

# Single Blade Boxjoint Jig

Build a simple jig to create box / finger joints on the tablesaw, with a single blade.

**Tools:**

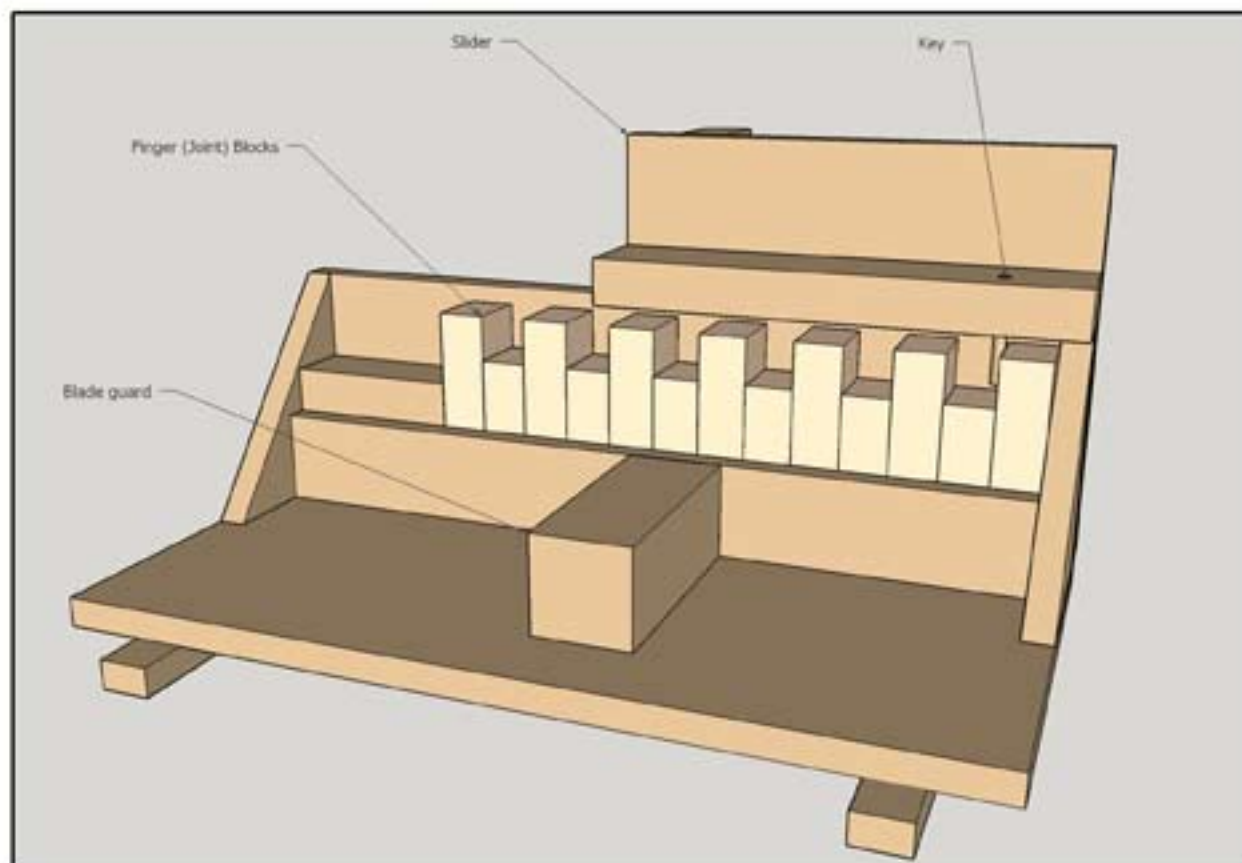
Tablesaw  
Drill & Driver

**Other:**

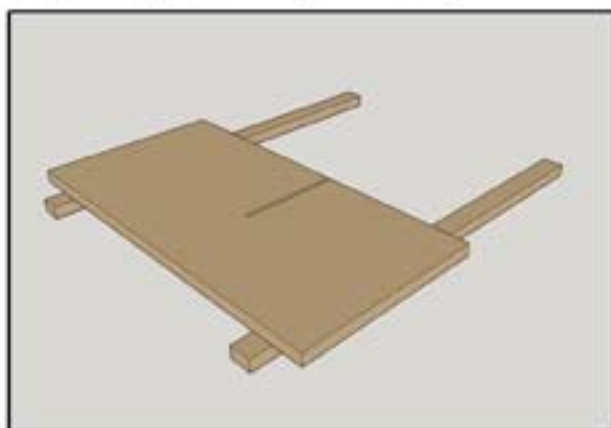
Glue  
Screws  
Bolt (exact diameter of saw blade kerf)

**Timber:**

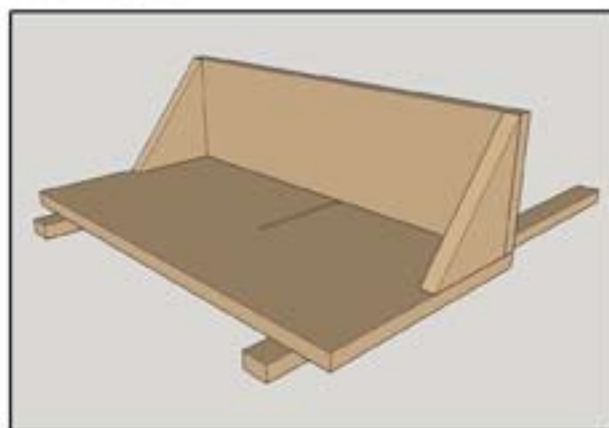
MDF or Plywood sheet scraps  
Pine 2x4 offcuts



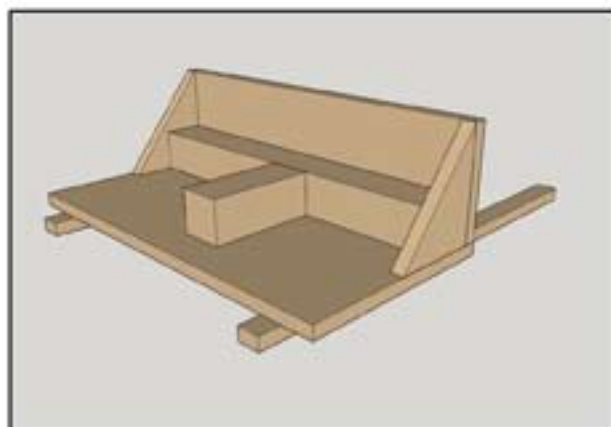
1) Cut some runners to fit your mitre slot and affix them to a base of roughly 360mm by 180mm. (14in x 7in)



2) Fix a front fence, around 100mm (4in) tall. Also add two triangle supports on the ends.

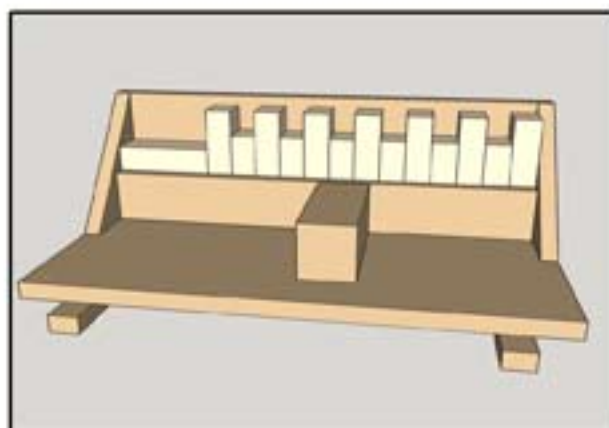


3) Screw a piece of 2x4 pine against the fence for a platform for the building blocks to sit on. Add a shorter piece to guard where the blade exits.



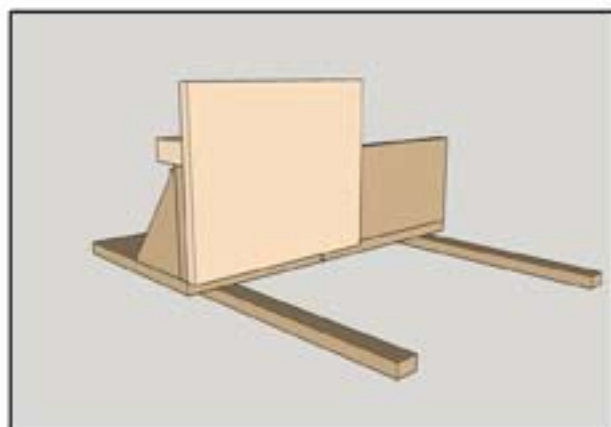
4) Cut your finger blocks. The width of a block is the width your joints will be. Cut two sets. One set will stand twice as tall as the other.

Cut the leftmost block to fit. This block will be used to jam the rest together so they don't move until you pull them out to rearrange them.



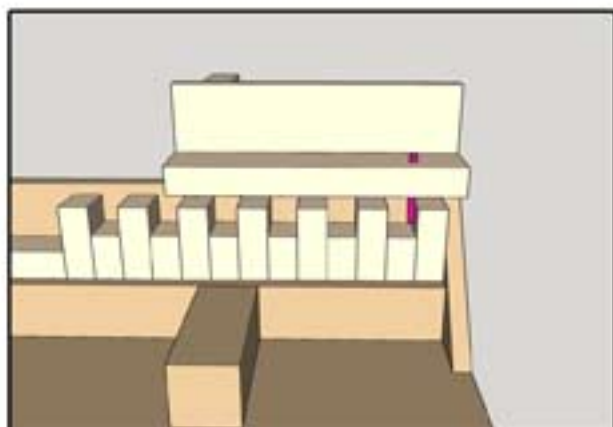
4b) Cut an extra finger block, about 150mm (6in). This will be used to offset the work pieces exactly the width of one joint.

5) The slider is made from a rectangle roughly 200mm x 170mm. (8in x 7in) Attach a horizontal length to the back to make it hang off the fence. When hanging, the base of the slider should clear the table easily.



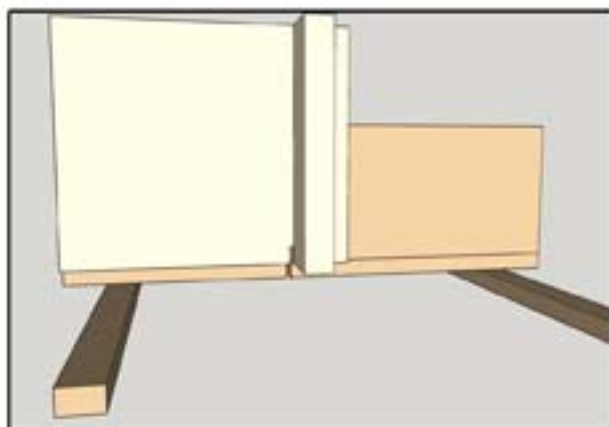
7) Position the slider to the right hand side. Drill a hole in the slide support that you can insert your key into.

The key **MUST** fit snug and should not bend or waver as you move it side to side in the joint.



8) With the slider positioned as far to the right as the key will allow (see image7) run the jig through the saw blade to create a kerf on the slider.

Mark a square line up from the outside of that kerf and affix a piece of wood to act as a fence.



9) The jig is now complete.

To use it:

- 1) Set the height of your blade to the width of your stock.
- 2) Place 2 box sides against the fence.
- 3) Insert the spacer block and then the final 2 box sides.
- 4) Clamp the work pieces to the slider, remove the spacer.
- 5) Make your cuts:

Cut the left side of the joint, back it out of the blade, then slide to the right and cut. Then hog out the middle over multiple passes by cutting, sliding over slightly, and repeating. I like to finish the cut by sliding the jig side to side over the blade to flatten the joint, however be sure that you have removed the bulk of the waste before doing that.

Problem?

Joints are too wide or the fit is too tight?

- Your key is wider than your kerf. The jig travels less relative to the blade than the key does.

Joints are too loose?

- Your key is too narrow. The jig travels more relative to the blade than the key does.

Other problems?

- Head to [thewoodfather.com](http://thewoodfather.com) to watch my video on the jig or to ask me a question.