

Table Saw 101

Cove Cutting

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Beyond the Basics: Cove Cutting

While 99% of table saw operations done with a regular saw blade are simple straight cuts, it's also possible to use that blade to shape a hollow cove profile — a task normally done using a shaper fitted with a big, expensive cutter. Cove cutting requires an angled fence that's mounted to the saw table. The fence guides the workpiece (a length of molding, furniture part, etc.) over the top of the saw blade at a skewed angle, which scoops out a hollow shape: The greater the fence angle relative to the blade, the larger the radius of the cove; the higher the blade, the deeper the cove profile.

You can cut coves using only a straight board clamped to the saw table as a fence, but the process is easier and safer with a twin-rail jig that securely guides the workpiece during cutting. The

commercially made jig shown above attaches to the saw table's miter slots. After the fences are adjusted to the desired angle, the distance between them is set just a hair wider than the width of the workpiece. To keep the stock from lifting during cutting, the jig's featherboard is adjusted to suit the thickness of the workpiece and positioned directly over the saw blade.

For safety's sake, a table saw cove is cut in a series of passes. The first pass is taken with the blade about 1/8" above the saw table. It's raised a little at a time (3/32" - 1/8") for each subsequent pass, until the final cove depth is nearly reached. To leave a smoother surface that's easy to clean up with a little sanding, raise the blade a scant 1/32"-1/16" for the final pass.