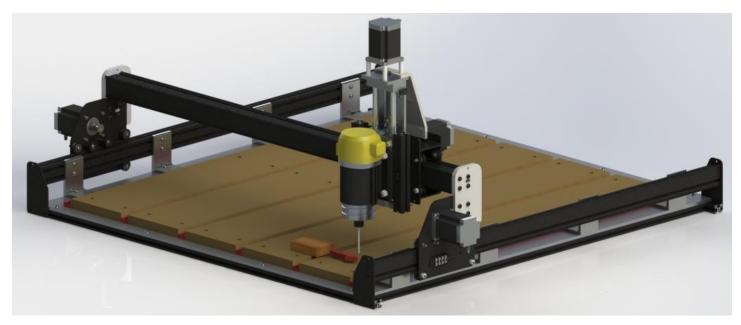
## How to check for flatness on your waste board

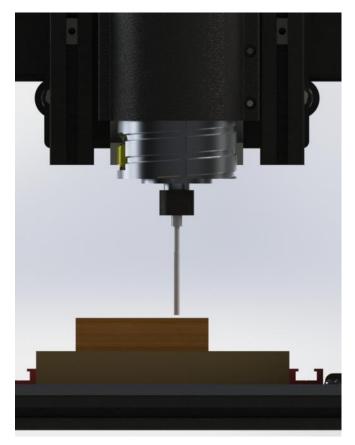
First, get a flat scrap piece of wood. Zero the bit on top of the wood in the front left corner. Move the bit down until there is just a little bit of resistance but you can still move the wood out from under the bit AND back under it. This is now your control or reference point.

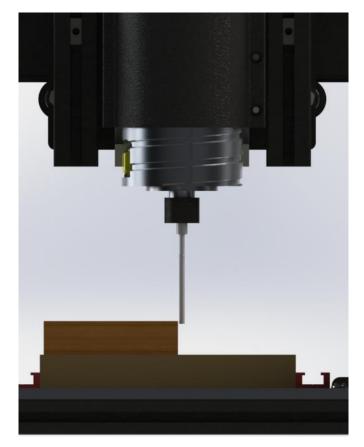


Move the block of wood out and jog it over to the front right corner. Then try and slide the block under the bit.



Is there a gap now? Is there interference and you can't get the block under the bit? A gap equals a spot lower than the control point. Interference equals a spot higher than your control point. Measure and note the difference.





Do this for all corners and one in the middle of the waste board.



Figure out where the low spot is. If the low spot is the control point, zero off the waste board there and set your shapes cut depth to  $.01^{"}$ . I use a standard  $3/4^{"}$  flat router bit at around 80 ipm and a 60% step over. It only takes about 10 minutes to cut a  $30^{"}$  x  $30^{"}$  square.

If the low spot is somewhere else, use the difference between the control point and the low spot and add .01" to that to get your shapes total cut depth. Zero off the control corner and skim cut.

All of this is assuming that it is only your MDF waste board that is warped and not your Y end plates. Your entire assembly should have been made as flat as possible during the initial build.

This is just a suggestion and one of many ways to do it.

-Phil Johnson

Designsbyphil.com

