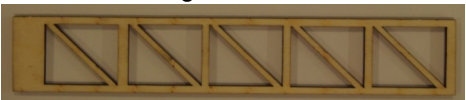





Before you start you may want to read through the instructions to get a feel for the things you will be doing, and the basic order in which they will be done. You are on your way to adding a centerpiece to your layout, so let's get started!



### Parts list – (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 to 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 |   |
|-----|---|-----|---|
| 2   | Side walls with door<br>                 | 1   | Front Wall<br>                   |
| 1   | Back Wall w/ blank area for sand bin<br> | 2   | Roof sections<br>                 |
| 2   | Sand bin long side—Plank Layer<br>       | 2   | Sand bin long side—Post layer<br> |

| Qty | Description  | Qty | Description   |
|-----|--|-----|---|
| 1   | Sand bin Short side—Plank Layer<br> | 1   | Sand bin short side—Post layer<br>   |
| 4   | Sand Tower leg—side<br>             | 1   | Sand Tower Top Plate—Rectangular<br> |
| 1   | Sand Tower Tank<br>                 | 1   | Sand Tower Tank Top—Round<br>        |
| 24" | Sand Tower Piping—Wire<br>          | 1   | Injection Molded Smoke Stack<br>      |

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

The Korber #305 Sandhouse & 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, Light grey (automotive grey primer) or Flat Brown (Camouflage Brown) for building walls.—RustOleum camouflage flat spray paints work well

Flat Black (Camouflage Black) for roof sections, and sand tower

Flat Brown (Camouflage Brown) for sand bin timbers

- Paper towels or soft cloth rags
- Cyanoacrylate (CA) glue. Also known as Super Glue, Gorilla™ super glue works well  
We really like the new Gorilla brand super glue because it is thicker than most super glues, and allows you to put in 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
- Medium grit sandpaper or emery board
- Play Sand—used to fill the sand bin.— Available at stores like Home Depot or Lowes.
- 17" by 4" by 1/8" Masonite or Luan plywood to form a base
- Testor's Dull-cote™ (optional)
- Small clamps (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 assembly. All the wall sections are colored in a light grey color like aged wood and are ready to use. Optionally, the Camouflage Brown provides a nice freshly painted look. In a well ventilated area (outside is good) apply a coat to the outside (detailed side) of all the wall sections. Now is also a good time to paint the roof sections a flat black.

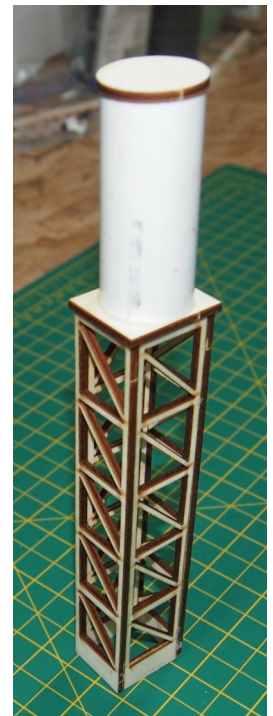
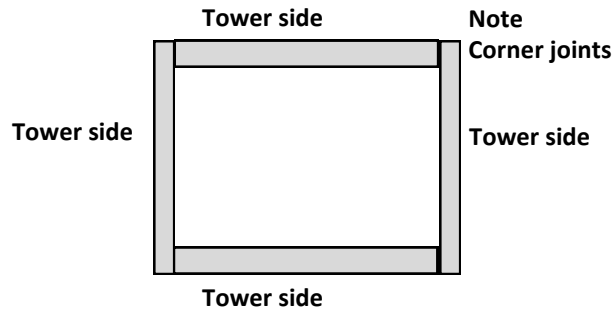
Once dry, the wall sections should be washed using a mix of either watered down black paint, or alcohol and India ink. The purpose of the wash is to settle the black color in the groves/joints on the walls and give definition.

## 2 - Assembly of Sanding Tower

The tower is made up of a four tower legs and topped with a rectangular platform and cylinder .

- The tower legs/sides are all the same; however, do pay close attention to make sure the angle cross braces on the sections are going in the same direction: high at the left side, and lower on the right. The parts will fit either way, but the cross brace pattern can get out of sync with the next side. See the picture on the right.
- Glue two sections together to form a right angle aligned at the corners, following the diagram below.
- You may find using a right angle piece of material, or even a square piece wood secured to your workbench provides a nice guide to get a clean joint of the two sides.
- Repeat this step for two additional sides to create a four sided tower.
- Glue the rectangular sand tower top plate to the top of the four sided tower.
- Glue the cylindrical sand tank to the top of the sand tower top plate.
- Glue the round sand tank top to the top of the sand tank. You may want to use small clamps to hold the pieces together while the glue dries.
- Drill a 1/8" hole in the base of the sand tank on one side.
- Cut a piece of the sand tower piping—(wire) 10" long and bend to match the shape of the outline to the right, This represents the pipe/-hose used to fill the locomotives sand box. Once the part is formed, insert the short end into the hole and glue in to place, using the photo of the completed kit on the first page of these instructions as a guide.
- If you intend on placing the tower directly next to the sand house, repeat the previous step, but drill the hole at the top of the sand tank on the side of the tower that will be placed up against the building. This is where an additional pipe/wire will attach in a later step.
- Once complete, paint the entire tower and pipes flat black.

Top View



Form 10" wire to this shape for sand pipe/hose

## 3 - Assembly of Main Structure

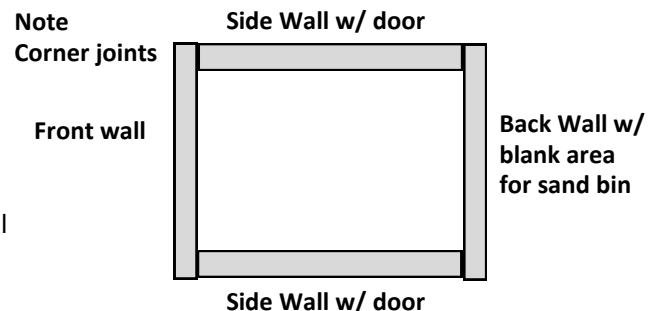
The assembly of the main structure is based on making a simple "box" when viewed from the top. Each of the two, longer side walls has a door in the wall. The end walls, front and back, are shorter and have the peaked roof line. To the right is a top-down view drawing of the relationship of the wall sections.

This kit is fairly long once you add the sand bin therefore it is recommended that you construct the kit on a 1/8" Masonite or plywood base, approximately 4" by 17" (16" if tower located remotely from the sandhouse) for added rigidity.

### Placement of walls

- Take one sidewall and end wall and line them up to make a right angle. The use of a small square is helpful. The end wall should overlay the edge of the side wall. Some sanding may be necessary. Rough up edges only where you need to glue. Glue the two wall sections together and let dry
- Repeat the last step but using the other end wall, and finally repeat using the other side wall assembly to complete the "box".
- Optionally use clamps as necessary to hold pieces together

Top View

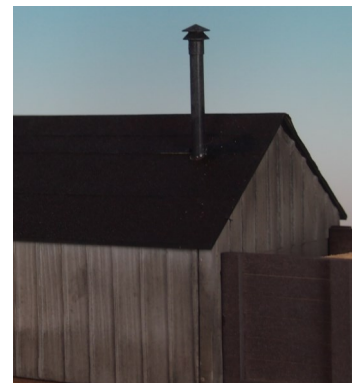


## 4 - Install Roof

The #305 Sandhouse has a two sided peaked roof made from plastic. The intent is to glue these pieces together and to the front and back walls of the building.

- The roof is designed so two pieces fit resting on the front and back walls and joined at the peak. Dry fit in place, and

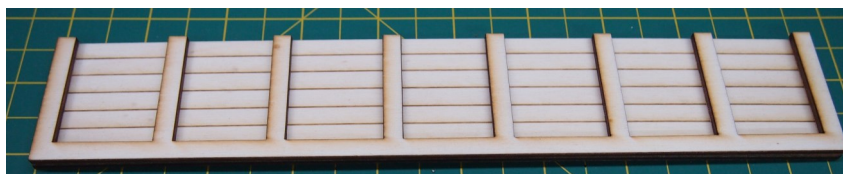
note that some trimming may be needed for a flush fit. Align the center seam at the peak of the roof, leaving a small overhang of roof material over the front and back walls.



- Use a small piece of tape (black is good) to tape the two roof sections together at the peak on the underside of the roof material (smooth side). Place back on the building as before and glue it in to place.
- The injection molded smoke stack is designed to attach in a hole you will drill in the roof. First remove the bottom section of the smoke stack as shown in the photo above and discard. Drill a small hole in the roof the same size as the diameter of the smoke stack.
- Place the bottom of the smoke stack (the end you just removed a piece from) in the hole in the roof, and glue in to place.

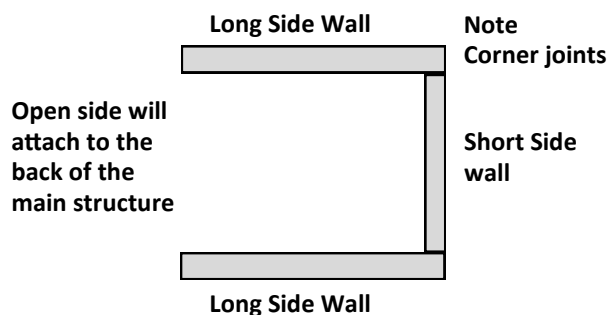
## 5 - Assembly of Sand Bin

The Sandhouse and Tower kit includes a rectangular wood bin which holds the sand waiting to be dried. We will assemble this bin, and attach it to the end of the main structure we just constructed



Top View

- The sand bin has three wooden sides, with the fourth side being the back of the main structure. Each of the three wooden sides has two layers- a plank layer, and a post layer.
- Lay the plank layer of a long side on your work surface, engraved side up. Place the long side post layer on top of the plank layer and dry fit together making sure all sides are flush to one and other. Glue together as shown in the photo above.
- Repeat the previous step for the second long side, and for the short side.
- Glue the sides together to form a “U” as seen in the diagram to the right. Be careful to overlap the long side walls over the end of the short side wall. The use of a small square may be helpful.
- Optionally use clamps as necessary to hold pieces together
- Once dry attach the sand bin assembly to the back wall of the main structure, and the base you are building the model on as shown in the photo to the right.
- Optionally use clamps as necessary to hold pieces together—Once dry fill the sand bin with the play sand



## 6 - Placement of Sand House and Tower

The #305 Sandhouse and Tower can be placed on the layout either with the tower adjacent to the Sandhouse or remotely from the sand house. In either case the tower needs to be glued to the layout so that it does not tip over.

- If you place the tower adjacent to the sand house, the top pipe you installed in the tower build needs to be attached to the roof of the sandhouse. Align the tower next to the sand house, and mark the spot on the roof where the pipe attached to the top of the sand tank meets the roof. Drill a 1/8” hole at the spot you marked, insert the top feed pipe into the newly drilled hole and glue in to place.
- If you want to mount the tower remotely from the sandhouse, form another pipe using the guide in the tower step, from the remaining longer piece of wire (approx. 14”). Drill a 1/8” hole at the top side of the sand tank, insert the newly formed pipe and glue in to place. This newly attached pipe extends below the base of the tower, trim the pipe to match the base of the tower as this pipe will also be glued to the layout.

## 7 - Final Detailing – Weathering

Your Korber #305 Sandhouse and 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.