

The background is a collage of images related to wood planing. On the left, a hand plane with a light-colored handle and a dark body is shown. In the center, a long, thin wooden board is being planed. On the right, a close-up of a planer's blade is visible. The entire image is overlaid with a dark, semi-transparent rectangular area that contains the title and author's name. The title is in a large, bold, green font, and the author's name is in a smaller, white font. The background also features abstract green geometric shapes on the right side.

Building Wooden Planing Forms

Mark Thurling

Why build a wooden planing form

- ▶ Cost: Under \$200 vs \$3500au
- ▶ For the experience, and the satisfaction of knowing you made the form that made your rods.
- ▶ No wait time for posting from the US.
- ▶ The ability to customise the forms for your own usage.
- ▶ Lighter than metal forms.



Selecting Timber and Hardware



- ▶ Select the wood: Hard wood should be used. Maple is best. I used big box store pre planed 1 ¼” by 1 ¼” timber for convenience.
- ▶ Purchase hardware: To adjust the taper push-pull bolts are needed every 5”. I decided to use threaded inserts and a metal dowl for location. An online store was the cheapest option. All my hardware was M6

Adjustment Holes



- ▶ Mark out three holes every 5". 1 push, 1 pull and 1 in the center for the metal dowel.
- ▶ To drill the holes, I clamped my two pieces of timber together. Then I set a fence on a pillar drill.
- ▶ Another method could be to use a doweling jig

Putting it all together

- ▶ I added some metal inserts for the push bolts to push against. If/when I make another, I would try roofing nails.
- ▶ Soft wax paste was added on all the threads during assembly.
- ▶ After assembly I spent some time making both planning surfaces level.



Setting the form.

Objective: To cut a v groove that slopes $.001''$ every $1''$

Method: Open form $1/6''$ ($.0625$) it's entire length. Set dial indicator to "0" at butt end of rod. Progress to the tip setting each station $.005''$ deeper than the last.

Cutting the groove.



You will need to make a cutting tool to cut the groove in your form.

The depth of cut must be adjustable.

I purchased a lathe tool and a marking tool. The marking tool ended up working best for me.

It is best to remove a small amount with each pass.

To achieve a .030" depth at the tip when the form is closed cut until your indicator reads .090"
($1/16" = .0625"$ $.0625 + .030 = .0929$)

If the tip of the butt section is .090" continue on the butt side to .150"
($.0625 + .090 = .1525$)

Grooving the plane sole

I decided to put a groove in the sole of my plane to protect the form.





Questions?



Homemade Lathe and Binding Jig