



Bob's Miniatures

Specializing in Model Railroad Stuff





**My name is Bob
and I am a Model
Railroader.**

**I'm also a 3D
Model Designer**



The purpose of this presentation is to show you how I build an HO Scale chain-link fence using my products from Bob's Miniatures. This is the second part of a 3-part tutorial. In this part, I will show you how to easily convert these simple frames to realistic looking chain-link fences for your HO scale layout.



The following instructions are geared for the beginner or the layman with new bench work. You seasoned model railroaders have built, torn down layouts, built again and already pretty much know what you are doing. But tag along anyway, you may glean something.

Don't worry if the video gets a little too fast for taking notes. It will be available on my information website as an Adobe .pdf file that you can down-load and print.

<https://bobsminiatures.com/>

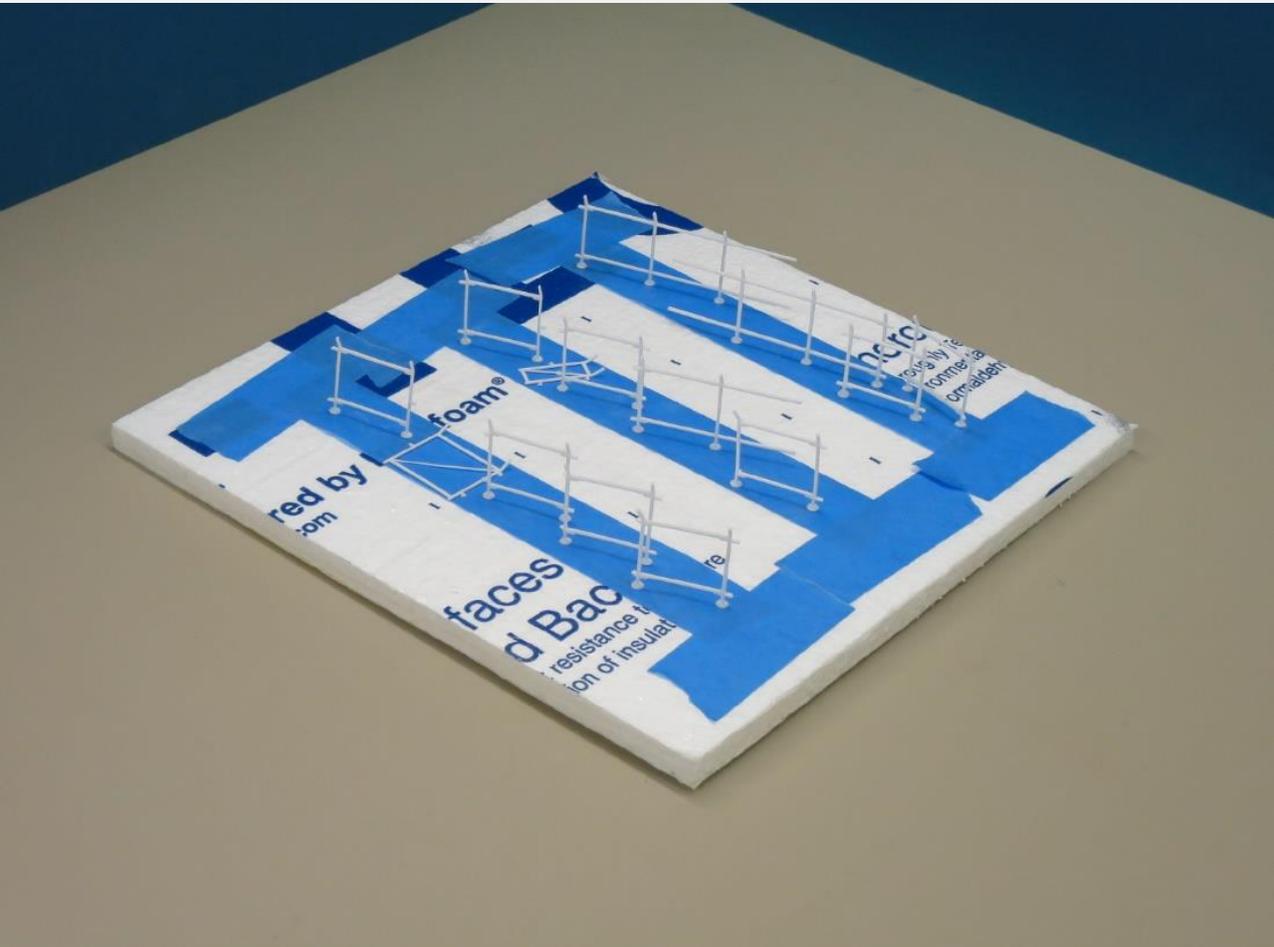
At this time you should pretty much have received all of your fence parts (from part-1) and have your support material at hand.

So, let's get to work and build a fence.

This is my way of painting chain-link fence frames:

- Cut out a couple pieces of ½” foam insulation about 12” wide x 12” long to use as a part holder while painting your fence. Lay one of the pieces flat on your work bench.
- Tear off about 6 pieces of 1” wide blue painter’s tape that are about 3” long and tack them to the edge of your work bench.
- Tear off a piece of blue tape about 7-8” long and place it along the middle of the piece of insulation with the sticky side up. Using one of the short pieces of tape, tape one end down onto the insulation. Stretch the long tape across the center and tape the other end down with another short piece of tape. Tear off two more pieces of blue tape about 7-8” long and repeat the process, placing them parallel to the first piece and somewhere between it and the edge of the insulation.
- Now you have a sticky surface to hold your work while you paint.

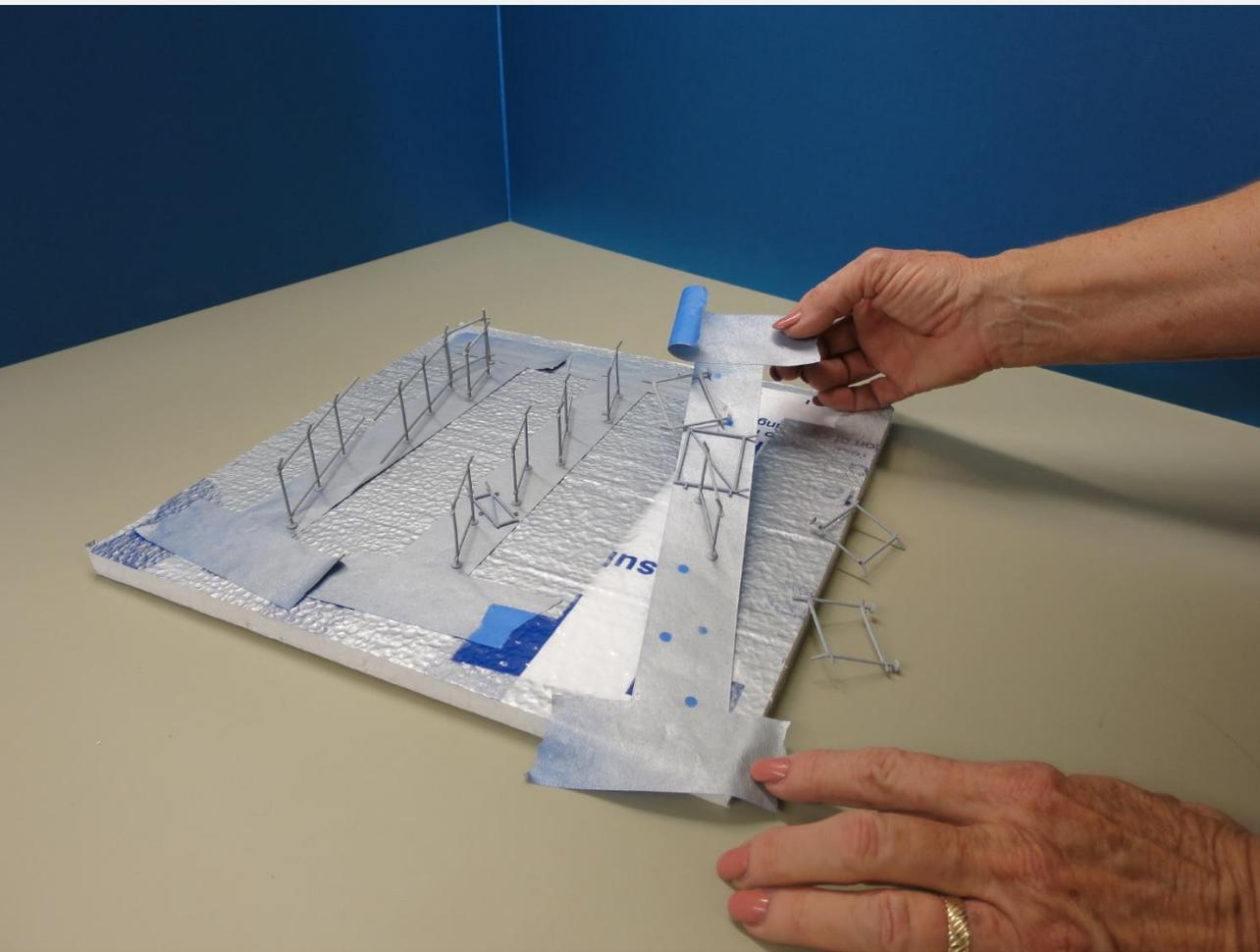




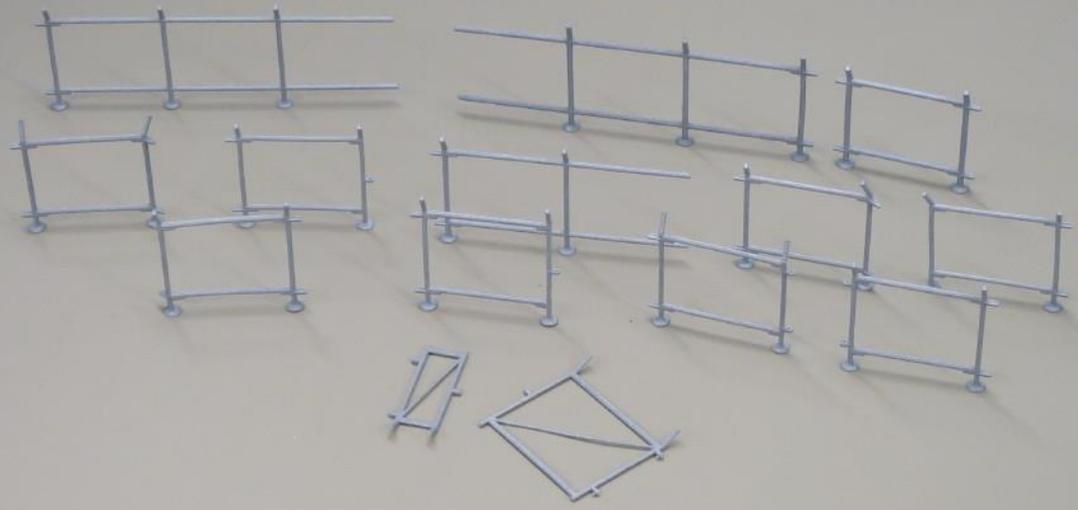
Begin sticking the base of your fence parts onto the blue tape. Be sure to leave some breathing room between each part so one part won't block another part from the paint spray. For those parts like gate section that are without bases, you can stick them flat on the tape or pin them onto the insulation with map pins. If you are painting gate, mask off the hinge parts of the assembly and brush paint them carefully later. You don't want to get paint on the hinge pins or in the hinge holes.



Put a disposable glove on your hand that will be holding your work so you will not accidentally paint your hand too. Step outside or wherever you spray paint and give your fence parts a good coat of aluminum colored paint that bonds with plastic. I use Rust-oleum 2x Ultra Cover paint. Set your painted work aside and let it dry 20-30 minutes. Now you can prepare the next piece of insulation and add more fence parts to paint.



To remove your dried fence from the tape, pull off an entire strip of tape with the fencing attached. Carefully peel the tape away from each fence base. Otherwise, there is a chance of breaking off the base. Set the fence parts aside and prepare the insulation for more fence parts to paint as needed. Continue this cycle until all of the fence parts are painted with the aluminum colored paint.

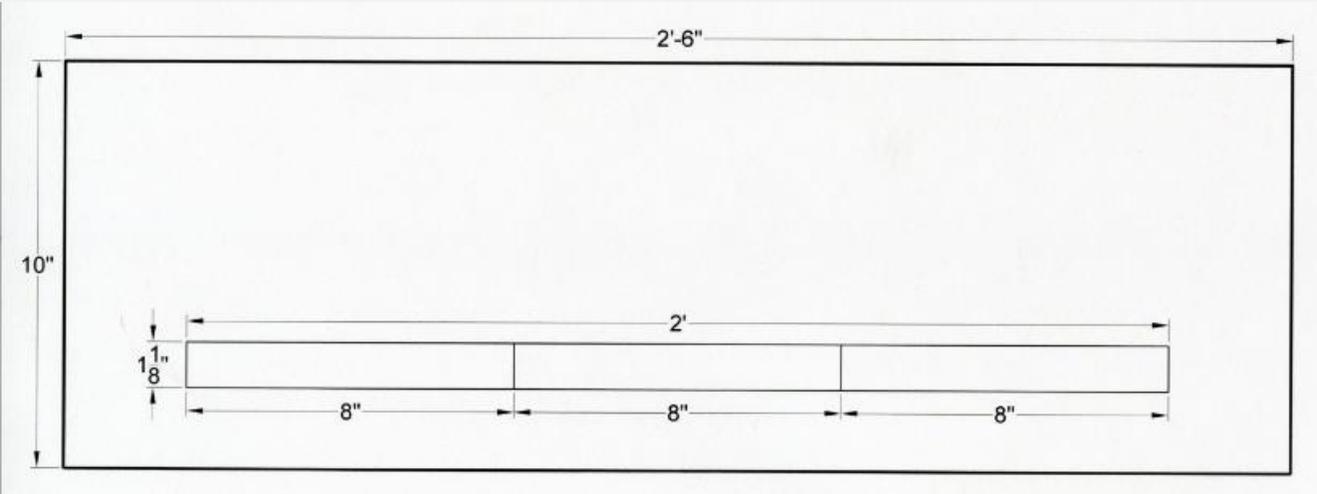




Now that all of your fence parts are painted Aluminum, it's time to paint the bases. If you don't want to expose the bases, then paint them a matching color of the medium you will be using as ground cover, such as green turf, brown turf, or gravel. Since chain-link fence posts are buried in the ground with concrete, I choose a flat, acrylic concrete colored paint. Using a small brush and a flat, acrylic paint, carefully paint the bases of all of your fence parts.

All of the fence parts are painted and time to prepare the chain-link wire mesh.

- Take a piece of scrap wood or MDF about 30" long and draw 2-parallel lines 24" long x 1 1/8" apart with a straight edge and pencil.
- Start at one end of the parallel lines and draw 3-consecutive rectangles that are 8" long, using the parallel lines as sides.
- Now you have a pattern/template to cut-out your wire mesh.





- Cut-off 26" of tulle ribbon mesh from its spool (as discussed in part-1 of this tutorial.)
- Lay a long edge of the mesh along the closest parallel line to you and tape it down with blue painter's tape as shown.
- Lay a metal straight edge over the rectangles with its edge along the furthest parallel line. Hold the straight edge down firmly and use a **sharp** Utility knife to cut the mesh into a 1 1/8" wide strip. I'm lucky enough to have a work bench that allows me to clamp down my projects (as shown.) You cannot allow the straight edge to move while cutting.
- Inspect the edges for any rough spots and set the strip aside.
- Continue cutting as many mesh strips as possible from this original ribbon piece. You may get 3 or 4 strips from it. Anything less than 1 1/8" wide is scrap.
- Continue this process until you have enough mesh to cover all of your fence pieces. You can always cut more strips as needed.



- Clip a wooden clothes pin to each end of a mesh strip. One pin is a handle and the other pin is a weight
- Put a disposable glove on the hand that will hold the handle pin.
- Step outside or wherever you spray paint. Let the weighted end dangle while spray painting the mesh on both sides with the same aluminum colored paint as the frames.
- Lay the painted mesh, clothes pins and all on a clean, smooth, dry surface to dry. Better yet, hang them up to dry. Cut about 4 sections of utility wire about 2 ft. long. Bend and form one end to go over your garage door overhead frame and bend a small “L” shape on the other end. Pre-drill holes on one side of each handle clothes pins larger than the wire. Then when you have finished painting the strip, you can simply hang them on the “L” shape end of the wire to dry.
- You can repeat this process as often as needed until all of your mesh sections are painted.

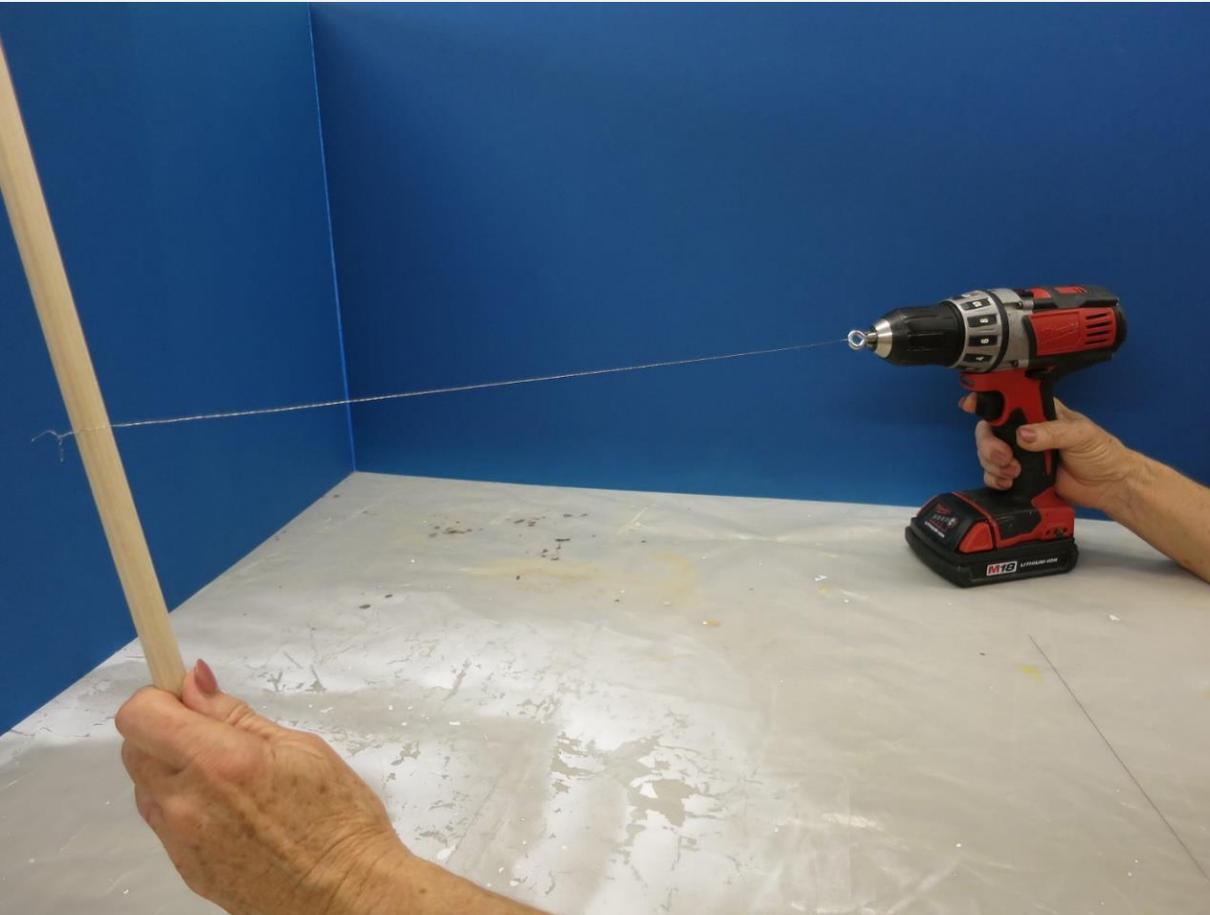




- After the mesh sections have dried take one section at a time and remove the clothes pins.
- Place the section back onto your cutting board, aligning the bottom edge of the mesh with the closest parallel line and centered left to right with the 3 rectangles.
- Tape down the mesh as shown with blue painter's tape.
- Use a straight edge and a **sharp** Utility knife to cross cut your mesh into 3 smaller sections using the 3 rectangles you drew earlier.
- Now you should have 3 sections of mesh about the same length, each long enough to cover the longest fence part.
- Repeat this process until you have enough mesh sections to cover all your fence parts.
- Check the edges ragged places. If you find some bad areas, discard the whole section or maybe use it in a shorter section.

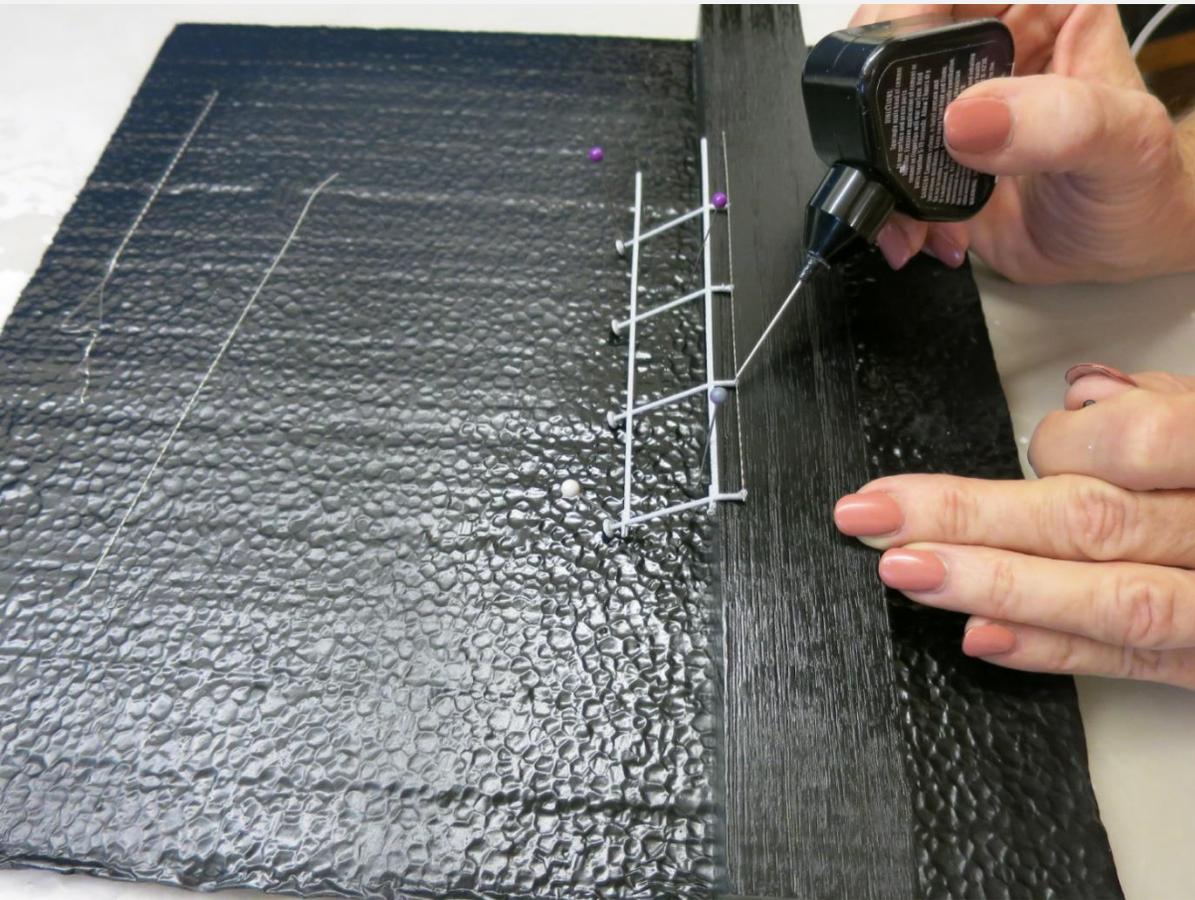
You may want to find a comfortable place to sit as it becomes a little more tedious.

You should have most or all of your mesh sections painted and cut to working size.

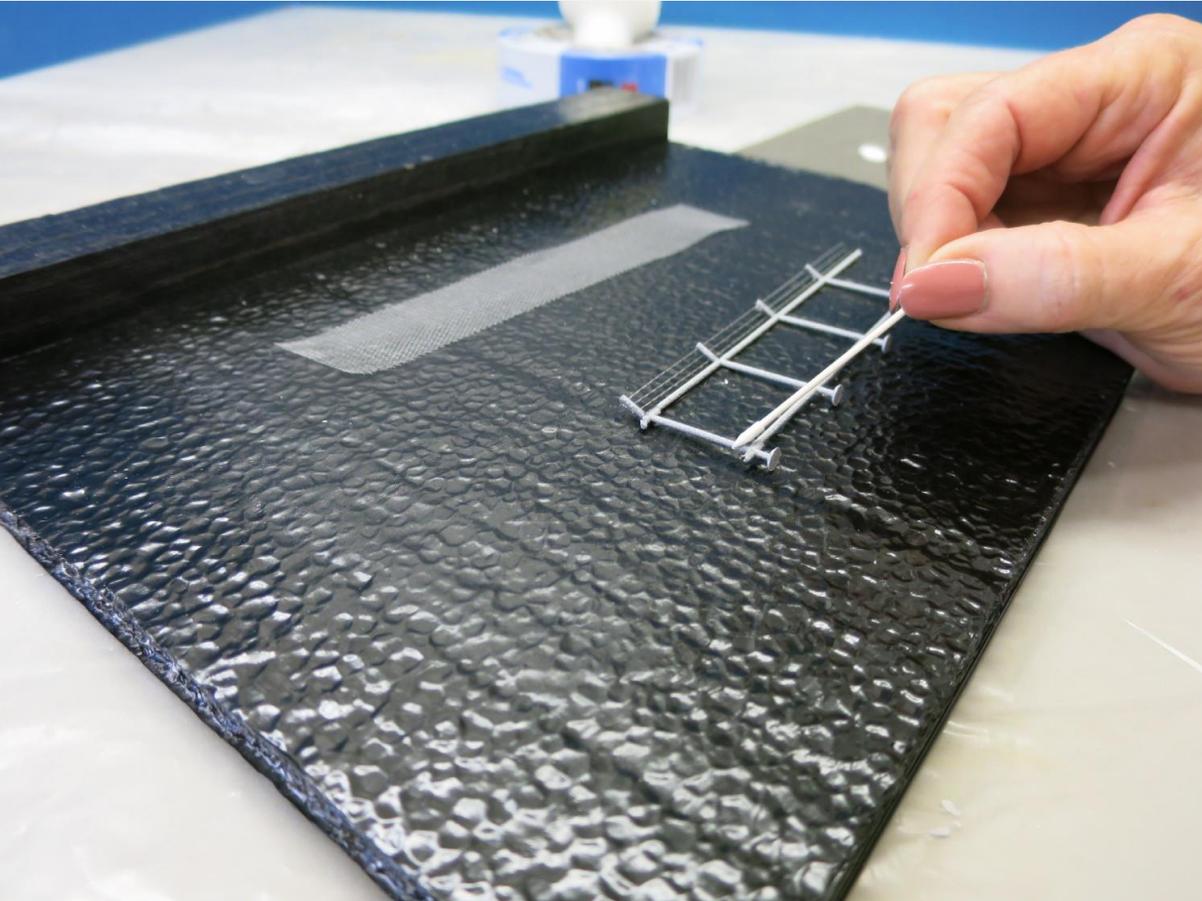


Let's add 3-strands of barbed wire to the tops of our fence. Well, at this scale, you probably can't see the barbs anyway, so let's string wire. The fence looks OK without the wire, but it adds a lot to the looks.

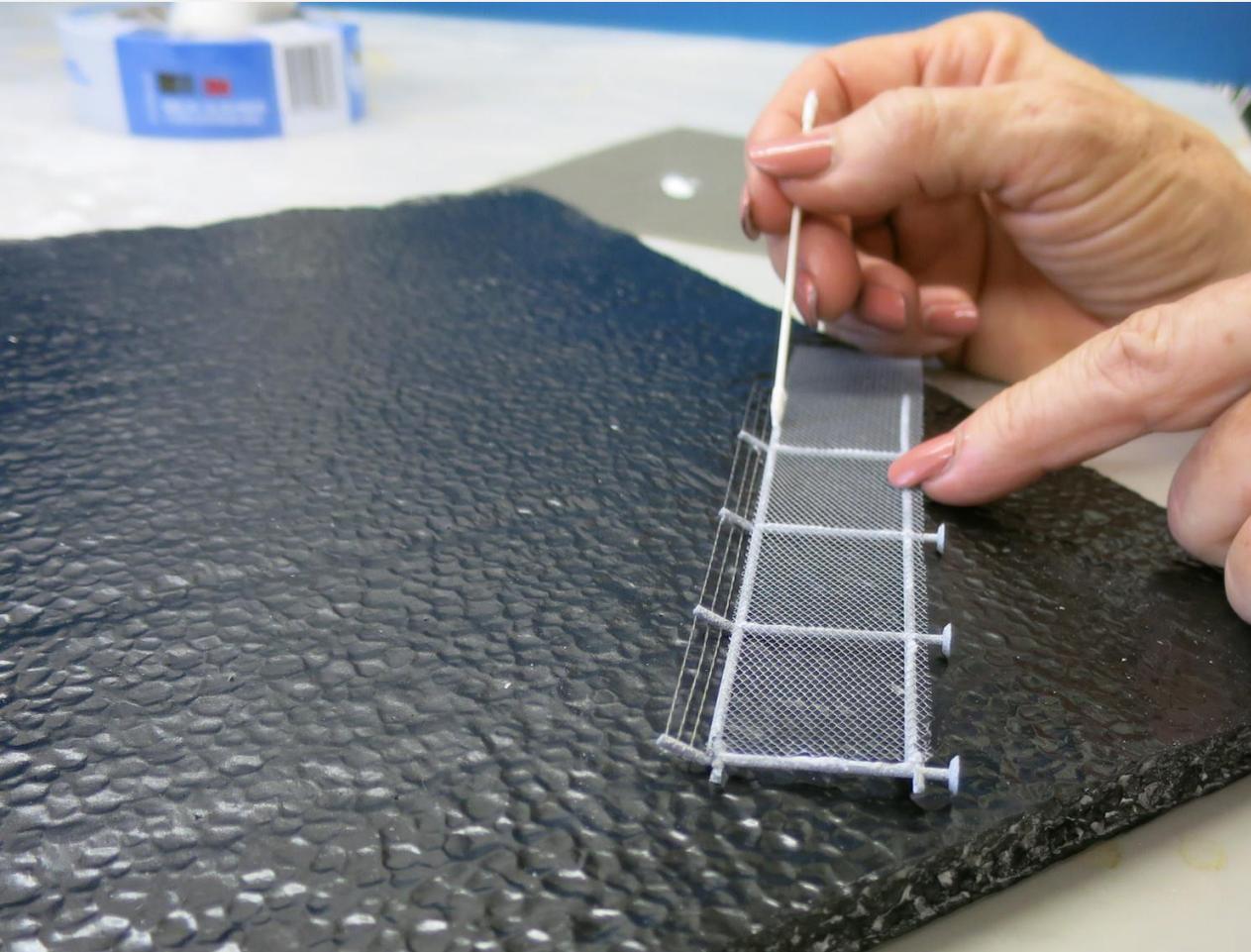
- Be sure to cut off all extra posts and cutoff any rails as needed before gluing on the barbed wire. Attempting to cut the frames, wire and mesh afterwards is tough if not impossible.
- Install a screw eye into the chuck of an electric drill.
- Cut an approx. 40" length of 32 gauge jeweler's wire, feed an end through the screw eye and then twist the ends together.
- Feed a dowel through the loop at the twisted ends.
- While holding the drill and dowel so that the wire is taut, activate the drill, and let the two wires twist together uniformly. Don't over-twist or the wire will curl.
- Cut the wire from the drill and dowel and lay aside.
- Repeat this procedure until you have at least enough "barbed wire" to go around your fence perimeter 3-times.



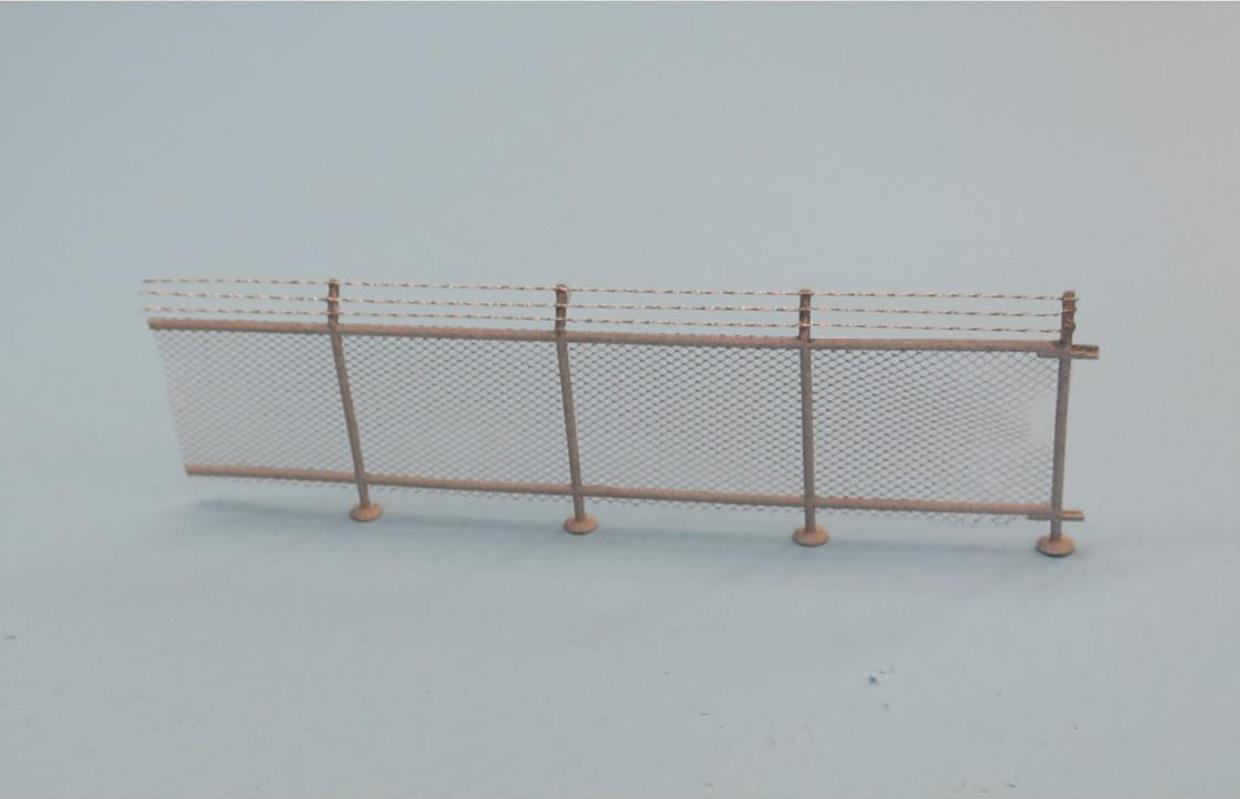
- I prepared a jig on a piece of insulation foam with a block of wood and some straight pins to hold my work in place
- Pin down the fence frame with straight pins with the bent barbed wire fence top positioned as shown.
- Cut a section of twisted wire approx. 1” longer than the fence section and lay it across the top of the posts as close as possible to the tips.
- Add a drop of model glue or Super Glue to each point where the wire crosses the fence post. I use Model Master’s plastic model glue. I don’t know of anything that sticks to stainless steel other than a weld or solder. The glue doesn’t stick the wire to the fence, it surrounds and binds the wire to the fence.
- Cut a second length of wire in the same manner as the first, but place the wire across the posts slightly higher than the bend and glue it in place as you did the top wire.
- Cut a third length of wire in the same manner as the first, but place the wire across the posts as close to the middle as possible with equal distance between the upper and lower wires. Let dry for about half an hour between wires.
- Trim each wire flush at the outside fence post. Leave the extra wire where there is no post as it will be connected to the next fence section later.



- Take one of your painted frames and lay it down with the barbed wire arms up. This is the outside of the fence.
- Lay a section of mesh across the frame to be sure it fits. If it is adequate, set the section of mesh aside.
- Cut out a piece of waxed paper or tin foil wrap about 6" x 6" to use as a glue staging area. In the next few steps it is important to work quickly as the glue will dry fairly fast. I use a gluing mat.



- Pour a few drops of white, clear drying glue onto your glue staging area (foil wrap or wax paper). I use either Elmer's white glue or Woodland Scenics Scenic Glue.
- Quickly swab on a fairly generous amount of glue over the entire front of the frame from the staging area with a mini swab. I use Tamiya cotton craft swabs.
- Quickly, but carefully align the section of mesh that you set aside onto the frame with the long edge along the top rail and the end edge the first post. Try not to wrinkle the mesh. If you do, push or pull the wrinkle out before the glue dries. The mesh needs to be relatively taught across both directions of the frame. When the glue dries, cut off the excess mesh along the ends of the rails with a pair of scissors or with an Exacto knife along the second post if there is one. The mesh should extend slightly below the bottom rail.



Continue the above barbed wire and mesh procedures for of all of your fence sections.

In the third and final presentation, we will install the fence sections on the sample layout.

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<https://www.bobsminiatures.com>

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<https://www.shapeways.com/shops/bob-s-miniatures>



End of Part-2
Thanks for viewing

