

A 1" Scale Bobber Caboose Kit

From the Austin & Texas Central Railroad



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Description

This kit was born from a desire to build a large-scale model that could be carried on a commercial airline. It was determined that the largest item than can fit in the overhead bin is a 1" bobber caboose.

The design was inspired by the DL&W Bobbers of the late 1890s. An excellent surviving example is the Morristown & Eric Caboose No. 1 (built as DL&W Bobber No. 4 in 1899) at the Whippany Railway Museum (<http://www.whippanyrailwaymuseum.net/exhibits/equipment/cabooses/m-a-e-qbobberq>). Once the kit is built, the body length is 15 inches and the length over the end sills is 20 inches. The body is 9½ inches wide. The height from the bottom of the body to the top of the cupola is 11 inches.

The kit is comprised of laser cut ¼" and 1/8" Baltic Birch plywood for all large or structural components, basswood for window and door trim, and acrylic sheet for window panes. All critical mating points use tab-and-slot and box joints for strength. The grooves between wood planks along the body walls and end platforms are laser scribed.

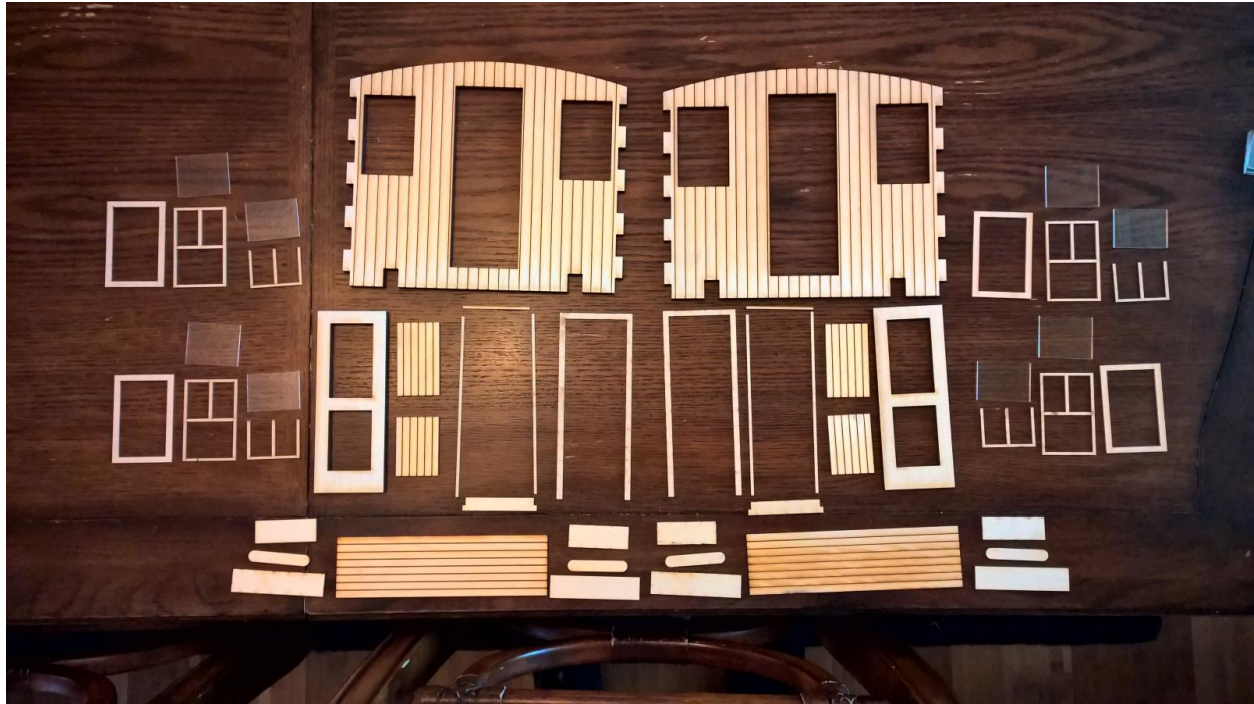
Assemble the kit with common wood glue. Light filing or sanding may be necessary, but all joints should be very tight. Be very careful when test fitting parts as damage may occur when disassembling. For best finishing results, use an opaque stain or thinned paint that the wood can readily absorb. This will allow the wood grain to stand out and not fill in the grooves. The box joints vanish with an opaque stain.

This kit includes only wood and acrylic components to construct the caboose body. The builder is expected to supply any components necessary to take this kit from a caboose body to a ready-to-roll model. This includes constructing a roof, frame, pedestals, wheels, axles, couplers, railings, ladders.

The assembly steps outlined below should serve as guidance. Read through them thoroughly before beginning in case you wish to modify your procedures.

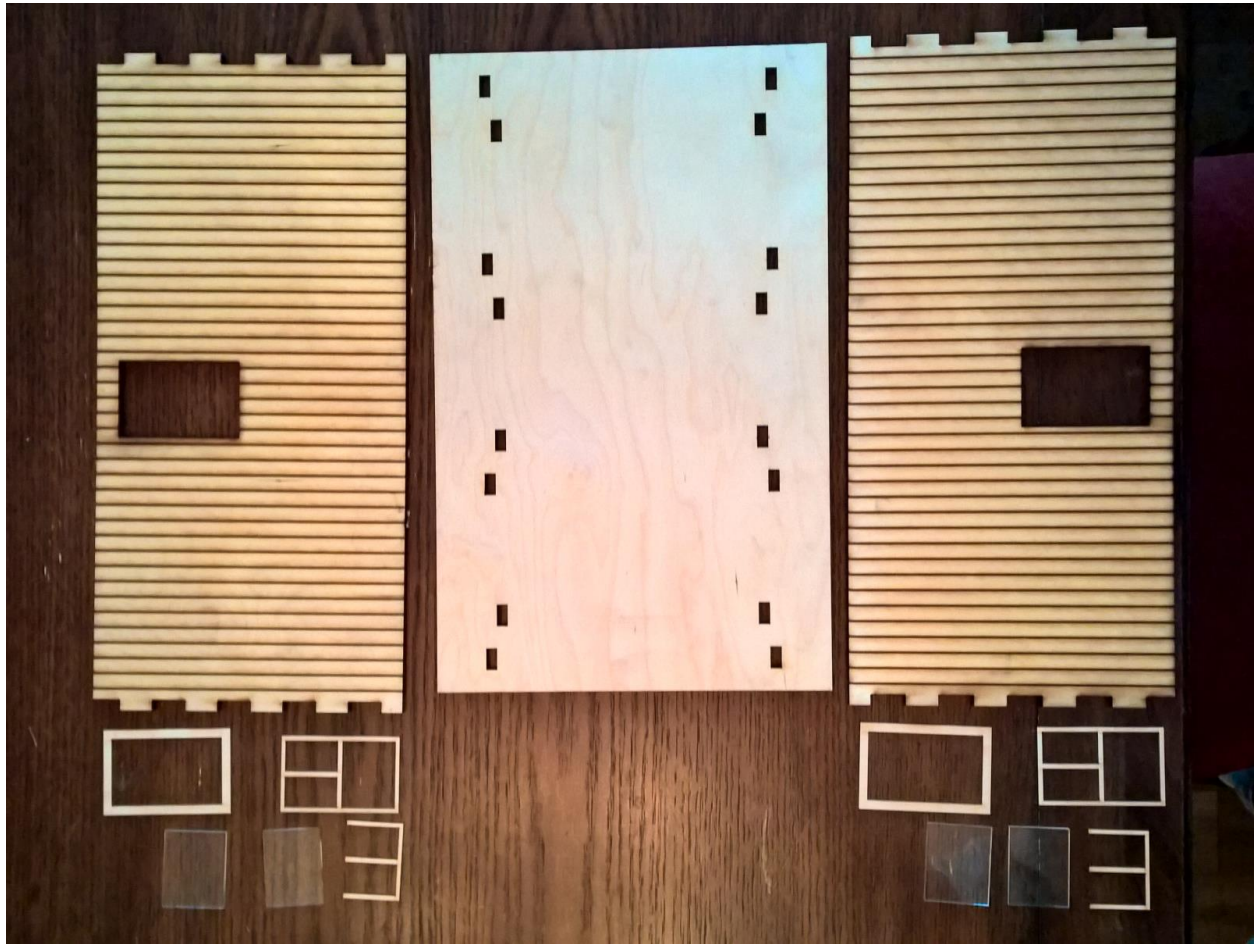
Parts Listing

Body Ends



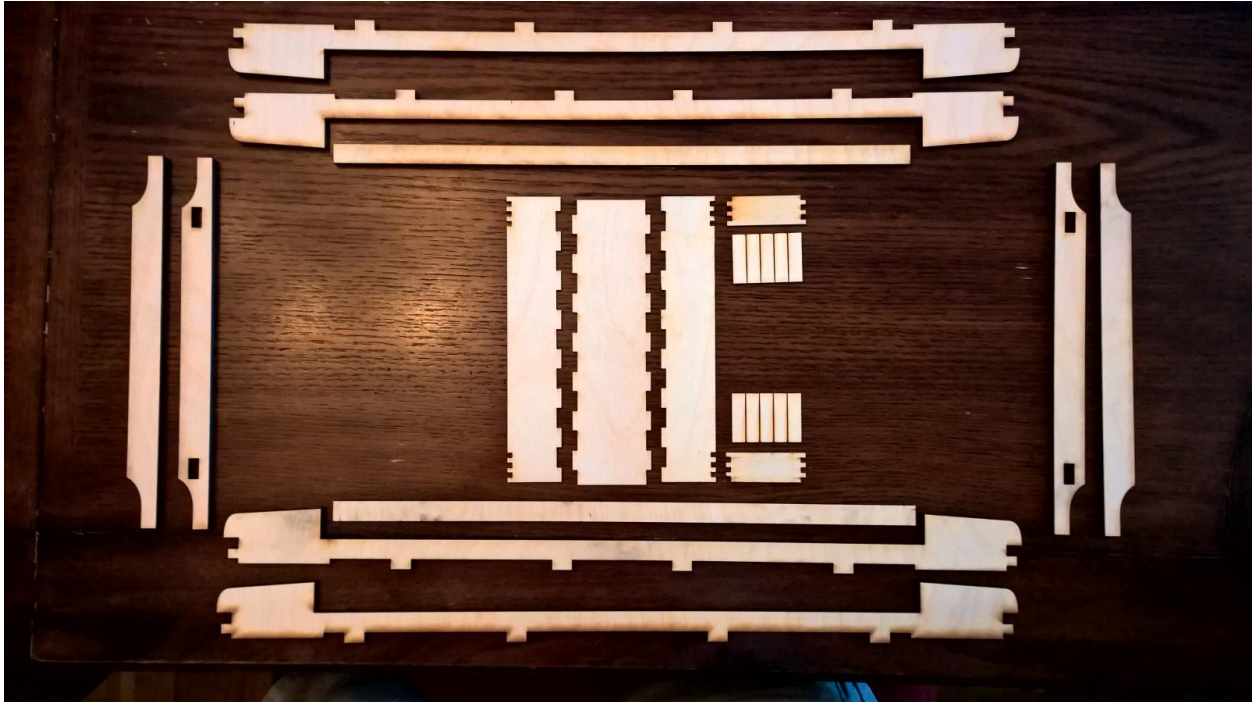
- End wall, qty 2
- Door, qty 2
- Upper door insert, qty 2
- Lower door insert, qty 2
- Door frame, qty 2
- Upper door stop, qty 2
- Side door stop, qty 4
- Door threshold, qty 2
- Window frame, qty 4
- Window fixed sash, qty 4
- Window inner sash, qty 4
- Window fixed pane, qty 4
- Window inner pane, qty 4
- End platform, qty 2
- Upper step, qty 4
- Toe kick, qty 4
- Lower step, qty 4

Body



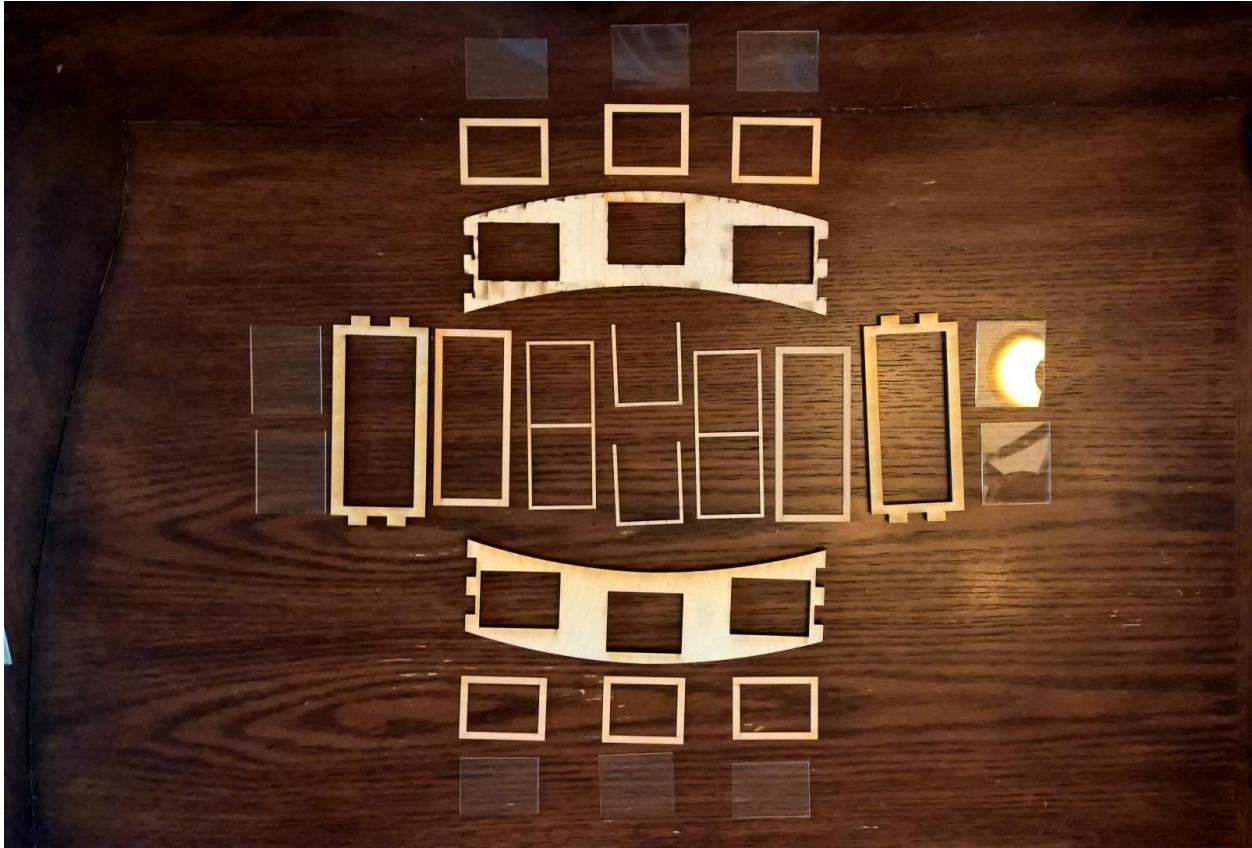
- Side wall, qty 2
- Floor, qty 1
- Window frame, qty 2
- Window fixed sash, qty 2
- Window inner sash, qty 2
- Window fixed pane, qty 2
- Window inner pane, qty 2

Frame



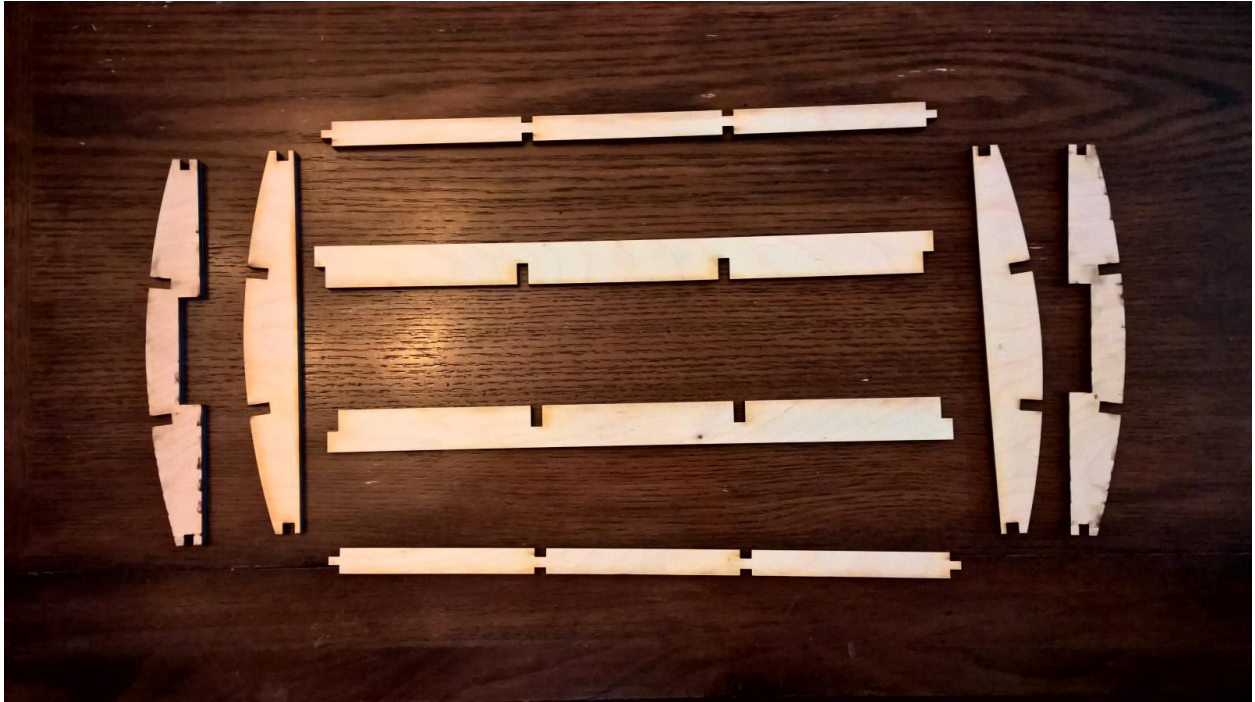
- Frame beam with outer tabs, qty 2
- Frame beam with inner tabs, qty 2
- Frame beam with no tabs, qty 2
- End sill with slots, qty 2
- End sill with no slots, qty 2
- Battery box bottom, qty 1
- Battery box side, qty 2
- Battery box upper mounting plate, qty 2
- Battery box door, qty 2

Cupola



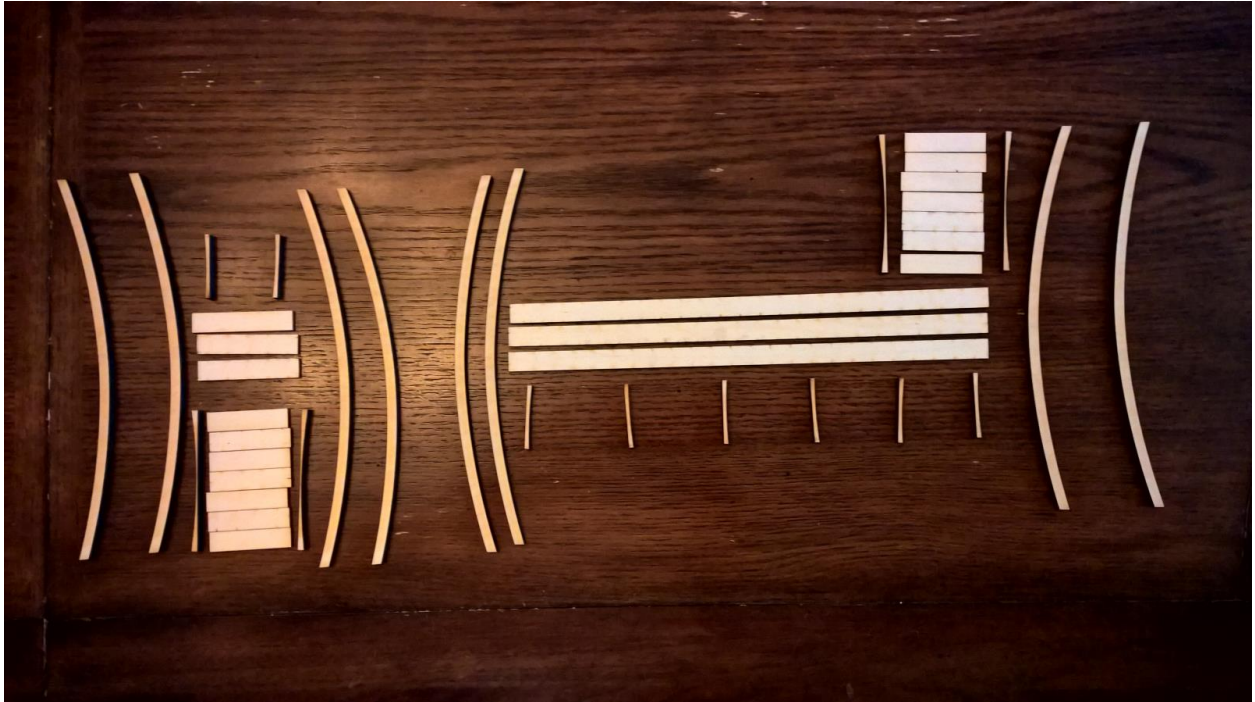
- End wall, qty 2
- Side wall, qty 2
- Center end wall window frame, qty 2
- Center end wall window pane, qty 2
- Outer end wall window frame, qty 4
- Side wall window frame, qty 2
- Side wall window fixed sash, qty 2
- Side wall window inner sash, qty 2
- Side wall window fixed pane, qty 2
- Side wall window inner pane, qty 2

Roof Frame



- End roof frame spreader, qty 2
- Inner roof frame spreader, qty 2
- Side roof frame beam, qty 2
- Inner roof frame beam, qty 2

Roof Detail

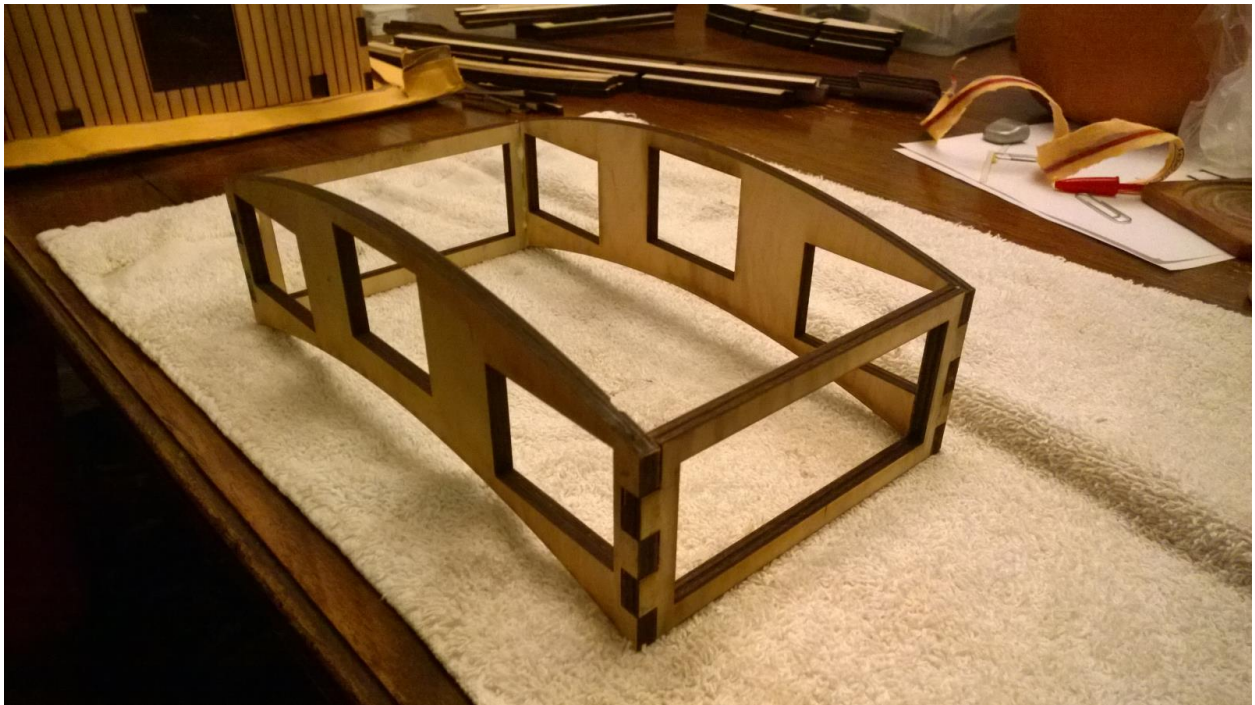


- Roof bow, qty 8
- Catwalk support, qty 8
- Short end catwalk plank, qty 3
- Long end catwalk plank, qty 3
- Catwalk approach support, qty 4
- Catwalk approach plank, qty 14

Assembly Guidance



Glue the main walls together. To ensure a square body, suspend the floor in the body supporting it with the frame beams resting through the end windows



Glue the cupola walls together. Be sure to check square.



Glue the tabbed frame beams to the floor and to each other. Be sure to clamp the ends of each frame beam to make the end sill assembly easier. Glue the floor/frame assembly to the body.



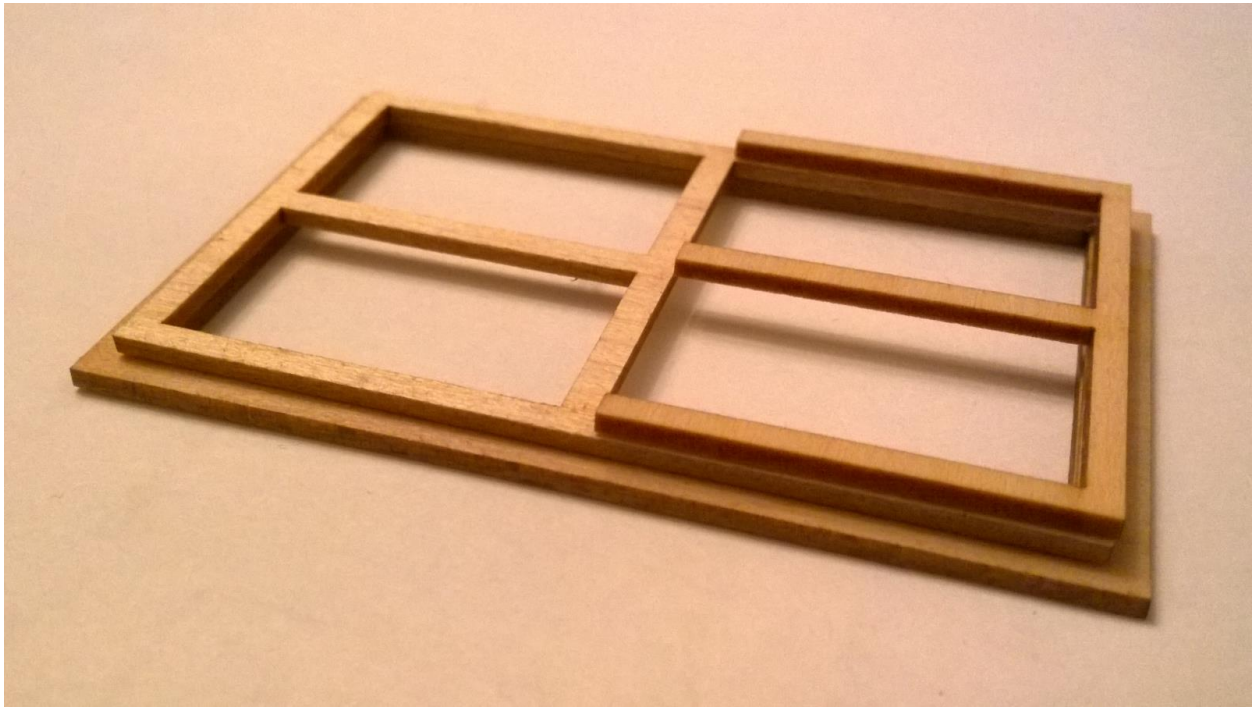
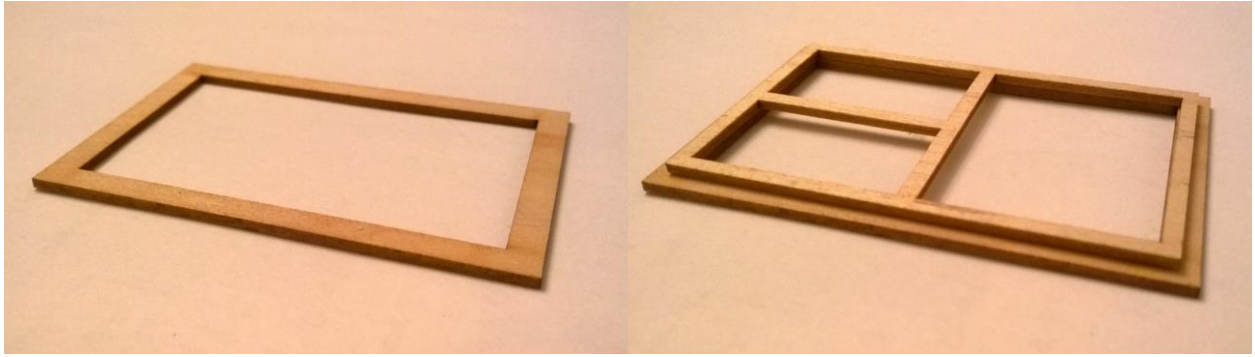
Glue and clamp the untabbed frame beam to the floor/frame assembly on the outside of the frame beams.



Glue and clamp the end sills to the tabs on the end of the frame beams. The untabbed end sills should be glued to the ends covering the tabs.

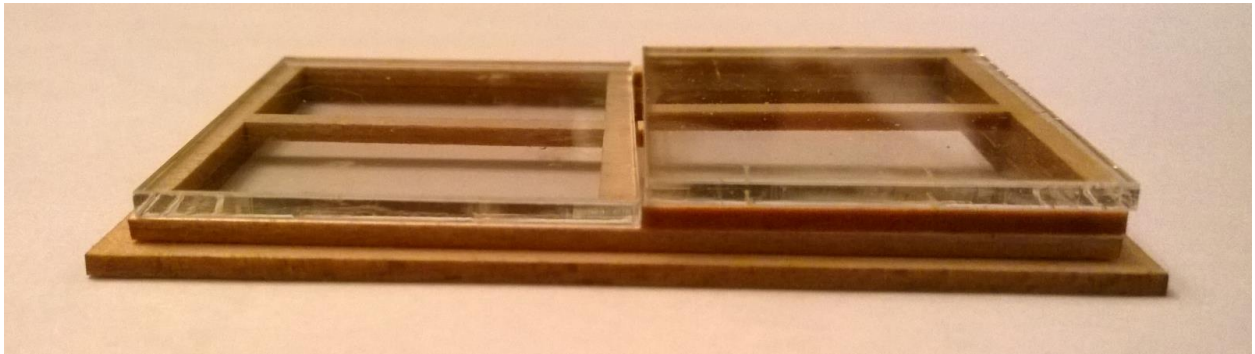
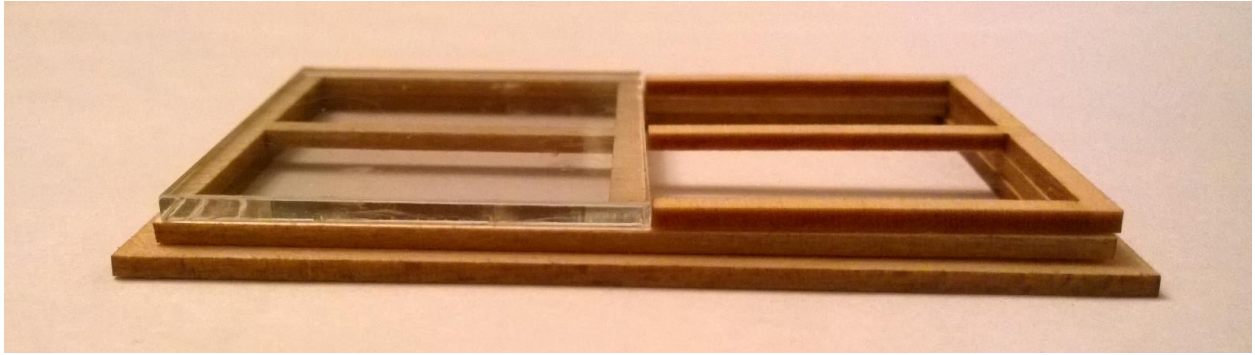


Glue the platform to the ends.



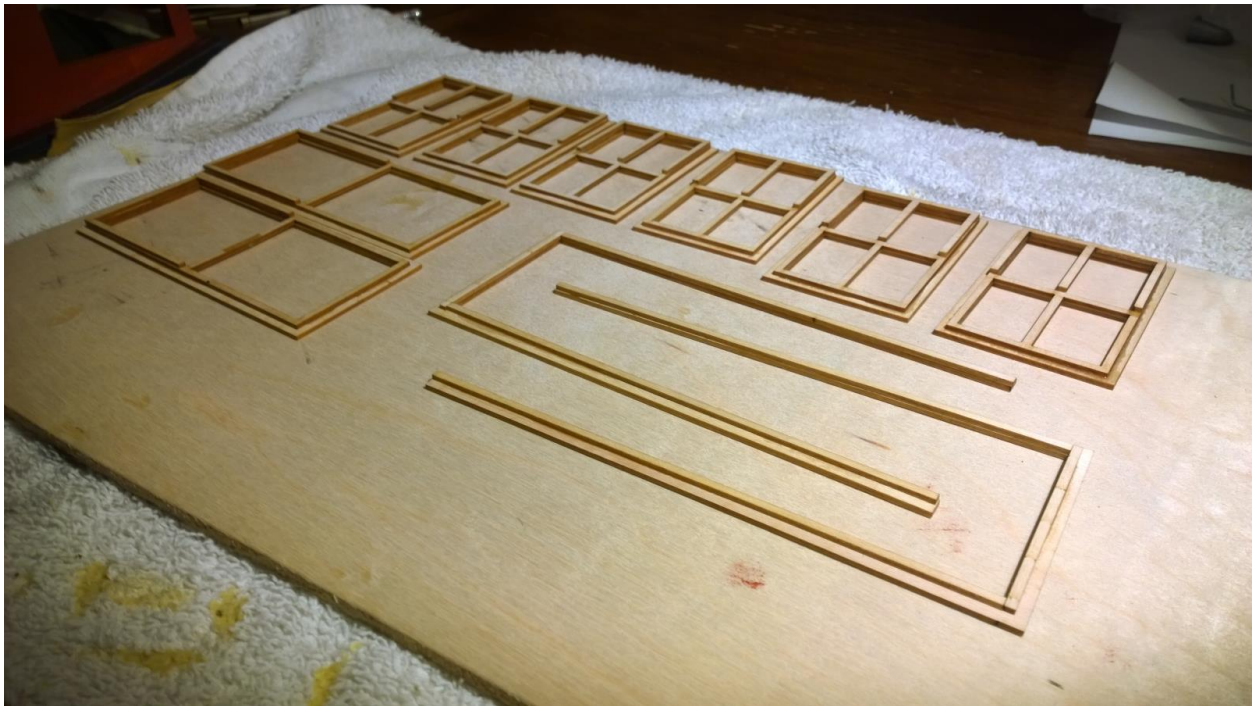
Glue the window frames and sashes together.

Before attaching the window panes, it is a good time to paint or stain the window frames.



Glue the acrylic window panes to the window frames.

Now is a good time to spray paint or frost the inside of the windows, if desired.

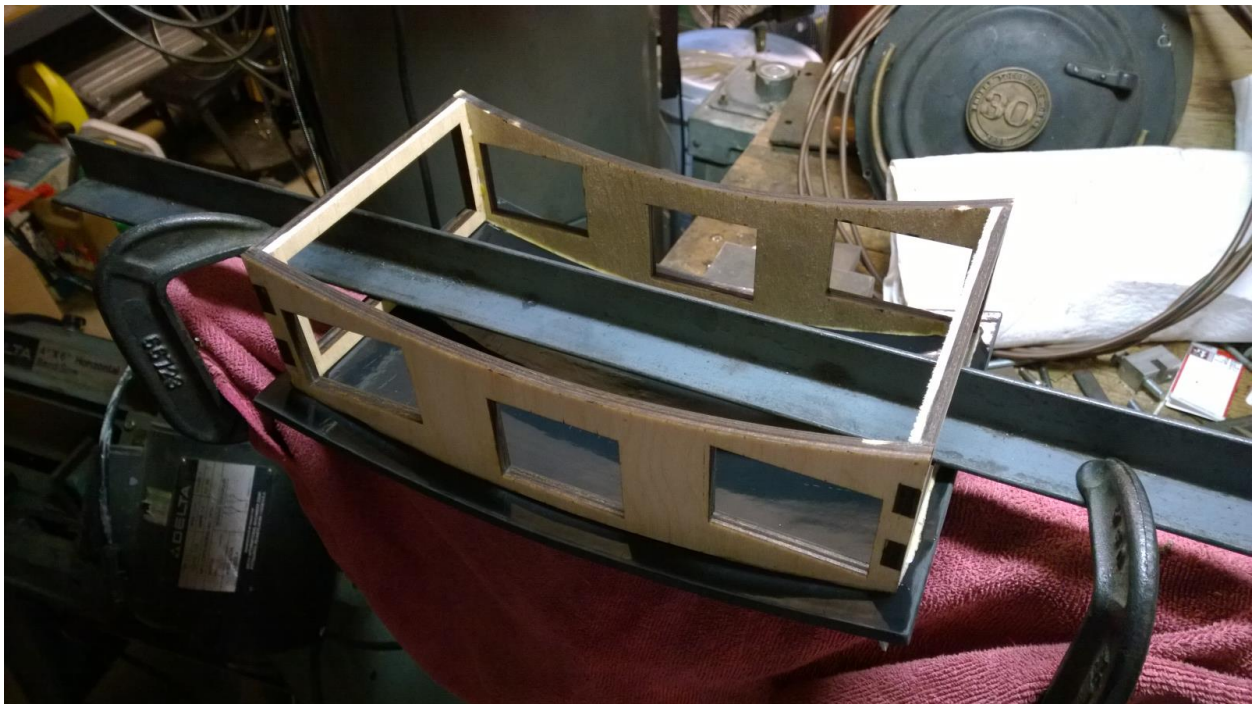


Glue the door frames together. Once dry, it is a good time to paint or stain the door frames.

Glue the window assemblies to the body and cupola from the inside.



Assemble and glue the roof frame. Be sure to check square and that it will match the body. Now is a good time to construct a roof and attach the roof frame creating the main roof assembly.



Construct a cupola roof and attach the cupola to the roof. Depending on how you construct your roof, this is the last time to have access to the interior of the cupola.



Attach the curved roof beams to the underside ends of the main roof and cupola roof assemblies. The number and position of installation are the builder's choice.



Attach the cupola to the main roof assembly.



Glue the catwalk to the main roof.

Glue the door insert panels to the doors. After the glue is dry, it is a good time to paint or stain the doors.

Glue the door thresholds

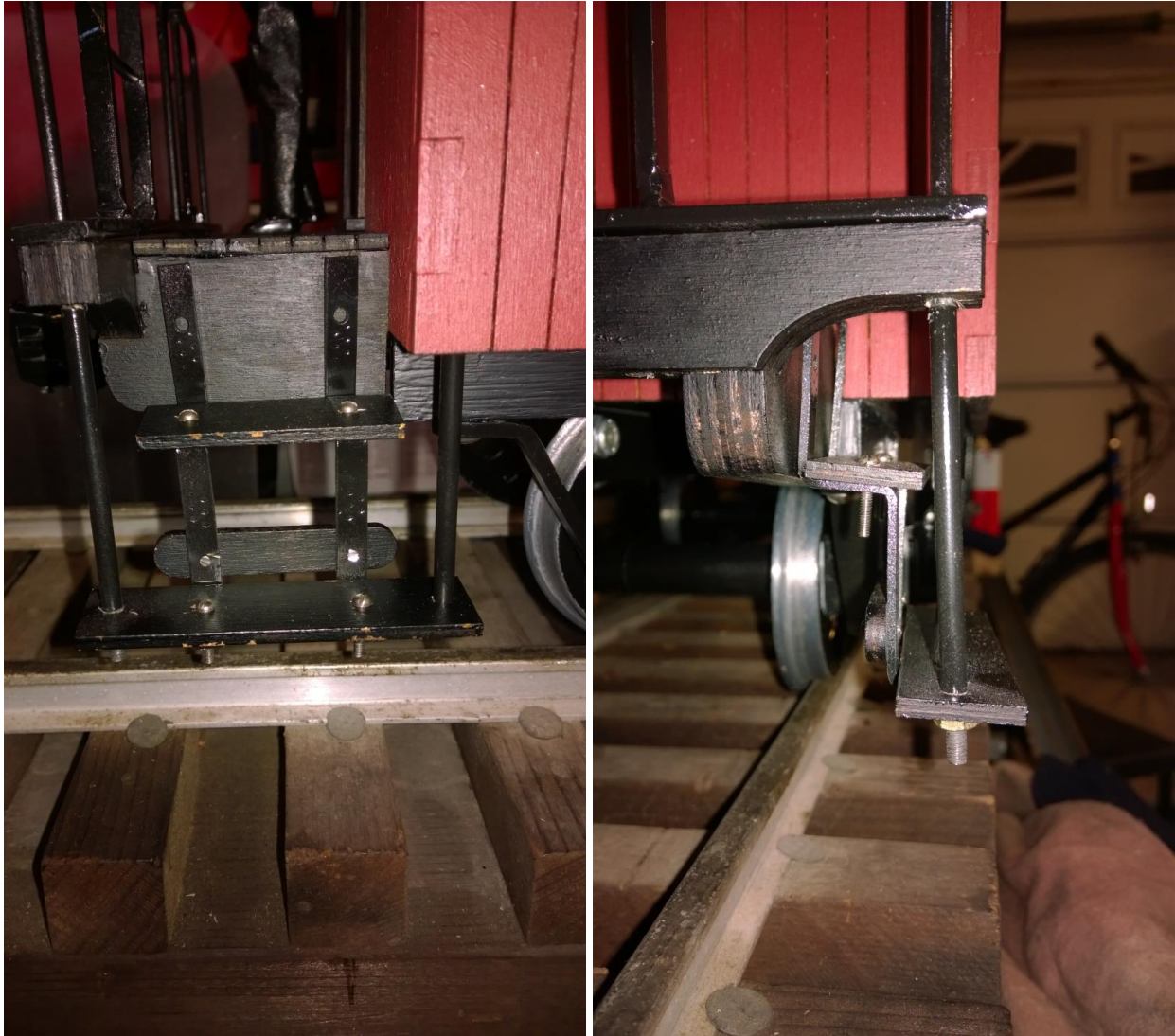
Glue the door frames to the body from the outside.



Glue the doors to the body from the inside.



Glue together the battery box for mounting under your frame.



Study the pictures for an example of mounting the steps.

As a reminder, this kit only includes the wood and acrylic components. The builder is expected to design and construct all remaining parts necessary to complete a ready-to-roll model.

A Completed Example

This model flew from Texas in January 2015 to attend the Echtdampf Hallentreffen in Karlsruhe, Germany.

