Plate display rack
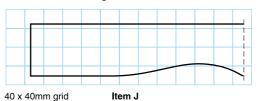
Bring crockery and glasses out of hiding

Displaying crockery is a great tradition. This classic plate rack has enough storage to take care of an average size (26cm) dinner service plus wine glasses. You can even add the optional drawers to hide away napkins and other bits and pieces. By Dieter Mylius

What you will need

Item	Part	Size	Material
A	Sides (2)	240 x 19 x 650mm	Tasmanian oak
B	Dividers (2)	240 x 19 x 517mm	Tasmanian oak
C	Top and base (2)	240 x 19 x 910mm	Tasmanian oak
D	Side shelves (2)	240 x 19 x 195mm	Tasmanian oak
E	Plate shelf	240 x 19 x 502mm	Tasmanian oak
F	Glass holders (2)	240 x 10 x 195mm	Plywood
G	Central support (2)	40 x 19 x 150mm	Tasmanian oak
H1	Drawer divider	95 x 19 x 221mm	Tasmanian oak
H2	Drawer-divider facing	19 x 19 x 95mm	Tasmanian oak
I	Back filler	60 x 10 x 938mm	Tasmanian oak
J	Bottom rail	110 x 19 x 900mm	Tasmanian oak
K1	Backing boards (10)	85 x 10 x 640mm	Tasmanian oak
K2	Backing boards (2)	85 x 10 x 590mm	Tasmanian oak
L	Top rail	50 x 19 x 770mm	Tasmanian oak
M	Front top trim	70 x 19 x 1030mm	Maple bullnose
N	Side top trim (2)	70 x 19 x 295mm	Maple bullnose
O	Scotia trim (total)	19 x 19 x 1550mm	Maple scotia
P	Bottom trim (total)	19 x 9 x 1500mm	Maple half round
Q	Dowel strips (4)	40 x 19 x 492mm	Maple
R	Dowels (18)	8mm dia x 385mm	Dowelling
Drawers (optional			
S	Sides (4)	90 x 19 x 221mm	Pine
T	Front/back (4)	70 x 19 x 198mm	Pine
U	Bottoms (2)	221 x 206 x 4mm	Plywood
V	Drawer faces (2)	94 x 19 x 236mm	Tasmanian oak

Pale maple is used as trim as it is easy to source and looks similar to Tasmanian oak. You'll also need eight brass hooks for cups, and two knobs if you make the drawers. All joints are glued and screwed unless otherwise indicated. Check sizes against the unit as it is being built.

Step 1 Check the size of your plates and adjust measurements as needed. Cut the sides (A) to length. Use the pattern below to mark out the decoration, then cut out with a jigsaw. From the bottom, measure up 105, 124, 374, 384, 414 and 433mm. Also measure 19mm from top. Square across for housings, then set a router with a 19mm straight bit to cut the 5mm-deep top rebate and bottom groove from front to back. The upper central housing stops 10mm from the front, as does the 10mm-wide groove below. Make other side a mirror image.

Step 2 Measure 255, 265, 295 and 314mm from the bottom of the dividers (B) for the position of the side-shelf housing and glass holder. On the other side of the board, measure up 100 and 119mm for the plate-shelf groove. Rout out, stopping short of the front edge and ensuring the two pieces make an exact mirror image.

Step 3 After cutting the top and base (C) to length, measure in 190 and 209mm from both ends. Rout out the housing for the dividers. **Continued**

40 x 40mm grid   **Item J**

Prepare side shelves (D) and take a 5 x 10mm notch out of the front corners to fit around the stopped housing in the sides and dividers.

Step 4 Screw the top and base to the dividers but first predrill 5mm clearance holes in the top and 3mm pilot holes in the dividers to avoid splitting the timber. Then screw the sides to the top and base. Glue and push in the side shelves and add the plate shelf (E) without screwing.
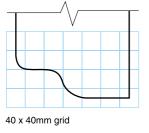
Step 5 Shape the glass holders (F) to hold wine glasses by their stem. Use the pattern (previous page) to give a 15mm-wide slot. Drill a 15mm-diameter hole at the end of each groove, then cut out. Notch the two front corners as with the side shelves. Bevel the bottom edges and front of the central support (G), then fix under the central tongue of the glass holders, flush with the back. Glue and slide holders into the grooves in the dividers and sides.

Step 6 Glue the drawer-divider facing (H2) to the divider (H1), then centre between the plate shelf and the base.

Step 7 Screw the back filler (I) to the bottom rail (J) so the ends overhang by 19mm and the bottom edges are flush. Working from the back, transfer the decorative pattern to the back filler and jigsaw out. Clean up and round-over the cut using sandpaper, then screw to the sides.

Step 8 Evenly set out the backing boards (K1). Rip down the two edge boards (K2) to suit the width and plane smooth. Screw boards at top and base. Add top rail (L), centring it and screwing on from the backing-board side. Round corners with a jigsaw.

Step 9 On the top of the cabinet, use a combination square to mark a 45° line from each front corner. Next, measure 25mm in from the front edge in two places, and partly drive in two
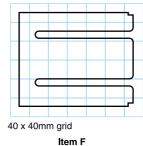
small nails at these points. Hold a length of trim (M) against the nails and mark the mitre cuts from the corner lines drawn on the cabinet. Cut the mitres. Similarly add the side trim (N). Finish the top with the scotia (O) fitted under the top bullnose.
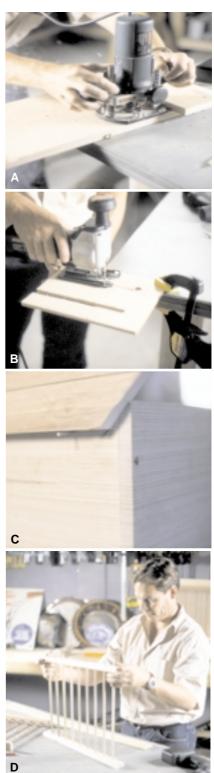
Step 10 Cut mitres on the bottom trim (P). Nail in place, covering the screw holes at the side.

Step 11 Cut the dowel strips (Q) to length. Draw a line down the centre of each, then find the midpoint and divide each one into nine 49mm increments. Select two as the bottom strips and drill 8mm-wide x 15mm-deep holes at each mark; tape drill bit to mark depth. Drill 9-10mm holes through top strips so dowels will slide easily. Bevel two face edges of each strip. Feed dowels (R) into bottom piece, then slide on top strip. Check both dowel assemblies fit, then screw in place. Use a 30mm-wide block to get correct spacing for back strips, and space front strip 25mm from front. Screw top strip from the top and bottom strip into the plate shelf. Remove dowel assemblies to allow the cabinet to be finished.

Step 12 For the drawers (optional), cut 4 x 5mm-deep grooves in the sides (S); position each groove so the top edge is 10mm from the bottom of the side panel. Keeping flush with the tops of the grooves, screw the sides to the fronts and backs (T). Slide in the bottoms (U) and fix to underside of front and back. Screw drawer faces (V) in place from the inside. Test fit the drawer and ease as needed. Add knobs.

Step 13 With the dowel assembly removed, fill all nail holes and any exposed screw holes with a matching wood putty. Sand smooth, then apply two coats of clear finish such as tung oil, sanding between coats. Space cup hooks evenly under the base; predrill and screw in. Screw unit to wall studs using the top and bottom rails or plug

A Run the router along a straight edge to cut the housings for the shelves.
B To cut the glass holders, drill a 15mm hole at end of groove, then cut out.
C Use a 45° line drawn from corner of cabinet to mark length of top trim and provide a guide for mitred corners.
D Feed all dowels into top and bottom strips before fitting into the cabinet.

40 x 40mm grid

Item A

40 x 40mm grid

Item F