Farm Type Water Tank

Formerly Built By

SUGAR PINE MODELS
LEGACY MODEL RAILROAD KITS REIMAGINED FOR THE FUTURE
A DIVISION OF CONOWINGO MODELS

HO scale

www.conowingomodels.com
https://www.facebook.com/ConowingoModels/
conowingomodels@yahoo.com
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Thank you for purchasing this kit!

This kit is believed to be of a structure. Which one, we don't know. What we do know is that it is based on structures that are predominant in California.

The kit itself was originally built by Sugar Pine Models. Sugar Pine changed hands several times over the years. The kit you have before you today has been updated and modernized to bring you a modern, craftsman kit that is easy to construct.

See conowingomodels.com for more info and tips on the instructions below. Additionally, we occasionally update instructions and recommend that you check the website for updated instructions before beginning construction.

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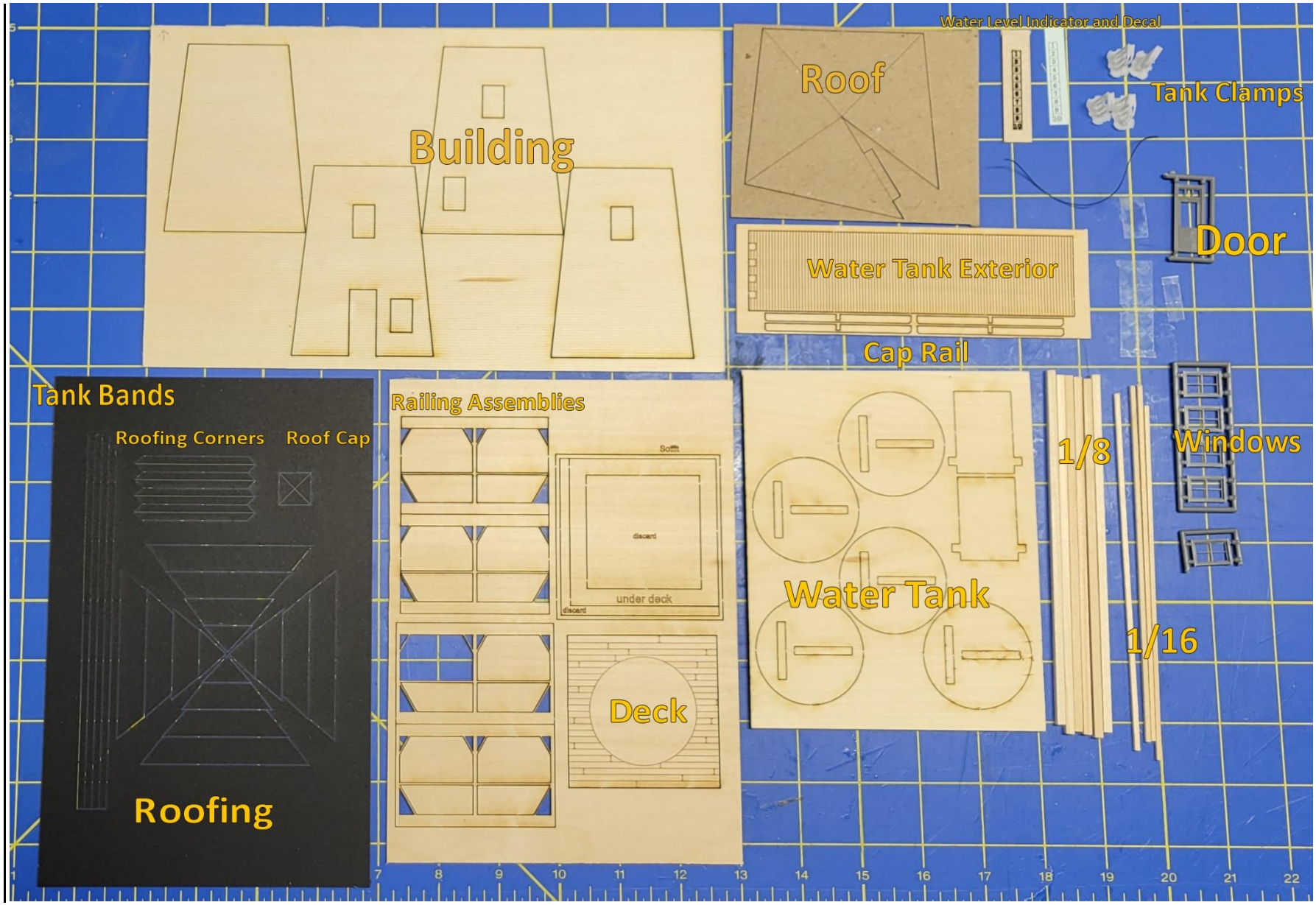
OPTIONS

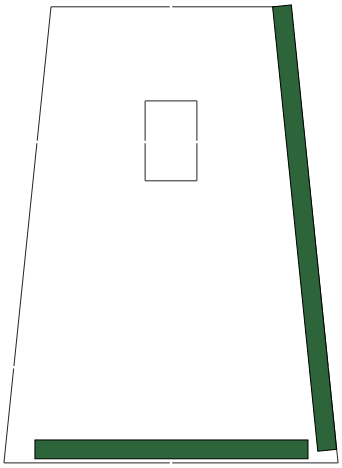
This kit doesn't really offer any options, but you can still be quite creative with it.

Options include color variations or perhaps it could be used as a water tank on a short line railroad, with a few minor alterations.

If you Google "California farm style tankhouse", you will see a number of variations, including several with windmills.


Water Level Indicator and Decal
Roof
Tank Clamps
Building
Door
Water Tank Exterior
Cap Rail
Tank Bands
Railing Assemblies
Roofing Corners
Roof Cap
Soffit
discard
under deck
discard
1/8
Windows
Water Tank
1/16
Deck
Roofing

BRACING



☐ 1. Cut and glue the 1/8 stripwood into place as shown above.

☐ Repeat this step for all four pieces.

☐ All bracing goes on the inside and does not protrude.

☐ Ensure there will be adequate clearance on each piece.

☐ The bottom piece should have a small gap at the bottom. This is to allow the wall to lean in slightly without the piece of 1/16 coming off of the base. This would leave a gap.

☐ All four pieces should be braced uniformly, regardless of doors and windows.

DETAIL PREP

☐ 1. Remove the doors and windows from their carriers, ensuring you remove all of the spue from each.

☐ 2. Carefully remove the four railings from their sprues, ensuring the supports don't fall off. If they do, that's ok- they can be glued back on later.

☐ 3. Remove the tank band clamps from their 3d carriers.

☐ 4. Cut a spare piece of 1/16 x 1/16 stripwood to the width of the water tank level indicator. This will be your **SITE GAUGE.** Seen below in red.

PAINTING

☐ 1. Paint – **FLAT/MATTE YELLOW**
(We used Apple Barrell Marigold)
4 external walls for the base

☐ 2. Paint – **FLAT WHITE**
All doors and windows
All pieces of the railings. Spray painting them can be difficult, but may yield better results than brush painting them. **If you can see it, paint it.**
1/16 x 1/16 stripwood (for corners)
Soffit (sides and bottom)
Underdeck (bottom side)
Water tank level indicator

☐ 3. Paint – **FLAT GREY/CEMENT**
Base. Ensure you get the sides.

☐ **4.** Paint – **FLAT BLACK**
Tank band clamps
Site Gauge (The pilot model is red)

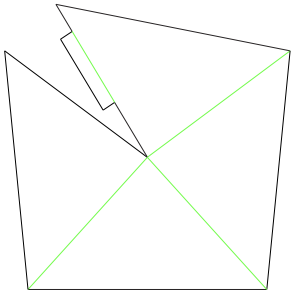
☐ 5. Stain (We used **HUNTERLINE CEDAR**) –
1/8 inch base of Tower Floor.
Exterior of the tank.

If you do not stain/paint within the circle, it will prevent some warping. That being said, you may still need to apply weight to it to prevent that.

We felt Cedar looked more "California" and a little more appropriate than either Blue Grey or Driftwood as the tank would be more protected from the weather.

☐ 6. Stain (We used **HUNTERLINE DRIFTWOOD**)–
1/16 x 1/32 roofing piece

ROOF ASSEMBLY



☐ 1. Locate the chipboard roof that looks like the above piece.

☐ 2. You will notice that there are three etched lines that meet in the middle and one that is on a smaller section. This piece is a tab.

☐ Bend those surfaces away from the etched lines. This forms your roof.

☐ 3. Add some glue to the tab and tuck it evenly under the neighboring triangular roof surface. This forms the roof.

TARPAPER ROOFING PREP

With this kit we were debating the possibility of using cedar shingles, like on many of our other kits. However, we decided that keeping with the tarpaper roofing would help retain the look and feel of the original Sugar Pine kit.

If you want to shingle your building with cedar shingles, we suggest https://www.rail-scale-models.com/HO-Dragon-Scale-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 roofing pieces 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.

The following steps refer mainly to weathering. If you choose to have the building and roof in a newer condition, don't follow steps 5 through 7 as closely as you would if you are more heavily weathering it.

☐ 4. You will notice that there are four pieces of each shape of the roofing material.

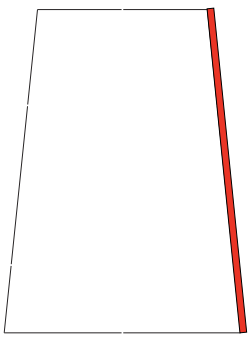
☐ 5. Take a strip from the construction paper and line it up along the corner of a scrap piece of 2x4 or an edge of a hard material you don't mind getting messed up.

☐ 6. 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. (Above photo of a regular, flat roof, not the square roof.)

☐ 7. If you so desire, you can dig into one of the long the 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)

☐ 8. Repeat steps 3 - 7 until all roofing strips are complete.

CORNERS



☐ 1. Cut and glue pieces of 1/16 stripwood to the **outer** edge of each wall. (Only one shown for clarity)

☐ We recommend that you glue the 1/16 to the same side as the bracing. This will help form a pocket to rest the adjoining wall to.

WATER TANK LEVEL INDICATOR

The water level indicator works on the premise that there is a float inside the tank that is connected to a rope, which pulls or drops the level indicator on the outside of the tank.

☐ 1. Cut out and apply the decal to the water tank level indicator as shown above.

☐ 2. Let dry.

☐ 3. Decide where you want the water level to be.

☐ 4. Glue the site gauge to the piece of thread as shown above. We used CA so these next few steps go quickly.

☐ 5. Flip the site gauge over and glue into place, evenly.

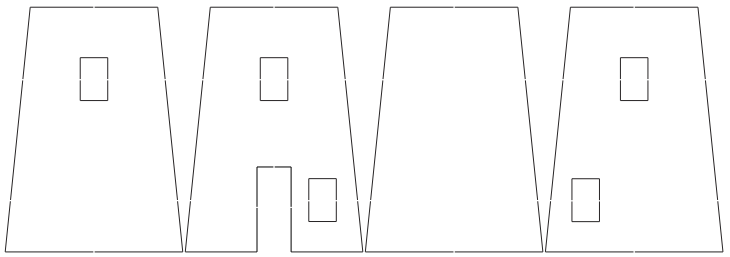
☐ 6. Pull the string tightly, so it's in a straight line on the front of the indicator.

☐ 7. Add a drop of CA to the top of the backside of the indicator and wherever the bottom of the thread ends up. Feel free to shorten the thread on the backside.

BASE CONSTRUCTION

☐ 1. Glue the four walls together. The sidewalls are interchangeable.

☐ Ensure the building is supported so that it will dry squarely.



☐ 2. Gather the four walls for the tower and arrange them however you wish. (Corner bracing not shown) The only thing we could tell from the photos we have is that the wall to the left of the front door had one window.

☐ 3. Plan how you are going to hold the structure together squarely and so that there are no gaps between walls while drying. The pilot model didn't dry uniformly and there are gaps in it.

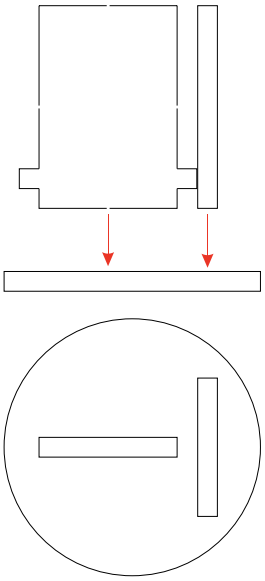
We recommend rubber bands, but also used some clamps when trying to fix the issue.

☐ 4. Once you're happy with your plan, glue the walls together and apply your support to keep it together.

☐ 5. When dry, center and glue into place the Tower Floor on the top of the tower.

TANK ASSEMBLY PART 1

☐ 1. Cut out the five circular pieces and the two accompanying somewhat rectangular pieces from the tray of 1/8 inch pieces.

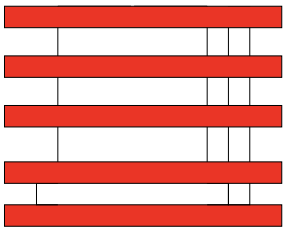


☐ 2. Set one of the circular pieces down and glue the rectangular pieces "keys" to it with the notched ends down.

This serves as a keystone for the remaining pieces.

A fast-drying adhesive will allow you to continue the following steps quicker. However, if the "keys" are not perfectly aligned, the circular pieces will not fit and could break. Depending on your comfort level, you may decide to use a tacky glue, such as Aileens'.

We, unfortunately, could not find a dowel big enough so we had to make our own.



3. CAREFULLY, add the remaining circular pieces to the "sandwich".

The circular pieces break easily if you're not careful. If this happens, we recommend glueing it back together and adding weight to ensure it reforms its' original shape.

We recommend using a tacky glue, such as Aileens' for this step.

The pieces don't need to be exactly evenly spaced out. The point is to provide an even surface for the tank wrap to conform and adhere to.

☐ The top piece does need to be at the top.

☐ 4. Set aside to dry.

TANK ASSEMBLY PART 2

☐ 1. Soak the tank wrap in water until it warps.

We recently learned a technique where you use boiling water to warp your tank wrap.

If you don't want to try the technique described below, use room temperature water. It will just take longer to curl the wood.

☐ **BE EXTREMELY CAREFUL** if you try this technique. You could get burned if you're not careful.

☐ Microwave two cups of water on HIGH for 3 minutes. It will boil.

☐ Pour it into a flat pan and soak your tank wrap in it until it curls.

☐ 2. Carefully, ensure the tank wrap will fully conform to the tank.

If it comes out a little off, you can trim it.

If it's a little uneven, you can compensate for that by cutting a piece of excess to fit. But you'll do that later.

☐ 3. Add a tacky glue to either the outside of the circular "sandwich" or the underside of the tank wrap.

☐ 4. Wrap the tank around the "sandwich", ensuring the entire tank is wrapped and fits evenly.

☐ 5. Add several small rubber bands to ensure the wrap adheres uniformly.

☐ 6. Set aside to dry.

TANK ASSEMBLY PART 3

We provided tank bands simply because they're easy and we haven't found a technique we liked from the more traditional wire and turnbuckle system.

☐ 1. Cut out and glue into place the tank bands as desired.

☐ They should wrap evenly around and should be vertically spaced as well.

☐ 2. Apply the tank band clamps where desired.

If the tank bands are all in a row, that would probably indicate a newer structure, whereas of they were spread out some, the structure was a bit older.

☐ Keep in mind that the water quantity indicator will need to be placed on a flat spot (preferably in the front).

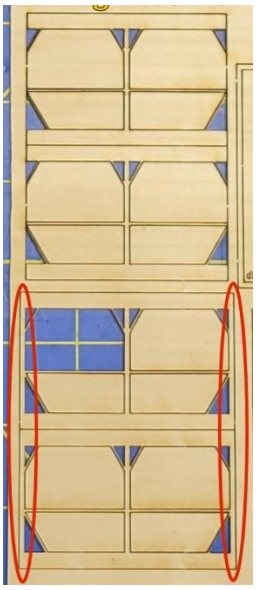
DECK ASSEMBLY

☐ 1. Take the tower floor and glue the underdeck piece to it, ensuring it is square.

☐ The painted part of the underdeck goes on the bottom.

☐ 2. Using the part on the 1/16 tray marked "discard" and put it underneath the deck at an angle, so the deck is raised above your work space 1/16".

This is because the deck soffits are 3/16" thick and will have a lip below them when properly assembled.



☐ 3. Examine the railing assemblies, realizing that two have sides and two do not. They are opposites.

☐ Notice that there are Ys on the support braces in the middle. When it comes time to install these, you should see the Y. If not, they're on wrong.

☐ Be careful with the railings as the supports like to break off. We tried to add some strength to them as we designed the kit, but breakage is inevitable.

☐ Should a support brace break, put it aside and glue it into place in the finishing touches stage.

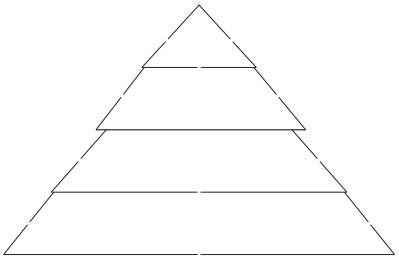
☐ 4. Dry fit all four railing assemblies to the deck, so you see how they go together.

☐ Dry fit the soffit to the top of the railing assemblies.

☐ 5. When you're happy with how they fit, glue the assembly together and set aside.

If you have a way to hold it square, that's your best bet. **DO NOT USE** rubber bands.

ROOFING



The roofing pieces stack like a Christmas tree.

☐ 1. Starting at the bottom, glue a strip of the roofing into place on the chipboard roof.

☐ We recommend you do all four of the bottom layers before proceeding.

☐ 2. Take the next layer and glue it above the bottom layer.

☐ You want for the top edges to match up with the edges of the roof side. This will cause a slight overlap.

☐ 3. Again, proceed to apply the layer for all four sides.

☐ 4. Repeat until all four pieces are on each side.

☐ 5. Trim any excess.

☐ 6. Glue the pieces for the corners into place so that they are even on the bottom.

☐ 7. Apply the cap. You may decide to cut slits so it fits.

☐ 8. Trim any excess.

WINDOW/DOOR/DETAIL FINISHING

☐ 1. Using a clear drying glue, apply the respective pieces of acetate in the windows and doors.

☐ 2. When the glue has dried, glue the doors and windows into place.

☐ 3. The four cap rails can be fit and glued into place on the tops of the railings.

You will notice that there are notches in two corners. Those are the inside corners and install from the inside out.

☐ 4. Glue the building onto the base, ensuring the pad in front of the door is where it's supposed to be and everything is even.

☐ 5. Glue the tank to the center of the deck as marked by the circle.

☐ 6. Glue the water tank level indicator to a desired position on the tank.

☐ 7. Glue the deck to the top of the building. It should fit like a glove, nice and square.

☐ 8. Glue the roof squarely to the top of the deck.

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

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