



Learn about plywood options that are great for projects around the shop.

choosing Plywood for the Shop

Over the years, I've used a lot of plywood for jigs, fixtures, and other shop projects. You already know there are many types of plywood to choose from. But how do you know which ones are best for use around the shop? To find out, let's take a look at a few different ones you might want to consider.

BIRCH PLYWOOD

One type of plywood I use a lot of is birch. But what can be confusing is that all birch plywoods are not the same. So what's the difference?

Cabinet Grade. If you look at the photo below, you'll see a sample of cabinet-grade (or "domestic") birch plywood. It's widely available at most lumber yards and home centers.

Look closely and you'll see a very thin outer veneer of birch on the faces. But what's on the inside? The core of cabinet-grade birch plywood is actually made of fir, like most construction-grade plywood.

There are a couple of problems with using domestic birch plywood in the shop. First, it has relatively few plies. And since fir is a softwood, it's not as strong and doesn't hold screws as well as some other types of birch plywood. I've also found those inner plies can have a few voids.

Domestic birch may not be the best choice for shop projects. For durability and strength, I turn to Baltic birch plywood.

Baltic Birch. When you say "Baltic birch," most people think of a plywood with many thin plies

like you see in the photo above. These layers are assembled with alternating grain directions, like conventional plywood, using interior-grade glue. The difference is that all of the plies are made from birch (photo below).

This type of construction makes a strong and stable sheet of plywood. It's a much stronger material than domestic birch plywood. The inner plies are void-free and it does a great job of holding screws. That's why I like to use Baltic birch for projects like tool chests and for jigs like you see in the top left photo on page 2.

Another great benefit of using Baltic birch is that it's available in a wide variety of thicknesses. But there's something you should know about thickness. Plywood imported from other countries is measured in millimeters. You'll have to take this into consideration when you purchase your plywood.

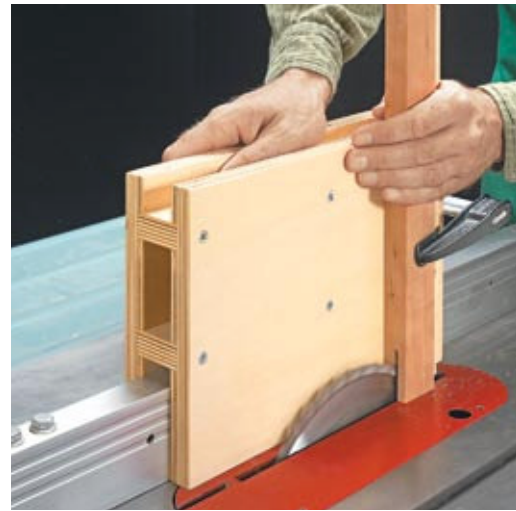
A close cousin to birch plywood I'll sometimes use is Finnish birch plywood since it looks and works a lot like Baltic birch. To know the difference, let's look at their history.

◀ **Cabinet-Grade Birch Plywood.** *The only birch used in this product is on the front and back face veneer. These outer veneers are very thin and the core plies may have some voids.*

◀ **Arauco Plywood.** *Imported from South America, the inner plies and faces of this product are made from radiata pine cut from managed forests.*

◀ **Baltic or Finnish Birch.** *Known for its many thin plies, this plywood is dense, straight, stable, and easy to work with. It's imported from the northern Baltic region of Europe.*





History. Before World War II, what we now call “Baltic” birch was called “Russian” birch. It was made in the Baltic region, including Finland. After the U.S. entered the war, the product became known as “Baltic” birch.

After the war, Finland took over their plywood production from

Russia. And that’s where “Finnish” birch plywood comes into play.

Finnish Birch. Finland soon made improvements to their birch plywood. As I said, Finnish plywood looks the same as Baltic birch. But Finnish birch typically has better quality face veneers and inner plies than Baltic birch. And what might be most important is that the veneers in Finnish plywood are put together using exterior-grade glue. As you might expect, these differences mean that Finnish birch can cost more than comparable Baltic birch.

ANOTHER OPTION

For some projects I don’t need all

the strength (and expense) of Baltic birch plywood, but I still want something stronger than cabinet-grade plywood. I found a good alternative called *Arauco*.

Arauco is the name of the company in South America that makes a plywood from radiata pine trees (see photo at the bottom of page 1). You’ll see that *Arauco* plywood has seven plies. It’s stronger than domestic birch and less expensive than domestic or Baltic birch. The downside is its face veneers are less attractive and may contain some defects or patches.

So there are a number of plywood options for shop projects. It all depends on your needs. 🛠️



▲ **Variety.** Baltic birch plywood is commonly available in thicknesses from 1/8" to over 1".

Durable and Attractive: Phenolic-Faced Plywood

As I was looking around for plywood to use for some shop projects, I found something that’s almost ideal. I wondered why I hadn’t noticed it before. It’s a unique product — phenolic-faced plywood.

If you look at the photos below, you’ll see what looks like Baltic birch plywood with a thin coating on the faces. This tough coating is a plastic material (phenolic) over Finnish birch (exterior grade) plywood.

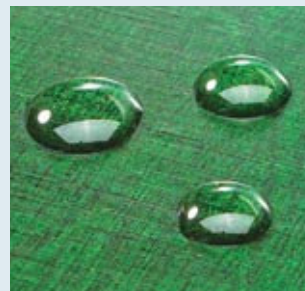
What I found out was that it was originally engineered for concrete forms. Its coating was designed to withstand the abrasion and moisture from concrete.

And since this coating is slippery, it releases from the concrete easily. This plywood has great properties for making jigs and fixtures — durability and low-friction. An extra benefit is that it looks great, too.

Manufacturers make this product available in a variety of colors and thicknesses, but I had a hard time finding retail sources for it. The good news is that *Woodcraft* carries this specialty plywood. It’s available in 2’x4’ sheets in 1/2" and 3/4" thicknesses in a green color like you see in the photos (see Sources). I’m sure you’ll find lots of uses for it in the shop.



Great for Jigs and Fixtures. Durability and less friction make this an ideal product for lots of shop uses.



▲ **Water-Resistant.** A thin phenolic film protects the faces. You’ll want to seal the edges for exterior use.

