

CUT AWESOME BOX JOINTS LIKE A PRO

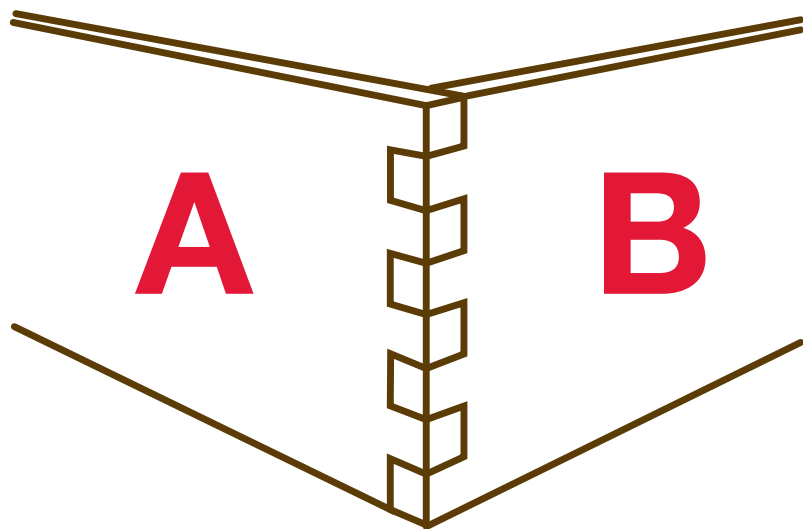
People love the unique look of a beautifully made box joint. That's why they are seen in everything from chests to jewelry boxes. But, interestingly, the box joint was not always admired for its beauty. Rather it was revered for its strength. In the days before modern packaging, many products came in wooden boxes that were held together with strong interlocking "box" joints; hence the name. These joints were particularly sturdy due to the increased gluing surface between the fingers of the joint.



Today woodworkers have discovered that, unlike mortise and tenon joints whose wood grain is oriented to expand and contract in different directions, box joints connect boards that move in unison. This unity of movement allows for intricate mating surfaces, letting woodworkers be as fancy and creative as they'd like.

You too can easily utilize box joints to give your projects a decorative “WOW” factor while providing a super-strong joint.

A blade set **makes this joint a snap!**



The goal is to create notches in two mating pieces of wood so that they fit snugly together. To do this, the notches must be cut to the exact height and width requirements. But, don't sweat it! Freud has developed a method of creating perfectly square, flat-bottom box joints, on a table saw without using a dado set or saw blade. The SBOX8 Box Joint Cutter Set makes box joint construction easy, producing

strong, accurate joints without shims or awkward adjustments. This patent pending innovation enables users to produce perfectly square, precise box joints quickly and cleanly the very first time.

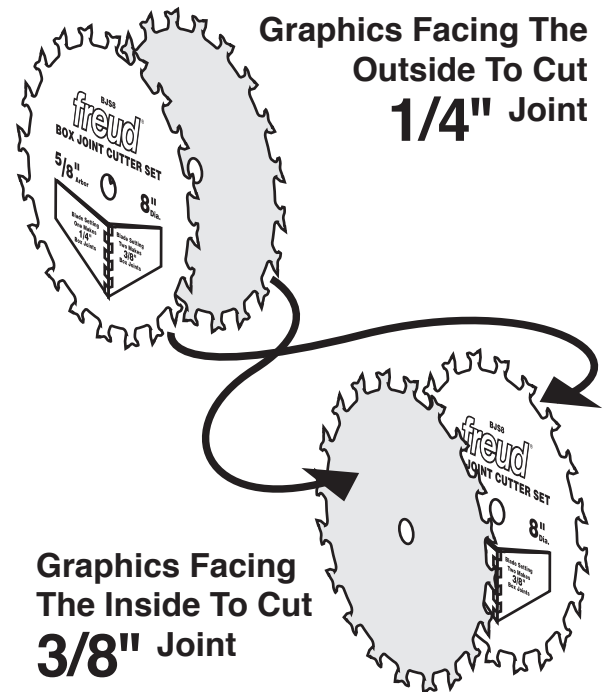
What's more, Freud's SBOX8 Box Joint Cutter Set box joint will produce these amazing results now and way on down the road, thanks to the Silver ICE™ (Industrial Cooling Element) Coating and the TiCo™ Hi-Density Carbide teeth. The revolutionary Silver ICE Coating resists "pitch" buildup that causes the blade to heat up and warp and also puts additional drag on your saw's motor. Resisting pitch build up means longer blade life and extended tool life – not to mention eliminating down time to clean the pitch off your blades. The TiCo™ High-density Carbide used in making the teeth is specially formulated by Freud from titanium, cobalt and tungsten to provide cuts with sharp edges and a flawless finish with a dramatically longer cutting life.

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First, set up the blades.

You should install the blades of your Freud Box Cutter set in accordance to the width of the pins or fingers of the joint. For 1/4" fingers, the blades should be mounted in your table saw with the printed sides facing out. And, for 3/8" fingers, the printed sides should be facing inward. In either case, make sure the carbide tips of each blade do not in contact with each other to avoid any damage.

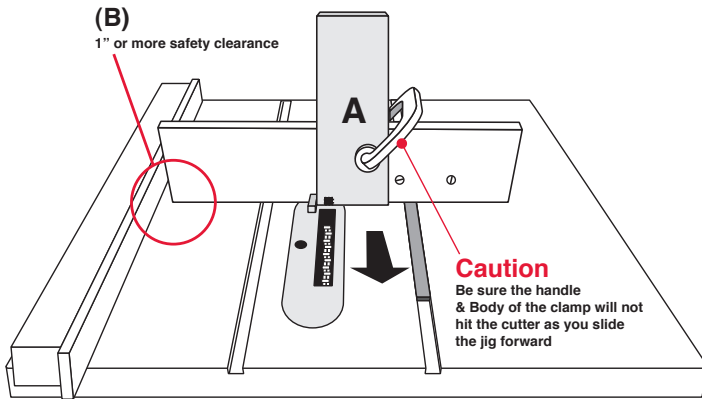
Now, you need to adjust the height of the blade. Simply place a piece of your stock face down on the table saw and up against the blade. Raise or lower the blade so that its height equals the height of the stock, plus 1/64".



A word about jigs

A jig will be needed to manage the spacing of your cuts. There are good commercial jigs available. But, if you are inclined to make your own, Freud includes easy-to-follow instructions for making a jig in its Box Joint Cutter Set.

Cut a notch in the first board

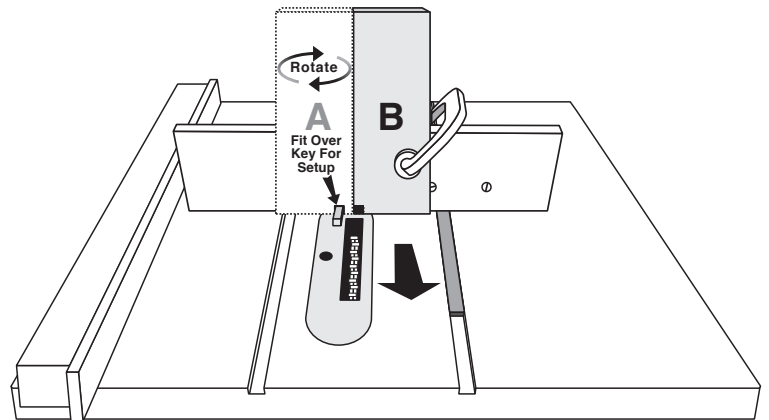


Remember, it's always good to make test cuts to double check your set-up. Make sure the scrap wood you use for these cuts is the same width and thickness as your good wood. Also, use precaution and always unplug your saw when you turn the power off to prevent an accidental start up.

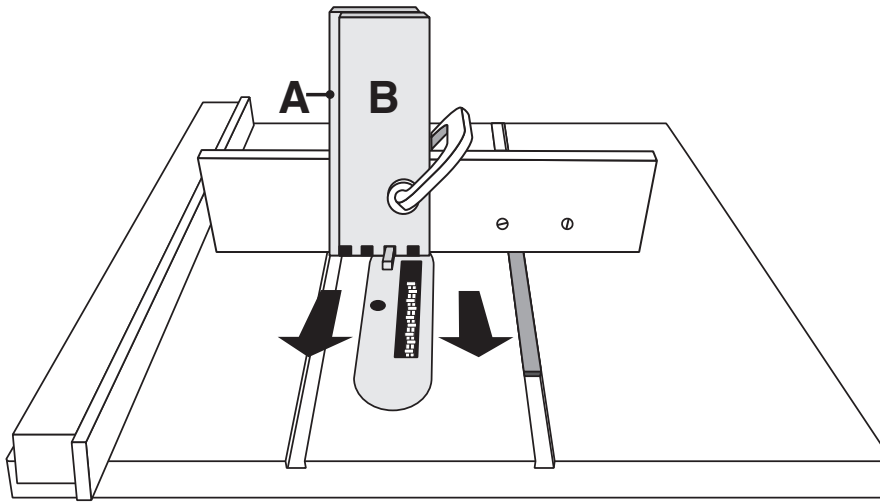
Place the first board (A) against the face of the jig and slide it over until it butts up to the jig's index pin. Clamp the board to the jig to keep it secure. Turn the power on to your saw and slide the jig over the blade to produce a slot and a pin. Turn off the saw, remove the board from the jig, then return the jig back to its original position

And now for the notch in the second board

So that the pieces fit together correctly, the notches in the second piece need to be shifted over to accept the fingers of the first piece. To do this, unclamp the first board (A) and flip it around, then fit the notch over the index pin. Next, butt one edge of the second board (B) against the first board. Clamp the second board securely in the jig and remove the first board. Turn the saw's power on and run the jig over the blade. Turn off the saw and return the jig back to its original position and remove the second piece (B).



Cut a row of notches in both boards



Turn the first board (A) back around to its original orientation and place the notch over the pin. Now, put the second board (B) over the first board (A) with its notch also over the pin. The boards should be staggered. Clamp both boards to the jig to keep them secure. Turn on the

saw's power and slide the jig over the blade to produce a slot and a pin in both boards. Turn off the saw, return the jig back to its original position, and remove both boards. Now, slip the notches you just cut over the index pin and re-clamp the boards to the jig. Turn on the power to the saw and make another pass over the blade. Continue cutting notches in this manner until you have cut notches all across the workpiece.

Check the fit

Now that both boards are complete, make sure they fit together snugly. If they don't come together, the spacing between the index pin and blade needs to be increased. If the joint is too loose, the spacing should be decreased. The fingers should be slightly proud of the mating piece. If not, the height of the blade needs to be adjusted.

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Glue, clamp, sand and admire!

You're on the home stretch! Apply glue evenly to the inside surfaces of the fingers. Assemble the pieces and clamp. When the glue is dry, remove the clamps and sand the ends of the fingers flush. All that's left is to stand back and admire!

