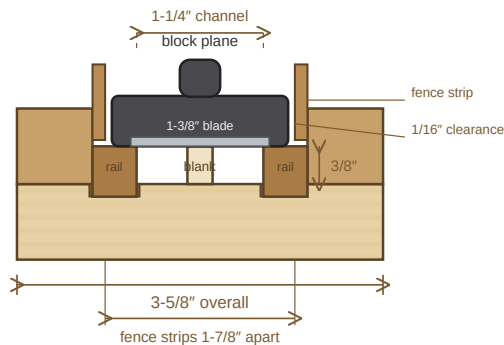


Brace-Planing Jig

One jig, seven rail pairs — every Session 1 brace part, thickened with the Lie-Nielsen 60-1/2 low-angle block plane.

THE IDEA

The plane rides **sole-down on two rails**; the brace blank lies on the bed between them. The blade cuts the blank flush with the rail tops, so **exposed rail height = finished dimension**. Swap the rail pair to change dimensions — the base never changes. The rails drop into shallow dadoes in the bed — no fasteners, no fuss. Two fence strips on the wall inner faces sit 1-7/8" apart to guide the 1-3/4"-wide plane body, so the plane can't wander sideways. Width passes are done the same way with the stick stood on edge.



End cross-section (3/8" rail setup, UTB/MTB blank). Sole bridges the channel; blade cuts the blank flush with the rail tops.

PARTS

Part	Qty	Dimensions	Material / notes
Base	1	15" × 3-5/8" × 3/4"	Baltic birch or MDF; flat. Rout two 1/2" × 1/8" dadoes for the rails before gluing the walls
Outer walls	2	15" × 3/4" × 3/4"	Hardwood; glue + screw from below. Inner faces parallel, 2-1/8" apart, flush with the base edges — they back up the rails; the fence strips do the plane-guiding
Fence strips	2	15" × 1/8" × 3/4"	Hardwood; glue to the wall inner faces, inner faces 1-7/8" apart, bottom edge 7/16" above the bed — guides the 1-3/4" plane body (1/16"/side). Wax the faces
Rail pairs	7 pr	15" × 7/16" × (H + 1/8")	Hard maple. Exposed H = 2 mm, 3/32, 1/8, 3/16, 7/32, 1/4, 3/8" (extra 1/8" buries in the dado). Mill each pair together; label both sticks
End stop	1	1/2" × 1-1/4" × 1/16"	Hardwood strip glued across the channel bed, 1/16" proud, leading face 11-1/4" from the start end
Bench-hook cleat	1	4" × 3/4" × 3/4"	Under the start end, flush with the start edge; hooks the bench edge — the jig is its own bench hook
Double-stick tape	—	—	Holds the blank on the bed (consumable)

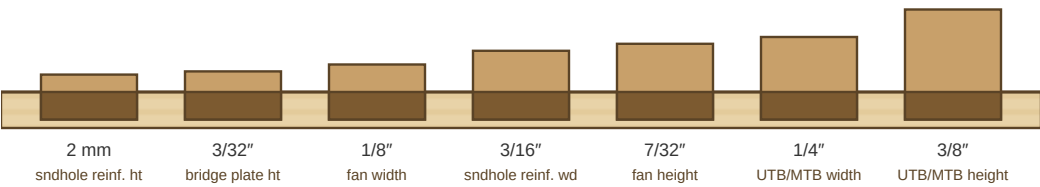
RAIL SETUPS PER PART

Part	Height pass (flat)	Width pass (on edge)
Upper transverse brace (UTB)	3/8" rails	1/4" rails
Main transverse brace (MTB)	3/8" rails	1/4" rails
Fan braces (×3)	7/32" rails	1/8" rails
Soundhole reinforcements (×2)	2 mm rails	3/16" rails
Bridge plate	3/32" rails	Rip on bandsaw; edge-clean freehand (too tippy on edge)

Notes. The 1-3/8" blade overlaps each rail by about 1/16", so rails are wear items — expect faint witness marks over time; flip or re-mill as needed. The bridge plate is thickened flat in the jig; rip its 1-1/8" width on the bandsaw instead of standing it on edge (too tippy). Plane direction matters: flip the blank end-for-end if the grain tears.

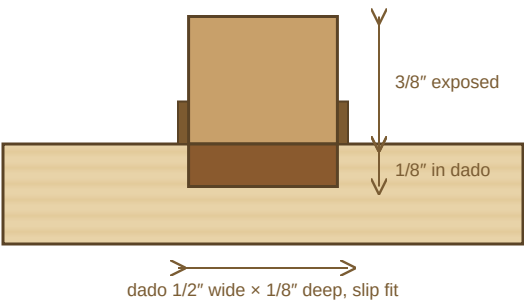
THE RAIL SET

Seven pairs — one per finished dimension. Mill each pair together so the two sticks match, and label both. Every rail is 15" × 7/16" × (H + 1/8"); the extra 1/8" buries in the bed dado, so the **exposed** height is the finished dimension.



The full set at true relative heights. The darker 1/8" seats in the bed dado; exposed height is the finished dimension.

DADO DETAIL



One rail seated in its dado (3/8" setup shown). The dado locates the rail; the walls back it up.

MILLING CHECKLIST

Exposed height H	Mill rails to (H + 1/8")	Used for
2 mm	5.2 mm	Soundhole reinforcements — height pass
3/32"	7/32"	Bridge plate — height pass
1/8"	1/4"	Fan braces — width pass
3/16"	5/16"	Soundhole reinforcements — width pass
7/32"	11/32"	Fan braces — height pass
1/4"	3/8"	UTB / MTB — width pass
3/8"	1/2"	UTB / MTB — height pass