



Specialty Joint Guides for Leigh FMT Jigs

**Square Tenon Guides, Louver Guides
and Y-Axis Mortise Guides**

User Guide

All specialty guides for FMT Jigs are engraved with the Leigh logo and dimensional information. When installing new guides, the Leigh logo **must** be readable from the operator's position. Guides can only be installed one way.

Please read, understand and be familiar with FMT Pro / FMT / Super FMT Jig operations before using the specialty guides.



**Before starting, watch
the Instructional Video**

Scan the QR Code to stream to your tablet or smart phone, or view it in the support section at Leightools.com



Scan QR code

Square Tenon Guides

Note: All square tenon guides for Leigh FMT Jigs are installed and used in the same manner as regular tenon guides.

1. Install the square tenon guide with the Leigh logo facing the operator.
2. ALL square tenons are routed with a **1/2" spiral up-cut router bit: Leigh #180 (HSS) or #180CL (Solid Carbide)**.
3. The left guide pin on the FMT router sub-base should be set at one-and-a-half turns up for the first test cut and then adjusted for fit as necessary.
4. Left guide pin adjustments affect only the thickness of the tenon.
5. Left guide pin adjustments **do not** affect the width of the tenon.
6. Table limit stops and table movement may be used to increase or decrease the width of the tenon (see Longer and Shorter Joints section in your user guide).
7. As with regular tenons, a light climb cut (clockwise) at full depth will ensure a clean shoulder.
8. Complete the tenon routing in the normal direction (counter clockwise).
9. Although primarily intended to fit tenons to mortises formed by square chisel mortisers, a bit with a cutting diameter matching the guide size may be used to rout the mortise, and the corners squared with a hand chisel. Please note the guides are designed so routed mortises will be slightly shorter than the tenon width. This ensures that there is adequate wood for a perfect fit on through tenons.

Louver Guides

1. Install the louver guides with the Leigh logo facing the operator.
2. Louver guides must be used in pairs; a left hand guide and a right hand guide.
3. Louver mortises are routed with a 1/4" diameter bit and produce a mortise 1/4" x 1-1/4" at a 45° angle. Use the standard 1/4" x 1-1/4" tenon guide to produce matching tenons: **Leigh #670420**.
4. Left guide pin adjustment does not affect the size of the mortise, therefore, the left guide pin

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Louver Guides *cont.*

should be turned down as far as possible without fouling the bottom of the guide. Adjustments for fit are made when routing the tenon.

5. Louvers will normally be routed at approximately 45° to the grain direction, therefore the direction of bit travel is important. Each louver guide is engraved with a directional arrow. Always favor the left side of the mortise slot when routing.

Procedure:

1. Center the table sight over the **second** louver mortise position on your workpiece and set the front-to-back and left-to-right limit stops to prevent table movement.
2. Using the left or right outer edge of the FMT table, mark a pencil line across the stile. This becomes the first reference mark.
3. Mark successive lines at 3"(76.2mm) centers along the stile.
4. Rout the first three mortises, unclamp and move the stile to bring the next pencil mark precisely under the table edge. Re-clamp and rout the next three mortise slots. Repeat as required.

Note: Long or heavy stiles should support either side of the jig.

Y-Axis Mortise Guide

1. Install the Y-Axis Mortise Guide with the Leigh logo facing the operator.
2. Select a router bit with a cutting diameter that matches the chosen mortise slot.
3. The length of the mortise may be increased or decreased using the front-to-back table limit stops and table movement (see Longer and Shorter Joints section in your user guide).
4. The center slot of the guide (1/4" x 3/4") corresponds to the center of the sight and bit. All other guide slots are indexed at 1/2" increments left or right of the center slot. The numbers across the top of the guide indicate the offset for the slot directly beneath the mark. For example, the 1/4" x 3/8" slot (far left) is offset exactly one inch to the left of the center slot. If you are using a slot to the left of the center slot, place your layout mark on your workpiece to the right of the desired location, equal to the offset indicated on the guide. Conversely, using a slot to the right of center requires an index mark to the left of the desired mortise location.
5. The outside guide surface on the right of the guide can be used to make mortises of any length or mortises (dado) completely through the mortise board from front to back. The offset for this guide surface is 1-3/4".
6. Use successive full depth plunges along the length of the mortise, then rout a full length clean up cut.
7. Left guide pin adjustments have no affect on the length or width of the mortise slot, however the left guide pin should be turned down as far as possible without fouling the bottom of the guide. Adjustments for fit are made with the corresponding tenon guide.