

# Conowingo Models



## PANTHER COMPANY HOUSE

N scale



[www.conowingomodels.com](http://www.conowingomodels.com)  
<https://www.facebook.com/ConowingoModels/>  
[conowingomodels@yahoo.com](mailto:conowingomodels@yahoo.com)



May, 2026

Thank you for purchasing this kit!

This building was designed to be a company house, similar to those owned by the Panther Red Ash Coal Corporation at the Douglas Mine in Panther, West Virginia. Like many of our other kits, this one would go well in a mining town or could be easily modified to go just about anywhere a small building would fit.

See [conowingomodels.com](http://conowingomodels.com) for more info and tips on the instructions below.

### OPTIONS

You have two choices with this house- you can build it as shown- sticking off of a hill (as with the pilot model) or you could build it to sit on flat ground. We will refer to these options as the Raised or Flat option.

### INDEX

The instructions for this kit skip around. This is intended to keep the builder moving forward while things are drying. In an attempt to keep things straight, we've included an index.

We've also included a stripwood guide on page 3 to help ensure you are using the correct stripwood for each application. Those include a circled number ① to indicate which pieces you are to use at a particular step.

### WARNING:

This kit contains 1/16 x 1/16 stripwood, 1/32 x 1/32 stripwood and 1/32 x 1/16 stripwood. Before you cut the stripwood, make sure that you are using the correct stripwood for your application.

Simple guide-

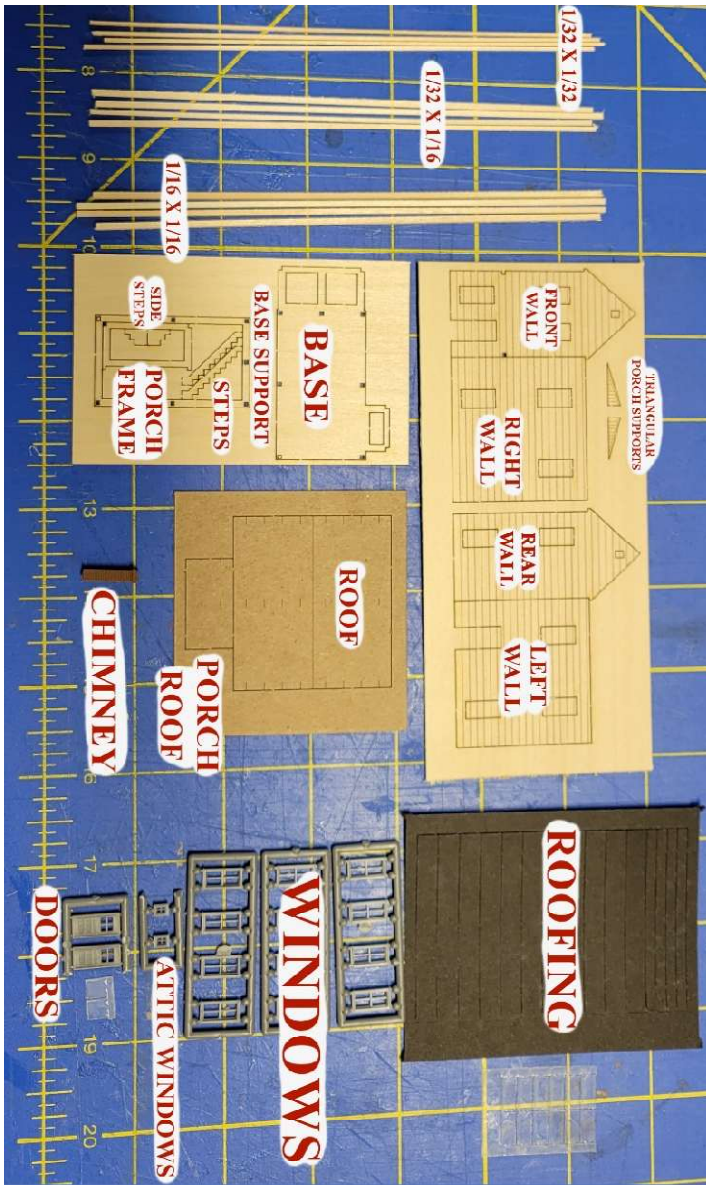
1/16 x 1/16 is bracing

1/32 x 1/32 is used for supports

1/16 x 1/32 is used for deckboards and steps

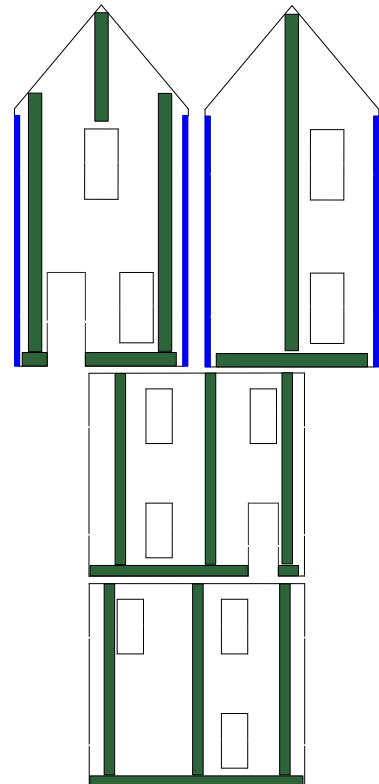
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## KIT CONTENTS



## BRACING

1. Start by bracing the walls as shown below. 1/16 x 1/16 stripwood is shown in **GREEN**. 1/32 x 1/32 stripwood is shown in **BLUE**.
  - We recommend avoiding bracing the area around the door frames as there may be a fit issue. However, if you cut a small indentation in the bracing where the doors go, they will fit without issues.
  - Ensure you will have clearance at the corners for the walls to come together.
  - We use 1/16 stripwood at the bottom to ensure a good bond with the base.
  - The 1/32 stripwood are your corner pieces. Should you choose to make them a different color than the siding, we recommend you add these later, before assembling the walls.



2. Add weights to ensure the walls and bracing dry flat.

## **STRIPWOOD SIZING AND PAINTING GUIDE**

These instructions assume that you are building the house as we did with the pilot model. Therefore, the colors listed below are only suggestions.

- **We recommend cutting the stripwood only as-needed.** Cutting all stripwood at once may have disastrous results. Should something not align properly or other malady there is a good chance that the wood will be either too short or too long and will end up being wasted. Use the dimensions listed below as a guide.
- Always cut stripwood pieces from the largest to smallest. Reserve any leftover pieces for the sheathing and trim.
- The HO scale pilot model suffered because we built the porch and then stained it. If you're planning on staining it, do yourself a favor and do the staining before cutting. If you stain both sides at once, it should not warp.
- We recommend altering the length of the vertical base supports based on the height of the object (hill) you choose to support the base with in the Base Supports section.
- One thing we tried and it worked well with the HO version of this kit was to very lightly spray paint the walls after bracing and before construction. As you spray it, there will be a grey that shows through. Let it dry and apply a grey stain to it to bring out the weathering.

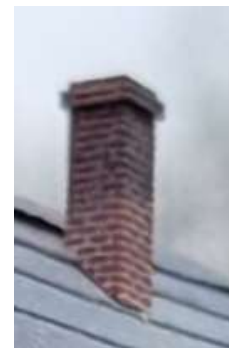
### **Below is the broad strokes version of the paint guide. The chart that follows has more detail.**

1. Paint the following items **WHITE**
  - Doors
  - Windows
  - Undersides of roof and porch roof
  - 1 piece of 1/32 x 1/32 stripwood
  - 2 Triangular porch roof support pieces
  - \*\* 4 Outside walls. Brace and let thoroughly dry before painting. \*\*

2. Stain the following items **GREY**
  - All remaining stripwood
  - Sides of the front and side steps
3. Paint the chimney **BRICK RED**
4. Optional - Sand the laser markings from the 3/64 base piece and the support piece that goes with it and stain **GREY**

## **ASSEMBLING THE WINDOWS/DOORS/CHIMNEY**

1. Using a clear-drying glue, install the acetate in the windows and doors.
2. Chimney placement and size are personal choice.
  - The chimney is at a 50° angle.
  - Figure out how tall you want the chimney. Mark it a little longer than you want it, just in case you mess up the angle.
  - Cut the bottom off of the chimney.
  - If you have an Altimation Sander (or a similar tool), set the angle at a 50° angle.
  - Put the chimney on the sander, with a piece of scrap wood between the repeater and the chimney so that it is being held level.
  - Turn the wheel until you're happy with the angle.
  - Test the chimney placement and repeat the sanding as required.



- Using your finger, apply some spackling paste to form the mortar on the chimney. It will take some trial and error to get it correct. Dipping your finger

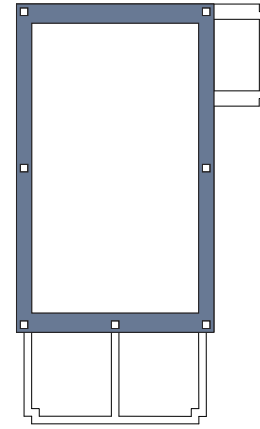
in water may help to smoothen, thin and improve your results.

- Some people install the doors, windows, etc. before assembling the building. For some, it solves dexterity issues. If you are having this issue, go ahead and try it. If not, we recommend waiting until after the building is fully assembled and dry before adding those items. This is so you don't damage anything should you need to use clamps to straighten your structure.

### **BASE SUPPORTS**

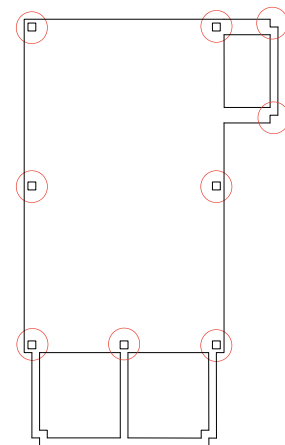
**This section is only for use if you are constructing the house in the raised position, although if your structure will sit on the ground, it will be a good base reinforcement.**

- For this particular step, we suggest using a tacky glue that sets up without fully drying, allowing you to manipulate it as needed.
1. Find an object where you can rest the base while it dries. Make sure it's tall enough for the supports to rest gently on the working surface. We recommend a 3-2-1 block for this and will refer to it as the 3-2-1 block. Keep in mind that the 1/32 x 1/32 pieces used for supports may need to be altered from what is listed in the Stripwood Lengths section due to the height of the object you choose.
- The vertical base supports are all the same length to help with construction. Once the house is complete and ready for final placement, you can either cut a hole in the base material or shorten the supports. The pilot model was not built this way and it posed some significant challenges when building the underside.
- In this section, you are adding the vertical supports for the base. This support is being installed upside down for ease of construction.



2. Flip the base piece over as shown above.
  3. Add the base support piece to the **underside** as shown above in grey.
- Make sure that the holes line up. Note that on one short side, the third hole goes in the front, against the decking.
  - This base support piece makes the base look more robust and it will also help hold the supports in place.

**You may choose to delay adding the following 1/32 x 1/32 base supports when the house is nearing completion.**



4. Cut and glue the nine 1/32 x 1/32 base supports into their respective holes (shown above) so that they sit flush. Use clamps, weights, 3-2-1 blocks or whatever you have to keep them vertical. If you're feeling lucky, perhaps a little CA would help secure the supports in place faster.

- There are two notches for the side porch that are included in this instruction. You may choose to add them later.
  - You will notice that there are two notches on the front porch that do not get the supports. The porch supports will be installed there at a later time.
5. When tacky, flip the base over onto the object mentioned in the header section and adjust the supports so they are vertical.
    - At this stage, you are (hopefully) letting gravity be your friend by helping those supports find a straight vertical position to rest in.
    - You may need to manipulate the supports into the vertical position.

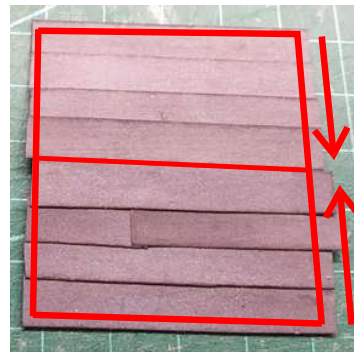
### **TARPAPER ROOFING**

After the HO scale version of this kit was designed, we found a high-resolution version of our example photo which showed the house actually had interlocking shingles. If you want your building to look like the real one, we suggest <https://www.rail-scale-models.com/N-Scale-V-Cut-Shingles> If this is one of your first kits, we'd recommend sticking with the tarpaper. It's much easier and quicker to do.

1. Find the black construction paper carrier sheet with the cut strips on it. **\*\*\*Do not remove the strips from the carrier sheet yet.**
2. You could use it the way it is to represent a brand-new roof by using as single, even coat of dark grey and skipping ahead to step 9. However, we recommend very quickly spray painting it with three different shades of grey. You don't want a uniform cover. Half-sprayed splotches are great.
3. It dries pretty quickly. Once the roofing is dry, cut a strip from the carrier sheet.
4. Take that strip and line it up along the corner of a scrap piece of 2x4 or an edge of a hard material you don't mind getting messed up.



5. Take either a 400-grit sanding sponge or sandpaper and gently run it across the construction paper strip. The goal is to blend the paint colors together.
6. If you so desire, you can dig into one of the long edges and sides of the construction paper enough that the black comes through to show roofing damage. It's your model, your call. (Photo shows fully assembled)
7. Repeat steps 3 - 6 until all roofing strips are complete.
8. On one piece of roofing material, scratch up both long edges if you're aging the roof. This will be your roof cap. Hold this piece separate from the rest.
9. Locate one of the chipboard roof pieces you prepared a while ago.



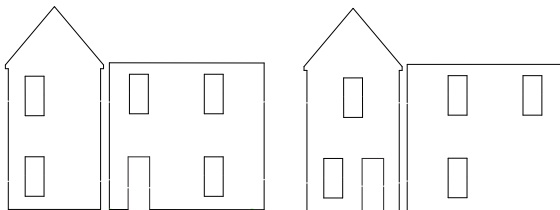
10. With the middle cut edge up, glue the roofing strips down in the following manner;
11. Start by adding a row of tarpaper at the bottom. There are guides on the sides and middle. Use them at your discretion to help keep the tarpaper straight. Ensure the scraped black edge is on the down side. You want a slight overlap on the bottom edge and on both sides.
12. If you desire, you can cut a row short and add an overlapping piece. Left to right or right to left

doesn't matter. This shows where the tarpaper roll ended and a new one began. You may also want to use a scraped edge on the "new roll" where it overlaps the "old roll". This shows character. The pilot model had four rows on each side of the roof.

13. We recommend flipping the roof around and doing the bottom row.
14. Allowing for slight overlap, add rows until both halves are covered. Do not cross over the cut line in the middle.
15. Repeat for the porch roof, using three rows.
16. Allow the roof to dry and cut the excess from the sides. You may choose to add some weight so that the roof dries flat. Not adding weight may add character, but you might not be happy with the results.

### ASSEMBLING THE WALLS

- For this set of instructions, we used a magnetic gluing jig to keep the corners at 90° angles.
- **The instructions on this page should be done fairly close together, while the glue is tacky. This helps ensure the building goes together squarely.**



1. Take one end and one side piece and glue them together at one corner as shown above. We recommend the front and right side, the rear and left side. Either way will work.
- Ensure that the bottoms line up and that the edges are even.
  - Brace the walls at a 90° angle
  - The two walls should meet at the 1/32 x 1/32 stripwood used on the corners.

2. Repeat step 1, ensuring the two halves are glued together at the same corner. We recommend that this be the rear and right side.
3. Let dry enough that it is tacky.

### ASSEMBLING THE HOUSE

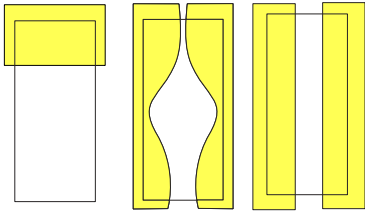
1. Glue together the two halves of the walls, ensuring the building is square and that it will sit level.
2. Glue the walls to the base while the walls are still tacky.
  - The house should sit so that it slightly overlaps on all sides, except in the front.
  - If the walls don't sit level on the base you can gently place 3-2-1 weights across the side walls to help level the walls.
3. Let glue dry.

### BASE MOUNTING

1. Take the base piece and flip it so that the side porch is located on the left side, at the rear.
2. Take the house and situate it so that the front door faces front on the base with the other three sides slightly and evenly overlapping the edges. If the walls do not line up satisfactorily, you can use clamps, rubber bands or other methods to straighten it.
3. When you are happy with how they are situated, glue the house into place on the base.
4. Let dry.

### WINDOW AND CURTAIN INSTALLATION

1. Install all windows.
  - Install the acetate with a clear-drying adhesive.
  - Do not install the doors yet as the decking needs to be installed first.



2. Cut various sizes of the yellow cardstock to form window shades and/or curtains, gluing them to the interior top and/or sides of the windows as you go. They don't need to be perfect; they just need to cover the top and both sides of the window. See the examples above for curtain ideas.

- Various lengths show "signs of life"
- We'd recommend using different colors for the shade and curtains.
- A dirty white or tan would have been the predominant color in a coal town. We chose this shade of yellow because we felt it would show some age and sun fading.
- If you don't have other colors of cardstock, you can use either colored construction paper, sticky notes, regular paper or paint the cardstock. Painting will cause the paper to warp a little, but curtains and blinds are not perfectly flat.

### DECKING



1. Using the stripwood intended for the front porch, glue down the decking material.

- The decking should be applied as shown above with a little bit of spacing to allow for expansion and contraction. (Yours will not have the porch roof installed yet, as shown in this photo.)

- Work from the middle, outward.

- You will need to cut out the notches for both end porch support posts. There does not need to be any cut out in the middle.
- The boards can butt against the front wall of the house and under the door.
- Leave a little bit of overhang on the sides and front.



2. Using the stripwood intended for the side porch ⑩, glue down the decking material in a similar manner as above.

3. There wasn't much to side porch on the real house and it certainly isn't much here!



4. We included two steps that were intended to be installed on the house rear side of the porch. You may choose to install them, or do as they did on the real house and use two pebbles for steps.

- If you decide to add the half railing as shown above, we recommend waiting until all the stripwood from the kit has been used first, or use some from your scratch box.

**If you decided to sit the house directly on the ground, the following steps are unnecessary.**



5. Glue the two step supports inside the respective supports on the backside of the side porch. (Rear of the house.)

6. Depending on the terrain, you may need to alter the height of the steps.

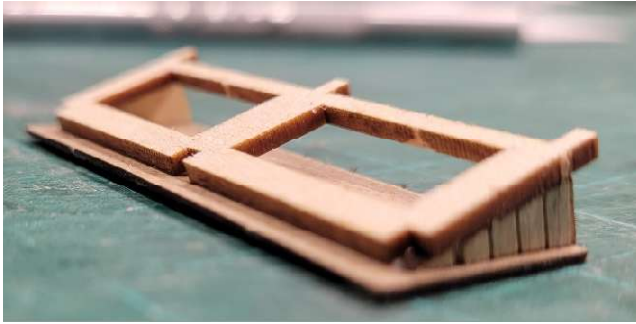
7. Cut and glue into place the steps ⑩ to fit the side porch.

### PORCH ROOF ASSEMBLY

The porch roof frame mirrors the deck frame in that when complete, they will be directly lined up.

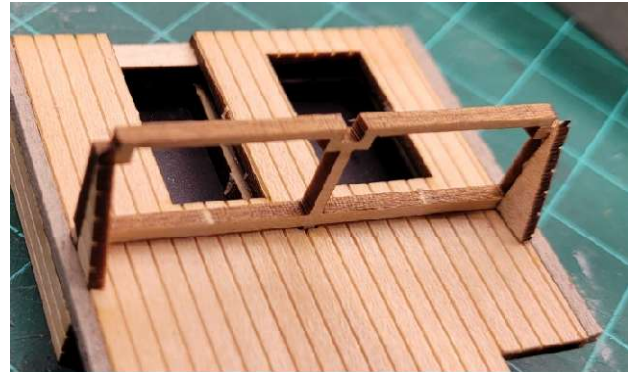
You may sand the edges so that the notch disappears. If not, you can stain it away later.

The two notches will attach the roof to the structure. The photo below is of a different kit, which has a middle notch as well.



Glue the triangular sides to the porch roof frames so that the scribed pieces will be vertical when they are added to the structure. (Shown upside down above).

The short edge should cover the square notch in the corner.



The above photo shows what the assembly will look like installed, minus the roof.

Install the porch roof.

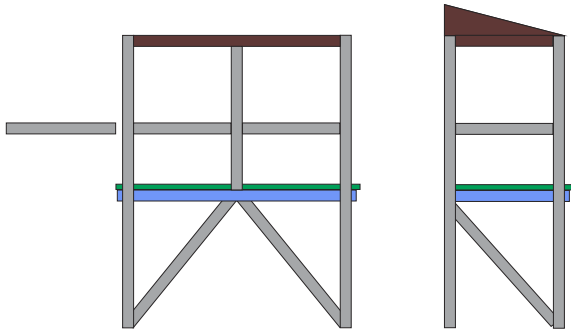
### FRONT PORCH FRAMING



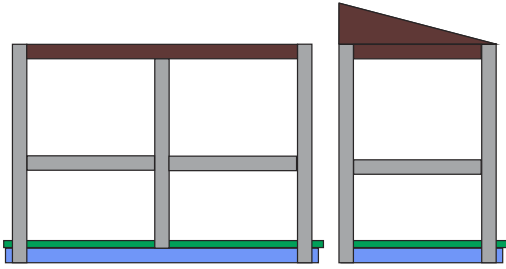
- This hi-res photo of the house shows a cringingly, primitively-constructed front porch and support system. The supports were tree trunks with bends in them and the angled supports appear to be 2 x 4s, angled 90' from what you'd expect. They used what they had on hand and could afford.

If you are building the raised version, use the illustration below to assemble the front porch.

- The area shown below in green is the 1/32 x 1/16 decking.
- The area shown in brown is the porch roof.
- The area shown in blue is the porch portion of the base.



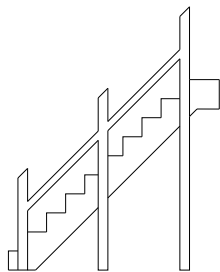
1. For the flat version, build your porch as shown below.



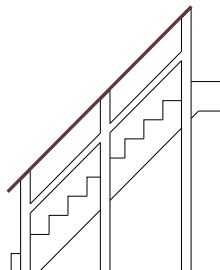
### FRONT STEP INSTALLATION

**If you decided to sit the house directly on the ground, this step is unnecessary.**

1. If you altered the height of the house, you will need to alter the stairs to match.
2. The following set of instructions would benefit from the use of CA, as it will allow you to move through these steps quicker.



3. If you choose to install the step railings, the railing supports should go on the outside of the steps as shown above. You may need to trim the sides of the steps for the supports to fit correctly.



4. Add a piece of 1/32 x 1/32 stripwood to the top of the railings as shown above in brown. They should be centered on the top of the railing supports.
5. Glue the front side of the top railing into place, even with the front side of the top step.



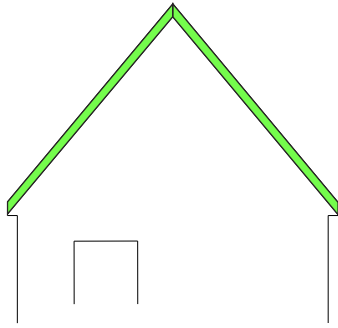
6. Install the front steps as shown above. They attach to the underside of the frame.
7. Cut and glue the bottom step into place first. This helps align the rest of the steps.
8. When happy with the alignment of the steps, install the remaining steps.

### ROOF ATTACHMENT

1. Glue the roof into place, so that the roof is centered front to rear.
2. Once the roof is firmly in place, fold and glue into place the reserved piece of tarpaper that covers the roof ridge.
3. If you choose, cut one or more pieces of tarpaper to serve as patches for the roof and install them.

### FINISHING TOUCHES

1. Install the doors. The door sill will overlap the decking.
  2. On the raised version, install the porch supports as shown above and in the photo. The illustration has the supports thicker than they should be.
- You will notice that there are more of the same supports under the house. We wouldn't worry too much about installing those as they most likely will not be seen.
  - Given the precarious nature of these supports, we recommend using CA for quick bonding.



3. Cut and install the 1/32 x 1/32 roof trim for both ends, ensuring that the trim is butted up against the roofing.



4. Using any remaining stripwood, cut and install any desired vertical sheathing to the underside of the house as shown above.
5. Attach the chimney.
6. Do paint touch-ups and weather as appropriate. We recommend a thin wash of Hunterline Concrete to grime up the structure after all weathering has been completed.

### **CONCLUSION**

Please share your photos on our Facebook page!

<https://www.facebook.com/ConowingoModels>

Once again, thank you for your purchase!

If there are any parts missing, please e-mail us what you need to complete the kit and we'll send it your way. Also suggestions for improvement are welcome. Please send photos!

See the Conowingo Models website  
[www.conowingomodels.com](http://www.conowingomodels.com)

Many thanks to my family, Jeff Grove, Steve Milley and Mark Schreier for their support!

Shingles from railscalemodels.com



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