

Conowingo Models



10 Foot Water Wheel

Kit includes: Two water wheels (one right hand and one left hand), sluices, sluice supports and two derricks in **HO-scale**.

www.conowingomodels.com
[https://www.facebook.com/ConowingoModels/
railrunner130@hotmail.com](https://www.facebook.com/ConowingoModels/railrunner130@hotmail.com)



First off, thank you very much for purchasing this kit. This is the second release from Conowingo Models.

This kit is intended to serve as an add-on so that you can convert any building (well almost any) into a mill. This water wheel was intended to be simple and funky. I'm not sure it would work in real life as there is no prototype.

Several of these pieces are frail. I have added extra cuts to the sheetwood to help alleviate issues. Be cautious when you cut them out.

If at any point you get lost or have an idea of how to make the kit or instructions better, please let me know. I want these kits to be the best product possible. If you're lost, I'll do what I can to get you where you need to be. See the website for more photos, tips and some expanded techniques for building this kit. Conowingomodels.com

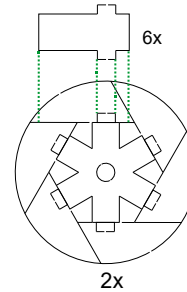
Also keep in mind that the illustrations are not to scale and may be modified to make my point.

PAINTING/STAINING

With this particular kit I think it may be more beneficial to do a majority of your painting/staining after the sub-assemblies are constructed.

ASSEMBLY

WATER WHEEL



(right hand wheel shown)

Keep in mind that this kit comes with a left-hand and right-hand wheel. Care should be taken to select the proper wheel for your application and also make sure the two halves match.

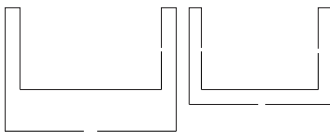
1. Locate the two halves and six paddles. Ensure the halves match. When you put them side by side, only one will have cheater lines scored in it to mark where the stripwood goes. The holes will match up.
2. Arrange the two wheels so they are right next to each other and will align easily. You will have one with the laser-cut cheater lines on the inside and one on the outside. This helps when it comes to putting them together.
3. Practice fit the paddles into the rectangular notches on one wheel (See above for a guide). Once you've got it figured out, glue them into place. Be sure to add glue to both notches.
4. Put the second wheel onto the top of the bottom wheel with paddles. You may want it to dry before proceeding to the next step, depending on how well your glue sets up.
5. If you're into adding nail holes, you will want to add them to your strip wood as you proceed with the next step.
6. Using the laser-cut cheater lines as a guide, measure, cut and glue the stripwood to the side of the wheel

that will be visible. Start from the guide and move up, placing the strips horizontally. Cover the rectangle, but not the triangle. **Do not** cover up the guide line to the upper right. Repeat five more times.

7. Once completely dry, it is recommended that you sand the edges so it looks nice and round. Paint/stain as appropriate.

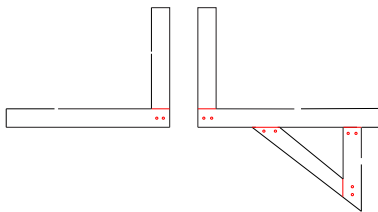
SLUICE SUPPORTS

In researching this topic, I found more questions than answers. What I decided to do was include the supports for the sluices themselves along with some stripwood and let you figure out how to support them.



1. Glue the support pieces together. I've included two types (4 of each total) for you to choose from. Pick and choose what you want.
2. Once dry, use the left over 2X8 stripwood (or wood of your choosing) to build the appropriate supports for your sluiceway

SLUICE SUPPORTS (FOR BUILDINGS)



1. The above supports (2 each) can be glued together. Again, you may wish to clean up the laser burn. These are the supports that attach to the building.



SLUICE

1. There are two sluice sections. They should be easy to fabricate should you require more for your use. There are three pieces to each.
2. Lay the bottom piece(s) flat.
3. Glue the sides to the long ends of the bottom piece(s). Ensure they are positioned so that the completed piece(s) form a U.
4. While the glue is still wet, locate the two pieces that form Hs (guides), along with the rectangle with a small cut out in it (gate). These control water flow. The two Hs are guides for the gate.
5. Before you glue these three pieces together, you have a decision to make. If your sluice is going to be shown with water flowing, you'll want to raise the gate. The guides belong on either side of the gate.
6. Glue the guides and gate into one end of the sluice. The guides should be squarely in the sluice with the bottoms of the Hs at the bottom. The gate should be positioned so that the bottom is no higher than the top of the sides of the sluice in a position of your choosing.
7. Paint/stain as appropriate including the sluice supports.

Again, thank you for purchasing this kit!

Please upload photos to our Facebook page <https://www.facebook.com/ConowingoModels/> or e-mail them to railrunner130@yahoo.com.

Many thanks go out to Mark at Foggy Mountain Models <https://foggy mountainmodels.com/>, Jeff at Carolina Craftman Kits <https://carolinacraftsmankits.com/> and Stephen at Rail Scale Models <https://www.rail-scale-models.com/>

Conowingo Models
 440 McCauley Rd.
 Conowingo, MD 21918