



Sideboard

Essential design.

Sideboard

Unique eye-catcher and practical storage space all at once: The sideboard with fashionable multi-material design.



1 Introduction

From multi-material to one of a kind! This sideboard will amaze guests in your home two times over: firstly because it is a unique piece of design furniture – and secondly because you built it yourself with only one power tool!

A wide variety of materials are used for this project: MDF boards, acrylic glass, aluminium dibond, and tiles. The tool used is the PKS 16 Multi Mini Hand-Held Circular Saw. Due to its three different saw blades (wood, multi-material, diamond blade), this multi-talented tool can cut all common materials with a wide range of sawing applications.

Even beginners will be able to do a good job of this project. And who knows: maybe it will be the beginning of your personal designer career.

You will find the detailed material list and the construction drawing under “Downloads for the project”.

Required power tools:

- > Hand-held circular saws
- > Paint systems - Wood
- > Multi-sanders

Other accessories:

- > Water-soluble felt-tip pens
- > 5-mm drill bit
- > 4-mm drill bit
- > Countersink
- > Sanding paper, grit of 120–240
- > Pencil, metre stick, rubber
- > Work surface (offcuts of chipboard 1000 x 420 mm; thickness 16 mm)
- > 2 trestles
- > A strip of MDF or similar material approx. 700 x 40 x 5 mm
- > Triangular file – for the diamond-shaped handles
- > Sanding paper, grit of 180-240



- > Sheeting or old newspapers
- > Screw clamps
- > Adhesive tape
- > Utility knife
- > For your own protection: Face mask, protective glasses and gloves

Detailed material list:

pcs	Designation	Length	Width	Thickness	Material
	Wood screws with flat head	45		4.5	
3 x 40	Panhead				
	Wood screws	25		4.5	
4	Shelf supports for drilled hole			5 mm	

2 Cutting the panels to size

Tip: Have the panels sawn to their final size at the DIY store or by a carpenter.

3 Sawing the cutouts in the cover panel for the tiles

Mark the cutouts as specified in the drawing. Mark the lines longer, i.e. beyond the actual rectangular dimension. In this way you will be able to find the cutting line precisely using the built-in cutting guide of the PKS 16 Multi. Insert the saw blade for multi-material into the PKS 16 Multi.

Now clamp the panel on the trestles. Fold out the cutting guide of the PKS 16 Multi, align the auxiliary stop accordingly and fix it using the screw clamps.

Since you are sawing through the entire material, you will be using the full cutting depth of the PKS 16 Multi so you do not need to make any adjustments to the cutting depth on the tool. You therefore leave this loose.

Now saw from corner to corner. To enable you to find these precisely, the middle and the end of the saw blade (at full cutting depth) are marked on the side of the contact surface of the PKS 16 Multi. Use these marks to precisely find the corners.

Make all 4 cuts in this way.

Then cut the back of the worktop in the same way.

Now press or break out the inner rectangular panel downwards.

Roughly rework the corners using the file. (These will later be covered almost completely by the tiles.)

The pressed-out rectangular panels will be used in the following step as an underlay panel when the diamond-shaped handles are cut out and the tiles are cut to size

4 Sawing out the diamond-shaped handle recesses



Print out 6 copies of the handle templates. Each handle requires the printout once for the front side and once for the rear side. Now cut out all paper templates along the outer rectangle using the utility knife.

Begin with the lower large sliding doors: To obtain a better support surface, for these cuts you need an underlay panel that you can saw into. For this, use the rectangular panel that was sawn out in the previous step. Saw it off using the PKS 16 Multi lengthways to the width of the sliding door.

Mark the horizontal axis of the diamond shape on both sides of the aluminium dibond panel, and align the paper template with it. Fix this using the adhesive tape. The template is made for a plunge depth of 5 mm in the slanted cuts and 16 mm (full cutting depth) in the straight cuts.

Begin with the slanted cuts and apply the cutting guide according to the template.

Fix everything using the screw clamps. Then set the plunge depth to 5 mm on the PKS 16 Multi and saw from mark to mark. Next you make the second slanted cut using the same procedure. Before now making the straight cuts of the diamond shape, set the PKS 16 Multi to full plunge depth (16 mm) or leave the setting loose.

When all cuts for the diamond shape have been made, turn the sliding door onto its back and stick another paper template on it. Then perform all cuts on this side as well.

Now press or break out the inner diamond-shaped panel. You can use the triangular file to rework the corners. Now do exactly the same on the large acrylic glass sliding door.

For the small acrylic glass sliding door you can use the PKS 16 Multi to saw the underlay panel to the width of the sliding door.

5 Grooving the base and middle panels and the cover panel for the sliding doors.

The groove is offset on the left and right of the cover panel so that the groove track in the finished furniture is not visible at the side. In contrast, the groove tracks in the middle and base panels must be completely followed through.

The side sections will then conceal the groove tracks in the finished furniture.

Begin with the cover panel: Place it on the trestles with the upper visible surface facing downwards. Clamp the base or middle panel onto the cover panel to serve as a guide. Set the PKS 16 Multi to 4 mm plunge depth. Place each mark 18 mm from the edge. Apply the saw at this mark and plunge into the material. Then saw to the mark at the other end. There you lift the saw blade back out.

To achieve a groove thickness of 3.5 mm, you now move the cutting guide 1.5 mm (the PKS 16 Multi has a width of cut of 2 mm with the multi-material saw blade) and make a second cut. Now use one of the sliding doors to check whether it can be slid back and forth in the groove without any problems.

Now do the same with the middle and base panels. As mentioned above, you can cut these grooves all the way from left to right.



TIP: If the groove does not have the full depth at the edge, rework it with a slim chisel or sand the entire width slightly smaller on the door at the corners.

6 Fitting together the carcasses

Begin with the small carcasses. Before fitting them together, mark the 16 mm thick parts to indicate how they fit together. The “carpenter’s triangle” is best suited to making a mark like this.

Don’t forget: Before fitting together, drill the holes for the shelf supports in the upper right carcass using the 5 mm diameter drill bit.

Then mark the position of the screws on the surfaces. Pre-drill each panel with 5 mm and countersink the screw holes so that the screws are completely sunken when later inserted.

Then put the parts together one after the other.

Important: Be absolutely sure to pre-drill with 4 mm diameter in the face side before inserting screws into the pre-drilled holes. This will ensure that the 4.5 mm diameter screw has enough space. If you do not pre-drill in the face sides, the MDF will split.

Proceed as described on each carcass corner and each carcass. Then screw on the rear panel using the rear panel screws (3 mm diameter panheads).

The rear panels also have to be pre-drilled for the screw connections (4 mm diameter drill bit). Due to the small diameter of the rear panel screws, you do not have to pre-drill for them in the face side.

7 Assembling the sideboard

First screw the furniture legs to the base panel. Then screw (4.5x25 wood screws) the base panel and the middle panel to the large carcass.

Important: Also pre-drill here and for the following screw connections with 5 mm diameter. Since you are screwdriving into a surface and not into a face side here, you do not need to pre-drill the second part.

You then place the three small carcasses on top. These are fitted to each other (4.5x25 wood screws) and to the large carcass via the middle panel (4.5x40 flat head).

Before you now fit the upper cover panel (4.5x25 wood screws), slide in the upper sliding door.

Once the upper cover panel is fixed, the lower sliding doors are also slid in.

Now all you have to do is screw on each of the side sections at four points from inside.

8 Cutting the tiles and shelf to size

First change the saw blade of the PKS 16 Multi. Insert the tile saw blade and set the plunge depth approx. 5 mm deeper than the thickness of the tile.

Mark the cutting lines on the tile using the felt-tip pen. Here you can also use the second rectangle that has been cut out as an underlay. Then adjust the cutting guide on the tiles and fix everything to the trestles. Saw both tiles to size in this way.

To cut the shelf to size, change the saw blade again and insert the multi-material saw blade. Apart from that, follow the same procedure as for the tiles.



9 Surface

To achieve a more perfect paint finish, we recommend disassembling the carcass again. Sand all parts with a grit of 240 and chamfer any sharp edges. Paint or spray all face edges first because they will heavily absorb the lacquer or paint. Once they are dry, sand the edges again with a grit of 240. (Please observe the manufacturer's specifications regarding drying time of the lacquer).

If the edges are still not closed after the second run, repeat this step. Then apply the lacquer or paint to both the edges and the surfaces.

10 Done

Done! Now you can position your new favourite piece of furniture as a stylish eye-catcher in the room – and appreciate having a really unique item that you have manufactured yourself.

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.