



## ARTS & CRAFTS STYLE TV TABLE

*Gone are the days of the hulking entertainment center. For classic style in a modern era, build this Arts & Crafts style TV table for a sleek look below your flatscreen television. Three drawers and a lower shelf provide plenty of space for holding related accessories.*

### END FRAMES FIRST

Construction begins with the two end frames. We laminated 4/4 stock to make the four legs (A). We created ours slightly longer and wider, then jointed, ripped to 1-1/2" square blanks and cut all four to the final length of 29-1/4"

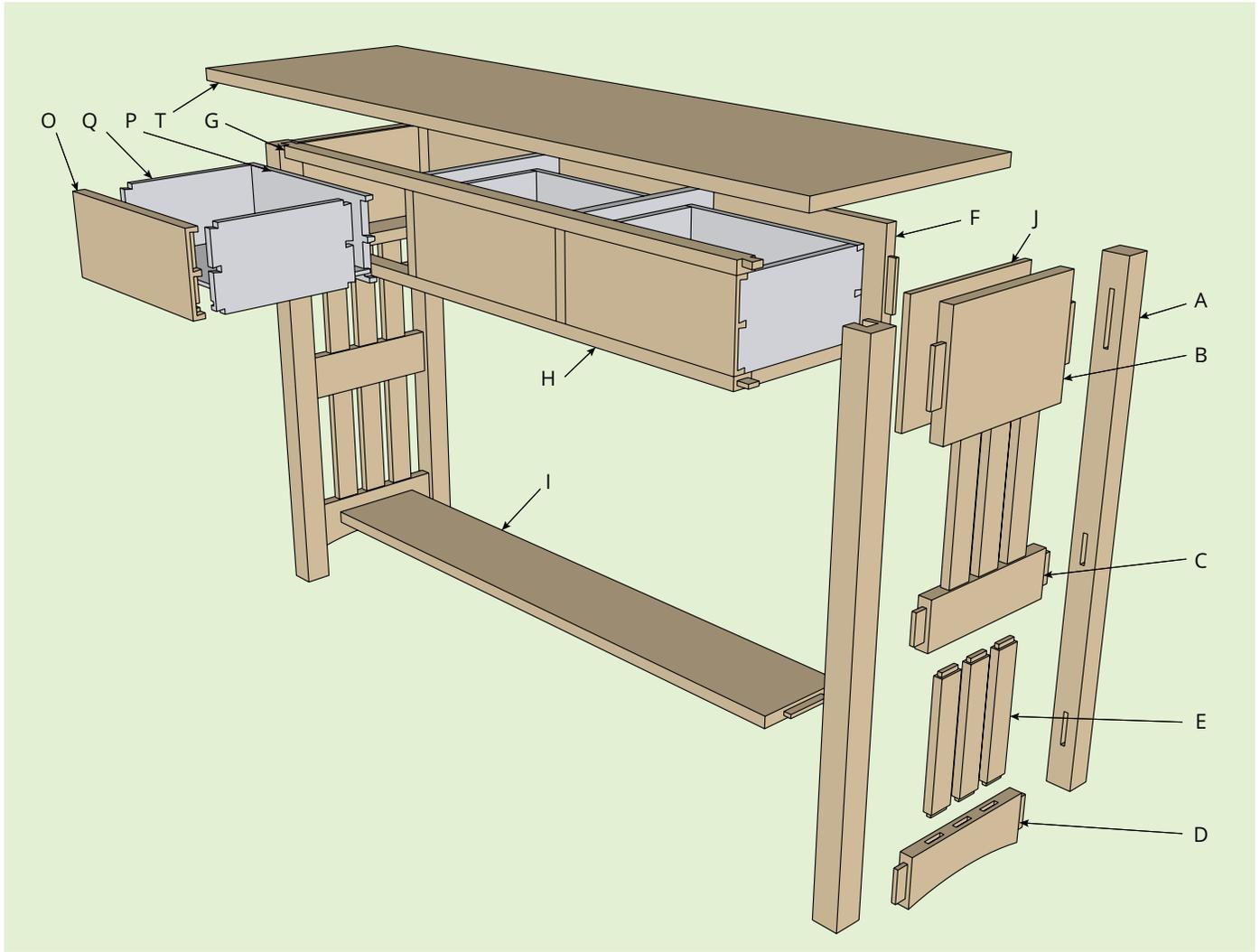
From 4/4 stock, cut the rails (B, C, D) to size, being sure to include 1-1/2" to the length to accommodate the 3/4" tenons on each end.

Each leg has the three mortises necessary centered on facing edges of the legs to create the end frame. Orient the legs, then layout and mill these mortises on all four legs. The top rail

mortises are 1/4" x 3", 3/4" deep with the top edge located 1-3/4" from the top edge of the leg. The mortises for the center rails are 1/4" x 1-3/4", 3/4" deep with the top edge located 14-1/2" from the top of the leg. The lower rail mortises are 1/4" x 2", 3/4" deep with the top edge located 24-3/4" from the top of the leg.

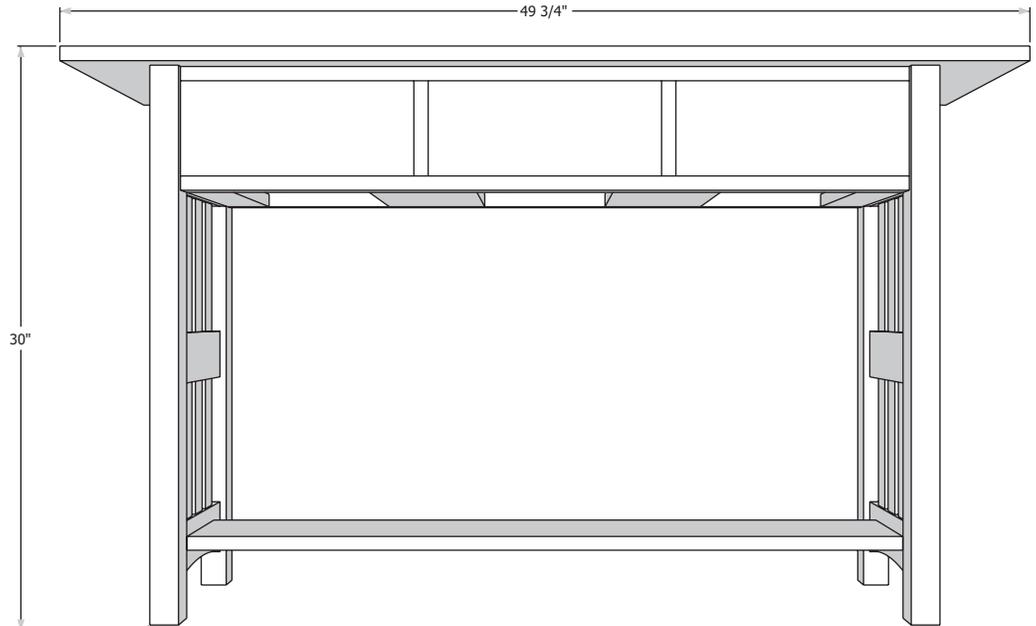
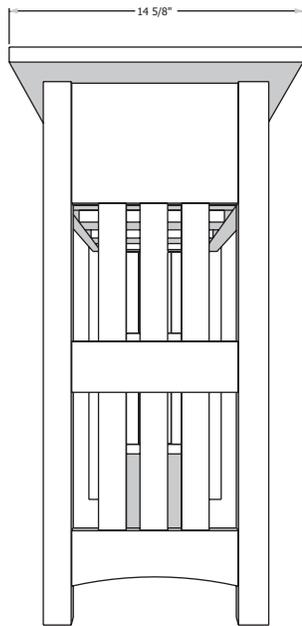
Determine which two legs will be the rear legs. These are connected by the rear rail with mortise and tenon joints. Cut the rear rail to size and mill the tenons on each end. Layout and mill the rear mortises in the legs. These mortises are 1/4" x 3", 3/4" deep with the top edge located 1-3/4" from the top edge of the leg.





ID	NAME	T x W x L	QTY	ID	NAME	T x W x L	QTY
A	Legs	1-1/2" x 1-1/2" x 29-1/4"	4	K	Drawer dividers	3/4" x 5-3/4" x 10-1/8"	2
B	Endframe top rails	3/4" x 6-1/2" x 10-1/2"	2	L	Drawer divider banding	3/4" x 1/2" x 5"	2
C	Endframe middle rails	3/4" x 2-3/4" x 10-1/2"	2	M	Middle drawer runners	3/4" x 5-3/4" x 9-3/8"	2
D	Endframe bottom rails	3/4" x 3" x 10-1/2"	2	N	End drawer runners	3/4" x 2-1/2" x 9-3/8"	2
E	Endframe slats	1/2" x 1-1/2" x 8"	12	O	Drawer fronts	3/4" x 5" x 12-1/4"	3
F	Rear rail	3/4" x 6-1/2" x 39-3/4"	1	P	Drawer backs	1/2" x 5" x 12-1/4"	3
G	Front top rail	3/4" x 1-1/2" x 39-3/4"	1	Q	Drawer sides	1/2" x 5" x 9"	6
H	Front bottom rail	3/4" x 1-1/2" x 39-3/4"	1	R	Drawer bottoms	1/4" x 8-1/2" x 11-3/4"	3
I	Shelf	3/4" x 6" x 40"	1	S	Drawer stops	1/2" x 1/2" x 2-1/2"	6
J	Endframe rail spacers	3/8" x 6 1/2" x 9-1/2"	2	T	Top	3/4" x 14-5/8" x 49-3/4"	1





The front legs are connected by an upper (G) and lower rail (H), which serves as a face frame for the drawers. These rails have a 1/4" setback from the front edge of the legs and are flush with the back edges. The lower rail requires a small horizontal mortise on the inside faces of the front legs. Cut the stock to size for the front rails and mill tenons on each end of the lower rail only. Layout and mill the lower front rail mortises to a size of 1/4" x 3/4", 3/4" deep on the two front legs. The top edge of the mortise should be 6" from the top edge of the leg and the inside edge of the mortise 1/4" from the back of the front legs.

**ROCK-SOLID BASE**

The upper front rail (G) is held in place with a dovetail to prevent racking of the assembled unit. To create this dovetail, cut a 3/4" wide rabbet 3/8" deep on the bottom face of both ends of the top rail. Then layout out and cut the pin. We like to use a 7 degree angle on hardwoods and left a 3/4" width on the largest edge of our tail.

Align the upper front rail with the top of the two front legs, flush with the back, and transfer the tail shape onto the tops of the legs. Extend the layout lines along the inside edges of the legs and

mark a depth of 3/8", then remove the tail waste.

Cut the lower shelf stock to 3/4" x 6" x 40" and form a 1/4" thick tenon on each end that measures 3" wide and 1/2" long.

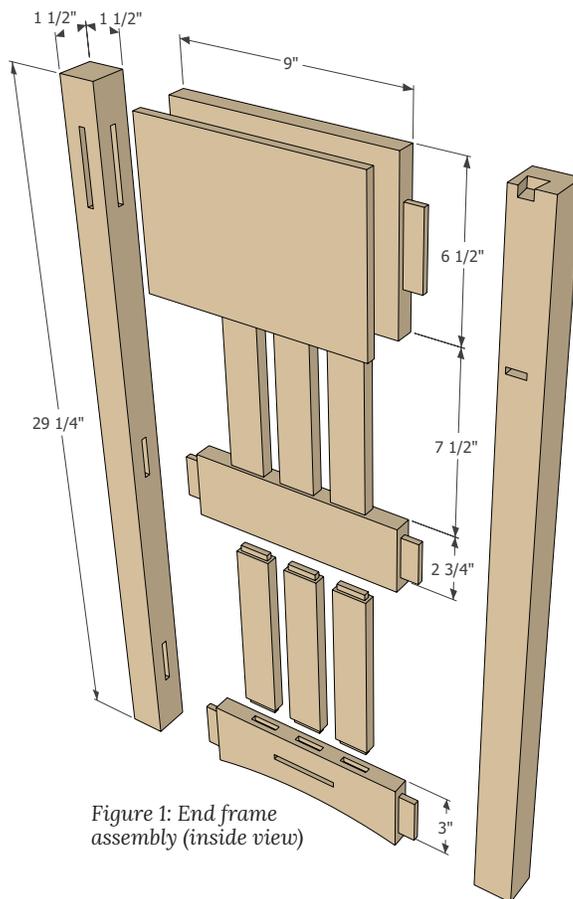


Figure 1: End frame assembly (inside view)

Once the legs are mortised, machine the matching tenons on the ends of the six end frame rail pieces. Layout and mill the mortises in the lower end frame rails to accommodate the lower shelf tenons, centering the 1/4" x 3" mortise on the rail, with the top edge of the mortise 1-1/8" from the top edge of the rail. Test fit the assembly.

Each end frame has six slats (E) connecting the upper, middle and lower end rails. Layout and mill mortises in the bottom of the top rails, top of the bottom rails and both edges of the middle rails.

Plane and cut the 12 slats to size, then cut the 1/4" x 1-1/4" tenons 1/4" long on each end. Test fit each assembly.

When satisfied with the fit, cut the curve along the bottom of each lower end frame rail. Save the offcut to aid in the assembly process.



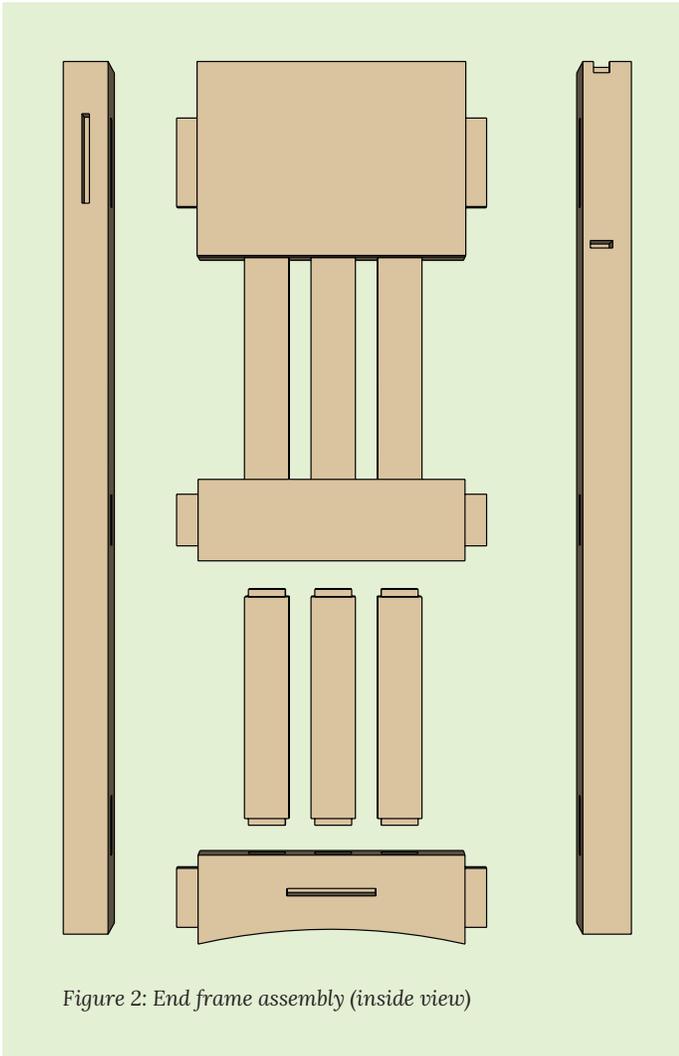


Figure 2: End frame assembly (inside view)

Route an 1/8" roundover on the edges of all four legs, stopping 6-1/2" from the top on the inside corner of each to allow for a seamless match with the filler piece that will serve as a drawer guide on the two outside ends.

Sand all end frame components and begin the glue-up. Begin by gluing the slats in place between the rails for one of the end frames. Use the offcut saved from cutting the curve into the lower rail to create a parallel edge for clamping the entire assembly. Then glue and clamp the legs onto each rail assembly, checking for square. Repeat this process with the other end frame.

### THREE HANDY DRAWERS

Plane stock to a thickness of 3/8" for the two spacer pieces (J) on inside of the two top end frame rails. These pieces should be cut to size and create a solid, flush edge along the inside of the legs. Glue these in place.

Two dividers (K+L) separate the three drawers. We built our dividers from 3/4" birch plywood to minimize cross-grain wood movement of the completed piece. We banded the front edges with solid cherry, then cut the piece to final dimensions, then notched the top front edge to mate with the upper front rail.

The drawers ride on solid hardwood runners. Cut two sized to mate with the drawer dividers (M) and two for the outside edges (N). We tested our fitting, then cut biscuit slots to connect the two mating pieces for the dividers, as well as slots in the end frame, lower front rail and rear rail. After joining the divider/runner assemblies (K+L+M), they and the end runners (N) were joined to the rear rail and lower front rail, checking for square.

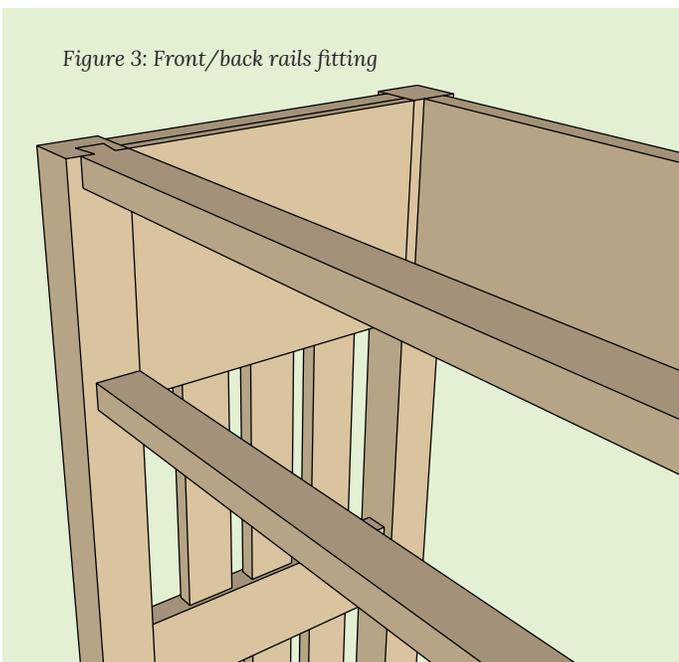
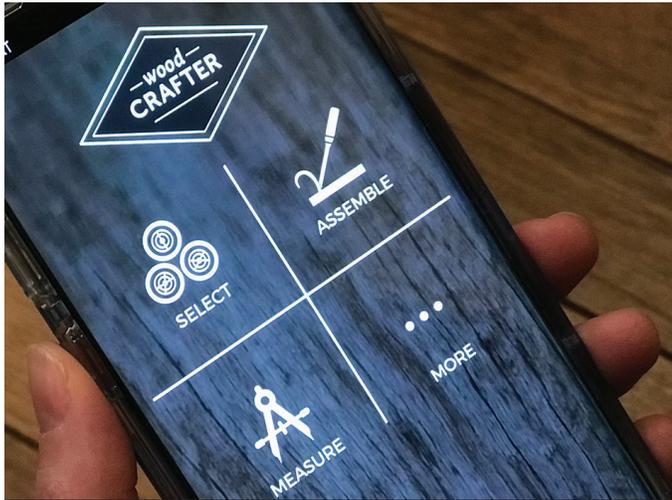


Figure 3: Front/back rails fitting

The complete base comes together by gluing the divider/runner assembly and lower shelf to the end frames. Slide the end frames onto the center assembly, then slide the upper front rail into the dovetail on the top of the front legs, clamping and checking for square.

The three drawers have exterior dimensions of 5" tall, 12-1/4" wide and a depth of 9-1/4" and can be created using your method of choice. We used half-blind dovetails for the fronts, through dovetails on the backs, with a 1/4" groove milled 1/2" front the bottoms to house the drawer bottoms. Prior to assembly, we located and drilled the hardware mounting holes.

After assembly and sanding, we inserted our drawers into the openings and positioned the drawer faces precisely flush with the faceframe. We then glued 1/2"x1/2" x 2-1/2" hardwood stops (S) to the runners at the location of rear edge of each drawer.



  
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**FINAL STEPS**

The top (T) is a simple panel, created from grain-matched edge-glued stock. We created our top oversized, then trimmed it to the final dimensions once the glue had cured. To attach the top to the base, we used z-clips. Using our biscuit joiner, we cut two #10 slots into each end frame to house the lower portion of the clips.

Finish sand all surfaces and then apply the finish of your choice. We first applied a coat of Danish oil. The base and drawers received three coats of shellac, while we finished the top with a polymerized Tung oil. After connecting the top and adding the drawer pulls, we applied a coat of furniture wax to the drawer sides and bottoms to reduce friction when used.

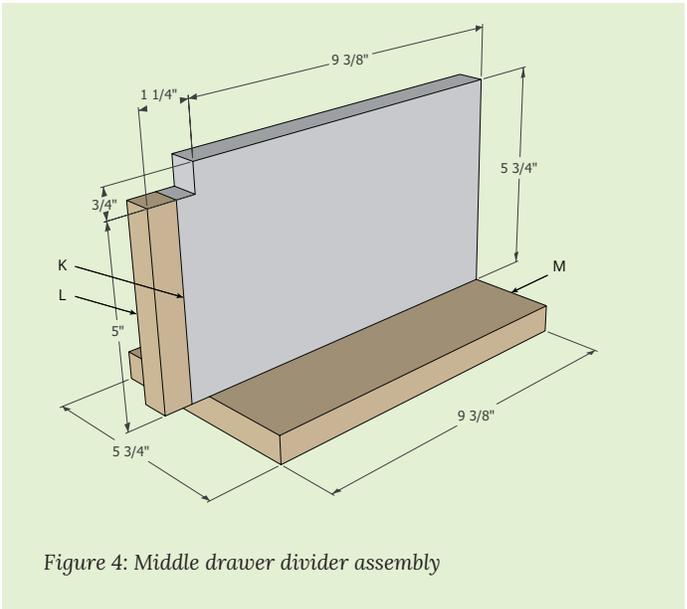


Figure 4: Middle drawer divider assembly

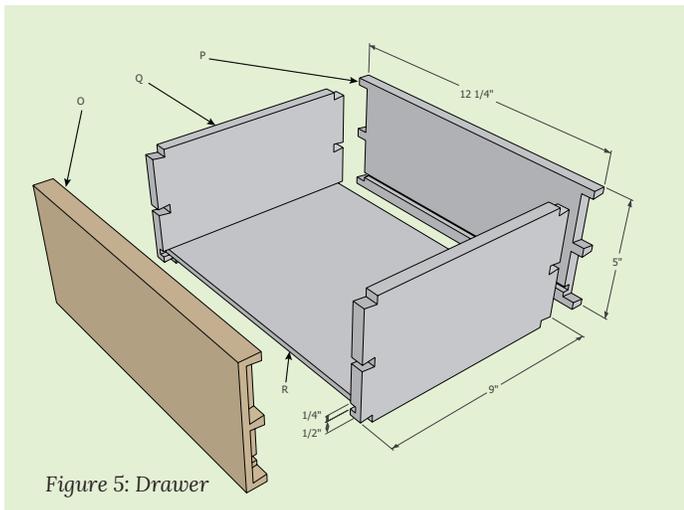


Figure 5: Drawer

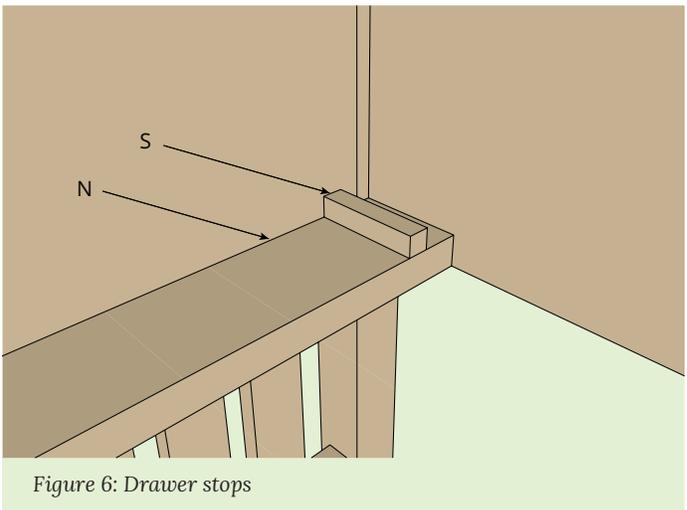


Figure 6: Drawer stops

