Leaning bookshelf

Relaxed reading

Bookshelf
Whether your reading material is light or heavy going: books just look cool in this shelf which casually leans against the wall.

1 Introduction

Even daunting text books can manage to look inviting if you store them on our bookshelf. Leaning nonchalantly against the wall, it makes bookworms seem laid-back.

The shelf bases and side panels of our bookshelf are fitted together with notched intersecting joints. The compartments thus created are screwed to the rear panel from the rear.

Important: Be extremely careful when working with the notched intersecting joints, and even drawing them.

The following construction guide is for 20-mm-thick beech glued laminated timber board. You must adapt the list of materials accordingly if you opt for other materials or material with a different thickness.

Ask your DIY store or carpenter to cut the required boards to size.

Required power tools:
> Jigsaw
> Orbital sander
> Cordless drill/driver
> Cordless screwdriver
> Fine spray system

Other accessories:
> Set of wood drill bits
> 20-mm and 30-mm Forstner bits
> Countersink bit
> Wood file
> Carpenter’s angle square
> Sanding paper, grits of 120–240, sponge
> Fabric roll, cloth
> Folding rule, soft pencil, rubber, pencil sharpener
> Cloth rag
> Clamps

**Detailed material list:**

<table>
<thead>
<tr>
<th>pcs</th>
<th>Designation</th>
<th>Length</th>
<th>Width</th>
<th>Thickness</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Sides</td>
<td>1,820 mm</td>
<td>120 mm</td>
<td>20 mm</td>
<td>Beech glued laminated timber</td>
</tr>
<tr>
<td>7</td>
<td>Shelves</td>
<td>610 mm</td>
<td>240 mm</td>
<td>20 mm</td>
<td>Beech glued laminated timber</td>
</tr>
<tr>
<td>1</td>
<td>Rear panel</td>
<td>2,080 mm</td>
<td>650 mm</td>
<td>20 mm</td>
<td>Beech glued laminated timber</td>
</tr>
<tr>
<td>1</td>
<td>Suspension fittings</td>
<td></td>
<td></td>
<td></td>
<td>30 mm diameter</td>
</tr>
<tr>
<td>1</td>
<td>Hooks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Felt pads</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Flat head screws, 4 x 45 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Making the notched intersecting joints

Make cuts measuring 60 mm deep and 20 mm wide in the side panels and shelf bases: cut the side panels from the front and the shelf bases from the rear. The cuts must be absolutely precise for the cutouts to interconnect perfectly at a later stage.

Mark the cutouts on the side panels and shelf bases. For this purpose, clamp the two sides together using clamps. Make sure you use pieces of scrap wood as buffer blocks to avoid leaving unsightly pressure marks. Draw the positions of the shelf bases on the leading edges, in accordance with the specifications in the drawing. Use the carpenter's angle square (a 90° angle with a stop) to extend these positions to a depth of 62 mm on the side surfaces. (The cutouts should be half as deep as the side panel width in theory.)

Follow the same principle to draw the cutouts for the shelf bases, this time from the rear edge.

Once all of the markings are in place, position the drill with the 20-mm Forstner bit (if you observe our material recommendation: the diameter must always be equal to the maximum board thickness) on the inner end of the traced cutout so that the centring tip of the drill bit touches the surface 10 mm before the end of the traced cutout. The hole is therefore located exactly in the centre of the marking.
Now make the cutouts using the jigsaw, always remaining within the pencil lines. If the cutouts are too tight in parts, you can go back and rework them with the wood file. Now slot all of the pieces together, dab a little glue on the insides of the cutouts and allow the joints to dry in accordance with the manufacturer's instructions.

3 Preparing the rear panel
Despite its casual appearance, the bookshelf is not simply leaning against the wall of course: For safety reasons, it is secured from above by a suspension fitting and a screw hook. Using the drill and 30-mm Forstner bit, install the suspension fitting approximately 60 mm below the upper edge at the back of the rear panel.
Attach two felt pads to the lower edge of the rear panel using the screws provided.
Now pre-drill the holes to fasten the compartments constructed from the side panels and shelf bases. To do this, align the compartments precisely on the back of the rear panel. Here, use a pencil to trace the outlines of the compartments. Make the holes in the grid thus produced (side panels: one hole at half the compartment height, shelf bases: one hole per compartment).

4 Joining the compartments and rear panel together
Place the rear panel with the visible side facing up on trestles. Align the compartments on top very precisely so that the drilled holes appear in the centre of the compartment edges.
You can now comfortably fasten the compartments through the rear panel using the cordless screwdriver and screws (4 x 45 mm).

5 Sanding the wood surface
Take time to prepare the surfaces so they are in the best working condition possible before starting assembly.
First buff all edges with sanding paper with a grit of 120 or 180 at a 45° angle to create a small bevel. Use your sander to sand all visible surfaces in the direction of the wood grain, first with coarse sanding paper (grit of 120, 180) and then with fine sanding paper (grit of up to 240).
Afterwards rub the surfaces with a damp sponge to wipe off the dust. Some loose wood fibres may protrude while the wood is drying. You can remove these with sanding paper with a grit of 180. The wood is now ready for surface treatment. Little tip: Make sure that the sanding paper is sharp enough to remove the wood fibres properly, not just flatten them.

6 Staining the surface
Staining refers to the process used to colour the wood. The wood stain can be applied with a fine spray system. After the stain has been applied, the surface of the wood remains unprotected until wax or paint/varnish is applied.
First read the manufacturer’s safety and handling instructions thoroughly. Make sure the room you are working in is well ventilated and not used for smoking, eating or drinking.
You should change the paint tank if you want to apply another material with your fine spray system in the next step.

7  **Painting the surfaces**

Pour the paint into the paint tank and dilute it if necessary with water. Using a test board, adjust the spray jet at the nozzle and the paint flow at the setting wheel. The spray jet can be set to horizontal or vertical for surfaces and tapered for edges.

Now apply a thin first layer of paint. Start with the edges and then paint the surfaces using even, parallel strokes.

During this process, wood fibres may appear (as they may have already during the rinsing phase). You can remove these after the paint has dried by using sanding paper with a grit of 220 or 240 in the direction of the grain.

For the second coat, use the same base as you did during the priming stage. This time, you can apply a slightly thicker coat of paint. Start again with the edges and then work on the surfaces using even, parallel strokes.

8  **Done!**

Bosch does not accept any responsibility for the instructions stored here. Bosch would also like to point out that you follow these instructions at your own risk. For your own safety, please take all the necessary precautions.