

MATCHFIT ULTIMATE WORKBENCH PLANS

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PROJECT OVERVIEW

The MATCHFIT Ultimate Workbench™ is an all-in-one multifunctional workbench. Using MATCHFIT Dovetail Clamps and Dovetail Hardware, it allows you to go beyond the edge and clamp anywhere on the surface for hassle-free assembly.

TOOLS & MATERIALS

- Table Saw
- Router table
- MATCHFIT Dovetail Router bit, or comparable 14°, 1/2" diameter dovetail router bit
- 1/4" diameter straight router bit
- 1" diameter forstner bit
- 1/2" diameter forstner bit
- 45 degree chamfer router bit
- 3/4" good quality plywood, 32"x72"

- 3/4" MDF, 32"x72"
- 16' 1-1/2" thick hard maple 5" wide
- Adjustable Locking Router Guide free plans HERE
- Vertical Edge Routing Guide free plans HERE
- 3/4" diameter forstner bit
- 1-1/2" 10-32 panhead screws and washers
- MATCHFIT Dovetail Hardware



FREE DOWNLOADABLE JIG PLANS

Scan this QR code for access to our library of free jig plans and for more information about the MATCHFIT 360 System. microjig.com/matchfitplans



INSTRUCTIONS

STEP 1 - CUT THE STOCK TO SIZE

To create the top and vertical side of the 360 workbench, cut a sheet of 3/4" plywood to 45-1/2" x 29-1/2", and another at 29-1/2" x 18-1/2" on the table saw. Next, cut a sheet of 3/4" MDF to 45-1/4" x 29-1/4", and another at 29-1/4" x 17-1/4".







INSTRUCTIONS

STEP 2 - LAMINATE PLYWOOD AND MDF TOGETHER

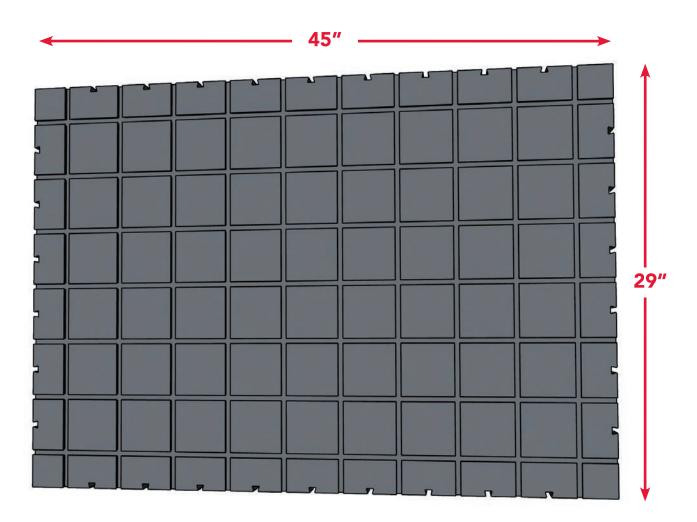
Glue MDF and plywood together leaving 1/8" reveal on all sides. This is to ensure that you have a flat edge to run along the fence when cutting laminated pieces to final size on the table saw.



INSTRUCTIONS

STEP 3 - CUT STOCK TO FINAL DIMENSIONS

- Cut the top to $45" \times 29"$, and the vertical side to another at $29" \times 17"$ on the table saw.

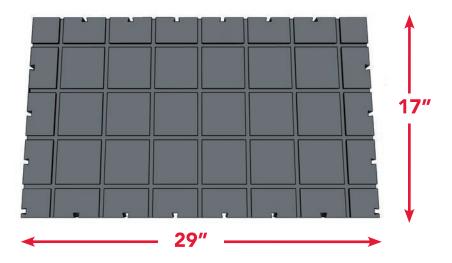




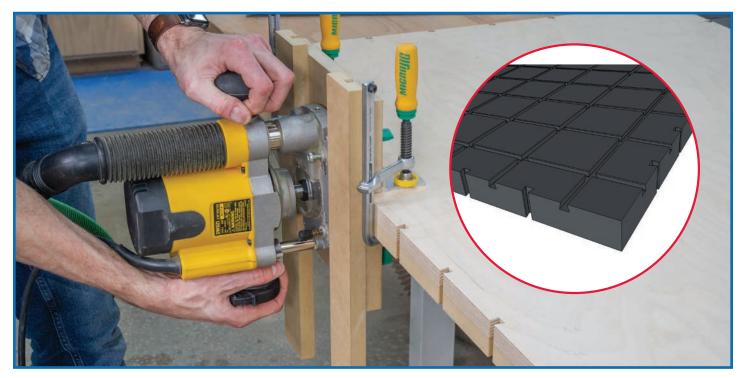
INSTRUCTIONS

STEP 4 - CUT VERTICAL DOVETAIL GROOVES

- The outermost vertical groove will be 4-1/2" in from the edge. Mark 4-1/2" in from the edge on all four side, then mark every 4".



Route vertical grooves using vertical edge routing guide



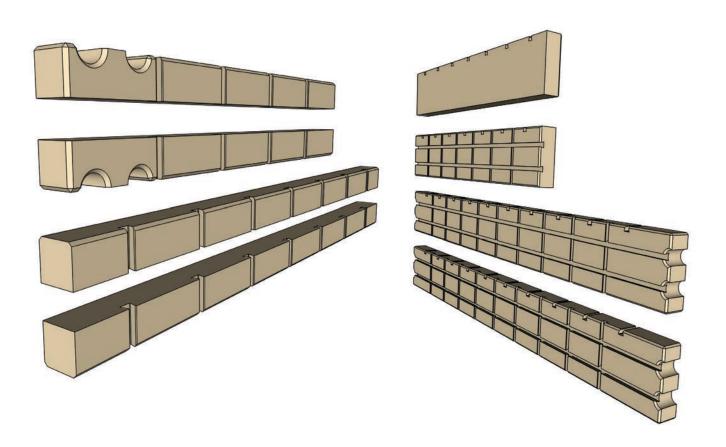


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INSTRUCTIONS

STEP 5 - PREPARE APRONS

- Cut solid hard maple to length. You'll need
- (2) at 48"L x 5"W
- (2) at 29"L x 5"W
- (2) at 29"L x 1-1/2"W
- (2) at 20"L x 1-1/2"W
- Mill all aprons down to 1-1/2" thick





INSTRUCTIONS

STEP 6 - DRILL GROOVE OPENING HOLES

- With a 1" diameter forstner bit, drill a half hole on center with dovetail grooves, on the ends of the 48" long aprons
- Drill half holes at 1" and 3" in from the ends of the 20" long aprons for the vertical side.

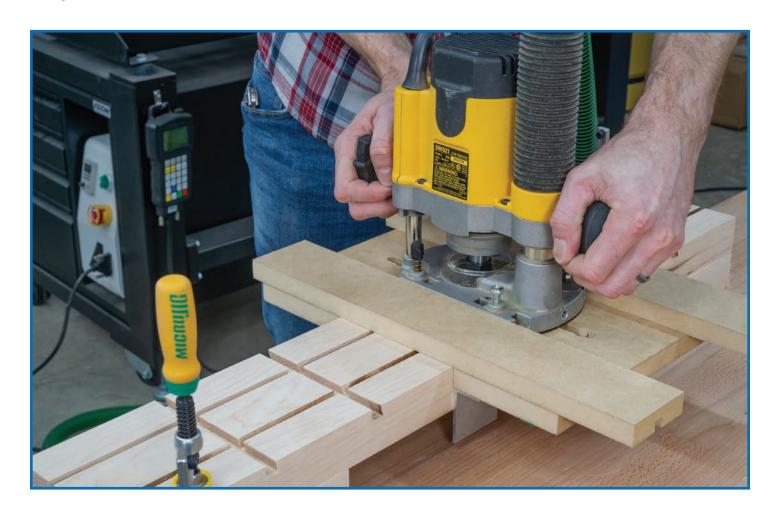


INSTRUCTIONS

STEP 7 - CUT APRON DOVETAIL GROOVES

- Using a 1/4 straight bit set to a depth of 5/16", cut relief grooves for the aprons' vertical dovetail grooves with the vertical edge router guide used in STEP 5. Use the spacing shown below (profile of spacing)

NOTE It's important to route grooves across the grain before routing grooves along the grain to avoid excessive tearout.



INSTRUCTIONS

STEP 7 - CONTINUED

- On the router table, set fence to 1-1/2" to cut relief grooves for the aprons' horizontal dovetail grooves.
- Route relief grooves in all four 5" wide aprons, then rotate aprons 180 degrees to cut relief grooves 1-1/2" in from the other side.



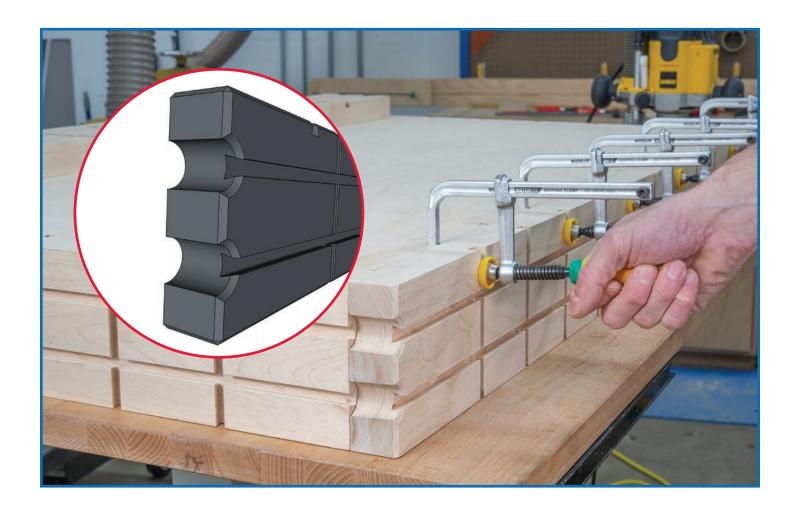


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INSTRUCTIONS

STEP 8 - GLUE APRONS TO TOP AND SIDE

- Using the vertical grooves in the plywood/MDF pieces, glue and clamp on maple aprons.
- Allow to dry, sand the joints smooth if needed.

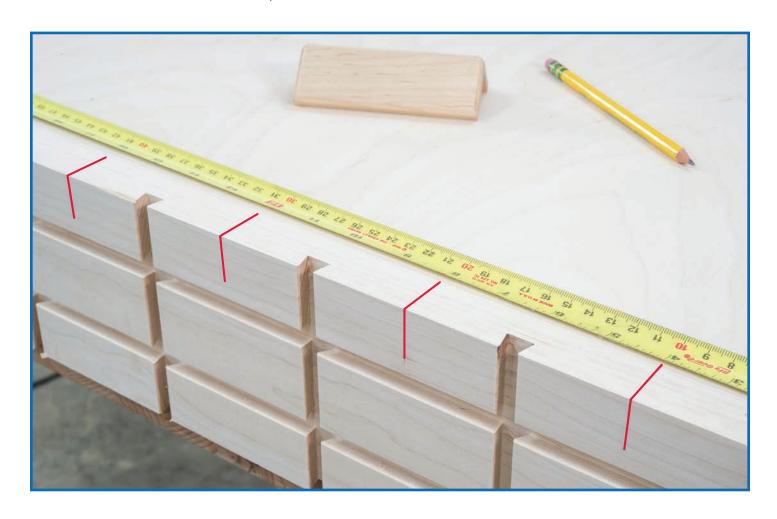




INSTRUCTIONS

STEP 9 - ROUTE TOP AND VERTICAL SIDE DOVETAIL GROOVES

- Mark every 4 inches from the edge, around all sides
- Using a 1/4" diameter straight router bit, cut relief grooves 5/16" deep with the Adjustable Locking Router Guide free plans HERE





INSTRUCTIONS

STEP 9 - CONTINUED

- Route the two outermost dovetail grooves on the long side first, then route the shorter side grooves, using the first two dovetail grooves to secure the router guide.





INSTRUCTIONS

STEP 9 - CONTINUED

- After all relief grooves are cut, change to dovetail router bit, and route dovetail grooves.
- Repeat process for vertical side





INSTRUCTIONS

STEP 10 - DRILL DOG HOLES (OPTIONAL)





INSTRUCTIONS

STEP 11 - ATTACH VERTICAL SIDE TO TOP

- Mark your hole locations to match the apron's dovetail groove spacing.
 - Make sure that the vertical side doesn't cover dovetail groove openings.
- Hole locations will be 1" and 3" in from the top edge. Horizontal spacing should be 2" and 10" in from each side.
- Counterbore 3/8" deep with a 1/2" diameter forstner bit.
- Drill through holes with a 1/4" standard drill bit.
- Thread female dovetail nuts onto screw on the back of the vertical side.
- Insert dovetail nuts into apron's dovetail grooves. Make sure the vertical side is level and its edges are even with the edges of the top, then tighten screws.





INSTRUCTIONS

NOTE

These plans are for the workbench top and side only. The base pictured is a crank adjustable height sit/stand desk frame. This allows the table to be used as outfeed and additional support on any tool or work surface in the shop.







We hope that you enjoy these project plans and learn a few new tricks to use in your shop. Share photos of your completed project with us on Facebook, Twitter and Instagram with hashtag #worksmarter

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> > Enjoy!



