Calculating Size of Door Parts

Door and Sidelight Rails

- Rail length = sidelight or transom width – (stile width x 2) + 1”
- 1/2” Long Stub Tenon
- 2-1/2” Long Extended Tenon

Silte lengths: Should be equal to the finished height of the door, sidelight or transom.

Rail lengths: Are determined based on the width of the stiles and the length of the tenon you plan to use.

Rails with 2” Tenons: Rail = door width – (stile width X 2) + 4”
- Figure 12

36” – 6-1/2” – 6-1/2” + 5” = 28”

Rails with 2-1/2” Tenons: Rail = door width – (stile width X 2) + 5”

Example
Rand = 10’ – Rail: 2” Wide or wider for a true French appearance.
- Figure 13

#1 – Full length door panel rails: Use stiles of at least 4-3/4” wide for a true French appearance.
- Figure 13

#2 – Transom rails: should be the same height as the door or sidelight rails that will be located below the transom. For a true French appearance

- KD. Avoid extending the rail past the stile height. The rail should be at least 10” to 10’ long and 6” wide. Make sure it squares and fits, just like your sidelight and transom stiles.

#3 – Rail length = sidelight or transom width – (stile width x 2) + 1”

#4 – Top rail: Alcove 5/8” Wide or wider for a true French appearance.

#5 – Bottom rail: At least 4” Wide or wider for a true French appearance.

#6 – Transom rail: At least 1-1/2” Wide.

Materials Required

In addition to the Freud French Door router bits, you will need the following tools and supplies to build your door unit:

- Router table with fence, miter gauge and at least one more bushing. We also strongly recommend that you shop vacuum unit or dust collector, as this is a very dusty operation.

- Saw for ripping rails, rails and other door parts.

- Table saw for cutting stock such as rip tables or similar device to support long rails.

- Mortising machines, Olds with mortising attachment, or Olds with rip table.

- Various woodworking tools and equipment including hammer, chisels, ruler, edge, straight edge, squares, coping saw.

- Clamps to secure all door joints.

- A sturdy, level work table or saw horses for door assembly.

- Lumber for door parts (and door jambs), if required.

- Side view of door assembly.

- Glass.

- Seaweed or building glass for door installation.

Creating your own French door is a fun and rewarding woodworking project that enables you to add curb appeal or definition to any of your rooms. As with any woodworking project, having your French doors made easily will enhance the best performance and results from your French door cutting, observe these safety recommendations for each stage of the project:

1. Never use a router bit that is damaged or dull.

2. Always turn off and unplug the router before replacing, installing or adjusting bits, adjusting the router fence, or assembling or disassembling bits.

WARNING: Failure to observe these warnings could lead to serious bodily injury or death:

- Use router bits with a router only.

- Check the bit is sharp and free from damage. Do not use the bit if it is dull, broken, cracked or if any damage is noticed or suspected.

- Always use an appropriate support, such as Freud’s LM72R series or LU87R series ripping blades are excellent choices for this thick wood.

- Glass.

Safety Tips

For any rails that will have long tenons, including all door rails, use an extended tenon for strength.

- Make Second Mark Here

- Figure 11

- Be sure that the fence is parallel to the rail gauge track, then rout across each rail on the workpiece.

- The procedure described for routing the rail ends will apply for the rail ends.

- After routing each rail face down, turn the rail over and repeat the cut with the stock face up. The procedure described for routing the rail ends will apply for the rail ends.

- The side view of door assembly.

- The procedure described for the second pass. Continue this process until the largest bit in your set, or with profile cutter and three slot cutters. For a true French appearance, the largest bit should be at least 10” to 12” long and 6” wide. Make sure it squares and fits, just like your sidelight and transom stiles.

- The procedure described for the second pass. Continue this process until the largest bit in your set, or with profile cutter and three slot cutters. For a true French appearance, the largest bit should be at least 10” to 12” long and 6” wide. Make sure it squares and fits, just like your sidelight and transom stiles.

- Make a cut in two passes, setting the fence to remove 1/2” of the stock on the first pass.

- Make a cut along one edge of the Set Up Block, then machine the grain.

- Use a straight edge to align the router table infeed and outfeed fence with the bearing on the bit, then make the second cut. Make the cut in two passes, setting the fence to remove 1/2” of the stock on the first pass.

- Make a cut along one edge of the Set Up Block, then machine the grain.

- Use a straight edge to align the router table infeed and outfeed fence with the bearing on the bit, then make the second cut. Make the cut in two passes, setting the fence to remove 1/2” of the stock on the first pass.

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Installing Glass in the Door Unit

Milled wooden glass stop. For forensics, roll the stop from the same material used for the door in many cases, you may have enough scrap stock left when you buy your glass and rails to bond the glass stop into the glass stop.

End note that the door frame that already is in place. Check the door frame carefully for any signs of rot or other damage. If it is in good condition, turn this section titled “Making the Flat End Cut” on the center of the description. Tenons on horizontal muntins should not be larger than the finished muntin width, but wide enough to safely handle in routing and sawing operations. Rout the stile profile carefully, using backerboards to control the width and backerboards of all surrounding features. In these instructions if your stock is wide enough, rout both edges to the finished width of the muntin and rails by 1/16" and wide enough to safely handle in routing and sawing operations. Rout the stile profile carefully, using backerboards to control the width and backerboards of all surrounding features. In these instructions if your stock is wide enough, rout both edges to the finished width of the muntin and rails by 1/16" and wide enough to safely handle in routing and sawing operations. Rout the stile profile carefully, using backerboards to control the width and backerboards of all surrounding features. In these instructions if your stock is wide enough, rout both edges to the finished width of the muntin and rails by 1/16" and wide enough to safely handle in routing and sawing operations. Rout the stile profile carefully, using backerboards to control the width and backerboards of all surrounding features. In these instructions if your stock is wide enough, you can use enough clamp-on edges to secure the door frame and rails to bond the glass stop into the glass stop.

Wear safety glasses and protective glasses when handling glass. If you encounter difficulty safely routing and sawing operations, Rout the stile profile carefully, using backerboards to control the width and backerboards of all surrounding features. In these instructions if your stock is wide enough, rout both edges to the finished width of the muntin and rails by 1/16" and wide enough to safely handle in routing and sawing operations. Rout the stile profile carefully, using backerboards to control the width and backerboards of all surrounding features. In these instructions if your stock is wide enough, rout both edges to the finished width of the muntin and rails by 1/16" and wide enough to safely handle in routing and sawing operations. Rout the stile profile carefully, using backerboards to control the width and backerboards of all surrounding features. In these instructions if your stock is wide enough, rout both edges to the finished width of the muntin and rails by 1/16" and wide enough to safely handle in routing and sawing operations. Rout the stile profile carefully, using backerboards to control the width and backerboards of all surrounding features. In these instructions if your stock is wide enough, rout both edges to the finished width of the muntin and rails by 1/16" and wide enough to safely handle in routing and sawing operations. Rout the stile profile carefully, using backerboards to control the width and backerboards of all surrounding features. In these instructions if your stock is wide enough, rout both edges to the finished width of the muntin and rails by 1/16" and wide enough to safely handle in routing and sawing operations. Rout the stile profile carefully, using backerboards to control the width and backerboards of all surrounding features. In these instructions if your stock is wide enough, rout both edges to the finished width of the muntin and rails by 1/16" and wide enough to safely handle in routing and sawing operations. Rout the stile profile carefully, using backerboards to control the width and backerboards of all surrounding features. In these instructions if your stock is wide enough, rout both edges to the finished width of the muntin and rails by 1/16" and wide enough to safely handle in routing and sawing operations. Rout the stile profile carefully, using backerboards to control the width and backerboards of all surrounding features. In these instructions if your stock is wide enough, rout both edges to the finished width of the muntin and rails by 1/16" and wide enough to safely handle in routing and sawing operations. Rout the stile profile carefully, using backerboards to control the width and backerboards of all surrounding features. In these instructions if your stock is wide enough, you can use enough clamp-on edges to secure the door frame and rails to bond the glass stop into the glass stop.