

“The Poor Man’s Ultimate Work Table”

By
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I found Brendan Mathews’ article on the Ultimate Workbench in the February issue most intriguing, but also somewhat out of my price range. In February and March, though, I took Brendan’s plastic laminating class at Palomar College, and one of the requirements for the course was to make something with a Formica top of some sort. It struck me, in a moment of insanity that I’m still trying to analyze—with an eye towards avoiding any repeats!—as a wonderful reason to replace my old work tables.

For my own self, I have never been one to use a work bench, as I much prefer a simple table. I rarely use a vise, but when I do I have one that can be simply clamped to any available work surface (it’s the Gripmaster that was once a mainstay of middle-of-the-night TV infomercials), and since I don’t do hand planing, except for edge-to-edge glue joints, I don’t need the mass of one of those 8/4 maple behemoths. However, the table that is my main work horse is a 24”x48” particleboard topped table I first made fifteen years ago when I was a weekend warrior. It’s now on its third top, and a new table altogether seemed like just the solution. And while I’m at it, might as well replace the redwood work table, the outfeed table, and make a dedicated table for the sixty-pound planer that, as the years go by, gets increasingly less fun to haul out of the top drawer of my tool cupboard. So one table became four, and they, in turn, became my life’s work! As it is with all of my projects, the work took considerably longer than I thought it would, but I’m pleased with the results.



Last October I converted my garage to a year-round shop to replace the dry-weather-only shop I’d had on an adjacent patio. Heretofore, I’ve had to pick up my tables and haul them wherever I want them, but again, it’s a task I enjoy less and less with the years. To make it easier to get my new work tables around the shop I opted for 3” heavy-duty casters (available from Rockler) which swivel and have brakes to hold the tables steady wherever I want them.

One of the problems with the old tables was that outside location. Even though I covered them when not in use, the rains tend to make the unfinished wood move quite a bit. It’s something I wanted to do all I could to avoid, so I planned the project accordingly.

To give the tables more mass, I used 4x4s instead of 2x4s for the legs and instead of simply putting them together with screws or 8d nails (hey, it was fifteen years ago, and I wasn’t high tech!), I decided on biscuits and yellow glue for all the joints. To properly

support the tops, I used extra stretchers between the aprons, and to give myself extra room for clamping, I set the aprons in at least four inches all around.



The 4x4 legs were not big enough to seat the mounting plates for my casters, so I added a piece of 6/4 redwood to the base of the legs. To keep the costs down I used construction grade common for the legs (it's normally used for fence posts) and kiln-dried studs for the stretchers and aprons, all of which I ran through my planer for a consistent thickness.

The tops are two layers of 3/4" MDF which I glued together with contact cement. It

was a cold rainy day at Palomar College when I did the glue up, and I wasn't convinced that the contact was sufficient to keep it from delaminating later on, so when I attached the table tops, I screwed through the tops into the aprons and stretchers, making it a point to use a lot of screws, thereby insuring that a subsequent delaminating is impossible. I rimmed the MDF with poplar an inch thick, rather than the standard 3/4", which led to a nice bit of providence.

One who has an aptitude for making fortunate discoveries accidentally is said to possess serendipity, which is one of those little tidbits one comes across in one's reading, but it's something that's always stuck in my mind, because to tell you the truth, most of my "plans" come about in just that manner! Because they're just work tables, I made up my mind not to make extended sweeping round corners, because I was not too keen on using the extra piece Brendan uses when he goes around such a corner. Also, the template I had with its 1" radius corner seemed like just the ticket, mainly, I think, because I already had it.



Well, sir! It turns out that the reduced radius is every bit as pleasing to the eye as the sweeping curve, and because the popular rim is an inch thick, the glue seam is off on the side, thereby producing a solid wood front every bit as professional as if I had actually planned it that way!

To help reduce wood movement I painted the table bases, and the tabletops are laminated with Formica top and bottom to seal them. Once I had laminated the

bottoms of the tabletops, I chamfered the edges, then screwed down through the tabletops to secure them, then Bondoed the countersunk holes and installed Formica over the tops,

following up with a final chamfer on all edges. The last step was to seal the exposed poplar with polyurethane.

Because there were quite a few Guild members in Brendan's class this year I would like to make a few observations about my experiences. First, for those who may have thought I had a terrific idea when I objected to Brendan's cutting Formica on the table saw and recommended a jig saw instead, let me just say that that part of things did not work as well as I would have liked. It's a method I successfully used some seven or eight years ago when I made a microwave counter for our kitchen, and it went well for a time with the current project, then the saw's chattering caused some three-inch splits that ruined a piece with a one-inch trim border. Fortunately, I was able to salvage it by re-sizing, re-cutting, and using it on one of the smaller tables. After that near-catastrophe, though, I switched to a utility knife which worked fine. I found that I could easily make a cut, then follow that same line for subsequent deeper cuts, as the blade did not wander in the Formica. Once the cut was deep enough, the Formica snapped quite easily.



Also, when I saw Brendan Mathews with his block of wood for rolling down Formica, I thought the board was, um, well, peculiar, but I have always made it a point to try anything suggested by Palomar College teachers. And I'm glad I did. I had a piece of maple that was exactly the right size, and it just works like a champ. Much better for putting down pressure as one withdraws the sticks because you can easily use it with one hand. And because you're using the edge of the board, you

can put down considerably more pressure than one might think.

Finally, I must say that the tops did not lay as flat as I would have liked. The substrate was dead flat before I put down the Formica, but I put extra glue on the edges all around, to help prevent a subsequent delaminating, and I think that extra glue made the edges just a bit proud of the field. Hind sight being twenty-twenty, I should have just given the entire surface three coats of glue, rather than putting down two coats in the field and three on the edges. Now, though, when I put down a straight edge and sight under it, I can see that there's an error of about one-one hundredth of an inch, give or take a kasmooshmundo.

All in all, I'm pleased with the results, and I now have a one hundred percent confidence factor in my ability to make a Formica countertop. For those who may have thought about taking Brendan Mathews' class, I cannot recommend it too highly.