

Conowingo Models



GENERAL INSTRUCTIONS HELP

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Directions for Conowingo Models kits will skip around from one sub-assembly to the next. The intent is to keep the model moving forward, helping you complete it in less time. We suggest that you check off each step as you complete it. We're currently reworking instructions on our kits to more compartmentalize instructions and include check boxes for completed areas.

It is best to read through the directions before you begin construction. This is so you understand the process. On occasion, we will explain the hows, whys and important things to note. We explain what worked best for us to construct the kit. You may decide to take a different approach. That's ok.

Many of Conowingo Models kits are unlike any kits you've seen before. In some cases, we use unusual building techniques to make things easier to assemble. In some cases, it's to add detail. We've found that some of the added construction details give you a sense that you're really constructing a building.

Our intent is to provide modelers, beginner to expert, the same challenges.

We generally do not provide detail parts. This is because we want to not only keep the price down for you, but increase creativity with the kits.

Recommended Products

Listed below are the products we use. They may or may not be the best, but we have experience with them and they work for us. Different people like different products for different reasons. Find what works best for you and stick with it. We do not formally endorse, nor are we paid

to endorse any of the following products. However, we're always open to endorsements.

Glues

Unless specified otherwise, we recommend using either a wood/hobby glue or a fast-drying CA.

Aileen's Tacky Glue – Slow drying, lots of play time, but it will firm up fairly quickly. Peels off if you need it to, but not 100% of the time. We've had a 16 oz. bottle for several years. There are a few other types if Aileen's, but we haven't tried them yet.

CA – Fast drying. We recommend a medium viscosity CA. Lately we've been using Gorilla Micro Super Glue Precise in gel form. Make sure you use an odorless product.

Testor's Clear Parts Cement – We're still on our original bottle from 2012. It has a lot of the same properties as Aileen's, but it's thin and can get really runny if you're not careful. There are others, such as Canopy glue, but we don't have experience with them yet.

Paints/Stains

With the demise of railroad hobby paint companies, we're somewhat at a loss of recommendations. For the most part, we've been sticking to Apple Barrel and Plaid. They're cheap, readily available and easy to use/ clean up. I don't know how well they work with airbrushes. However, acrylic paints will warp wood like it's their job. You can fight this by bracing and/or painting each surface on both sides.

Stains-

As we've said, nothing beats real wood. We recommend staining things that you want to age. The catch is that stains warp wood, so you have to brace everything well and LET IT DRY for a while BEFORE staining. Use weights and clamps to stave off the warping.

While the stain dries in 15 minutes, it takes a good 24 hours to dry to prevent warping.

Hunterline Stains are a favorite of ours and do a fantastic job. <https://hunterline.com/>

However, if you're looking for a more subtle stain, we recommend Vetro Weathering Solutions <https://www.besttrains.com/>.

Spray flats – We use either Testors Dullcote or Rust-Oleum Dead Flat to seal models and protect weathering.

The Rust-Oleum is typically cheaper, more readily available and available in larger cans.

Weathering With Stains

As an example on weathering, we'll talk about St. Mary's Gate Lighthouse. We try to keep things simple. We started out by washing the braced walls with **Hunterline Driftwood**. Next, we used acrylic paints, (white and off-white mixture) thinned with dirty paintbrush water. Yup. I said it. Dirty paintbrush water darkens and mellows the paint at the same time. We used sponges to drybrush on the white mixture. If it went on too strong, we drybrushed on more dirty water.

More recently, we tried a technique that seemed to work surprisingly well. After bracing, LIGHTLY spray the structure white. When that has dried, add a weathering stain over the top of it. This hits the wood that didn't get the white and ages the white that shows.

Weathering With Paint-

As for rust, we use two different products, depending on the look we're going for. **Vallejo rust wash** works well. We only bought one container of it and it does the job. We also found that for a thicker rust, **Apple Barrel Burnt Orange** works well. Using a brush, we did the same applications mentioned above as with the white paint. Occasionally, we might add a dark grey to tint it.

Tools, Etc.

The late Neil Besougloff, editor of Model Railroader suggested always starting a new project with a brand-new **#11 blade** in your hobby knife. Personally, we have three hobby knives floating around the workshop at any given time. They take turns with the newest blade. The newest blade is always used on the main hobby bench where the finest details are done. The newest blade should be used for cutting parts from their carrier tray, decals The middle blade floats around the shop and is used for general applications. The third, dull blade is used for trimming castings or applying putty. We feel that this accomplishes just as much, but isn't as wasteful as new blade, new project.

3D Parts-

Thanks to Bernard Hellen of miniprints.ca , we recently came upon the Tamaya Sharp Pointed Side Cutter. This

product is great for cutting out 3D printed parts. It works well on other styrene parts as well. It's Tamaya part number 74035. They have an MSRP of \$45.00, but can easily be found for about half of that. Huge hint- Only use them for 3D printed parts. Do NOT use them to cut ANY wire!! Ask us how we know.... A big key with these is that you want them as sharp as you can get them, so don't cut plastics with them.

Also on the 3D parts front- We recommend washing 3D parts in a solution of water with a drop of **Dawn dish detergent**. While we wash parts in both Isopropyl Alcohol and again in water after production, it doesn't clean them up as much as we'd like.

Rolling Stock Weights

For a while now, we've recommended **tungsten putty**. It's available from Amazon, but can probably be found elsewhere. It works well on the rolling stock. Once you've applied the decking, bolsters and queen post(s), fill in the gaps on the main body with tungsten putty. The catch we've found is that it should not be applied on the undersides, as it will leak out.

Caboose Lighting Kits

Conowingo Models offers a caboose lighting kit, which is applicable on Caboose #1 and Caboose #2. Installation for both kits is pretty much the same. However, they require the builder to have a working knowledge on how to install such kits. Instructions are minimal as a result.

1. Plan out the location of the caboose "building"
2. For the truck wiring, choose a place as close to the bolster as you can, but still inside the building. Ours are typically in line with the lateral center of the car, between the trucks.
3. Drill holes in the floor based on that location.
4. Plan on installing the bridge rectifier and resistors in the middle section for Caboose #1. Aft section for Caboose #2. Although unless the doors are modeled open, it doesn't matter in Caboose #2.
5. Select your marker location. On Caboose #1, it's a little bit difficult. It should probably go above the right side of the aft-most side window. If that doesn't look like it would work, try it below the cupola window on the right. For Caboose #2, we recommend centering it aft of the aft-most window, slightly above the top of the window. Neither caboose is real, so the choice is yours. You're not chasing a prototype.

6. Do your wiring before gluing down the building. We'd put the LED in the mid-section of Caboose #1. Aft section for Caboose #2. However, it would be either glued or taped to a wall so that all visible light from it is indirect. Be sure to trim down your wires, so you don't end up with a rats' nest. Include some slack so that the trucks can turn freely. Be careful, if you cut out too much wiring, you'll have to go back and solder some back in. Ask us how we know...

Wrap Up

If there are any parts missing, please e-mail us what you need to complete the kit and we'll send it your way. I'm a one-man shop and I do occasionally miss things. Suggestions for improvement are also welcome.

See the Conowingo Models website
www.conowingomodels.com

Or our Facebook page
<https://www.facebook.com/ConowingoModels/>
for more exciting, funky buildings and rolling stock for
your model railroad!

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