Mine Mount Models
CRAFTSMAN MODEL KITS

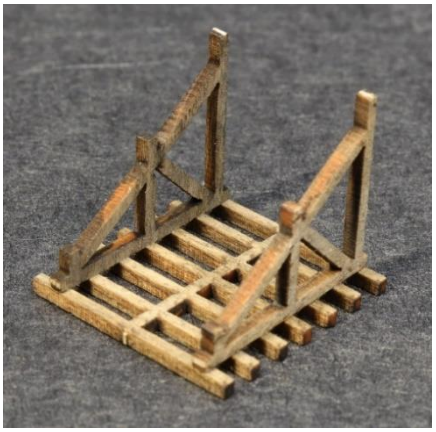
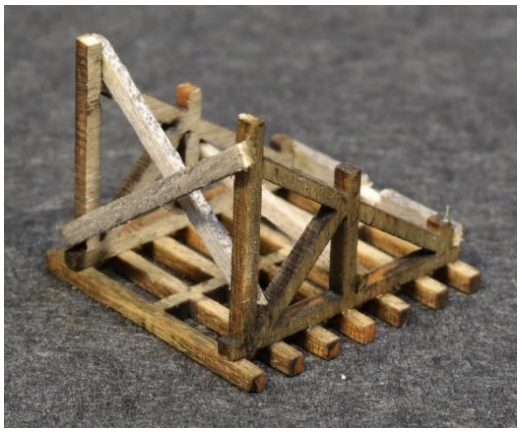
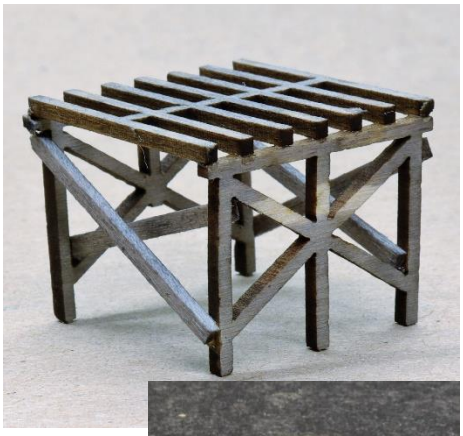
The Water Tower

Pre-assembly

1. Inspect all sheets of laser cut materials against the diagrams provided in the instructions checking for any missing pieces or damaged parts. Please reach out to us with any issue.
2. Before starting your model, read these instructions completely to become familiar with the parts and assembly sequence.

3. The Platform

4. Start by deciding if the water tank is on a location with a pitch or flat. The kit comes with two different sets of legs supporting the platform. Use parts #1 for the platform, and either #2(x2) or #3(x2) for the legs to build the platform. Glue the two legs (#2 or 3) onto the joists #1. Create cross supports using 1/32" x 1/16" stripwood. (See below)

5. A 7/8" diameter by 7/8" long wood dowel is provided in the kit. This is the core of the water tank. Wrap laser engraved 1/64" plywood part #4 around the dowel. We suggest slightly pre-bending the plywood into a cylinder shape to make it easier to glue around the dowel. You may have to trim off a board or two from the plywood to make the ends meet properly. Use rubber bands wrapped around the cylinder to allow it to dry thoroughly before proceeding.

Weathering Technique

Use a variety of different colors of wood stains to achieve a richer wood tone on your tank. Try to hit individual boards with a lighter or darker stain to make them stand out. We like to use a lite green stain sparingly along the bottom of the boards, letting it wick up naturally through the grain of the wood. To create a calcification on the tank from minerals in the water, make a paste using white or light gray weathering powders and isopropyl alcohol. Dab it in random streaks on the side of the tank. When the alcohol evaporates, a nice crusty texture is left behind. Also, wherever a metal band or turnbuckle is in contact with the wood, add streaks of rust.

6. The kit includes two unique styles of top for the water tank: a flat and a conical version. The flat version uses parts #5,6. Glue #6 onto the engraved side of #5, centered and aligned with the direction of the boards. Add two pieces of 1/32 x 1/16” stripwood to each side of #6. (See left)

7. For the conical roof, use parts #6,7. The cone made using 1/64” laserboard #7. This is a circle shape with a wedge cut out from it. To achieve the cone, you need to bend the circle, so the straight side of the wedge overlaps the tab side of the wedge. Glue this and allow to dry.

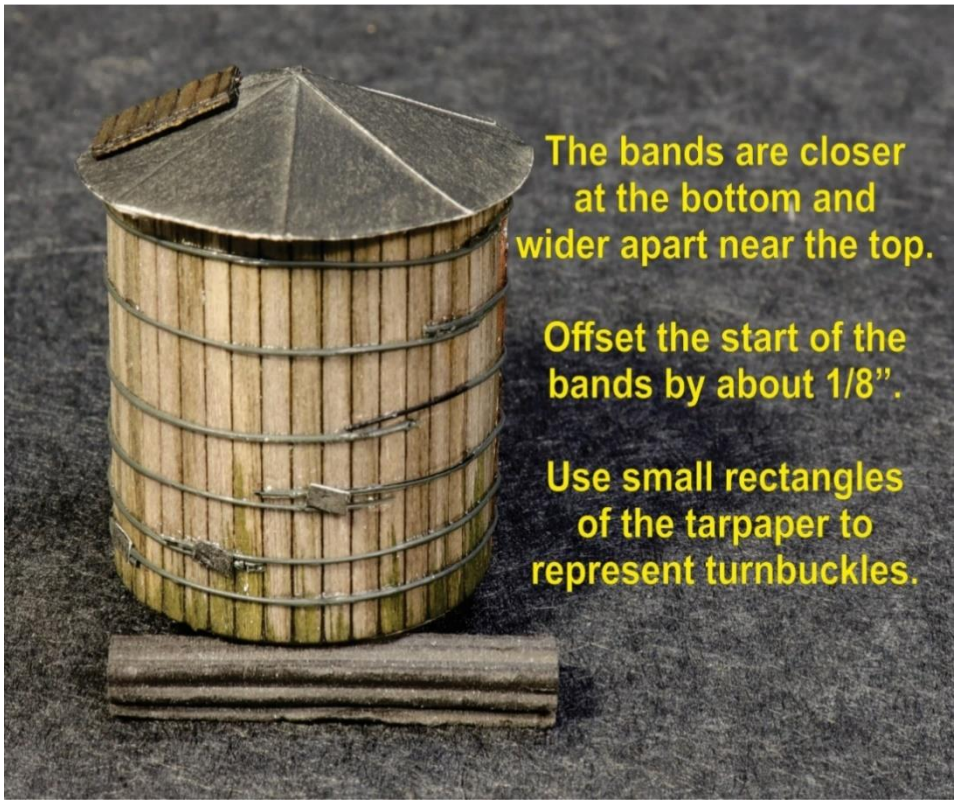
8. To provide water into and out of the tank you need piping. Use the small and large ALUMINUM tubing. Cut the small tubing to approximately 1-5/8”, and the large tubing to about 1”. The small tubing gets a short bend on one end to go into the top of the tank. Drill a hole 1/16” in the tank about 1/8” down from the top. The larger tube is for under the tank. It is positioned in the center of the platform, through the joists and down to the roof. Either file one end of the tube to match the pitch of the roof or drill a hole for the tubing to pass through the roof. Touch up the hole with black paint to look like tar sealant. Make sure the top of the tube is flush or just below the tops of the joists. This allows the tank to sit flat on the platform.

9. OPTIONAL Part #8 is an engraved platform piece that can be added on top of the platform for the tank to sit on or you can leave it off.

10. To finish the tank details, glue on the conical roof, centered on the dowel. Use the tarpaper roof material to cover the laserboard. Cut it into 8 pie shape triangles and overlap them around the roof. Add the hatch #6 onto the roof.

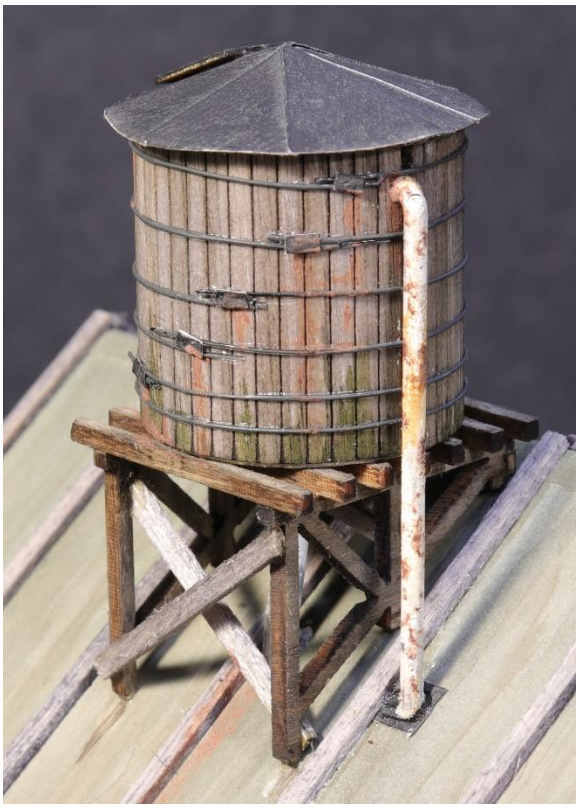
THERE ARE 2 OPTIONS FOR THE BANDING. Read steps 11 & 12 before making your decision.

11. To create the steel banding around the tank, use the .010" black monofilament cord. The bands start closer together at the bottom and get wider apart as they move up the tank. This is because of the increased pressure at the bottom of the tank. The kit is provided with eight (8) resin turnbuckles. You will use six (6) of the turnbuckles for this tank. Start by using a small drop of CA glue to adhere one end of the cord into the end of the turnbuckle. Allow to dry. The first turnbuckle is glued 1/16" from the bottom of the tank. Now wrap the cord around the tank, applying the smallest amounts of CA glue to a few spots of the cord to hold it in place. Poke the other end of the cord through the other side of the turnbuckle. Pull tight and add a small drop of glue to hold it in place. Continue this process up the side of the tank, being sure to space them out wider as you go up. Offset each starting point to the right by about 1/8".
12. OPTIONAL BANDING TECHNIQUE (skip the resin turnbuckles). Start by using CA glue to adhere one end of the cord to the side of the tank. Allow to dry. Now wrap the cord around the tank, applying the smallest amounts of CA glue to a few spots of the cord to hold it in place. Use a little more CA at the end of the wrap to hold it adjacent to the beginning of the cord. They should overlap by about 1/16". Continue this process up the side of the tank, being sure to space them out wider as you go up. Offset each starting point to the right by about 1/8". Use a small rectangular piece of the tarpaper sheet to represent the turnbuckle tightening mechanism.



13. Glue the tank assembly on top of the platform. Make sure the hatch is facing one of the flat sides of the platform. Glue the small aluminum tube into the top hole and have the bottom filed to match the pitch of the roof or drill a hole in the roof to allow it to pass through. Use a small square of tarpaper where the tube passes through the roof to represent a gasket boot.

14. Add the ladder #9 on the side of the tank. It should be up against the platform and in line with the roof hatch. (See left)



15. Use the .020" brass rod to bend two handrails for each side of the hatch on the water tank. Reference the schematic on the parts list for the shape and size of the handrails.

THE WATER TANK IS DONE!