



Technical Solutions

by Jim Falk, CMA Member
President of Progressive Woodwork, Inc.

“Secret Compartments for Fun and Function”

Part 1

I recently finished a large mahogany bathroom vanity. In passing, my clients mentioned they also needed a built-in along one wall in their daughter’s room. I heard from the parent what they wanted her to have and asked the daughter what she would like in the unit. I have found when doing a child’s room, getting them on board makes the whole job go much smoother. She gave the usual, “I don’t know” answer. I asked the parents to stay in the room and had the daughter meet me in the hall for a meeting in quiet voices. I told the daughter that I could put secret compartments in the unit that no one needed to know about. If she made a simple drawing for me to work from, I would do these special things just for her. We went back to the parents and I

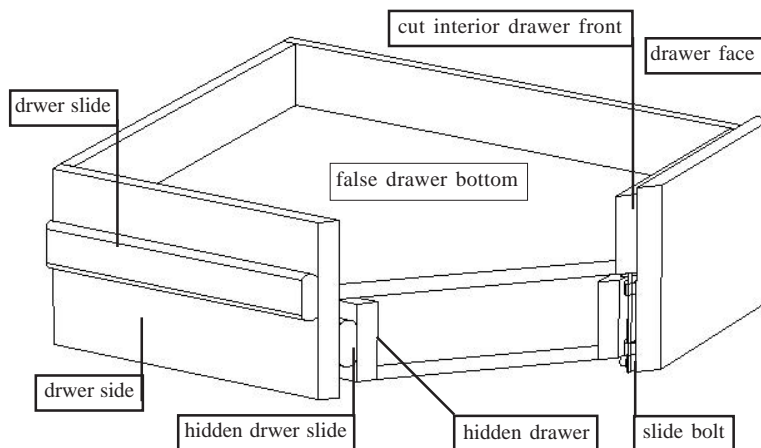
mentioned that the daughter was going to make a drawing for me to work from. It ended up becoming a mother-daughter design project. For any of you that have or know kids in or near the 4th grade, know how persistent they can be. She pushed the project without me even being there. I told the daughter to make a little asterisk on the drawing where I should put the secret compartments. The design I used for the project utilized “drawers under drawers”. This is a little complex but once designed, it can be repeated easily.

Some clients feel the need for hidden security. Whether this is in the form of a place to conceal a safe or just a secret hideaway, it provides them with greater peace of mind. Secret spaces come in

many forms; from the extreme of pivoting bookcases that expose elaborate hidden temperature-controlled rooms for special collections, to small cubbyholes that held papers in the roll top desks of yesteryear. The bottom line is, these little extras are very attractive to clients. One of the easiest ways to provide a compartment is to put a secondary bottom on a base cabinet (with verticals that go to the floor). Place a secondary horizontal horizontal location on a base cabinet, cut a large opening in what would have been the typical bottom horizontal, and supply an extra shelf the same depth as the bottom horizontal. One accesses the compartment by removing the loose bottom horizontal. This is not all that

Continued on page 15

Cut-Away view of Drawer Under Drawer



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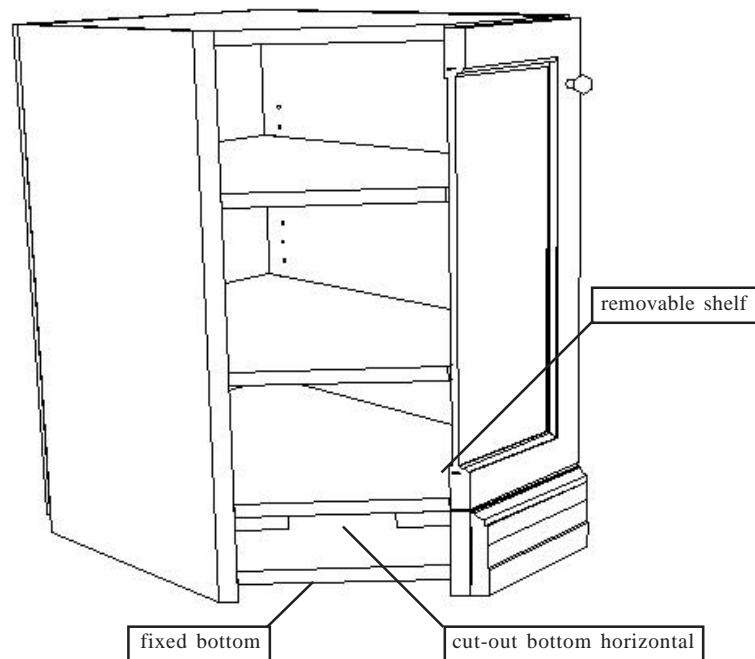
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Technical Solutions Continued

convenient, but when the client goes on a trip, it may be the best place to hide the jewelry box. This technique also works well in conjunction with a floor safe.

Another variation of bottom-engineered concealment is in a window bench. A standard flip top bench with a piano or European hinges are used. Inside, the left and right verticals go to the bottom. The center can be slightly raised, 2" +/-, as there is a door on hidden hinges opening to a floor safe (which has been installed with poured cement around its perimeter). Put a HVAC grille on the kick (at the safe location) to make it appear that it is a functional box.

Next Issue: Sliding backs and secret compartments as a design element.



Cut-Away view of Secondary Bottom



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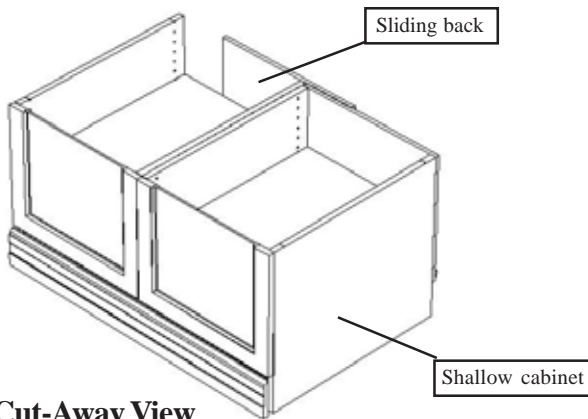
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Part 2

In this day of CNC fabrication, sliding backs are a breeze. These can be either vertical or horizontal. For cabinets along a wall, where two cabinets are adjacent to each other, fabricate one pair together.

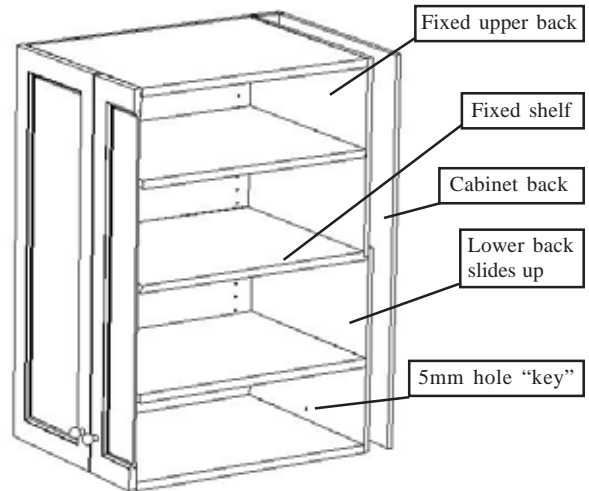
This technique works especially well in a cabinet where clothes are hung, making access to the back easy. Behind the cabinet can be placed a small wall or floor safe (such as behind a knee-wall). Edgeband the bottom of the sliding back with some PVC tape to make it slide easier.

You can also flip this concept 90-degrees. Use a cabinet with a standard back on the verticals. Dado a fixed shelf on the top for a false back and a finished surface on the bottom. The back on the upper portion of the cabinet is set forward a few inches and a sliding back on the lower portion of the cabinet slides up just behind the upper false back. This creates an easily accessible secret area.

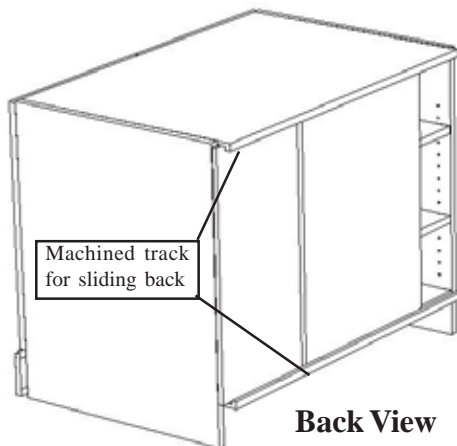


Top Cut-Away View

One of them has the back set forward of the other by 1/2". A groove is put into the top and bottom shared horizontals to allow the other back to slide behind the fixed back. A simple hole allowing the client to insert a "key" (a 5mm shelf rest pin), is all that is needed.



Cut-Away Side View



Back View

Sometimes I need to hide certain design aspects of the job for a better appearance. Large, floor standing 60" diagonal televisions are nice when the doors are open! One solution is to set the television in the corner of the room. Use two floor-to-ceiling pilasters with capital and plinth blocks, I design the pilasters wide enough to house the flipper door mechanism. To close the doors, one simply opens the pilasters, slides out the doors, closes them in front of the televisions and then closes the pilasters. Reverse the procedure to open. One note here: some hardware may not come in the correct length for a

Continued on page 13

Recent Work

John Gillis, of John Gillis Cabinetry, Inc., recently finished this solid walnut cabinet. The cabinet was built without any plywood and used nearly 700 board feet of solid wood. "One of the challenges was to float all of the wood", said John. "The structural elements are frame and panel. The 3/4" thick top and bottom of the base cabinet have 1/2"



expansion joints and the thick countertop is done with a bread board end that is glued at the front, but loose at the mid and back (against the wall) so it can move freely. The horizontal section of face frame around the arches is similarly bread boarded into the vertical frames. The upper cabinet back is T & G". With just over 700 man-hours to construct, Gillis notes building it was, "lots of fun".

Technical Solutions continued

specific project. To remedy this problem, just order extra slides, cut off the front of the secondary set and the back of the primary set as needed. With a little rounding at the joint, screwing them to a common piece of wood allows you to customize the length.

Secret spaces can also be easily created in paneled rooms by using European or Soss hinges on a designated panel. Coupled with a touch latch, the user exposes an opening into the hollow of the wall.

This oak "mission style" fireplace mantel and surround was submitted by Tom Meadows of Creative Works, Inc. We have done the kitchen in the house also, the customers future



plans include a buffet and hutch for their dining area and an entertainment center, all in a "mission style"

Outside the Box



"Zoe" the shop dog, 1993-2006

Secret panels can be a specified design feature, or mentioned quietly to the client. They can certainly add a bit more to the bottom line. And without requiring tremendous amount of work. Any way you do it, they always seem to be fun. You will notice that there are no photos in this article. The best thing to do with secret compartments is to keep them secret!

Editor's Note: Send your technical solutions, favorite jigs, techniques or unique projects to editor@cabinetmakers.org.