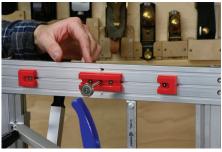
After selecting the size, find center of your combination of segments and use one of the non-tapered guide bearing shafts to center the template array on the template holder. This works for either the round-end or square-end templates.







The three steps in the mortise slot allow three widths of mortise. Use the lowest step when you need a perfect fit side-to-side for through mortise and tenon. Use the second or third step if you prefer a little side-to-side adjustability. This can sometimes be helpful during glue-up. Using the third step also allows room to wedge the tenon.

To center an array of segments that does not have a center hole option, use a try-square to locate each end equidistant from the center of the template holder. The metric scale on the template holder is easiest for this because there are more lines.



A mortise and tenon 1/8" larger or smaller than those shown on the chart can be made using one circle end piece and one triangle end piece. Center the combination of segments using the try-square measuring method above since the centering holes will be off by 1/8".

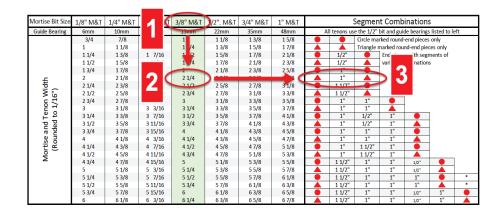
Note: All tenons are cut using the 1/2" bit and the guide bearing shown on the chart under the M&T size selected. Other combinations of bit and guide bearing are possible, but the recommended combination works best for all sizes. All mortises are cut using a bit the same diameter as the M&T thickness with the 10mm guide bearing in the mortise slot.

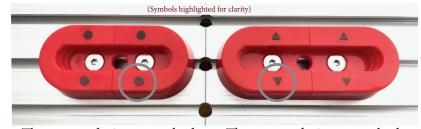


Segmented Mortise and Tenon Templates

Three steps to selecting any of 154 sizes of round-end M&T plus another 77 sizes of square-end tenons.

- 1. Select the M&T thickness (mortise bit diameter)
- 2. Choose the desired width
- 3. Find the combination of end pieces and segments





The two end pieces marked with circles make a 1" wide M&T at 3/8" thick. The two end pieces marked with triangles make a 1-1/4" wide M&T at 3/8" thick.

Segmented Mortise and Tenon Templates for the PantoRouter®

Mortise Bit Size	1/8" M&T	1/4" M&T	5/16" M&T	3/8" M&T	1/2". M&T	3/4" M&T	1" M&T	Segment Combinations								
Guide Bearing	6mm	10mm	12mm	15mm	22mm	35mm	48mm	All tenons use the 1/2" bit and guide bearings listed to left								
Mortise and Tenon Width (Rounded to 1/16")	3/4	7/8	15/16	1	1 1/8	1 3/8	1 5/8			Circle ma	e marked round-end pieces only					
	1	1 1/8	1 3/16	1 1/4	1 3/8	1 5/8	1 7/8			Triangle r	marked round-end pieces only					
	1 1/4	1 3/8	1 7/16	1 1/2	1 5/8	1 7/8	2 1/8		1/2"		End pieces with segments of					
	1 1/2	1 5/8	1 11/16	1 3/4	1 7/8	2 1/8	2 3/8		1/2"		various combinations					
	1 3/4	1 7/8	1 15/16	2	2 1/8	2 3/8	2 5/8		1"							
	2	2 1/8	2 3/16	2 1/4	2 3/8	2 5/8	2 7/8		1"							
	2 1/4	2 3/8	2 7/16	2 1/2	2 5/8	2 7/8	3 1/8		1 1/2"							
	2 1/2	2 5/8	2 11/16	2 3/4	2 7/8	3 1/8	3 3/8		1 1/2"							
	2 3/4	2 7/8	2 15/16	3	3 1/8	3 3/8	3 5/8		1"	1"						
	3	3 1/8	3 3/16	3 1/4	3 3/8	3 5/8	3 7/8		1"	1"						
	3 1/4	3 3/8	3 7/16	3 1/2	3 5/8	3 7/8	4 1/8		1"	1/2"	1"					
	3 1/2	3 5/8	3 11/16	3 3/4	3 7/8	4 1/8	4 3/8		1"	1/2"	1"					
	3 3/4	3 7/8	3 15/16	4	4 1/8	4 3/8	4 5/8		1"	1"	1"					
	4	4 1/8	4 3/16	4 1/4	4 3/8	4 5/8	4 7/8		1"	1"	1"					
	4 1/4	4 3/8	4 7/16	4 1/2	4 5/8	4 7/8	5 1/8		1"	1 1/2"	1"					
	4 1/2	4 5/8	4 11/16	4 3/4	4 7/8	5 1/8	5 3/8		1"	1 1/2"	1"					
	4 3/4	4 7/8	4 15/16	5	5 1/8	5 3/8	5 5/8		1 1/2"	1"	1"	1/2"				
	5	5 1/8	5 3/16	5 1/4	5 3/8	5 5/8	5 7/8		1 1/2"	1"	1"	1/2"				
	5 1/4	5 3/8	5 7/16	5 1/2	5 5/8	5 7/8	6 1/8		1 1/2"	1"	1"	1"		*		
	5 1/2	5 5/8	5 11/16	5 3/4	5 7/8	6 1/8	6 3/8		1 1/2"	1"	1"	1"		*		
	5 3/4	5 7/8	5 15/16	6	6 1/8	6 3/8	6 5/8		1 1/2"	1"	1"	1/2"	1"			
	6	6 1/8	6 3/16	6 1/4	6 3/8	6 5/8	6 7/8		1 1/2"	1"	1"	1/2"	1"			
	-				-					1						
Mortise and Tenon Width (Rounded to 1/16")	3/4	7/8	15/16	1	1 1/8	1 3/8	1 5/8			Square-ei	end pieces only					
	1 1/4	1 3/8	1 7/16	1 1/2	1 5/8	1 7/8	2 1/8		1/2"		End pieces with segments of					
	1 3/4	1 7/8	1 15/16	2	2 1/8	2 3/8	2 5/8		1"		various combinations					
	2 1/4	2 3/8	2 7/16	2 1/2	2 5/8	2 7/8	3 1/8		1 1/2"		<u> </u>					
	2 3/4	2 7/8	2 15/16	3	3 1/8	3 3/8	3 5/8		1"	1"						
	3 1/4	3 3/8	3 7/16	3 1/2	3 5/8	3 7/8	4 1/8		1"	1/2"	1"					
	3 3/4	3 7/8	3 15/16	4	4 1/8	4 3/8	4 5/8		1"	1"	1"					
	4 1/4	4 3/8	4 7/16	4 1/2	4 5/8	4 7/8	5 1/8		1"	1 1/2"	1"					
	4 3/4	4 7/8	4 15/16	5	5 1/8	5 3/8	5 5/8		1 1/2"	1"	1"	1/2"				
	5 1/4	5 3/8	5 7/16	5 1/2	5 5/8	5 7/8	6 1/8		1 1/2"	1"	1"	1"		*		
	5 3/4	5 7/8	5 15/16	6	6 1/8	6 3/8	6 5/8		1 1/2"	1"	1"	1/2"	1"			

*Note: On the 5 1/2" and 5 3/4" round end M&T and the 5 1/2" square end M&T, there is not a centering hole. Align the ends to be equidistant from center using a square for these sizes.



Indicates the round-end pieces with the circle mark. These together make a 1" M&T X 3/8" thick (other sizes according to the chart above)

Indicates the round-end pieces with the triangle mark. These together make a 1-1/4" M&T X 3/8" thick (other sizes according to the chart above)

Indicates the square-end pieces. These together make a 1" M&T X 3/8" thick.

The square-end templates do not have steps in the mortise slot since these will always be through M&T and the ends of the mortise will need to be squared with a chisel