

Dado Blades and Dodo Birds

Andrew Davis, May 2017

As all of EMGW readers probably already know, a dado blade or a dado blade set is a type of circular saw blade used with a table saw or radial arm saw to cut dados, grooves, or rabbets. Common knowledge is that there are two classes of dado sets (in 6" and 8" sizes) – 1) stacked dados that use inner and outer blades (24 or 48 teeth), chippers, and shims for finer adjustments; and 2) wobble (or adjustable) dado blades that use an adjustable offset so that the blade moves back and forth as it spins.

The advantage for a stacked Dado set is that when the cut is made you will see that the top of the dado is true, i.e. flat and perpendicular to the sides. For the wobble wheel, the cut will leave a slight cove. As the cut gets wider with the wobble blade, the cove will also become more pronounced and you will not achieve the tight fit you require. The advantage of the wobble blade is there are fewer parts and generally a faster time to set up. A variation on the stacked theme is Freud's SD608 (~\$275) "dial-a-width" stacked set with 2 blades and 5 chippers that uses some type of asymmetrical cam that the company claims allows adjustments to 0.004" increments. Speed of setup comes at a cost!

In January, I decided to purchase a new dado blade, and since I am considering the purchase of a SawStop table saw, I began an investigation. Turns out there is another distinction in dado blades – those that have a kickback prevention design and those that don't. SawStop specifically recommends AGAINST kickback designs, which as fate would have it, is where most products fit.

Another point of confusion, 8" stacked dado sets can be found on amazon with prices ranging from ~\$40- to ~\$300 (Forrest). The Dewalt for the Sawstop (best seller on amazon) comes in at ~\$115. As woodworkers know, there is quality and there is quality – number of teeth, type of carbide, 2 or 4 cutter chippers, etc. Freud alone has two products – one for \$90 and one for \$190, neither of which is recommended by SawStop. A new Freud was announced this month – and Freud claims it is SawStop-compatible.

Also worth noting, perhaps as is the case with any product today, on-line customer reviews range from highly positive to somewhat negative on every dado blade I investigated. And some woodworkers, of course, recommend using a router to accomplish your dado needs – possibly sending the dado blade the way of the dodo bird.

You'll need a special table saw insert for your dado. Here's a video on making your own insert. Best if you understand Brooklynese English.

<https://www.youtube.com/watch?v=lqg7aK-7axM>