veritas[®]

Domino Joinery Table

Introduction

The Veritas Domino Joinery Table is designed to be used with the Festool Domino Joiner DF 500 to create accurately placed and aligned mortises for loose-tenon joinery. It increases the stability of the workpiece by precisely holding it in place while making the mortise with the Domino, especially when working on narrower workpieces.



Caution: To use this product safely, always follow the safety instructions that came with the Festool Domino Joiner. As with any power tool accessory, always wear proper eye protection and hearing protection.

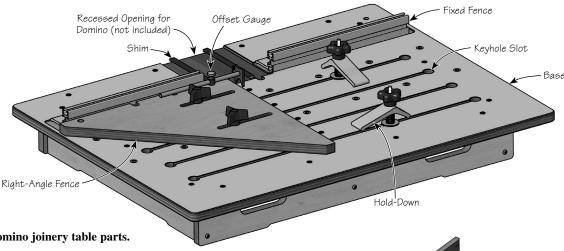


Figure 1: Domino joinery table parts.

The base unit features a recessed opening for mounting the Domino between the split fixed fences. Multiple keyhole slots run parallel with the fixed fence to provide tracks for mounting the hold-downs from any point.

While the movable fence accurately locates the workpiece in either a 45° or 90° position, the offset gauge makes it possible to move it to a mirrored location so that the "left" and "right" halves of a joint line up perfectly.

A pair of 6 mm shims is used to adjust the 5 mm vertical offset of the mortise to 10 mm or 11 mm from the base surface.

The frame has cut-outs on all four sides, making it easy to clamp the joinery table to your workbench when needed, and remove it when not in use.

Table Assembly

The joinery table requires some assembly. The parts have been designed for ease of assembly using a Robertson (square-drive) screwdriver and a 5/32" hex key.

- Lay the base panel face down on your work surface, such that the frame grooves face upward.
- Place the side panels into the appropriate grooves. The two side panels are identical.
- Place the stretcher in the center groove between the side panels, being sure to align the cut-outs in the edge with the keyhole slots in the base panel.
- Set the back panel in the grooves furthest away from the keyhole slots in the base panel.
- Secure the back panel to the side panels and stretcher using $#8 \times 1 \frac{1}{4}$ pan-head screws. Do not overtighten these screws.

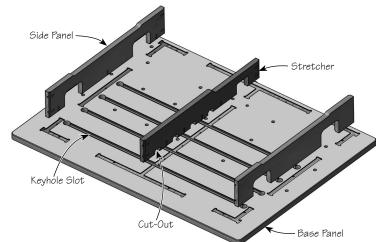


Figure 2: Locating the side panels and stretcher.

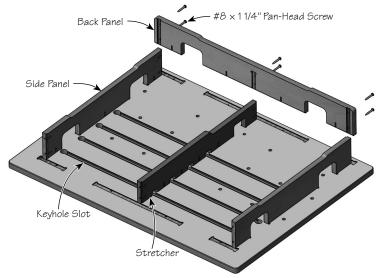


Figure 3: Attaching the back panel.

- 6. Set the front panel in the remaining grooves closest to the keyhole slots.
- 7. Attach the front panel to the side panels and stretcher with $48 \times 11/4$ pan-head screws.

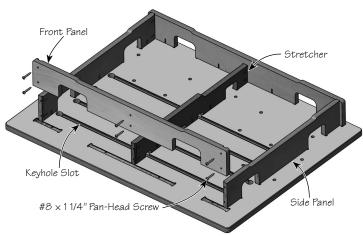


Figure 4: Attaching the front panel.

- 8. Carefully flip the entire assembly over, right side up. Ensure the frame members are still located in the grooves in the underside of the base panel.
- 9. Secure the base panel to the frame and stretcher using the $\#8 \times 1\ 3/4$ " flat-head screws.

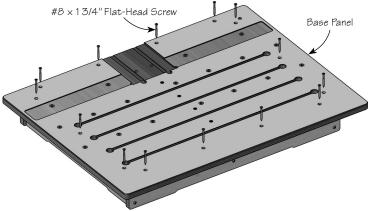


Figure 5: Securing the base panel to the frame.

10. Place the two aluminum fixed fences in the milled cavity in the top and push them against the milled sides of the cavity to ensure the two fences are aligned with each other. Secure the fences in place with the $1/4-20 \times 3/4$ " button-head screws and 1/4" washers.

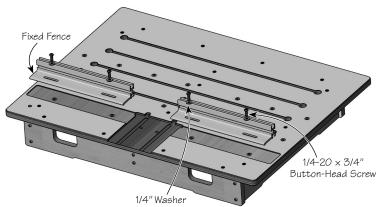


Figure 6: Attaching the fixed fences.

Mounting the Domino

1. Thread the two mounting studs into the M5 holes in the bottom of the Domino base plate. The mounting studs need only be finger tight.

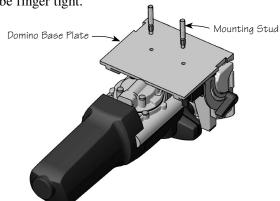


Figure 7: Installing the mounting studs in the Domino base plate.

- 2. Use the pair of 6 mm thick shims to adjust the 5 mm vertical offset of the mortise to 10 mm or 11 mm from the base surface of the joinery table.
 - a. To establish a 10 mm vertical offset, place the 6 mm thick shims into the slots in the milled cavity for the Domino base plate.
 - b. For an 11 mm vertical offset, butt a 6 mm thick shim against either side of the cavity.
 - c. With no shims, the center line of the Domino bit will be 5 mm from the base surface of the joinery table.
 - d. If a greater range of offsets is desired, an accessory shim pack with 2 mm, 4 mm and 8 mm pairs of shims is available separately.

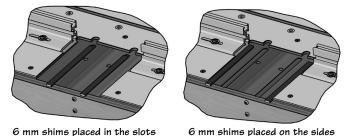


Figure 8: Adjusting the vertical offset with shims.

3. Insert the mounting studs in the Domino base plate through the holes in the base surface of the joinery table. Secure with two brass knobs. Do not fully tighten the knobs.

Note: You may need to move the fixed fence to clear some of the adjustment knobs on the Domino.

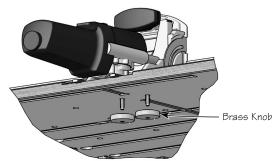


Figure 9: Installing the Domino to the base surface. (Panel frame members removed for clarity.)

Installing the Right-Angle Fence and Hold-Downs

- 1. Align the two cut-outs in the edge of the right-angle fence with the spring stops in the face of the Domino.
- 2. Ensure the right-angle fence is in contact with the fixed fences.
- 3. Secure the right-angle fence with the two wing knobs threaded into the insert nuts.

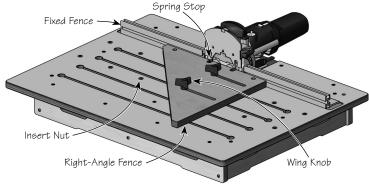


Figure 10: Aligning the Domino to the fixed fences.

- 4. Align the Domino face with the right-angle fence and tighten the brass knobs. This aligns the Domino to the fixed fences.
- Install the hold-downs through the holes in the ends of the keyhole slots. The end of the T-bolt should engage the undercut in the keyhole slot.

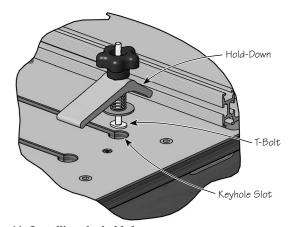


Figure 11: Installing the hold-downs.

Note: In practice, the hold-downs will need to be moved to different keyhole slots, as needed, to adequately hold a workpiece in place.

The joinery table is now ready to use.

Cutting Mortises in Mitered Joints

- 1. Cut and miter all the parts of your project/frame to length.
- 2. Lay out the parts to form the frame and mark all the joint locations to indicate which side is up. Notice that each part has a left and right end, and the geometry of these ends creates mirror images.
- 3. On at least one of the joints, also mark the desired center of the loose tenon. In our example, we used a capital letter R on the left end of the part. This reference mark will be used for the initial set-up of the joinery table.

Note: As with all joinery cut by machine, it is good practice to have a number of extra parts to use for testing the set-up. This is particularly important when configuring the joinery table for the second half of the joint.

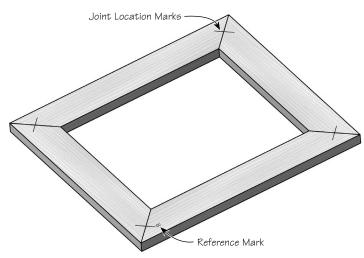


Figure 12: Example of a typical mitered frame. Note joint location marks across each miter.

- 4. Using the part specifically marked for set-up, align the reference mark with the centerline mark on the face of the Domino.
- 5. Clamp the part in place using at least one hold-down. Larger parts may require two hold-downs.
- 6. Slide the right-angle fence against the part, ensuring it is also tight against the fixed fence. Lock the right-angle fence in place using the wing knobs.

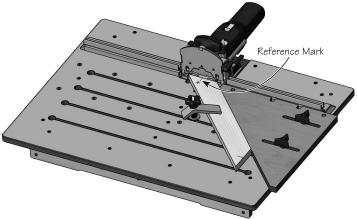


Figure 13: Cutting the first mortise.

- 7. Cut the left mortise.
- 8. Replace the part with the next frame piece and proceed to cut the left mortise in the end of the three remaining parts.

- 9. Once each part has the left end processed, place the offset gauge in the hole in the right-angle fence and adjust the gauge so the cursor registers against the inside surface of the outermost spring stop on the front face of the Domino.
- 10. Lock this setting, and then remove the offset gauge from the right-angle fence and set it aside.

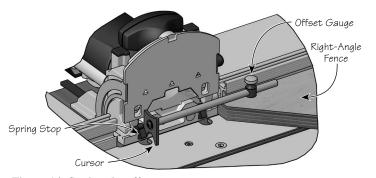


Figure 14: Setting the offset gauge.

Note: While there are a number of features on the face of the Domino that can be used for reference alignment, make it a habit to consistently use the same reference point. In our example, our reference point is the inside surface of the outermost spring stop on the front face of the Domino.

- 11. Reposition the right-angle fence on the right side of the Domino and place the offset gauge in the hole in the fence.
- 12. Slide the fence/gauge assembly until the cursor is aligned with the inside surface of the outermost spring stop.
- 13. Ensure the right-angle fence is tight against the fixed fence. Lock it in place using the wing knobs.

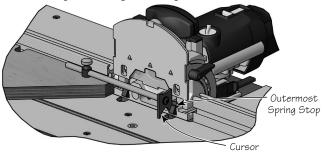


Figure 15: Reversing the right-angle fence and setting the mortise distance with the offset gauge.

- 14. Remove the offset gauge.
- 15. Make a test cut with a scrap piece of the frame material to ensure the set-up is correct and the desired mating right joint alignment is achieved.
- 16. If all is correct, proceed to cut the right mortises in all the parts. (If not, adjust as required.)

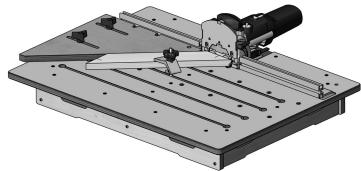


Figure 16: Cutting the mating Domino mortises.

Cutting Mortises in Butt Joints

Butt-jointed frames require a bit more care than mitered joints as far as marking the parts and being vigilant regarding "left" and "right" ends of the part.

Note: As with all joinery cut by machine, it is good practice to have a number of extra parts to use for testing the set-up. This is particularly important when configuring the joinery table for the second half of the joint.

- 1. Cut all the parts of your project/frame to length.
- 2. Lay out the parts to form the frame and mark all the joint locations to indicate which side is up, as well as which edge is out. In our example, we used a double line parallel to and across the parts that will receive the mortises. On either side of the mortise marks, we scribed a perpendicular line extending to the outer edge of each part to indicate the outer edge of the frame.
- 3. On at least one of the joints, also clearly mark where the center of the mortise should be on that surface. In our example, we used a capital letter R. This reference mark will be used for the initial set-up of the joinery table.

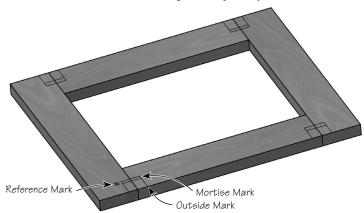


Figure 17: Butt-joint frame. Note the corner markings designate which surface gets a mortise (two lines) and which surface is the outside of the frame (one line).

- 4. Using the part specifically marked for set-up, align the reference mark with the centerline mark on the face of the Domino.
- 5. Ensure the part is tight against the fixed fence and clamp the part in place with at least one hold-down.
- 6. Slide the right-angle fence against the end of the part that is marked as the outside of the frame, ensuring it is also tight against the fixed fence. Lock the right-angle fence in place using the wing knobs.

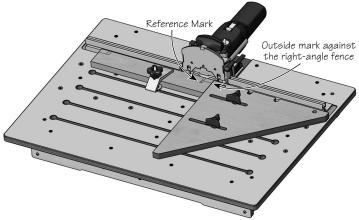


Figure 18: Cutting the first side-grain mortise.

- 7. Cut the first mortise. Proceed to cut all the mortises that are in a similar location. In our example, we cut the two mortises that are in the side grain on the left-hand end of the part.
- 8. Without changing the joinery table set-up, cut the two endgrain mortises on the left-hand end of the part. Ensure that the mark indicating the outside of the frame is in contact with the right-angle fence.

Note: You will need to move the location of the hold-down, as we did in our example.

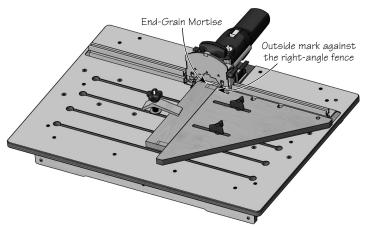


Figure 19: Cutting the first end-grain mortise.

- 9. Once each part has one mortise cut in either the side grain or the end grain, place the offset gauge in the hole in the right-angle fence and adjust the gauge so the cursor registers against one of the spring stops on the front face of the Domino.
- 10. Lock this setting, and then remove the offset gauge from the right-angle fence and set it aside.

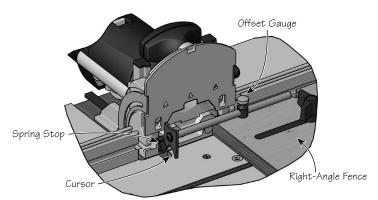


Figure 20: Setting the offset gauge.

Note: While there are a number of features on the face of the Domino that can be used for reference alignment, make it a habit to consistently use the same reference point.

11. Reposition the right-angle fence on the right side of the Domino and place the offset gauge in the hole in the right-angle fence.

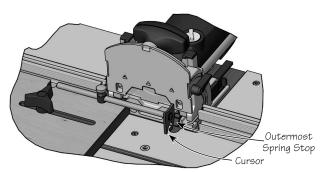


Figure 21: Repositioning the right-angle fence and setting the mortise distance with the offset gauge.

- 12. Slide the fence/gauge assembly until the cursor is aligned with the opposite spring stop.
- 13. Ensure the right-angle fence is tight against the fixed fence. Lock it in place using the wing knobs.
- 14. Remove the offset gauge.
- 15. Make a test cut with a scrap piece of the frame material to ensure the set-up is correct and the desired mating joint alignment is achieved.
- 16. If all is correct, proceed to cut the second set of side-grain and end-grain mortises. (If not, adjust as required.) As before, place the parts such that the mortise mark is against the Domino and the outer mark is against the right-angle fence.

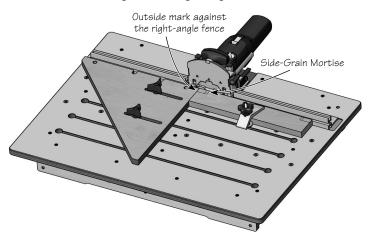


Figure 22: Cutting the second set of side-grain mortises.

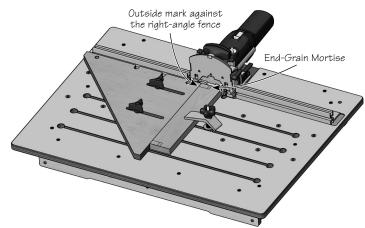


Figure 23: Cutting the second set of end-grain mortises.

Accessory

05J17.02 Optional Shim Pack, set of 6