



# Chess Table

Whether looking for competition or an exercise session for the brain, this beautiful chess table will keep your knights and bishops on an even playing field.

Chess is a great recreational game; and no, you don't have to be a mathematical genius either to play or to enjoy the game. An amicable friend, quite background music, a nice glass of your favourite beverage...you get the drift. And what better way to enjoy this 'game of kings' than with a stylish chess table.

The chessboard top consists of an arrangement of eight-by-eight dark and light offset squares. These squares are made of black walnut and maple. The top trim is made of purpleheart while the rest of the table is made of walnut. Begin by milling four dark and four light strips (A, B) to a width of  $\frac{1}{16}$ ". Cut them 25" long; the extra length enables you to shift material as you cut it and have enough material left over for an accurate final trim. Follow this by thickness planing the strips to  $\frac{1}{2}$ ", and then gluing the strips together, alternating one dark strip with one light strip.

Once the glue has set, remove the clamps and sand or scrape away any excess glue. Set the rip fence to cut  $\frac{1}{16}$ " widths. At this point it is prudent to run a piece of scrap through the saw and test it for exact size against the strips. Re-glue the eight pieces together, alternating the strips so that the light and dark squares are offset.

After the glue has set, remove the clamps, square up the board and sand the top flat. Use a drum sander to take the top down to  $\frac{3}{8}$ ". If you don't have a drum sander you can use a hand held Random orbital sander. Mill and glue up the pieces for the chessboard backing (C), and glue the backing to the bottom of the chessboard top.

To delineate the walnut on the chessboard from the walnut frame, glue  $\frac{3}{8}$ " purpleheart trim pieces (D) around the chessboard, joining them at the corner with mitre joints. To complete the top, mill and glue the table top sides (E) and ends (F) to the chessboard. You can use biscuits to help align the pieces.

## The Base

Mill the legs (G) from 1  $\frac{1}{16}$ " x 2" walnut boards. Try to match the grain pattern in the legs so that they help unify the look of the table. The mortises on the legs are  $\frac{1}{4}$ " wide,  $\frac{1}{16}$ " deep and 2" long. You'll need to cut matching tenons on the ends of the apron pieces (I, J). Note that there will be a  $\frac{1}{2}$ " shoulder on the bottom of the apron pieces.

The frame (H, I, J) was designed not only to hold the legs, but to carry two drawers that would hold the chess pieces. The frame, once assembled, is attached to the bottom of the table top. The technique used to attach the base to the table top on this table is mortise and tenon joinery. On the router table mill  $\frac{3}{16}$ " wide tenons on the top of the frame pieces, and then rout a matching mortise on the underside of the table top. This makes for a strong, stable assembly. At this stage it's a good idea to do a dry assembly, to ensure that everything fits together.

To lighten the overall appearance of the table taper the inside faces of each leg so that the bottoms are  $\frac{3}{4}$ " wide at the floor. This requires some careful measurement and angled cuts using a tapering jig (see Shop Jig: Aug/Sept '07, Issue #49). The top end of the cuts should stop an inch short of where the bottom of the frames will meet the legs, in order to ensure that the aprons and legs will fit snugly at right angles. Follow this up with a light sanding to remove any milling marks. Then use a quarter round bit to rout the sides of the legs, the edges of the frame that wouldn't be glued, and the top edge of the table top. End this with a final finish sanding.

Gluing the legs at right angles is critical if the table is not to wobble when completed. Start by gluing the legs to the end frames (J), making sure that the setting is square. A carpenter's square or large try square comes in handy here, as well as measuring diagonally from the top of the outside top corner to the bottom of the opposite leg. Once the end frame is glued to the legs the rest of the gluing process is pretty straightforward.

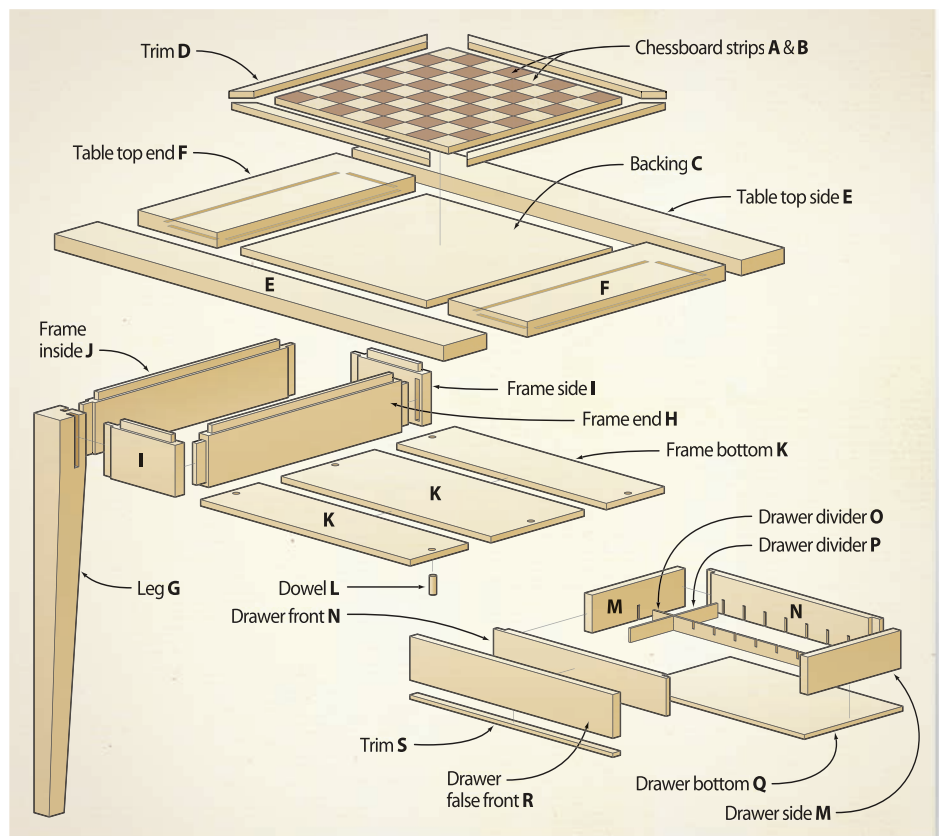
## The Drawers

The drawers are designed to hold each chess piece in its own compartment, white on one side of the table, black on the other. The spacing you choose for the compartments will depend on the size of the chess pieces you have; so ensure you've made or bought the pieces before building the compartment. The arrangement that fits best is two rows of eight compartments. To make it easier to remove the chess pieces from the compartments don't have the dividers reaching all the way to the top of the drawers.

The drawer sides (M) and fronts and backs (N) are joined by simple glued rabbets. A false front (R) with a piece of accent trim (S) is attached to the front of the drawer. Thin  $\frac{1}{8}$ " dividers (P, O) serve to form the compartments for the chess pieces. The trim

## MATERIALS LIST (All measurements in inches)

Part	Qty	T	W	L
A	Chessboard strips (walnut)	4	$\frac{3}{8}$	$15\frac{1}{16}$
B	Chessboard strips (maple)	4	$\frac{3}{8}$	$15\frac{1}{16}$
C	Chessboard backing	1	$\frac{3}{8}$	$11\frac{3}{16}$
D	Chessboard trim (purpleheart)	4	$\frac{3}{8}$	$\frac{3}{4}$
E	Table top sides	2	$\frac{3}{4}$	$2\frac{19}{32}$
F	Table top ends	2	$\frac{3}{4}$	$5\frac{3}{4}$
G	Legs	4	$1\frac{9}{16}$	$1\frac{9}{16}$
H	Frame ends	2	$\frac{9}{16}$	$2\frac{1}{2}$
I	Frame sides	4	$\frac{9}{16}$	$2\frac{1}{2}$
J	Frame insides	2	$\frac{9}{16}$	$2\frac{1}{2}$
K	Frame bottom	3	$\frac{5}{16}$	$1\text{ @ }5\frac{5}{8}$ $2\text{ @ }3\frac{1}{2}$
L	Dowels	6	$\frac{5}{16}$	1
M	Drawer sides	4	$\frac{1}{2}$	2
N	Drawer backs & fronts	4	$\frac{1}{2}$	2
O	Drawer dividers, long	2	$\frac{1}{8}$	$\frac{3}{4}$
P	Drawer dividers, short	14	$\frac{1}{8}$	$\frac{3}{4}$
Q	Drawer bottoms	2	$\frac{1}{4}$	$6\frac{1}{2}$
R	Drawer false fronts	2	$\frac{1}{2}$	$2\frac{5}{16}$
S	Drawer trim (maple)	2	$\frac{1}{4}$	$\frac{1}{2}$



piece serves to clearly identify the colour of the chessmen that the drawer holds. Leave one trim piece in its natural colour, and colour the other one black. While you could apply an ebony stain, a Sharpie® marker pen gives full penetration ensuring that none of the pale colour of the maple shows through the grain.

Set up a stop on a sliding mitre saw and cut seven  $\frac{1}{8}$ " x  $\frac{1}{4}$ " dados on the inside face of two of the (N) pieces and one dado on the inside face of two (M) pieces. Rip all the side, front and back pieces lengthways, and then re-glue a slotted piece to a solid piece.

The dividers (O, P) are somewhat fiddly.



**Drawer front/back cut and reassembled**

You need to cut matching  $\frac{1}{8}$ " x  $\frac{3}{8}$ " dados on the long dividers (O) that line up with the dados on the back and front pieces (N). The short dividers (P) are easier to do, as they only need a single dado cut in the middle of the



**Clamping apron to top**



**Short divider ready to cut**

board. To prevent the inevitable splintering that can occur with such thin pieces of wood use a backer board. Sandwich the dividers between two scraps of plywood, draw an alignment mark on the top of the



**Drawer front/back dadoed**



**Drawer detail**



# SUPERIOR STAINING & SANDING

**The only Stainable Wood Glue on the market !**

Contains real wood fibers for superior staining, painting, and sanding. Bonds strong as regular wood glue; ANSI Type II water resistant. Easy to clean-up with water.



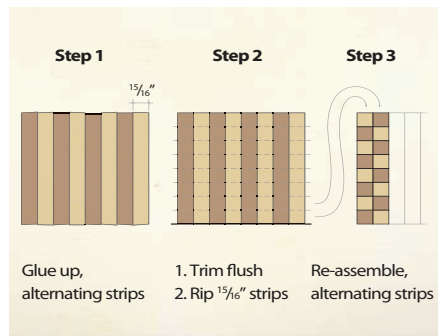
Try it yourself at  
[www.elmers.com/GlueGuide](http://www.elmers.com/GlueGuide)  
 1-800-984-0401

stack so you will know where to make the cut, and then clamp the sandwich to your mitre fence or crosscut sled – this will keep your fingers well away from the cut.

Once all the pieces are cut, it's time for another dry assembly just to ensure that everything fits together. It's easier to apply finish to the inside of the drawers before



**Drawer trim**



**Cutting the chess table top**

glue-up. Use masking tape to cover any areas that will be glued.

The last construction task is to mill the boards (K) that fit under the drawers and form an integral part of the table. These are made and installed last so you can ensure that the drawers fit well and slide in easily. Use 5/16" dowels (L) to attach the boards to the bottom of the drawer frame; a narrow



**Frame bottom installed**

gap between each board accommodates any seasonal movement.

A final sanding to 220 grit leaves everything ready for finishing. This is the most rewarding part of the project, as the finish brings out the lustre that has been hiding in the wood. For the walnut and maple mix it is especially rewarding, as the glorious contrast is an extra bonus. It is at this point that the grain pattern in the wood really shows up and gives the project its magic.

The finish used on this project is from Jamie Russell, from Vanscoy, just west of Saskatoon. To a pint of Watco Danish Natural Oil add ten to fifteen percent of polyurethane and a tablespoon or two of Japan drier. Apply this with a cotton cloth to all surfaces. According to Jamie, your work will achieve a final wonderful look by, "Giving it a polish with the cloth that you used to apply it every time you walk past it". This means that for about three weeks you can slip into you shop at least twice a day to enjoy that special feel of finished wood. It's a tough life, but worth it.

Whether you're an avid chess player or just like the occasional game of checkers, this chess table will make a fine addition to living room or den.



JERRY HAIGH  
www.jerryhaigh.com