

# VANGUARD MODELS

BY CHRIS WATTON

**\*\*24ft Launch\*\***

## Recommended tools:

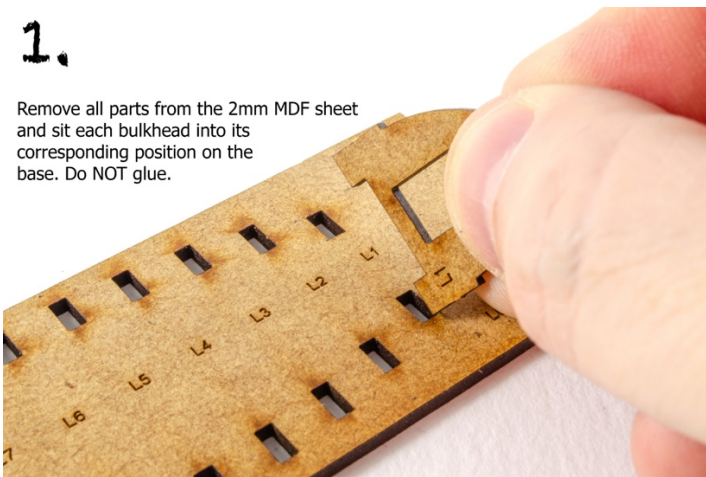
1. Sharp knife such as a scalpel, X-acto or Stanley.
2. Sanding sticks or abrasive papers (110 – 320 grade)
3. Steel rule
4. Needle/jeweller's files
5. Small clamps
6. Small tweezers
7. Masking tape (Tesa, Tamiya etc.)
8. Fine paintbrushes
9. Titebond I/II wood glue
10. Gorilla Glue CA gel

## Recommended Paints etc.

1. Plastikote matt white spray
2. Plastikote matt black spray
3. Vallejo black and brown acrylics
4. Mr Metal Colour aluminium paint
5. Ronseal Matt Polyurethane varnish

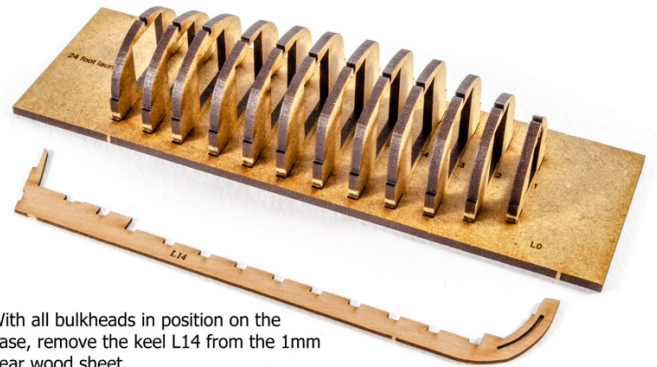
1.

Remove all parts from the 2mm MDF sheet and sit each bulkhead into its corresponding position on the base. Do NOT glue.



2.

With all bulkheads in position on the base, remove the keel L14 from the 1mm pear wood sheet.



3.

Sit the 1mm pear wood keel into the slots on each bulkhead. You may need to joggle things about to get it to sit. Once in position, brush wood glue into each joint and allow to thoroughly dry.



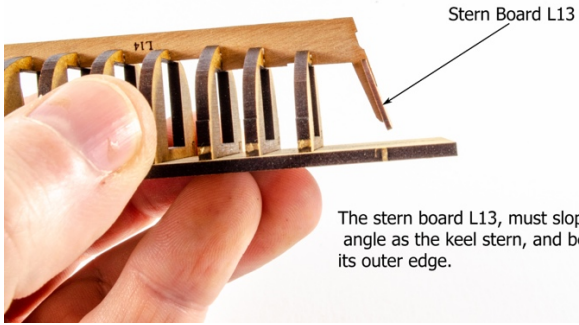
4.

Remove the stern board L13 from the 1mm pear wood sheet and glue it into position on the keel as shown here. Allow to thoroughly dry.



Please note that we have added a stiffening piece to the keel, just forward of this point. This is to provide strength to your hull as you work on it, and it will be removed later in construction.

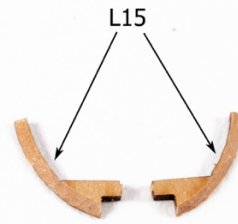
5.



Stern Board L13

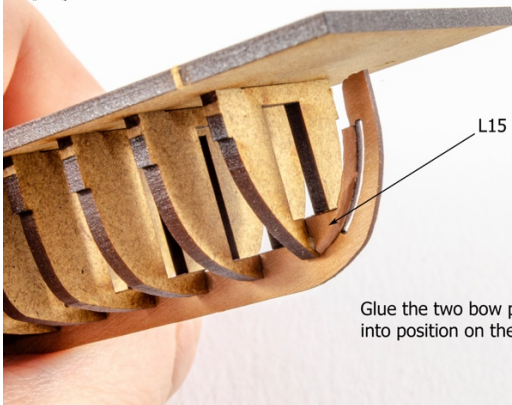
The stern board L13, must slope at the same angle as the keel stern, and be flush with its outer edge.

6.



Cut the two bow planking patterns L15, from the 1mm pear wood sheet and bevel the forward edges on one side, as seen in this photo.

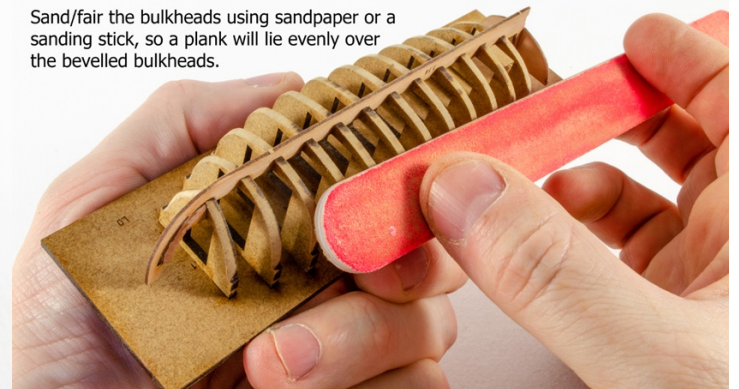
7.



L15

Glue the two bow planking patterns L15 into position on the keel as shown here.

8.



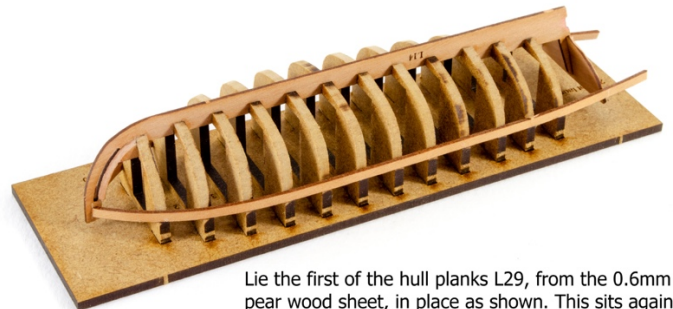
Sand/fair the bulkheads using sandpaper or a sanding stick, so a plank will lie evenly over the bevelled bulkheads.

9.



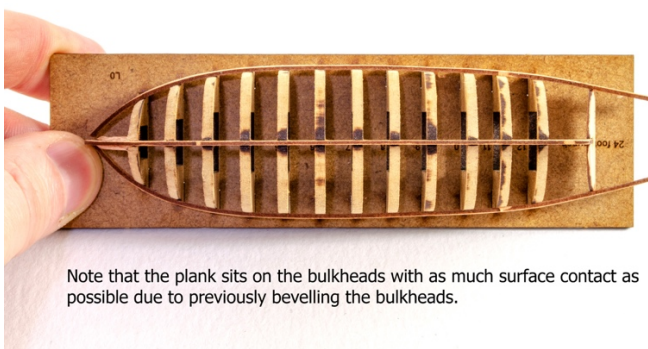
If you decide to soak the first planks to bend them, make sure you allow to thoroughly dry before fitting them.

10.



Lie the first of the hull planks L29, from the 0.6mm pear wood sheet, in place as shown. This sits against the shoulders of the MDF bulkheads. We advise using wood glue for this, and not CA.

11.



Note that the plank sits on the bulkheads with as much surface contact as possible due to previously bevelling the bulkheads.

12.



Using more 0.6mm planks (L29), continue to plank upwards towards the keel. To get maximum contact to the bulkheads, you will need to taper the planks. The pencil marks seen here are where these were tapered from. Edge-bevelling the planks will allow them to sit snugly together too. You will probably find it necessary to start planking from the keel at some point, and meet up with the previous planking.

13.



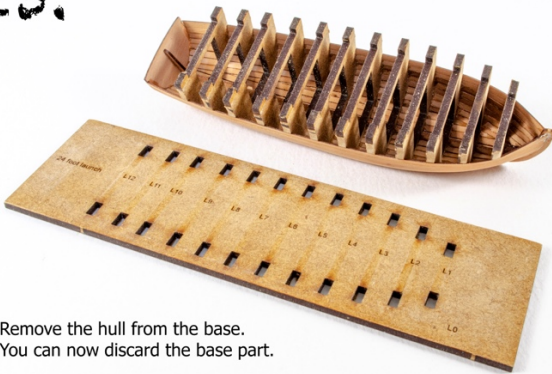
Here you can see the completed planking. It's perfectly ok to use infill planks (stealers) to close up any gaps, as these won't be seen underneath the paint layer. You can see the infill planks in this photograph.

14.



Sand the hull smooth using 110 grade abrasive paper to start with and then finishing with finer grades. We suggest any imperfections are filled with an acrylic filler, diluted with water.

15.



Remove the hull from the base. You can now discard the base part.

16.



To remove the MDF bulkheads, first snip away the bridge on each one.

17.



Using pliers, twist at each bulkhead to carefully remove it.

18.



You can now use a sanding stick to draw over the upper edges of the bulwarks, to evenly level them.

19.



Carefully sand the inside of the hull to smooth things out and remove any remnants of glue.

Cut the rib strips (L30) from the 0.6mm pear wood sheet and glue into place inside the hull as seen here. Space them about 5 - 6mm apart.

20.



Use a pencil to mark a spot on the forward ribs that is 3mm down from the edge of bulwark. Remove the seat support strips (L31) from the 0.6mm pear wood sheet, and glue underneath those pencil marks.

21.



OPTIONAL: To create a wood finish to the PE floor sections, you can first apply a coat of Tamiya XF-59 Desert Yellow.



On top of the paint, you can now apply a very thin coat of Raw Sienna oil paint, using a piece of foam.



Spots of Raw Umber oil paint can now be randomly applied to the previous oil paint covering.



Using your foam sponge, drag the dark oil paint spots into the lighter layer below. Keep doing this until you achieve the desired result.

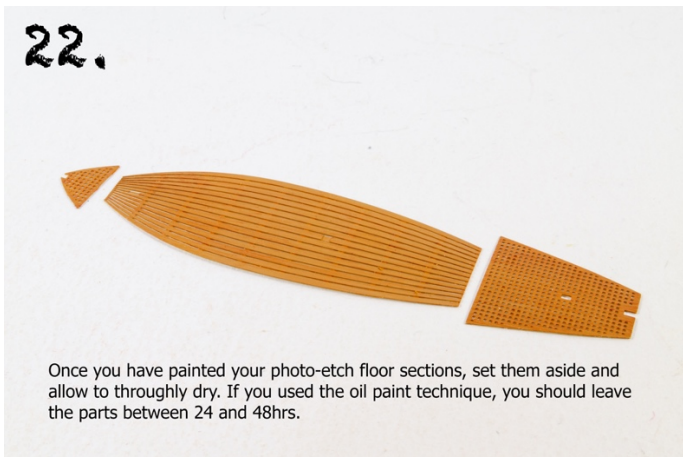


You can make your wood effect as subtle or coarse as you wish.



A fan brush could also be used to create knot effects and a more natural flow to the grain.

22.



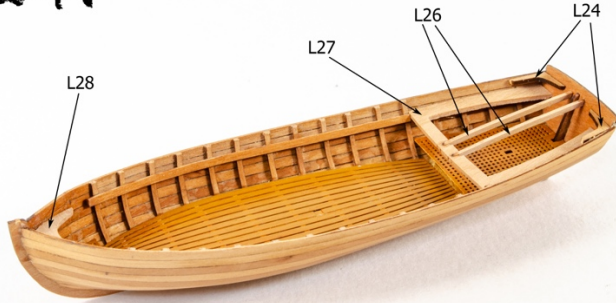
Once you have painted your photo-etch floor sections, set them aside and allow to thoroughly dry. If you used the oil paint technique, you should leave the parts between 24 and 48hrs.

23.



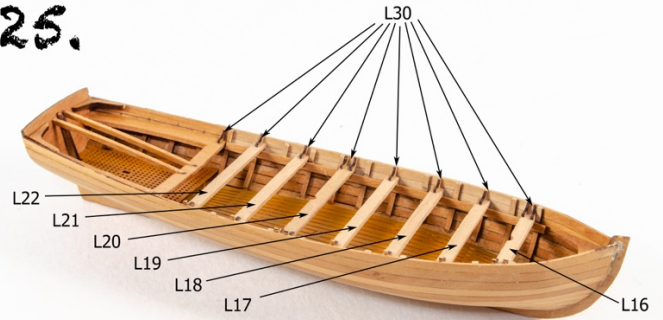
Using CA, glue the photo-etch floor sections into place within the hull.

24.



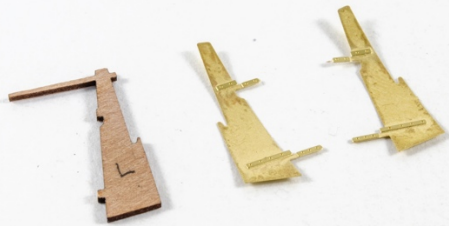
From the 1mm pear wood sheet, glue parts L24 (x2), L26 (x2), L27, and L28, into position as shown here.

25.



All of the seating now needs to be fitted, resting upon the seat support rails you fitted earlier. The seats are purposely over-length, allowing you to trim them specifically to your boat. With the seats in place, add the ribs (L30) from the 0.6mm pear wood sheet. Note they are doubled on the seats where the masts have support.

26.



Cut the rudder (L23) from the 1mm pear wood sheet and also the rudder side patterns from the PE sheet. For this boat, you can remove the rudder tiller as there is a separate arm to be fitted within the boat. It's up to you.

27.



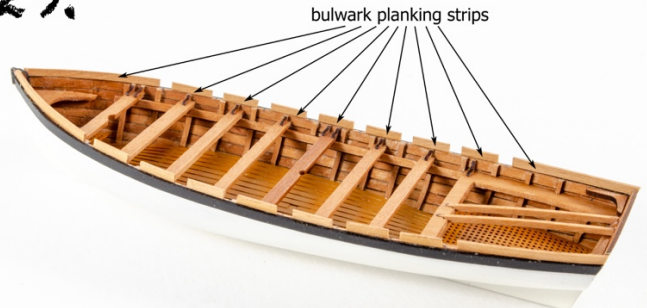
Glue the rudder side patterns to the rudder as shown here. We recommend using CA gel as it allows time to position the parts before the glue sets.

28.



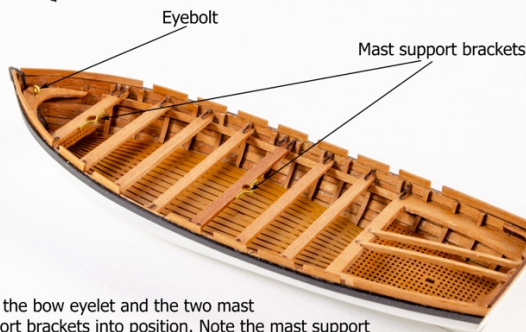
Paint the hull white and the wales (from hull planks) in black. When dry, fit the wales to the hull sides so they are flush with the top of the hull bulwarks.

29.



Here's another view of the hull with the wales fitted. Make sure you trim off any excess length from the rear of the hull. Add more lengths of planking along the top of bulwark for the oar positions.

30.

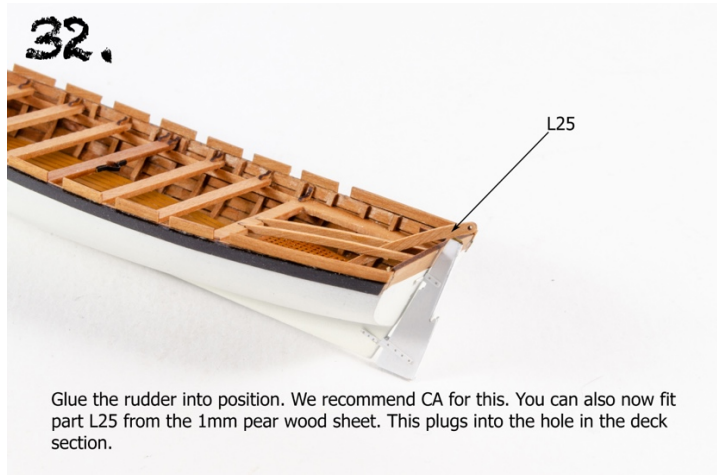


Glue the bow eyelet and the two mast support brackets into position. Note the mast support brackets are bent into a semi-circle in the middle. We suggest using a small drill bit to help form this.

31.



You are given the choice of using either photo-etch or wooden oars. If you use the wooden ones, sand the paddle to shape and slightly round the handle. To paint, we chose white for the handle with a varnished paddle. The paddle tip is painted in copper.



33.

Complete!



Fit the oars into position as shown here.  
If you don't wish to fit the rudder, then it can be stowed  
in the rear of the boat.

