



Woodsmith **PLANS**

MOBILE PLANER STAND



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Make your shop workhorse even more productive with this handy project.



Pound for pound, a portable planer has to be one of the hardest-working machines in the shop. And when you combine your planer with the versatile stand shown above, for you, the work will get a lot easier.

This project starts with a rugged, plywood case that puts the planer at just the right working height. A drawer for accessories, a large

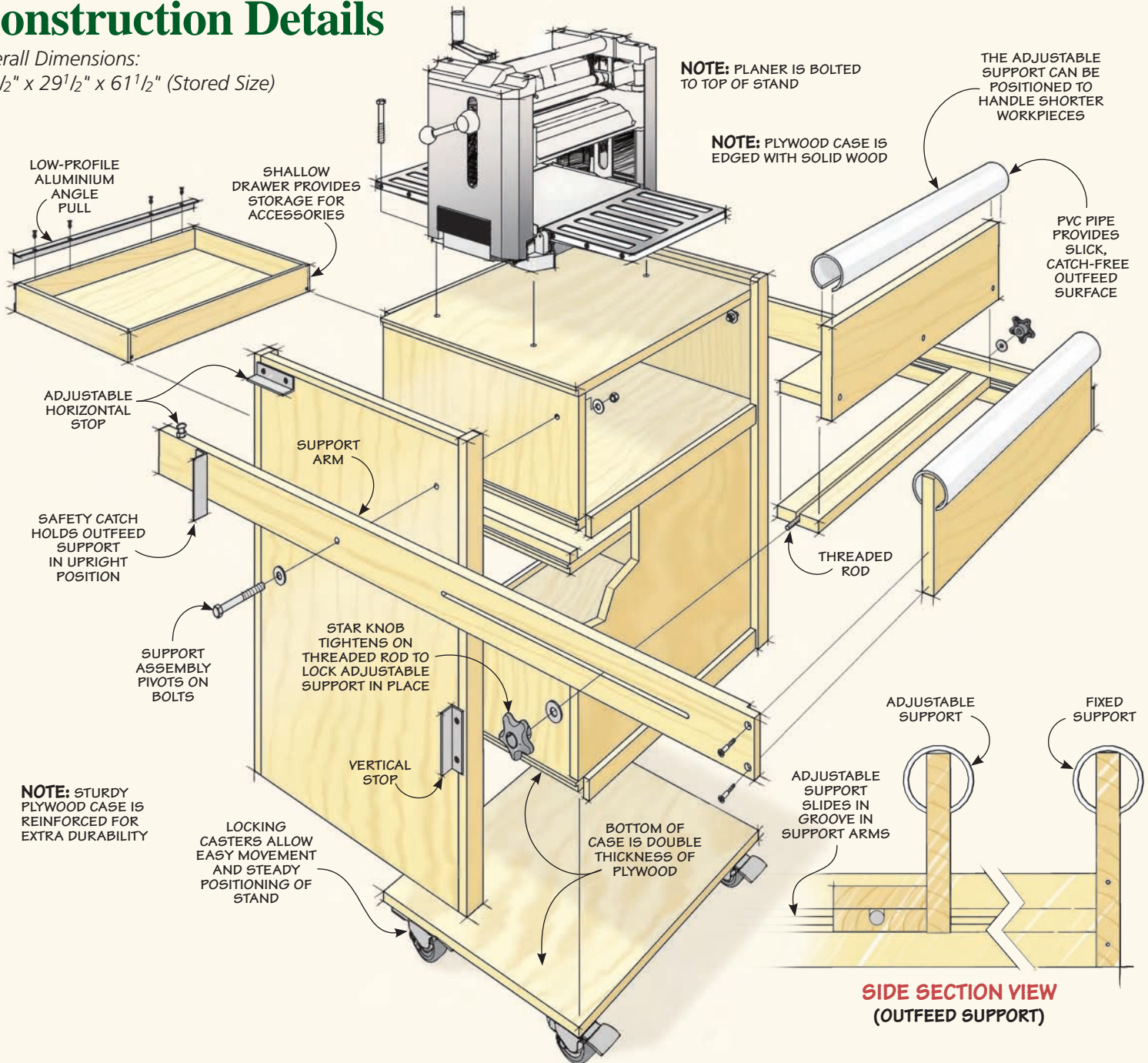
open storage area, and a set of locking casters round out the case.

But the feature that really stands out is the built-in, adjustable out-feed support. The key is that it's only "out" when you need it. When the job is complete, the support swings up over the stand and locks in place for easy movement and compact storage (inset photo).



Construction Details

Overall Dimensions:
21¹/₂" x 29¹/₂" x 61¹/₂" (Stored Size)



NOTE: STURDY PLYWOOD CASE IS REINFORCED FOR EXTRA DURABILITY

MATERIALS & SUPPLIES

A Sides (2)	20 x 30 - 3/4 Ply.	O Drawer Guides (2)	3/4 x 13/16 - 20	(2) 1/4" Washers
B Top/Upper Divider (2)	20 x 24 - 3/4 Ply.	P Support Arms (2)	3/4 x 3 - 48	(1) 1/4" x 28" Threaded Rod
C Bot./Lower Divider (2)	19 1/4 x 24 - 3/4 Ply.	Q Adj. Support Guide (1)	3/4 x 3 - 25 1/2	(2) 3/8" x 3" Hex Bolts
D Back Panel (1)	18 1/2 x 23 1/2 - 3/4 Ply.	R Adj. Support Guide Cover (1)	3/4 x 3 - 25	(4) 3/8" Washers
E Side Filler Panels (2)	20 x 8 3/4 - 3/4 Ply.	S Adj. Support Upright (1)	3/4 x 7 rgh. - 25	(2) 3/8" - 16 Lock Nuts
F Bottom Filler Panel (1)	20 x 23 1/2 - 3/4 Ply.	T Fixed Support Upright (1)	3/4 x 8 rgh. - 25 1/2	(2) 1/4" - 20 Threaded Inserts
G Side Caps (2)	1/2 x 3/4 - 20	HARDWARE		
H Stiles (4)	3/4 x 1 1/2 - 30 1/2	(5) 1" x 1" - 4" Aluminum Angle (1/8" Thick)		(7) #8 x 1 1/4" Fh Woodscrews
I Narrow Edging (4)	1/2 x 3/4 - 22	(1) 1" x 1" - 21 7/8" Aluminum Angle (1/8" Thick)		(12) #8 x 3/4" Fh Woodscrews
J Wide Edging (3)	1/2 x 1 1/2 - 22	(2) 1 1/2" I.D. x 25" PVC Pipe		(16) #14 x 1" Lag Screws
K Drawer Front (1)	3/4 x 21 3/16 - 22 7/8	(4) 3" Locking Swivel Casters		(16) 1/4" Washers
L Drawer Back (1)	1/2 x 21 3/16 - 21 7/8	(2) 1/4" - 20 Star Knobs		(2) #6 x 1 1/2" Rh Woodscrews
M Drawer Sides (2)	1/2 x 21 3/16 - 19 1/4			
N Drawer Bottom (1)	19 x 21 3/8 - 1/4 Ply.			

A Sturdy Plywood Case

Even a portable planer is a fairly heavy tool and the stand that it sits on may take a considerable amount of abuse. So I wanted to get off on the right foot by building a very sturdy case. I accomplished this with a combination of solid joinery and some “structural” reinforcement in a few critical spots.

SIDES AND DIVIDERS. A look at Figure 1 shows you how the plywood case is put together. The top, bottom, and dividers are joined to the sides with a tongue and dado, as shown in Figure 1a. This joint gives you both good gluing strength and racking resistance.

The first step is to cut the two case sides to size. Next, each side needs four dados. Your only worry here is to match the position of the dados on both side pieces.

With the work on the sides complete, you can cut the top, bottom, and two dividers to size. The top and upper divider are identical.

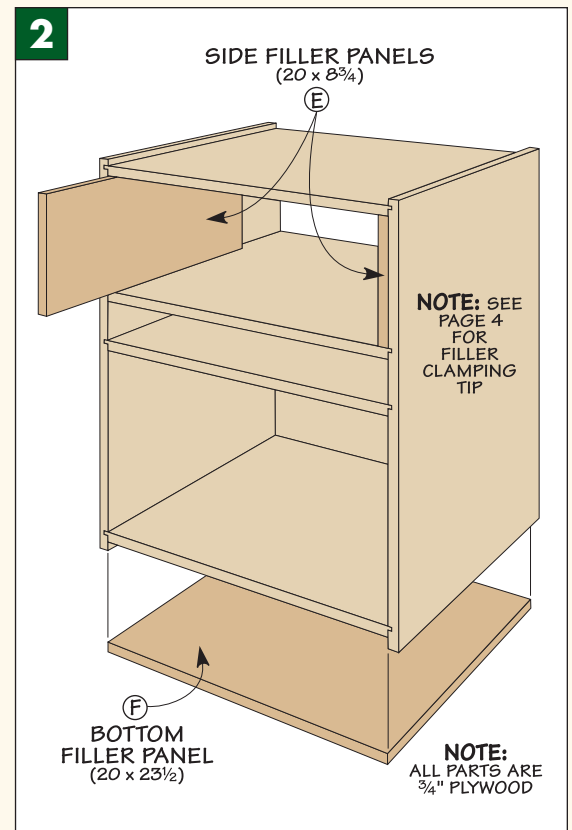
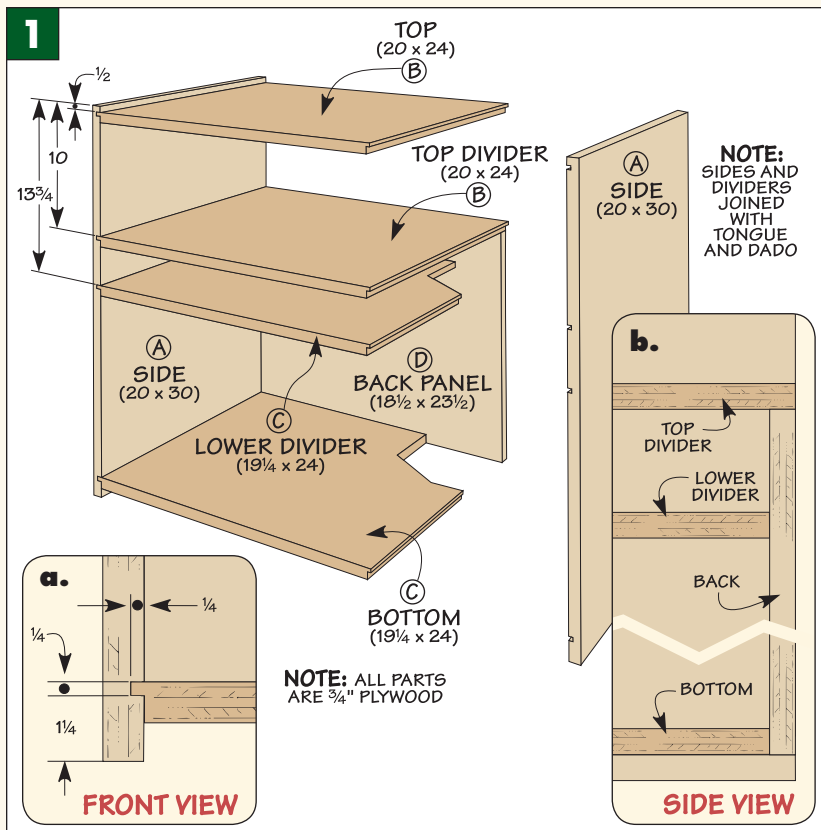


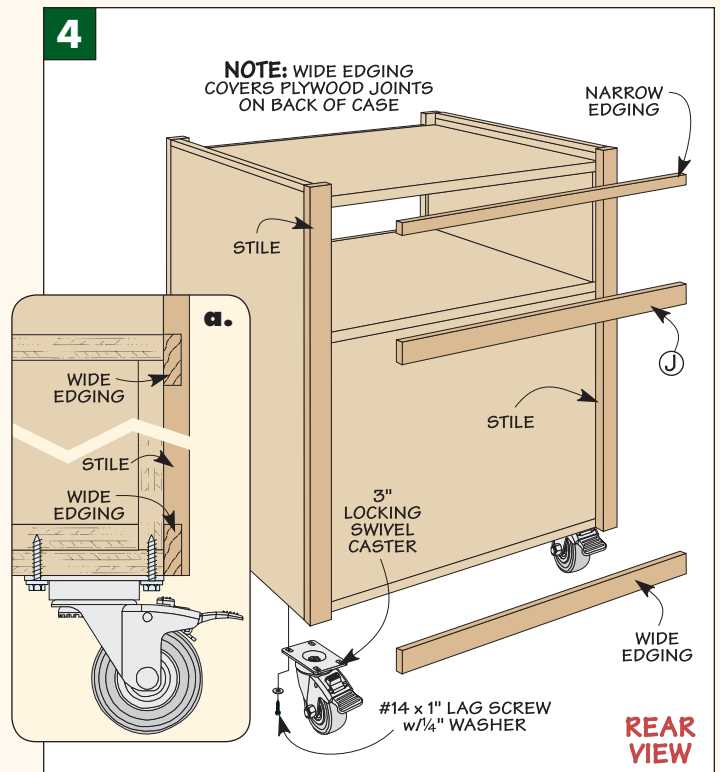
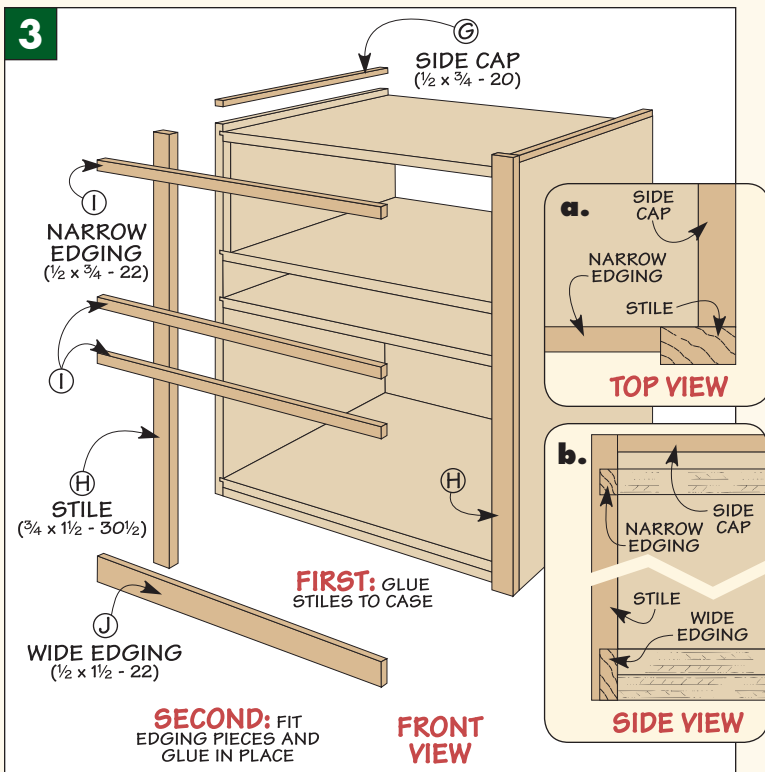
The bottom and lower divider are likewise identical, but $\frac{3}{4}$ " narrower (front to back). This makes room for a plywood back panel you'll add later. After cutting snug-fitting tongues on the dividers, you can start assembling the case. Glue and clamps are all it takes.

REINFORCEMENT. Next, I turned my attention to beefing up the case in a few spots. First, I added the

$\frac{3}{4}$ " plywood back panel (Figure 1b). This adds an extra level of racking resistance and also closes in the drawer opening and lower storage area. The back is sized to fit between the sides. It butts up to the upper divider and sits flush with the case bottom (Figure 1b).

Next, I strengthened the joints between the top and the sides by gluing a second layer of plywood





to the inside of the case, as shown in Figure 2. You'll find a handy clamping tip that will help you with this in the box below.

The final spot for reinforcement is the bottom of the case. Here again, I "doubled up" the plywood to create a very solid foundation for the casters (Figure 2). And I should note that this piece extends flush to the case back and sides.

THE EDGING

At this point, you have a solid case, but it's a little unfinished on the outside. Some hardwood edging glued to the plywood case will give it a cleaner look and help it stand up to shop wear and tear.

A look at Figures 3 and 4 above shows what needs to be done. The edging I applied is a cross between simple edging and a face frame. The pieces are simply glued in place one at a time. The front and back of the case get a similar treatment, but the pieces are a bit different.

THE PIECES. The first step is to glue a "cap" on the top edges of the sides and trim it flush. Next, I added side "stiles" cut from 3/4"-thick stock. They should be flush at the top, bottom, and outside edges, as in Figures 3a and 3b.

With the stiles in place you can start adding the horizontal edging. These pieces are thinner — just 1/2" thick — and are simply cut to fit between the stiles. And here is where there's a minor difference between the front and back.

On the front of the case, all of these pieces are sized to fit flush with the surfaces of the plywood (a double thickness at the bottom).

At the back, there are only three horizontal edging pieces. The two lower pieces are sized to conceal the joint between the dividers and the case back (Figure 4a).

THE CASTERS. Once all the edging was in place, I took the time to add the locking casters. This way, you can easily move the case while finishing the job. Just flip the case over and screw them to the bottom.

CLAMPING TIPS

The challenge I came up against when assembling the case was how to apply clamping pressure in places my clamps couldn't reach. Here are a couple of tricks I used to get the job done.

When gluing the filler panels into the case, I used heavy cauls with a slight bow planed on one edge. A clamp tightened at either end is all you need to apply pressure across the width of the panels (upper drawing).

The lower drawing shows how I teamed up heavy rubber bands and spring clamps to glue edging in place. Simply stretch the rubber band and pinch it with the clamp.

