

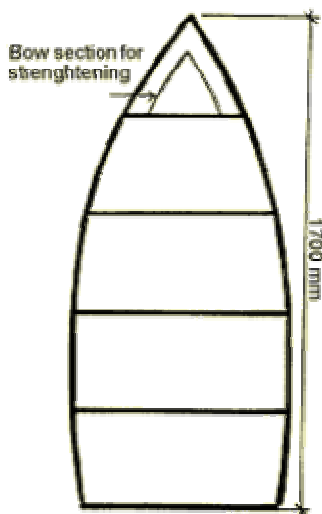
Boat Bookcase Plan

This unique boat bookcase is sure to be a talking point in the home of any woodworker. The steps for making this free woodworking project plan from Emporium Indonesia are as follows.

1. On a sheet of 18mm plywood sketch a rectangle measuring 720mm x 1700mm, then measure and draw a line directly down the center. You are now ready to draw in the shape of our boat. This will then form the back of the bookcase (see diagram).



2. To draw the boat's curved shape, first divide the length of the bookcase into five intervals set 340mm apart. Draw a line to give the position for the bottom of the shelves, remembering that there is a shelf forming the base of the bookcase.

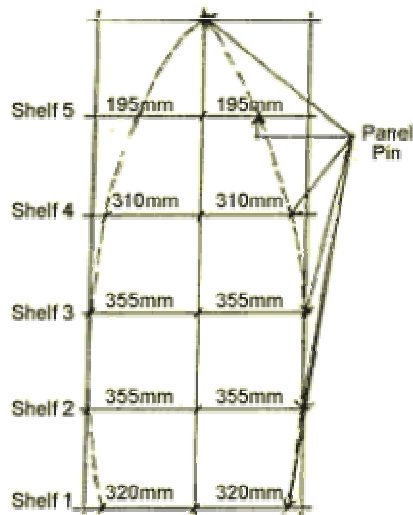


3. The next step is to mark the varying wood shelf lengths. Once these are marked it is a matter of joining the dots. The shelf along the bottom of the bookcase is 640mm long, so make a mark 320mm either side of the center line. The second and third shelves are 710mm long. Mark a line 355mm each side of the centre along the lines intended for the position of each shelf. The fourth shelf will be 620mm long - 310mm each side of the centre. For the last shelf, which is 390mm wide, you will only need to measure 195mm to each side. At all 10 of these points hammer a panel pin into the plywood.

4. There are two final panel pins that have to be put into place and they are set at the tip of the boat, 10mm apart. Once all 12 panel pins are in place, grab a piece of flexible

wood (about 4mm thick) and hold along the pins forming the curve. Hold in place and trace a line to give the shape of the boat. Cut along this line with a jigsaw tool and there we have the back of the bookcase.

5. Cut out the five shelves so they fit along the newly cut plywood. There may be differences, so hold each shelf in place, mark where the shelf meets the edge of the plywood back, square it across and cut. Plane the edges to match the angle of the boat's sides, then drill and screw each shelf into position onto the back of the bookcase.



6. As the sides of our boat bookcase are to be curved, we now need to make a bow section to strengthen the top of the boat so it will hold the curved pieces of plywood forever in position. Using the bookcase back as a template, cut out a bow section to fit above the top shelf. Draw a line 40mm in from each edge of this triangular shape and cut out so you are left with the shape of a boomerang. To hold the bow section in place, we use a "stem" - this is a solid piece of 3 x 2 timber that is screwed into the back of the bookcase and the front of the bow section to hold the bow section forcefully in place at the front of the top shelf. Before screwing the stem into position, plane the top edges of the stem so the plywood strips can be wrapped up forming a visual curve.

7. Now for the sides of our boat bookcase. Cut out 8 x 9mm x 75mm plywood to lengths of about 1800mm (they need to be longer than the boat so they can be cut to length once bent into position). Start at the back of the bookcase by screwing the first plywood strip into the bottom shelf and back of the bookcase. Then curve upwards to the tip, screwing to the sides of the shelves. Six screws are then inserted into the edge of the shelves, 15mm from the opposite edge of the plywood strips. The next strip overlaps the previous one by 20mm, so it covers the screws. It is also screwed into the shelves and at the top and bottom for added security. Repeat for the next strip, remembering to overlap the previous strip by 20mm. The last strip to go on is the one at the front of the bookcase. This is also screwed to the sides of the shelves, with two screws at the top and bottom holding it in place firmly.

8. And there you have it (hopefully!). Apply furniture finishing as required.

Project Plan Materials :

1 x sheet of 18mm plywood 2,400mm x 1,200mm (for shelves and back) 1 x sheet of
9mm plywood 2,400mm x 1,200mm (for the sides) 30 x 42mm particle board screws
100 x 30mm particle board screws 1 x tube of glue