

choosing the right Pocket Screws

Drilling pocket holes is only half the story. For solid joints, you also need to choose the right fasteners.

■ If you've ever used pocket-hole joinery, you know that few methods of joining two boards together give you a stronger joint faster. But you may not have given much thought to the screws that pull the joint together.

Despite its seeming simplicity, there's a lot of engineering that goes into the humble pocket screw. And you have many options, not only in the length of

screws you choose, but also in the thread type, the head type, and the material the screw is made from. Choosing the right one can make the difference between project success and failure.

Anatomy of a Pocket Screw. At first glance, a pocket screw doesn't look much different from other woodscrews. But take a closer look, and you'll see a lot of details that help pocket-hole joinery work as well as it does (illustration at left).

One critical aspect of the screw is at the end, in the form of a self-tapping tip. What seems like a minor feature of the screw can actually be a real time-saver, as it allows you to drill pilot

holes in only one board rather than both of them.

Above the tip, you'll notice that the threads extend halfway up the shank. Here again, this helps ensure a strong pocket joint. The shank is designed to pull the screw into the wood and then help draw the two workpieces together.

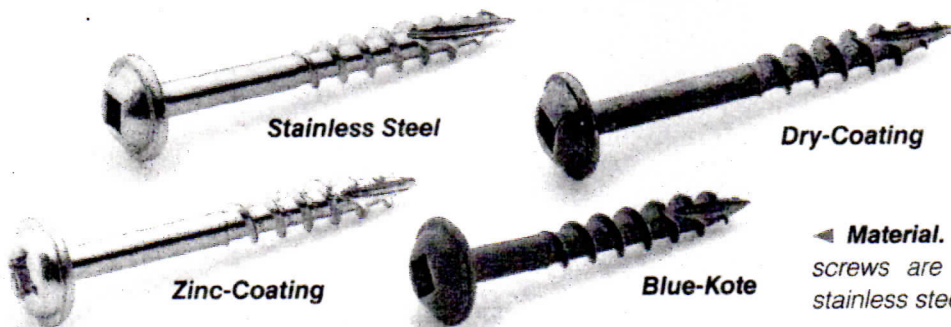
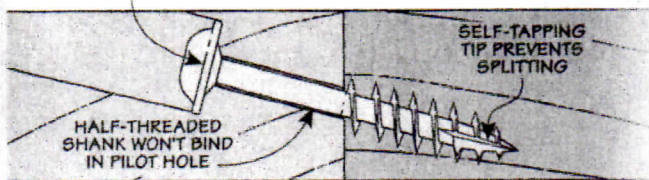
Pocket screws are available with either a washerhead or a panhead. Both of these types of screwheads have a wide, flat bottom. This allows the screw to firmly seat in the counterbore of the pocket hole and act like a clamp to hold the boards together.

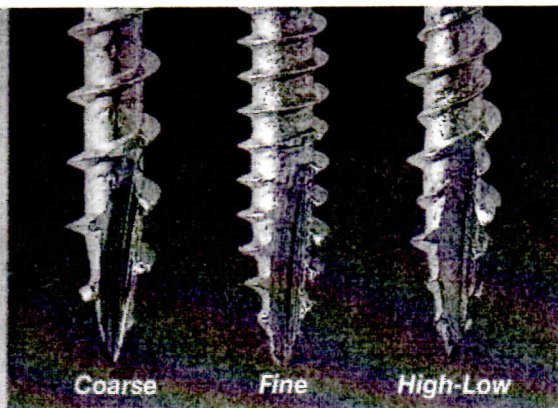
Speaking of the screwhead, one of my favorite features of pocket screws is that most of them feature square-drive heads (or a slight variation on the standard square drive). I have found that the square drive offers an almost "strip" proof method of installing pocket screws.

◀ **Material.** Zinc-coated and dry-coated pocket screws are for interior use. Blue-coated and stainless steel screws offer protection outdoors.

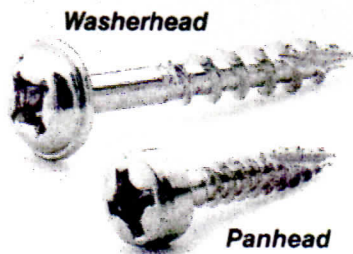
WASHERHEAD PULLS JOINT TOGETHER

SECTION VIEW





◀ **Thread Type.** Coarse threads are for softwoods; fine threads join hardwoods; and high-low threads bring both types of wood together.



▲ **Head Type.** Washerheads are standard, but smaller panheads are great for thin (1/2") stock.



▲ **Thin Stock.** This box made of 1/2"-thick oak is an ideal use for panhead screws.

Material Choices. Probably the most overlooked factor in deciding which screw is best for a specific task is the material it's made from. You can see the different types in the lower photos on the opposite page.

If you're building a project that's going to stay indoors, then standard pocket screws are a fine choice. These screws are made of steel with a protective coating. Kreg, one of the major manufacturers of pocket screws, makes screws with a silver-colored zinc coating. Some other pocket screws have a brown "dry" coating.

If the project is for use outdoors, however, you have a couple of choices. The first is a screw with an anti-corrosion coating. Kreg offers Blue-Kote screws that provide outdoor protection and durability. Other manufacturers have exterior pocket screws with a tan color similar to some deck screws.

If you want the ultimate in durability, Kreg also makes a stainless steel pocket screw. These are great for use in pressure treated lumber or if the project is exposed to harsh elements outdoors. Of course, these screws cost quite a bit more than standard pocket screws.

Thread Type. You can also choose pocket screws based on thread type. Here, your choices are fine, coarse, and the unique high-low thread. If you're working with any type of hardwood (oak, cherry, walnut, etc.), fine threads are the best choice to prevent splitting the wood. Coarse threads provide a stronger grip in soft woods like pine and sheet goods like MDF.

The high-low thread screw is a hybrid of coarse and fine threads. It's designed to work with both hardwoods and softwoods. If you're building a pine box with an oak face frame, for example,

this is a good screw to choose (photos, above left).

Head Type. While all pocket screw heads have a flat bottom, you do have a choice in the style of head (photo above). Panhead and washerhead screws both work fine in most applications, but the panhead is ideal for thin stock where the screwhead might protrude from the pocket hole (photo at right).

Screw Length. Then, of course, there's the length of the screw. This is extremely critical to getting a solid connection between two boards — without the screw sticking out of the wood. Most manufacturers offer a chart for determining what length of screw to use based on your material thickness.

To help you choose the right screw, there's a simplified version of that chart below, along with other tips that will ensure pocket-hole joinery success. 🛠️

picking the correct Screw Length

When it comes to choosing the right length screw, most manufacturers offer guidance for different wood thicknesses, such as the chart from Kreg Tool shown at right. One challenge that can arise, though, is if you're joining materials of different thicknesses to one another.

Trial & Error. There's no exact science to joining pieces of varying thickness. One way to test the screw length before joining

the pieces is to drive a screw into a pocket hole in one piece without the mating piece in place yet. That way, you can see how far the screw will extend into the mating piece.

For example, if you're driving screws through thin stock into thicker stock, you can probably use a slightly longer screw than what's recommended. If you're going from thick to thin, then choose a shorter screw.

Material Thickness	Screw Length	Preferred Head Style
1/2"	3/4" or 1"	Panhead
5/8"	1"	Panhead
3/4"	1 1/4"	Washerhead
7/8"	1 1/2"	Washerhead
1"	1 1/2"	Washerhead
1 1/8"	1 1/2"	Washerhead
1 1/4"	2"	Washerhead
1 3/8"	2"	Washerhead
1 1/2"	2 1/2"	Washerhead

NOTE: Screw length is measured from the bottom of the head to the point of the screw