Woodsmith SHOP-TESTED

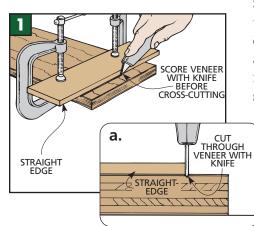
## TIPS & TECHNIQUES

## **Clean Cuts in Plywood**

When cross-cutting a plywood panel, the bottom layer of veneer often splinters out along the cut line. But there are some steps you can take to prevent this.

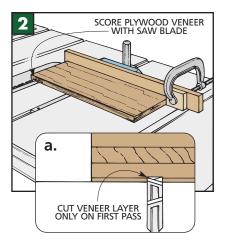
**PLYWOOD BLADE.** Perhaps the easiest way to avoid splintering is to use a blade that's made specifically for cutting plywood. But if you only have a combination blade, there are a few tricks to getting a clean cut. First, if the blade is crusted with sawdust or pitch, clean it well.

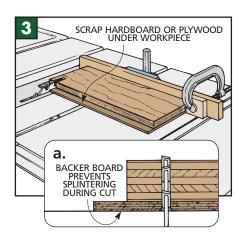
Second, change the cutting angle of the teeth by raising or lowering the blade. To control splintering on the bottom, lower the blade. To reduce splintering on the top of the plywood, raise the blade.



**SCORING CUT.** The most common way to get a clean cut is to score the panel along the cut line before making the cut (Fig. 1). To do this, cut through the veneer layer with a utility or other sharp knife. While this method works, it's sometimes difficult to line up the saw blade with the scored line.

**SCORING ON THE SAW.** An easier way to score the panel is to use the saw blade itself. The trick is to make the cut in two passes. On the first pass, set the blade just high enough to cut through the veneer (Fig. 2a). Then raise the blade and finish the cut on the second pass. To keep the workpiece aligned with the blade during both cuts, clamp an extension fence with a stop block to your miter gauge (Fig. 2).





**BACKER BOARD.** Another way to keep the veneer from splintering is to use a backer board (Fig. 3). This is a piece of scrap plywood or hardboard that's placed below the workpiece when making the cut. This way the veneer layer is supported and can be cut cleanly.

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## **TIPS & TECHNIQUES**

## **Clean Cuts in Plywood (continued)**

When I have a project that requires pieces cut from a 4x8 sheet of plywood, I like to start by cutting them to rough size with a circular saw.

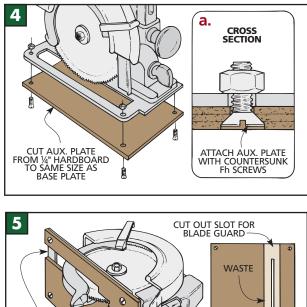
When cutting plywood with a circular saw, I always face the good surface of the plywood down since the blade causes chipout on the top ("up") side. But sometimes I want a clean cut on both sides of the plywood.

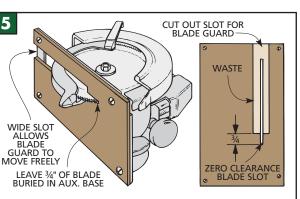
To prevent chipout on the top side, I attach an auxiliary plate to the saw's base plate (Fig. 4). The plate has a "zero clearance" blade slot cut in it. This backs up the wood fibers along the cut line and prevents chipout (see photos below).

The idea is pretty simple. Screw a piece of 1/4" hardboard to the saw's base plate (Fig. 4). Then plunge the blade through it. Now you've got a plate with a zero clearance blade slot.

The only problem is that now the blade guard won't work. It's held back by the auxiliary plate, so the blade is left exposed.

To solve this problem, cut a wide second slot centered on the first one (Fig. 5). Cut it wide enough to allow the guard to move freely, but stop it  $\frac{3}{4}$  back from the forward end of the blade slot (Fig. 5a).







The blade on a circular saw tends to chip out fibers on the top side of the plywood.



Attaching a "zero clearance" auxiliary base plate to the saw prevents chipout.