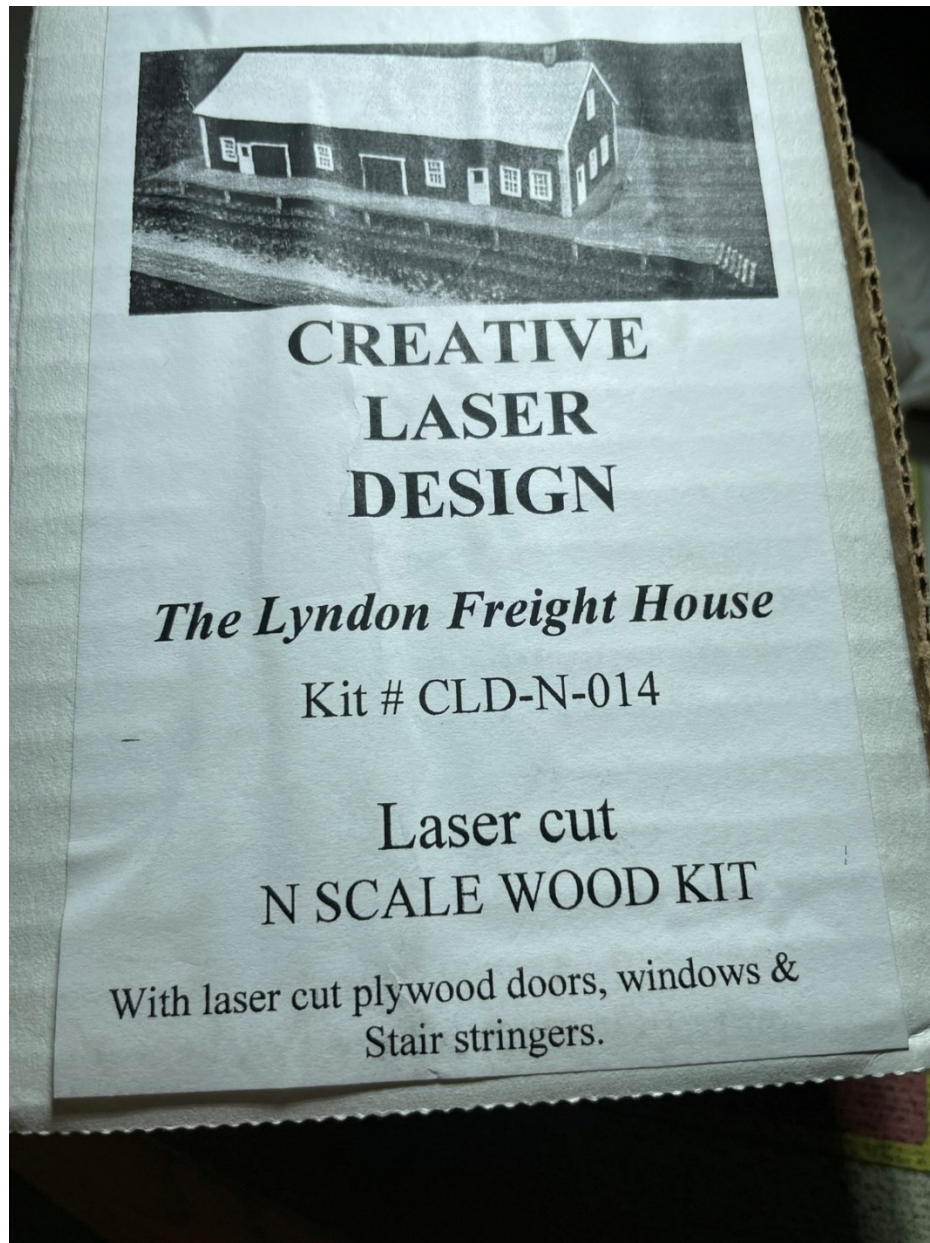


Building a Laser-Cut Wood Freight House

In this Update I will build the “Lyndon Freight House” kit #CLD-N-014 from Creative Laser Design. I am not sure if they are still in business – they were active at model railroad shows here in the northeast for years, but I cannot find anything current about them on the web now. I bought this kit on eBay last year. The packaging label is shown here.

[N-Circle_26-06-21_LyndonFreight](#)



The kit comes with good instructions - simple but clear, with useful photos and diagrams. They do not contain a lot of details – much is left for the modeler to figure out, but they are better than I have found in most other wood kits. In this article I will provide pointers where some assembly steps may not be clear.

The wood panels for the walls are a bit thicker than with many other wood kits. While they may be a bit too thick for the scale, this does not detract from the final appearance, and they are much easier to work with. However, the window and doors and frames are the same thin thickness as with other wood kits, but the laser cutting was very good – you only have to remove a small stitch in the corners of pieces to release them from the sprue, which reduces the risk of breaking them.

This is not a peel-and-stick kit, you just apply wood glue and slide the detail trim pieces into alignment. Gluing the frames to the window sashes and doors therefore was reasonably easy, if you have good eyes and steady hands! I placed them all on a glass plate, then put a second glass plate over them with a weight to clamp the wood glue more firmly while drying.

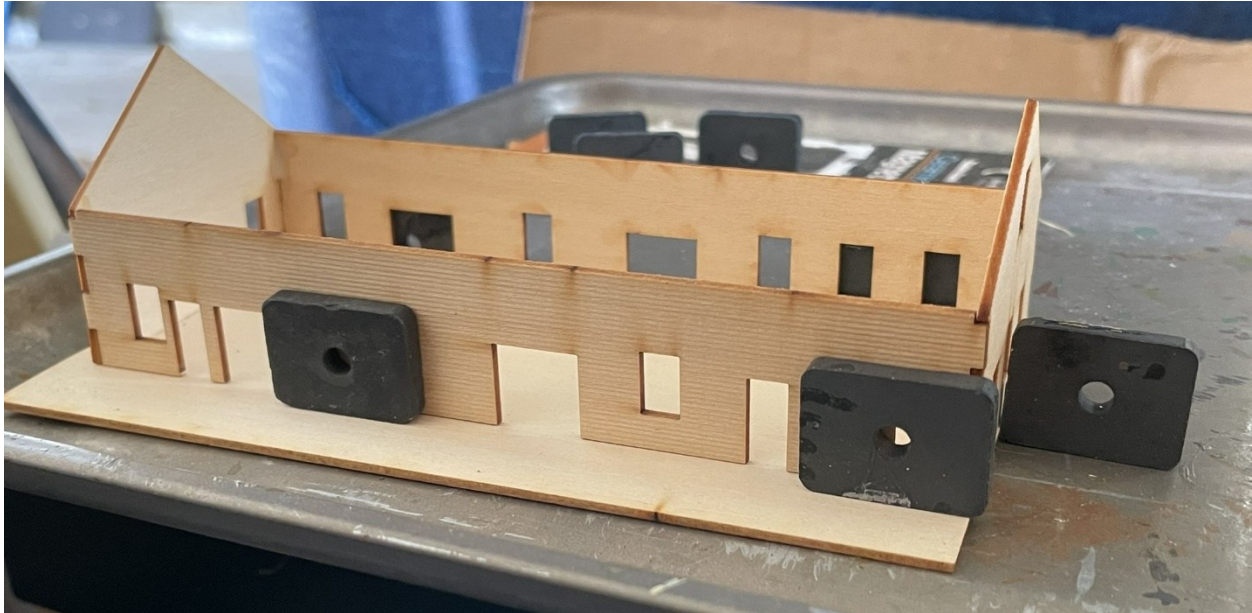
Note that the door frames are thinner on one end than the other, I assume intentionally, though there is no mention of this in the instructions. I assumed the thinner edge was to go on the bottom, to create a sill, while the upper end maintained the same width as the side frames. Why a kit creator goes to the trouble of designing in this kind of detail but doesn't point it out in the instructions so the customer can build the kit "correctly" is beyond me, but this is very common among laser-cut wood kits.

I mostly followed the instructions for this kit. I assembled the four walls first, before attaching the doors and windows, as the structure is so large it is easy to access the inside later.

The tabs on the two end panels appear to be identical – I did not think to test this before gluing the walls together, but it appears that one could accidentally swap the ends relative to the sides. Fortunately, I studied the photo in the instructions carefully before gluing! Though perhaps "it's not a flaw, it's a feature!" if you wanted the end with the loading door to be on the opposite end relative to the rail loading dock. The tabs and notches in the walls were well cut and aligned, which eased assembly.

To ensure the four walls would be square, I placed them on the floor panel in the metal assembly tray and used the edges of the floor to align the sides. The usual set of magnets were used to hold the walls in place to dry. Just be careful not to get glue on the bottom edges of the walls, you do not want to glue them to the floor at this point!

[N-Circle_26-06-23_LyndonFreight_Cropped](#)



I added internal corner shims cut from scraps of wood after the initial joints were dry to strengthen the structure during later handling in the assembly process.

With a little web research, I found that the Lyndonville Vermont Freight House is still standing today and is now a store-cafe. This research confirmed what I suspected from the black-and-white photos in the kit: the walls were red, with white trim. But I was not trying to duplicate the original structure specifically and I did not want this building to look like the Country Barn from Update 24, which will only be a few blocks away. Therefore, I painted the walls white with medium green trim – that seemed like a traditional Vermont color scheme. I did not prime the trim or walls first but rather choose to have the natural wood color show through for my usual lazy “weathered” look.

When painting the walls, I brushed plain water on the inside surfaces to counteract possible bowing from the acrylic paint. This work fine for the main walls, the upper sections of the end walls bowed out slightly at first, but then returned to straight, so it was not a problem later when glueing the ridgepole in place between the tops of the two ends, and I did not regret not having installed the ridge pole first, per the instructions.

I installed the windows and doors before the roof support beams and roof, so the structure would lay flat on the workbench during this work, and I could access them through both the top and bottom. Gluing them into the openings with wood glue was easy, they fit very well.

The window glaze has to be cut from a sheet of clear plastic for each window. Measure carefully, as the piece has to fit inside the wall opening to be flush to the back of the window sash. If you just cut a larger rectangle and attach it to the inside of the wall, there will be a noticeable gap between the glaze and the window frame. But the windows are all the same size, so that simplifies cutting the glaze

The inside dimensions of the windows are 8x5 mm. To make it easier to cut these fine dimensions accurately, I drew a pencil line 8 mm in from the edge of a piece of white copier paper, laid the paper on a cutting board, then aligned the long edge of the sheet of glaze to the edge of the paper. It was then easy to cut the glaze with a sharp hobby knife, following the pencil line seen through the glaze. The set up is shown here.

[N-Circle_26-06-26_LyndonFreight_Cropped](#)



I made a similar template of lines 5 mm apart to cut the 8 mm strip into 5 mm segments. I then attached the glaze to the windows with Micro Scale Kristal Klear.

Very thin wood stock is provided to cut to lengths for the trim around the freight doors. However, I believe there should have been two pieces in the kit, I only had one, so I had to cut and splice in parts from the scrap box for the top sections.

The four large freight doors have wider scribed panel spacings than the siding on the walls. Be sure to distinguish these from cut-outs from the openings in the walls for these doors – some of these scraps may be in the bag of parts for the kit.

The freight doors are larger than the wall openings, so they do not fit into the openings like the other windows and doors. The photos in the instructions show them attached to the outside of the walls, with the trim around them. For nitpickers, it is not clear how one would open these doors, unless they were to swing out, which would then obstruct movement on the loading dock. Therefore, I glued them to the inside of the wall and assume they move sideways on rails inside the building. I don't know how they really worked on the prototype for this structure. I attached them with the slats running vertically, perpendicular to the siding on the walls. I am not sure if

that is how they are “supposed” to be mounted, but it looked more interesting and they fit well in this orientation.

I left one of the two freight doors open on each side and added forklifts, crates and workmen in the doorways to make the scene more interesting, as we will see in the final completed photos.

The ridge pole for the roof is made from two 3/16-inch-wide wood pieces. Note that these are the two slightly shorter pieces in the kit. The two slightly longer and two shorter 1/4-inch-wide pieces are precut to the lengths of the four sides of the floor base for the foundation.

I glued the two ridge pole beams together face-to-face first and allowed them to dry. The ridge pole is butt-glued to the end walls; there are no slots to engage it. The rafters are also butt-glued to the ridge pole and the side walls.

To hold them in place, I placed the structure on glass plates with one open side of the top down before gluing in place the ridge pole with one center rafter to get everything aligned properly. After the glue was partially set, I rolled it over onto the other open top and inserted the opposite center rafter, as seen in the next photo. The precut angles on the ends of the rafters force the ridgepole to be aligned vertically. The glass plates prevent having the structure glued to the workbench – it is much easier to pry any glue spots loose from the glass with the edge of a sharp knife.

[N-Circle_26-06-28_LyndonFreight_Cropped](#)



Once the initial glue joints were set, I glued in the remaining four rafters, again using the glass plates beneath to press them against to ensure alignment with the plane of the underside of the roof panels later.

I opted not to glue shims around these joints to strengthen them because when the roof panels are glued on the top, this will create a strong three-dimensional glued structure. Realize that when the building is complete, none of this roof support structure will be visible, so you don't need to worry about how neat your glue joints appear.

There are four roof panels, each spans half the length of the building on the two sides. I painted them first with Vallejo grey primer, using the usual technique of “painting” the backsides with

plain water first, but they still started to warp significantly. Therefore, I put them in a sandwich stack with glass plates with a heavy weight on top to force them flat while drying.

They ended up flat, then I painted them with watered-down Polly-Scale ATSF Silver and they had to be clamped again, even with the primer already on them. I used a watery mix of the silver paint so the grey primer would show through some and the roof would look like old metal, not all shiny.

After the roof support structure was dry, I glued the roof panels in place, again using wood glue. Note that the panels are cut square, so where they meet at the peak creates a V-shaped gap. With more foresight, one could bevel the edges of the panels so that the edges of the top surfaces would meet with a flush joint. Not having that foresight, I filled the gap with a section of the 1/16-inch square wood provided for the dock support legs (I suspect they put two 1/16 inch sticks in the kit, more than needed for the dock legs, but fortuitous for filling the roof peak gap, rather than the two strips of thin wood needed for the freight door trim and stair treads...)

With the length of the roof being formed from two panels, you end up with a seam down the center. The panel ends are cut square, so it is a very narrow seam, but visible, nonetheless. But with some paint in the gap and weathering chalks over the area, it is not too noticeable.

I suspect the thin wood that was to be used for the freight doors trim was also supposed to be used for the stair treads but was missing in my kit. Fortunately, I had saved the wood cutouts from the Monroe Models barnyard fence kit built in Update 29. It turns out they were perfect for the stair treads! They were about 14 mm long, so I just had to cut them down to 10 mm and 6 mm lengths for the two sets of stairs. I did not build the third set stairs for the end of the loading dock; they will be very fragile without additional supports. The truck drivers will just have to walk up the ramp!

The instructions for the stairs just say: "We used double sided tape to glue assembly," with no further explanation. Using this as a cue, I created an alignment jig with a piece of double-sided tape on a piece of white copier paper, using three assembly magnets to set the two stairway widths, as seen in the following photo. Obviously, magnets are not needed here, they were just handy blocks nearby. The tape will hold whatever material blocks you use.

[N-Circle_26-06-27_LyndonFreight_Cropped](#)



I started by just attaching the two bottom treads and letting them dry before pulling away the magnets and adding the rest. This was very painstaking work – while I would say it was an interesting “challenge,” I would not say that it was remotely “fun.”

In retrospect, I realized that I should have cut a block the width of the desired spacing between the two stringers from some scrap material, placed it between them, then pressed the two magnets snug up against the outer sides. With the ends of the stringers extending beyond the blocks on one end as in the photo above, it would have been much easier to then glue the first two treads in place, let them dry, then add the remaining treads without the alignment blocks. Too late for me, but hopefully this helps you!

I suspect that in the larger scale versions of this kit, the stringers are thick enough that they stand up with just the tape and maybe outer blocks to hold them like I used. But in N-scale, they are so thin they just fall over as soon as you touch them with the wet glue. The stairs came out okay, but I will probably park a truck in front of them on the layout...!

The instructions provide minimal details for building the foundation. The foundation walls in the kit are just smooth wood pieces, I believe intended to be painted to look like concrete. To make the structure look older, I decided to be creative and add stone facings, using sections cut from Ratio Models “Coarse Stone Wall Sections,” part number 302. After cutting strips the width of the kit’s wood foundation boards, I superglued them to the boards, then painted a wash of watered-down light grey primer over them, to accent the mortar lines molded into the plastic.

I did not bother adding them to the trackside wall, as they will not be visible under the loading dock. The stone wall plates were only 75 mm long, while the long side of the building is 145 mm long, so I had to splice two sections for the truck docks side, but I will place a barrel or something in front of the joint to disguise it.

I glued the panels to the underside of the floor base, using the magnets to keep things aligned, as seen here.

[N-Circle_26-06-29_LyndonFreight_1_Cropped](#)



After the glue had partially set, I turned to structure over and placed a weight on top, to keep the bottom of the foundation panels in a flat plane as seen here.

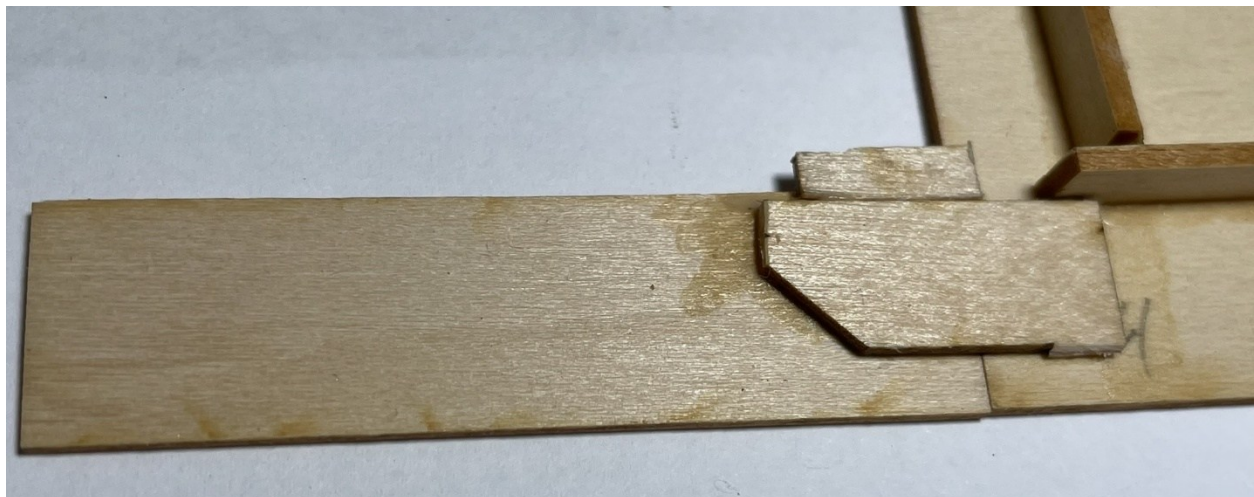
[N-Circle_26-06-29_LyndonFreight_2_Cropped](#)



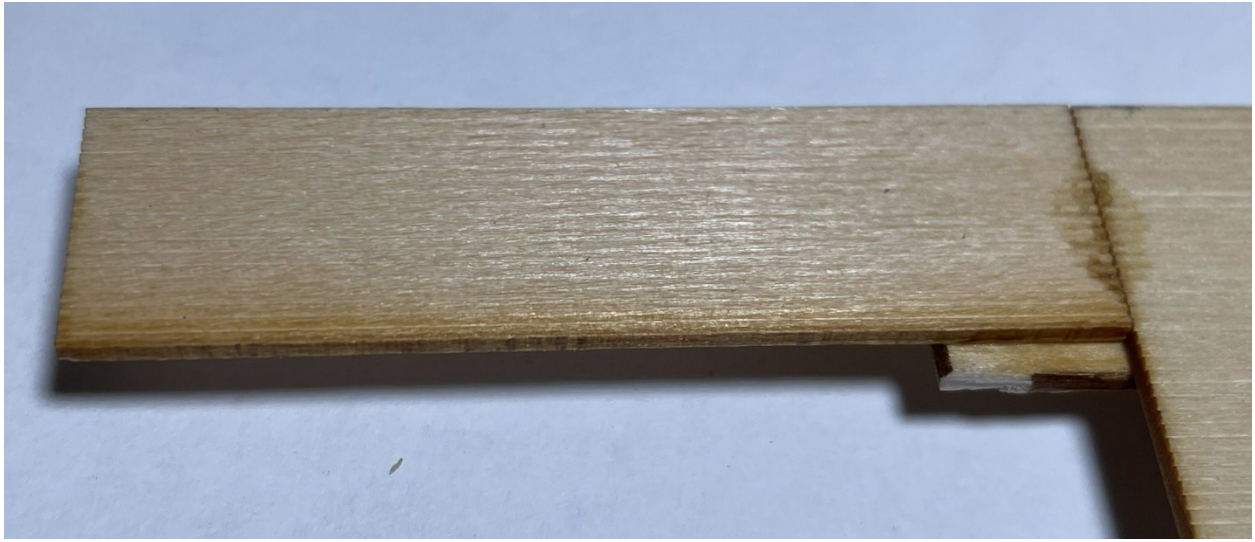
I added a wide shim on the underside of the loading docks spanning the joint between the main dock and the dock extension, as otherwise this just would be a thin butted joint. The shim was made from wood leftover from the sprue of a previous kit, the shape doesn't matter, as it will not be visible.

I also glued in place a narrow shim to support the upper end of the ramp, to strengthen this more than just a thin butted joint. Here we see the shims from below and then above.

[N-Circle_26-06-30_LyndonFreight_1_Cropped](#)



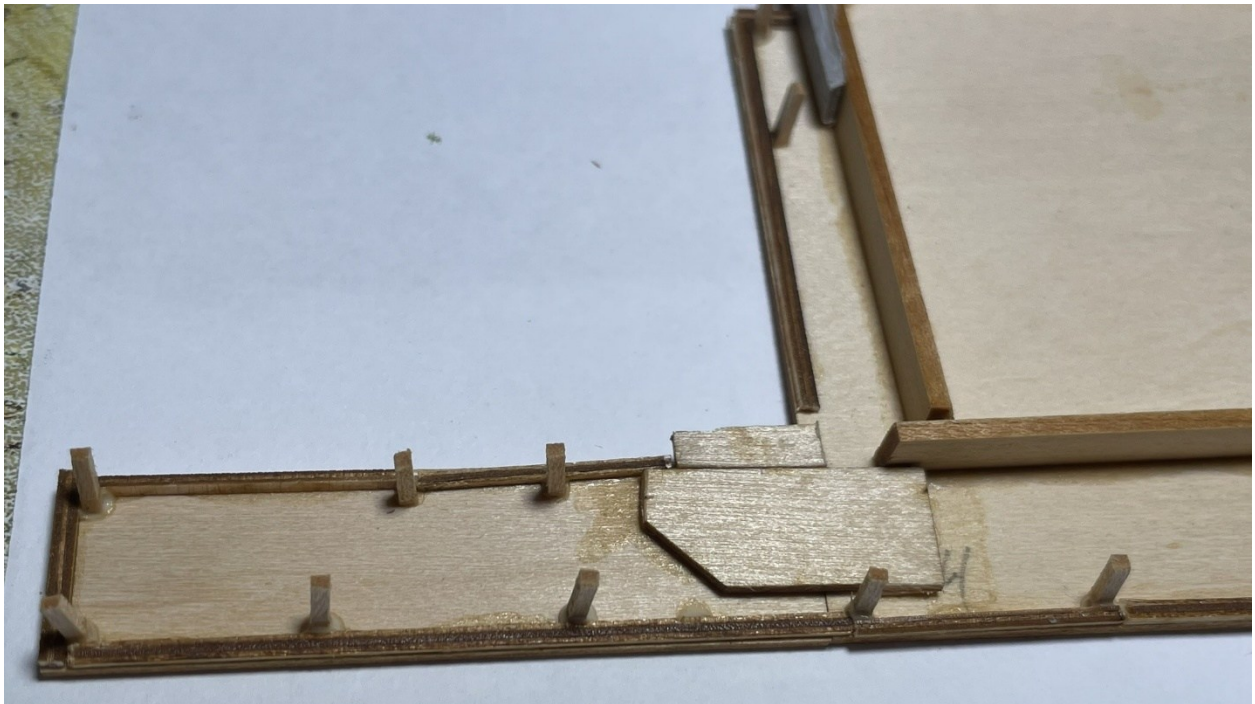
[N-Circle_26-06-30_LyndonFreight_2_Cropped](#)



The loading docks only are supported by 1/16-inch (1.5 mm) square posts butt-glued vertically to the underside, potentially very fragile if the structure is not permanently glued in place on a layout. To strengthen this structure, I added 2 mm wood strips salvaged from wood kit sprues (again, never throw anything away that could be used as a “part”!)

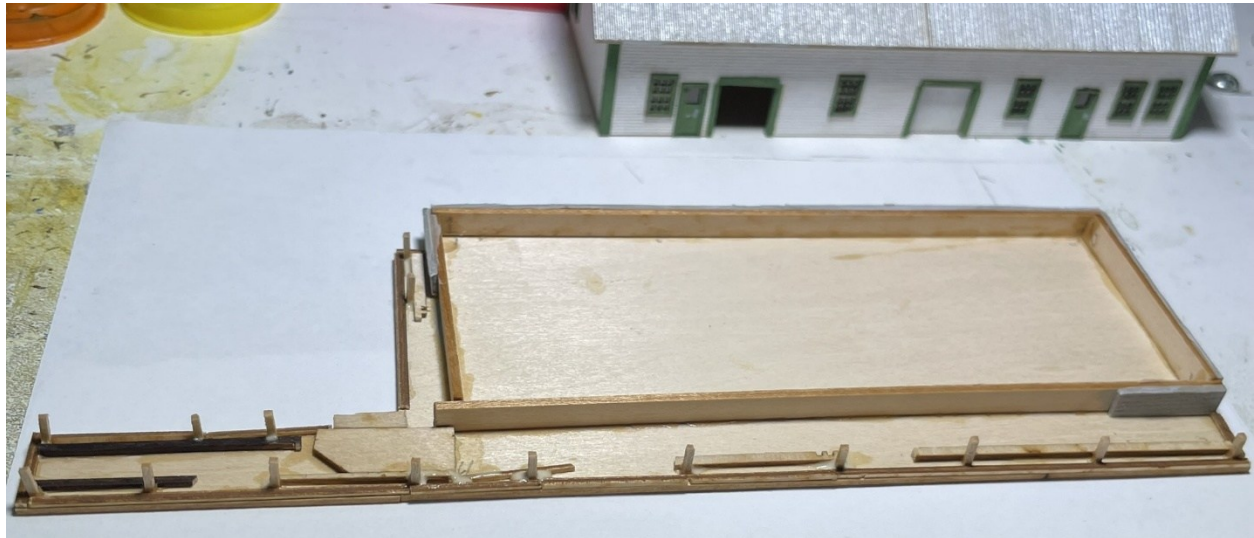
With these edge strips in place, it was easier to put the 15 support legs in place. I dipped their ends in the wood glue, then put them in place with needle nose pliers. The strips helped to hold them vertically without additional bracing – most of them are straight...

[N-Circle_26-07-01_LyndonFreight_2_Cropped](#)



After the glue was dry overnight, I added more wood scrap reinforcements on the inside edge of the posts, so they are sandwiched between heavily glued reinforcements front and back.

[N-Circle_26-07-0_LyndonFreight_Cropped](#)



Yes, I build structures with more strengthening reinforcements than most modelers would, as the N-Circle layout is a “stage” where scenery is not attached permanently, but will be swapped in and out for different “scenes” in the play, i.e. the four planned combinations of operating periods and regions. So, it will need to stand up to some future handling.

After all the loading dock, ramp and support structures were solidly in place, I painted them all a half-and-half mix of Tamiya “Flat Earth” brown and “Medium Grey.” I put a few drops of each in a bottle cap “palette” and mixed them together loosely with the paint brush. I was not attempting to mix them completely, but rather to leave pools with one color stronger than the other. Thus, when brushing the paint onto the wood floors, it left varying shades to create a lazy weathered appearance.

Having left one freight door open on both front and rear of the building, it was important to paint the floor inside these openings. But I did not worry about getting full paint coverage of the inside floor corners that will not be visible after everything is assembled.

The kit only provides a short piece of square wood stock to create the chimney. The end must be notched to match the angle of the roof, then painted. I had plastic resin pre-painted brick chimneys in my details box from other kits that were ready-to-go, so I used one of them, attached with superglue. It had an angled base, so I placed it on the side of the ridgepole, rather than notching it to go over the center. But again, I was not attempting to duplicate the Lyndon Freight House prototype.

Contrary to the kit instructions, I fully completed assembling the base foundation and loading dock extensions and painting them before attaching the building – this made it much easier to work on the two sections separately, especially to be able to lay the foundation upside down on the workbench to add all of the supports to the underside. I attached the building structure to the base with a bead of wood glue around all four edges, then added the two sets of stairs last. I later added shims under the steps where they attach to the docks, to strengthen these very small joints.

When everything was dry and solid, I brushed weathering chalks on the dock floors and roof.

The final step was to add figures and details from the Woodland Scenics “Dock Workers” and “Workers with Forklift” sets. And for the nitpickers: Yes, I could see that the forklift is too tall to get through the freight doors! But it will not be obvious from a typical viewing angle above the layout, and it would have been difficult to trim off the top of the lift and have it look right.

Here are final closeup photos of the completed kit.

[N-Circle_26-07-06_LyndonFreight_6_Cropped](#)



[N-Circle_26-07-05_LyndonFreight_5_Cropped](#)



N-Circle_26-07-02_LyndonFreight_2_Cropped



N-Circle_26-07-03_LyndonFreight_3_Cropped



And finally, two views of its temporary home on the south side of the layout, between the Shell fuel terminal and the Furniture Factory. Its current placement on a double crossover doesn't make sense for spotting freight cars at the loading dock and obviously the PowerPoint scenery panels beneath it need to be updated, but this allows us to see how it can fit into the layout. The Furniture Factory will probably need to move west, closer to the school, this may allow better placement for this new building.

[N-Circle_26-07-05_LyndonFreight_8_Cropped](#)



[N-Circle_26-07-05_LyndonFreight_9_Cropped](#)



Eventually I will need to decide on signage to add to the structure. But for now, without specific signage, this structure is comfortable to use in 1950s or 1980s, Vermont or Louisiana operating sessions.

This kit took about 14 hours to complete over 24 work sessions, including adding the extra details. I found it to be easier to build than many of the laser-cut wood kits discussed in previous N-Circle Updates.

This is probably the last major wood kit I will build for a while. I have three more smaller freight house kits that do not have a planned destination on the N-Circle layout, and a few small shacks and loading dock kits.