



# Blanket Chest

If you live in an older home you'll no doubt have found that closet space is at a premium; for some reason builders didn't include adequate closet space for the storage of seasonal clothing, and other household items. Here is a project that will give you a place to store winter items in the summer, summer items in the winter, or anything else you care to toss in throughout the year.

The construction of this blanket chest is straightforward and uses common materials and techniques.

I used Douglas fir for the frames and legs, and mahogany plywood for the panels. Several coats of milk paint give the panels a depth and sheen that is hard to achieve using modern finishes. For a more elegant and refined look, try this project using walnut for the frames and maple or

cherry for the panels. The dimensions of this project are such that all of the frame parts can be cut from 2' x 6' dimensional lumber. Adjust the dimensions as required to fit your room. The joints between the frame members are mortise and tenon, twins on the top rail and quadruples on the lower rail. I milled these joints using a mortise and tenon jig with a router and an appropriately sized spiral cutter. If you are cutting these in a traditional manner, larger single mortise and tenons would be equally effective. The panels fit into grooves in the rails and legs.

## The Legs

- When selecting stock for the legs, try to choose pieces with straight vertical grain. Boards exhibiting flat sawn grain can look odd when used on narrow structural parts; the erratic grain will seem incongruous with the function of the part.

- Mill enough stock for the four legs (A) using a jointer and thickness planer.

- With the stock for the legs milled to the final dimensions, stand them on your workbench and select the best two faces as the front legs, using some chalk to mark all four legs based on which position they will occupy.

- On the legs, lay out the locations of the mortises for the rails (B, C, D, E) and cut them using your preferred method. Set the legs aside for the time being.

## The Rails

- Mill enough stock for the four long (B, D) and four short (C, E) rails, and cut them to length. All tenons on the rails are 1" long.

- Cut the tenons on each rail and fit them to the corresponding mortises in the legs.

- When all the joinery has been cut on the basic frame, dry fit the parts and tweak any joints that are not quite perfect.

- With the chest frame temporarily assembled, use a piece of chalk to draw in the grooves that will be cut to fit the side panels (G). Doing this helps reduce the possibility that you will accidentally rout the groove on the wrong face of any of the parts.

- Next, cut the grooves for the side panels. This can be done on a table saw or with a table-mounted router. If you use a table saw, depending on the qualities of the wood you are using, you may end up with a rough edge. Using a table mounted router with a fence will take a few moments longer but will result in a cleaner cut, free of tear out and rough edges.

- Use a bandsaw to cut a shallow arc into the lower rail to lighten the look of the chest. For an easy method of laying out curves, or to lay out this arc, have a look at the 'Drawing Curves' article on page 30.

## The Top

- Mill enough stock for the frame members (J, K) for the top.

- Lay out the mortise and tenon joints, then cut and fit them.

- Using the same method as in the previous step mark the locations of the grooves for the top panel (I) with chalk and cut them.

- Unlike the main frame for the chest, the frame for the top must be sanded after gluing, so set the four frame members for the top aside in a different pile from the others.

## The Panels

- With all of the frame parts cut and the joinery completed, dry fit the frame components again. Measure the size for the panels based on the actual depth of the groove.

- Subtract 1/8" from the length and width and cut the panels (F, G, H, I) to fit.

- Pull the frame apart and re-assemble it with the plywood panels in place.

- If everything fits perfectly, move on to the finishing stage. If not, tweak the parts until they fit together effortlessly.

## Finishing the Panels

- I finished the panels with "Trading Post Red" milk paint. Select a colour that best suits the decor of your room.

- Sand the panels through to 150-grit and ease the edges slightly. This will make assembling the pieces a little easier.

- Mix up the milk paint according to the instructions. I combine the powder and water in a glass jar and then shake it vigorously for several minutes. You could also use a mixer.

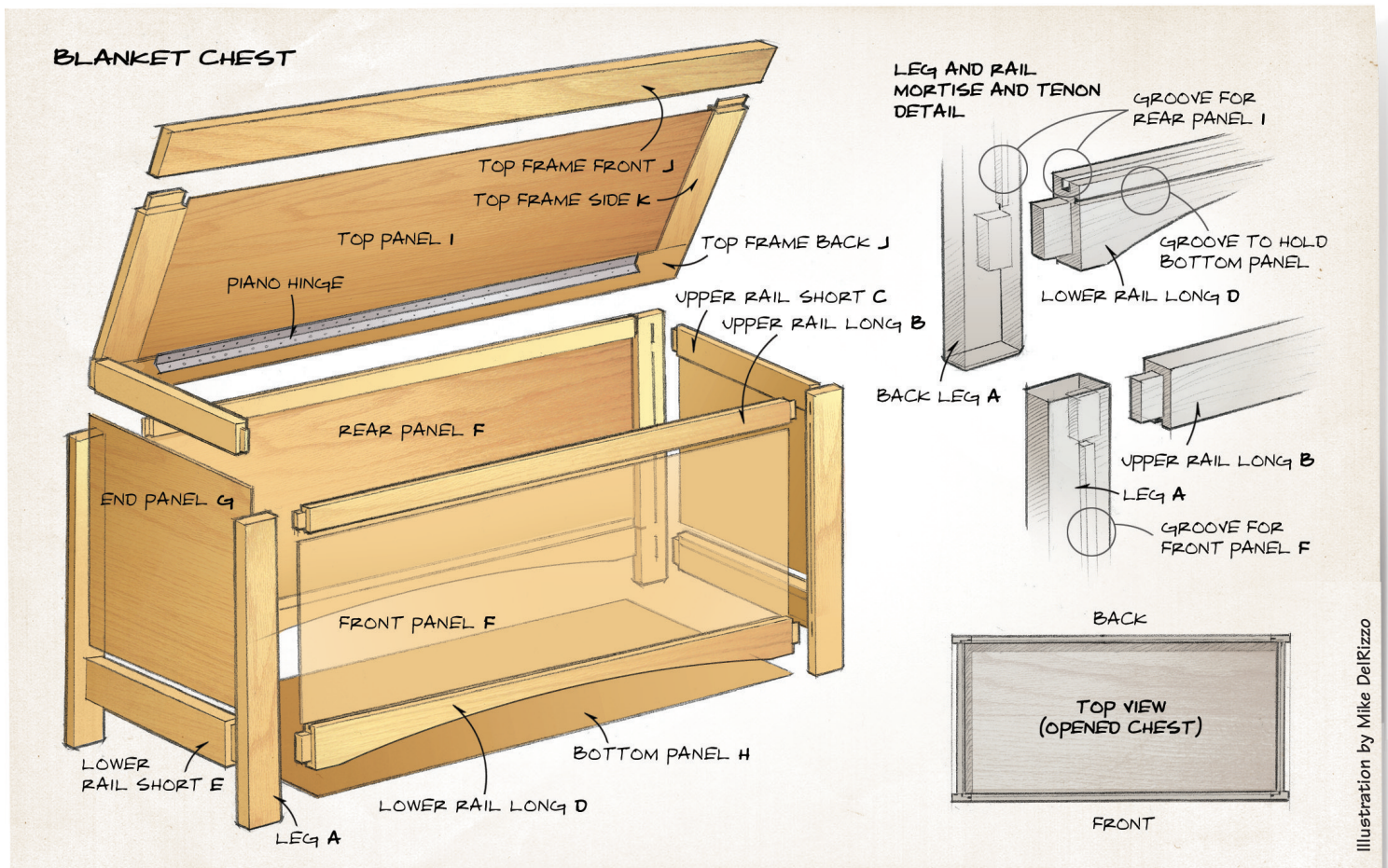
- Brush the paint on all of the exposed surfaces and let it dry. Milk paint dries quickly and by the time you have finished the last piece, the majority of the surfaces will already be dry.

- Using '000' steel wool, burnish the surface of the panels. This will remove any loose paint and will transform the dull, chalky colour to a deep rich red.

- Milk paint needs more than one coat to achieve full coverage. Usually two coats are sufficient for most applications. In this case I used four coats to get the effect I was looking for. Burnish the surface evenly after each coat.

- After the final coat of milk paint has been burnished, apply Watco Natural Oil to the painted surfaces. This seals them. Until they are sealed, splashes of water will damage the finish.

- After letting the Watco Oil cure, wipe down the panel and apply a coat or two of furniture wax. The wax protects the surface from any water damage. An alternative would be to use a wipe-on poly or to spray a similar finish using a compressor or HVLP system.



## Finishing the Frame

- Sand all of the chest frame members to 150-grit using a finishing sander.
- Apply a coat of Watco Natural Oil to all parts. Be sure not to get any oil on the tenons or in the mortises, or the glue will not bond the wood together effectively.
- After the Watco finish has cured, use the same process as you did on the panels to apply a similar coat of wax or poly to the frame members.

## Assemble the Chest

- With all of the frame and panel members for the chest finished, test fit everything one more time. All of your orientation marks will have been removed during the sanding and finishing, so this is your last chance to get it organized before committing your project to glue.
- Assemble the main body of the chest in stages.
- Begin with the back panel assembly, using clamps and glue; use a square or measure the diagonals to be sure everything is square.
- Assemble and glue the front panel. To ensure that the front and back are identical, cut some 1 3/4" long floating tenons and insert them into the mortises for the sides. Bring the two halves together and clamp up both panels side by side. Even if your sides are out by a half a degree or so, they will both be out in the same direction and the same amount making final assembly a breeze. Be certain there is no glue in the mortises or you won't be able separate the two halves. A layer of packing tape wrapped around the floating tenons will prevent them from accidentally being glued in place.

- When the glue has cured for the front and back, lay the back face down on your bench.
- Apply glue to the mortises and grooves and install the side rails, panels and the bottom.
- Apply glue to the mortises and groove in the front assembly and finish the assembly.
- With all of the pieces glued and assembled, set the chest on a flat assembly table and apply some clamps to draw the joints tight. By doing this on a flat table you will immediately notice if tightening the clamps pulls the assembly out of square (ie. one leg will lift off the table and the chest will rock slightly).

## Top it Off

- All of the frame members on the main part of the chest are of different thickness where they meet, so no sanding after assembly is required or desirable. The frame around the top on the other hand is flat and smooth and must be sanded after gluing. Finish the center panel to one coat of wax before gluing the top; this will prevent any excess glue that squeezes out of the joints from adhering to the panel.
- Test fit the top panel and frame members.
- Apply a little finish to the inside edge of the frame next to the panel. If any glue happens to squeeze out and get on the frame members, it will not cause staining problems later.
- Disassemble and apply glue to the mortises. If you apply glue to the tenons it will pile up as you try to insert them, creating a complete mess. Apply glue sparingly to the grooves for the panel.

- Assemble the panel, clamp it and check it to be sure it is square.
- I've bevelled the edge of the top, which in conjunction with the arched lower rail, lightens the chest visually. Beveling the top edge can be done a number of ways – using a table-mounted router, a table saw or in my case a jointer. Whichever method you employ, be aware that there is a risk of breakout on the trailing edge as you do the sides. You will be dealing with end grain at this point, so it is best to provide some additional support. Clamping a block of scrap to the trailing edge is a simple, effective solution.
- With the bevels cut, sand the edges, top, and bottom of the frame. Don't let your sander touch the center panel or you will damage the painted surface.
- Blow off the sanding dust and apply a coat of Watco Oil to the frame.
- Follow the oil with a coat of wax.

## Attach the Lid and Stash your Stuff

- Use a piano hinge to fasten the top in place. The legs on the chest extend past the upper rail, which could cause interference as the lid is opened. When you mount the piano hinge, be sure to set it back far enough so that the top will clear the legs. The overhang on the top will function as a stop to keep the lid from opening past 90°.
- If you plan on using lid supports or lid stays, buy them first and increase the width of the top rear rail accordingly.
- Friction lid stays prevent the top from slamming shut, potentially trapping fingers. When using these supports, I prefer to use them in pairs as it helps reduce stress on the lid by distributing the forces to both sides of the frame.
- Give the whole chest one more coat of wax to even out any blemishes.

**Milk paint available at:**  
Homestead House Paints  
[www.homesteadhouse.ca](http://www.homesteadhouse.ca)

**Friction lid stays available at:**  
Lee Valley Tools  
[www.leevalley.com](http://www.leevalley.com)

## MATERIALS LIST (All measurements in inches)

	Part	Qty	T	W	L
A	Legs	4	1 5/8	2 1/2	20
B	Upper rails, long	2	1 3/8	1 3/8	38
C	Upper rails short	2	1 3/8	1 3/8	17 1/4
D	Lower rails, long	2	1 3/8	3 3/8	38
E	Lower rails, short	2	1 3/8	3 3/8	17 1/4
F	Front/Rear panels (p)	2	1/2	12 15/16	36 1/2
G	Side panels (p)	2	1/2	12 15/16	15 5/8
H	Bottom panel (p)	1	1/2	16 1/4	39 1/4
I	Top panel (p)	1	1/2	16	39 1/4
J	Top frame, front & back	2	1 1/8	2 1/2	43
K	Top frame, sides	2	1 1/8	2 1/2	17

## NOTES

1. All stock is solid fir except: (p) mahogany plywood.
2. You will also need 36" of piano hinge and two 1/2" felt or rubber bumper pads.



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