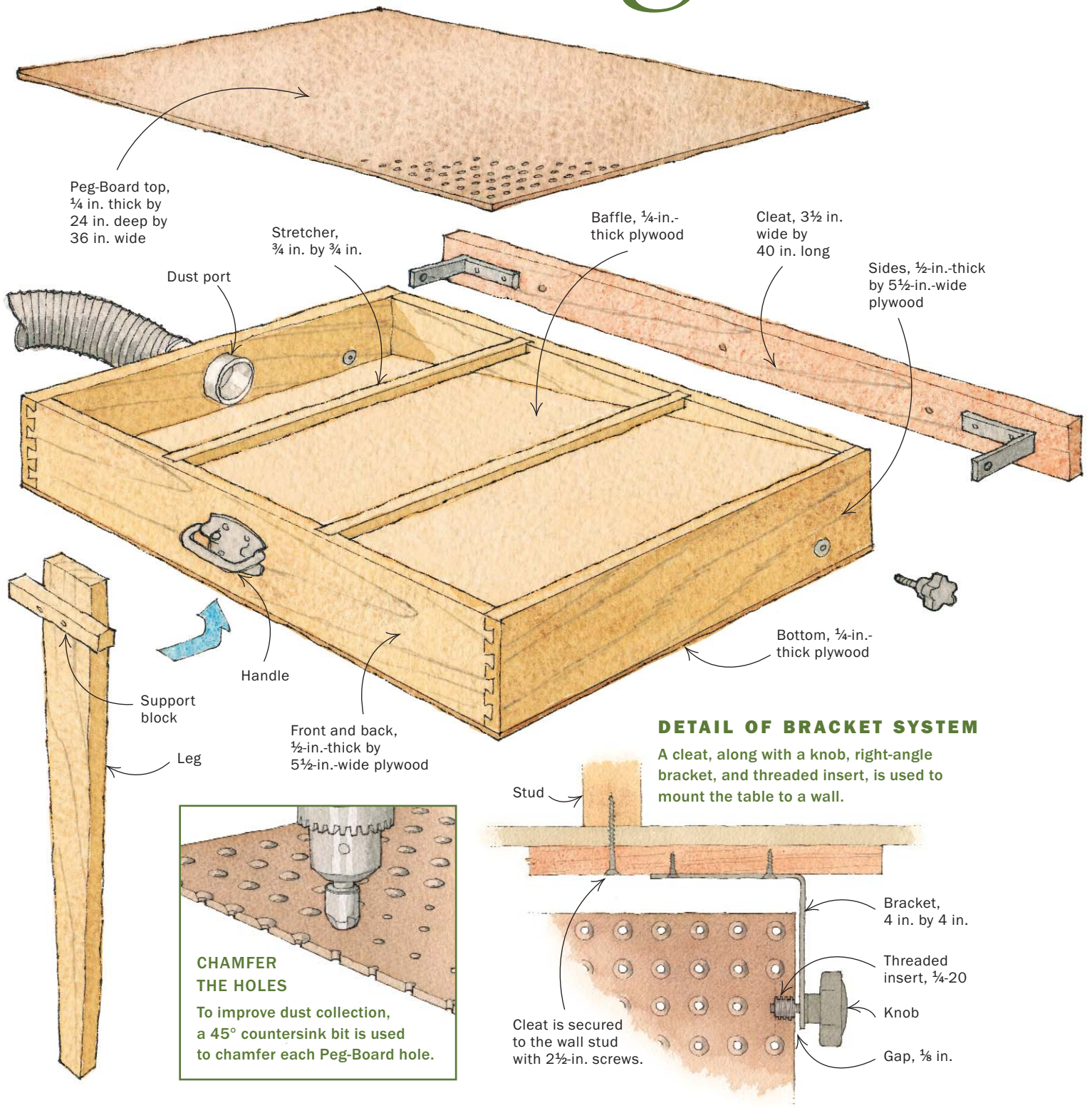


Fold-Down Sanding Table



In December 2002, a U.S. Department of Health and Human Services report officially designated wood dust as a human carcinogen. According to the report, “unprotected workers have a higher risk of cancers to the nasal cavities and sinuses.”

Such blunt facts make it clear that it’s important to control wood dust in the shop. As part of that effort, I built a fold-down sanding table that allows me to collect dust at the source as I sand.

The design is pretty basic. The table itself essentially is a shallow rectangular box with a Peg-Board top. A port in the side connects to the hose from my dust-collection system. When fired up, the dust collector draws air from above the table down through the holes in the top, taking along a good deal of the dust generated while I sand. Inside the box, a plywood baffle extending from one corner to the other helps improve the dust-collection effectiveness. The table mounts to the wall via a simple bracket system (see the detail on the facing page).

Shopmade tool
saves space
and collects dust
at the source

BY DAVID DIRANNA

Construction is straightforward

I own a dovetail jig, so it was easy to join the front, back, and sides of the table with dovetails. But you don’t have to use dovetail joinery. You can create strong-enough joints simply by butting the parts and screwing them together.

By the way, before assembling any of these joints, use a drill press and a circle cutter to cut a hole in one of the sides, with the hole diameter just big enough to create a snug fit for the dust port. I used a 3-in. PVC pipe coupling here. The 4-in. outside diameter of the coupling was a perfect fit for the dust collector’s 4-in. hose. This also is a good time to drill a hole at the back end of each side and install the threaded inserts.

Attach the bottom of the table with glue and finish nails. Then secure the baffle with a bead of silicone caulk along the full length of all four edges.

To mount the port, first add a generous coat of epoxy glue to both the edge of the hole and the end of the PVC pipe. Slip the pipe into the hole and allow the glue to dry.

To help support the Peg-Board, add a pair of ¾-in. square stretchers between the front and back of the box. The stretchers are glued into notches cut in the front and back pieces.

I wanted the Peg-Board top to be removable, just in case I needed to open the table for cleaning or repair. So the top is secured using only flat-head wood screws. By the way, before attaching the top, chuck a 45° countersink bit into the drill press and chamfer each of the Peg-Board holes to help improve dust collection.

When attaching the cleat to the wall for mounting the table, be sure to drive the screws into wall studs for maximum holding strength. Also, mount the cleat so that

the table is at a height you find comfortable for sanding.

Next, screw the two right-angle brackets to the cleat (you can find these brackets at most hardware stores). To allow the table to pivot, you need to space the brackets so there’s about ¼ in. between the side of the table and the inside face of each bracket.

Rip the leg to a width that allows it to just fit inside the handle and then cut it to length. Screw a short block near the top of the leg. The block fits under the handle, supporting the table. A couple of coats of polyurethane complete the project. □

David DiRanna builds furniture in his home shop in Fountain Valley, Calif.

READY TO SAND IN AN INSTANT

This sanding table not only makes sanding in the shop safer, but it also folds flat against the wall when not in use, saving space. Best of all, setting up or folding away the table takes just seconds. In use (right), the dust collector draws air and dust down through the holes in the top.



Down and out of the way. Simply removing the leg allows the table to fold flat against a wall.



Handle doubles as leg connector. The handle not only is used to lift and lower the table, but it also connects the leg to the table.

