



Bob's Miniatures
Specializing in Model Railroad Stuff

The logo is contained within a black rectangular border. On the left side, there is a silver lattice signal tower with two circular lights. To its right is a white trestle bridge with several vertical supports. Further right is a white rectangular signal tower with a flat top. On the far right is a detailed model of a steam engine, showing its wheels, boiler, and chimney, resting on a white circular base. The text "Bob's Miniatures" is written in a large, bold, black, sans-serif font, slanted upwards from left to right. Below this, the tagline "Specializing in Model Railroad Stuff" is written in a smaller, black, sans-serif font.



**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 to build an HO Scale chain-link fence. This is the first part of a 3-part tutorial. In this part, I will acquaint you with my fencing products which provides quite a few of fencing options. These options include a variety of fence sections and parts, including gates and building your own sections. We will organize and order the fence parts we need and collect some basic support materials.











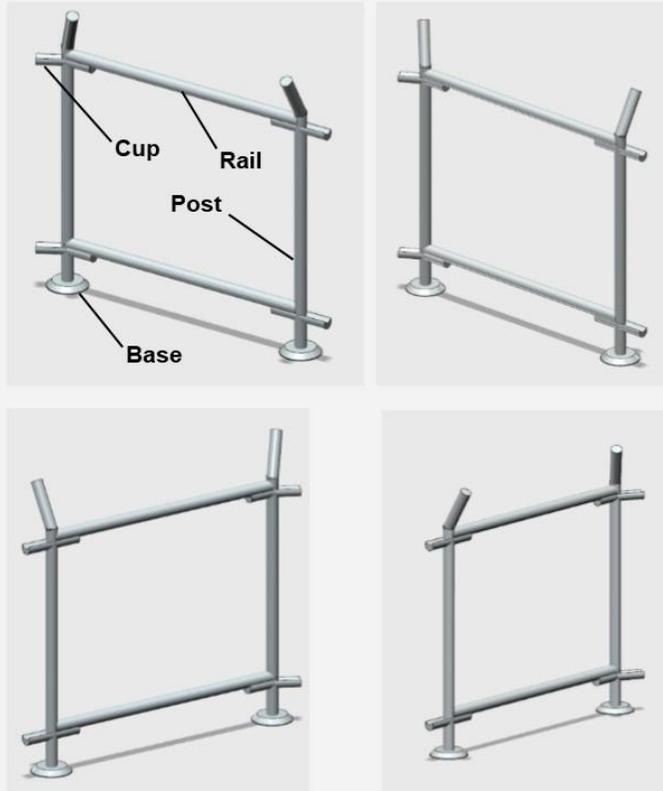
The following instructions are geared for the beginner or the layman with new bench work. You seasoned model railroaders have built, torn down layouts, built again and already pretty much know what you are doing. But tag along anyway, you may glean something.

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/>



I tried to keep the scale of my fence within HO scale tolerance. An average section of my fence is approx. 1.63"L x .26"W (at the base) x 1.46"H. At HO scale 1" = 0.0115" (real inches). 12" is approx. 0.138 (real inches). Therefore, this section is approx. 11.8 ft. long x 1.8 ft. wide (at the base) x 10.7 ft. High. (Real World)



My chain-link fence parts arrive unpainted and without chain mesh. They are simply fence frames that interconnect by gluing the rails of one fence section onto the receiving cups of another section or post. In my next video, I will show you how to easily transform these simple frames to realistic looking chain-link fences for your HO scale layout. I will show you how to use tulle ribbon as fence chain mesh. Tulle mesh is the stuff used in bridal veils. It is sold separately at yardage stores such as Hobby Lobby. Tulle net works super and you can get it for less than six dollars per spool. Each spool is about 6" wide and holds 25 yards of ribbon fabric. I cut the fabric into strips about 18" long and 1.125" wide with a straight edge and an exacto knife. I have a large selection of fence parts to choose from angling to every 15 degrees of the compass.



At present, My Shop offers a variety of 46 different security chain-link fence parts and 6 basic groups:

- Sections with various corner angles
- Straight Sections
- Single Posts with various corner angles
- Straight Single Posts
- Man and Vehicle Gates
- Cut-you own horizontal fence rails

My shop offers 4 different types of gates:

- Man gates that swing left or right
- Single vehicle gate that swing left or right
- A double vehicle gate
- Sliding gates that roll back to the left or right

For a complete listing of fence parts, visit my website:

<https://www.bobsminiatures.com>



Not all fences run straight across an area of your layout. Fences tend to go around existing objects or terrain to maintain some sort of security border around a property. In other words, keep others from freely accessing whose-ever property. Thus I have designed corner sections and single posts to help navigate around a property perimeter.

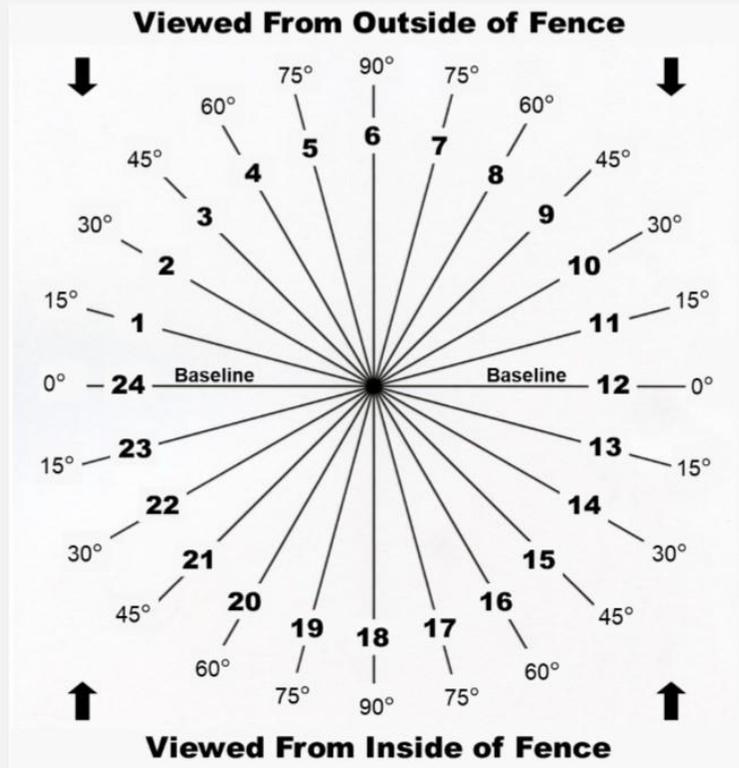
Fence Corner Chart

The following chart is a handy little tool to assist you in directing your fence line. It can be used as a compass or protractor to point the angle direction your fence needs to go. It can be used to assist in parts ordering. Identifying a fence parts angle as it comes from the shippers is sometimes hard to do. My fence parts are precision made, however if you purchase several different angles, they all pretty much look the same due to their small size. Just lay this chart on a flat surface and set the fence corner in the center of the compass, aligned with the baseline. The fence parts will stand alone on their bases. Sight straight down at the corner and angle of the cups will show the angle of direction. This chart is available as a free down-load from my information website at:

<https://bobsminiatures.com/>

Fence Corner Chart

Fence Corner Parts Key



Key No.	Fence Section	Section Part No.	Single Post	Single Post Part No.
1	15° - Not Available	N/A	15° - Inside Corner Post	CL-025
2	30° - Inside Corner-R	CL-002	150° - Inside Corner Post	CL-023
3	45° - Inside Corner-R	CL-006	135° - Inside Corner Post	CL-021
4	60° - Inside Corner-R	CL-010	120° - Inside Corner Post	CL-019
5	75° - Not Available	N/A	75° - Inside Corner Post	CL-025
6	90° - Inside Corner-L/R	CL-013/14	90° - Inside Corner Post	CL-017
7	75° - Not Available	N/A	75° - Inside Corner Post	CL-025
8	60° - Inside Corner-L	CL-009	120° - Inside Corner Post	CL-019
9	45° - Inside Corner-L	CL-005	135° - Inside Corner Post	CL-021
10	30° - Inside Corner-L	CL-001	150° - Inside Corner Post	CL-023
11	15° - Not Available	N/A	15° - Outside Corner Post	CL-026
12	Baseline			
13	15° - Not Available	N/A	15° - Outside Corner Post	CL-026
14	30° - Outside Corner-R	CL-004	150° - Outside Corner Post	CL-024
15	45° - Outside Corner-R	CL-008	135° - Outside Corner Post	CL-025
16	60° - Outside Corner-R	CL-012	120° - Outside Corner Post	CL-020
17	75° - Not Available	N/A	75° - Outside Corner Post	CL-026
18	90° - Outside Corner-R/L	CL-015/16	90° - Outside Corner Post	CL-018
19	75° - Not Available	N/A	75° - Outside Corner Post	CL-026
20	60° - Outside Corner-L	CL-011	120° - Outside Corner Post	CL-020
21	45° - Outside Corner-L	CL-007	135° - Outside Corner Post	CL-022
22	30° - Outside Corner-L	CL-003	150° - Outside Corner Post	CL-024
23	15° - Not Available	N/A	15° - Outside Corner Post	CL-026
24	Baseline			

Now that you have an overview of my fence products and options, let's move onto the planning and material support.



The first thing you need is to develop a plan. With a pencil and straight edge, physically draw the perimeter of your desired fence line onto your layout. A bit of existing turf scraping may be necessary. Use a scale or tape measure to measure stretches between angles and a protractor to measure each angle. Mark the location of each gate (man, vehicle or sliding gate) along the path. On a separate piece of paper, like computer paper, make a proportional drawing of the perimeter and record each measurement along its perimeter.





Use your sketch-up to order all of your parts, including straight sections, corner sections, single corner posts (as needed), gates and cut-your-own rail frames. Keep in mind that the section parts can be carefully cut across the rails to shorten the section into place. However, they cannot be lengthened without cut-your own rails and maybe with a single post or two.

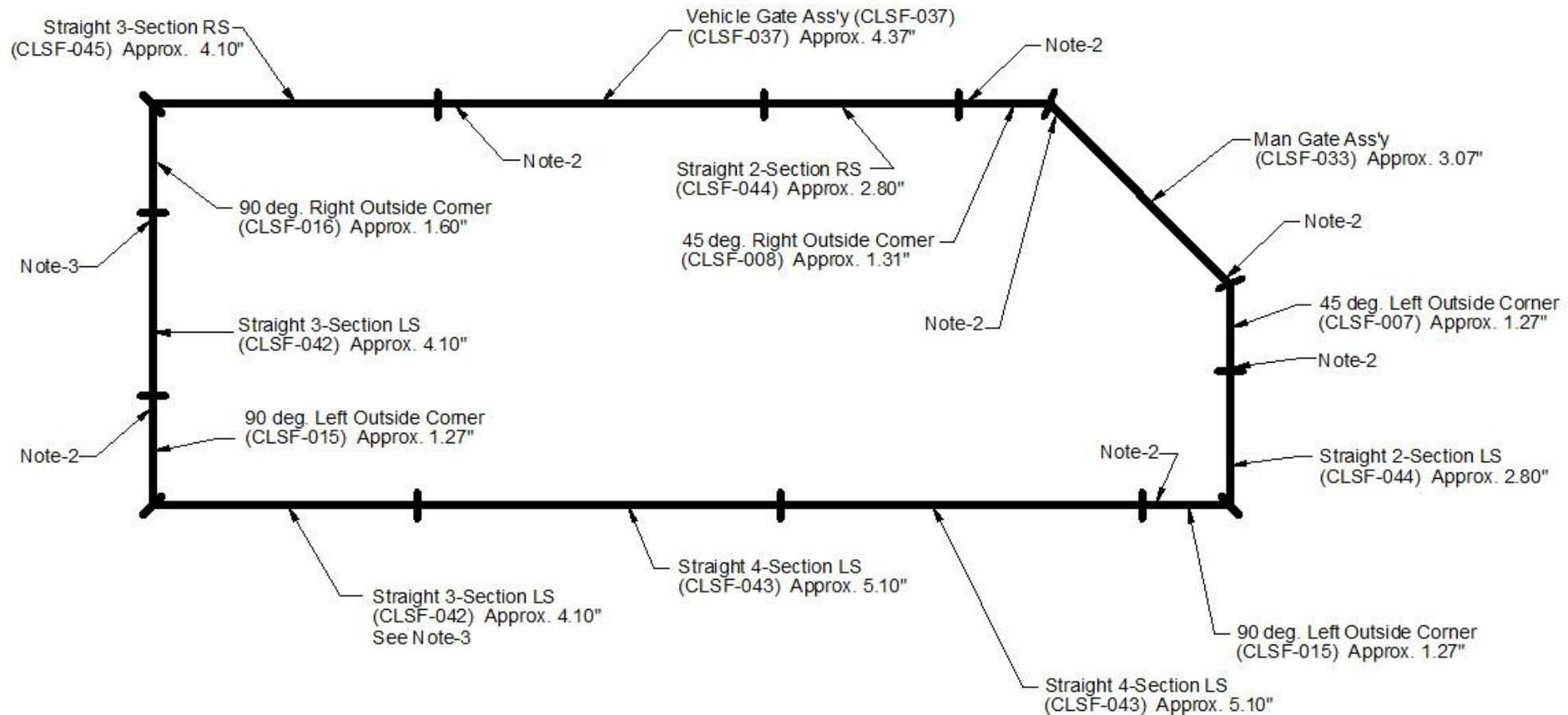


On the next slide, I prepared a random HO scale chain-link security fence perimeter as my tutorial fence project. It is about 15 ½” Long and 5 ¾” Wide. I will follow this schematic while building our sample fence. Don't worry if the video gets a little too fast for taking notes. It will be available on my information website as an Adobe .pdf file that you can down-load and print at:

<https://bobsminiatures.com/>

NOTES:

1. All corner sections come with 2-posts for versatility. Both posts are needed for continuing in the same direction. When changing direction, one post needs to be eliminated as you can't place 2-posts on the same spot. Remember that for each post you cut off, you lose 0.30" in length.
2. Cut this post off at the rail cups.
3. Cut off both rails equally to fit opening as needed.





Use my information website at <https://bobsminiatures.com/> to compile a shopping list of parts. My products can be found easily under the heading “Products and Price List.” The products file can be down-loaded and printed for reference and assistance in creating your list. Once you get your shopping list together, go to my Shapeways shop by clicking on the delivery man under “Purchasing and Shipping” of this web page. Here, you can place your order. Shapeways doesn’t have the parts in a bin. Each part is printed individually upon time of order, placed in plastic baggies, packed with plenty of cushion and shipped to your address via USPS.



Sample Shopping List

<u>No.</u>	<u>Part No.</u>	<u>Item</u>
1	CLSF-002	30 deg. Right Inside Corner
1	CLSF-007	45 deg. Left Outside Corner
1	CLSF-010	60 deg. Right Inside Corner
3	CLSF-015	90 deg. Left Outside Corner
1	CLSF-016	90 deg. Right Outside Corner
1	CLSF-008	45 deg. Right Outside Corner
1	CLSF-033	Man Gate Ass'y
1	CLSF-037	Vehicle Gate Ass'y
1	CLSF-040	Straight 1-Section
1	CLSF-042	Straight 3-Section LS
2	CLSF-043	Straight 4-Section LS
1	CLSF-044	Straight 2-Section RS
1	CLSF-045	Straight 3-Section RS

Now that you have your order placed, it's time to compile a list of support materials needed to complete the fence. Here is some stuff you may want to have available:

- A roll of gray tulle ribbon mesh (stuff used in bridal veils), sold separately at yardage stores such as Hobby Lobby. Tulle net mesh works super as chain mesh and you can get it for less than six dollars per spool. Each spool is about 6" wide and holds about 25 yards of fabric.
- A couple of cans of aluminum colored spray paint that bonds with plastic. I use Rust-oleum Ultra Cover 2.
- A bottle of White Glue that dries clear. I have good luck with plain Elmer's White Glue.
- A package of mini cotton craft swabs. Used to apply glue to the fence parts during assembly.
- An Exacto Knife.
- A sharp pair of scissors.
- A package of wooden clothes pins.
- A piece of wood or MDF to use as a cutting board for the tulle mesh. Approx. 12" wide x 24" long.
- A package of disposable gloves.
- A roll of 1" wide blue painter's tape.
- A roll of 1 1/2" wide blue painter's tape.
- A metal straight edge.
- A couple of 12" x 12" pieces of 1/2" Styrofoam or insulation. Styrofoam is usually kind of pricy. Home Depot sells 1/2" foam insulation in 3 ft. x 4 ft. sheets that works as well. I also use it to build landscape.

In the next presentation, we will put our plan into action and create a realistic looking HO scale chain-link security fence to enhance your layout.

Please Visit My Shop at:

<https://www.bobsminiatures.com>

OR

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



End of Part-1
Thanks for viewing

