Simple Router Table Plans

by

Our Home from Scratch
Disclaimer
Our Home from Scratch LLC and its legal owners cannot be held responsible for any loss, damage, injury or death resulting from following the procedures or techniques described in these plans. Our Home from Scratch LLC and its legal owners assume no risk and cannot be held responsible for any misuse of these plans either directly or indirectly. They make no statements as to the weight or strength capacity of the item described in these plans.

These plans may contain errors and Our Home from Scratch LLC and its legal owners cannot be held responsible for any error. No guarantee is made as to the quality of any product that is described herein.

Always use appropriate Personal Protection Equipment when working with tools and exercise caution if taking any action associated with these plans.

Attempt at your own risk. Some woodworking skills are required.

This procedure contains affiliate links.

Distribution Policy
By downloading these plans you consent to this distribution policy. These plans are not to be distributed in anyway without the express consent of Our Home from Scratch LLC or its legal owners. The individual pictures or procedures contained herein are also not to be copied or shared.
Introduction

The plans for this basic router table were developed from the same router table that is currently in my home shop. This router table project originally appeared in a guest post on One Project Closer in the post “How to Build a Router Table.” Unlike the details found in the blog post, these plans contain a complete material list, dimensions for lumber as well as step-by-step instructions. A number of changes to the router table design have also been incorporated in these plans, so the original post should be used as a helpful reference, but keep in mind that there are some modifications. It can be built mostly from material found at your local hardware store, but I recommend you purchase a few additional items to make the table more functional.

The table was designed for my requirements. Thus, the height of the table is set to a comfortable working level for someone who is 5’7” tall. Feel free to make the legs shorter or longer depending upon your own comfortable working height. The top to this table is made from melamine. Melamine provides a smooth, cleanable work surface, but you are also may use MDF or a different hard laminate surface of your choosing. The original plans also included caster wheels, but I’ve removed them from this version. The wheels cause the table to move too much while the router is operating and I don’t think it’s quite as safe with them. So skip the wheels.

If you get stuck on any particular part of these woodworking plans, feel free to email me at John@ourhomefromscratch.com with any questions you may have.

I hope you enjoy the challenge of building this project and get as much use out of it as I have.

R,

John
Overall Dimensions:

Height: 38.25”

Width: 32”

Depth: 18”

Getting Started

These woodworking plans will take you step by step through the build of this router table. The first thing you should do is read through these procedures to familiarize yourself with the materials, tools and skill requirements necessary to complete them.

Tools

The tools I used for this project include the following:

1. Table Saw with 60 tooth saw blade and a triple chip blade
2. Miter Saw (also with 60 tooth saw blade)
3. Cordless Drill
4. Kreg Pocket Hole Jig
5. Jigsaw
Material:

Listed below in Table 1 is a list of all the lumber you’ll need to purchase to build this router table. All of this lumber should be available at your local large hardware store (Lowe’s, Home Depot, True Value, etc.) Table 2 contains a list of all the hardware required. Items 3 thru 4 in Table 2 can be ordered from Rockler.com.

**TABLE 1: LUMBER MATERIAL LIST**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Width</th>
<th>Length</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3/4&quot; Thick Plywood Sheet</td>
<td>48&quot;</td>
<td>96&quot;</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>3/4&quot; Thick Melamine Shelf</td>
<td>16&quot;</td>
<td>97&quot;</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>1/4&quot; Thick Hardwood</td>
<td>3/4&quot;</td>
<td>48&quot;</td>
<td>1</td>
</tr>
</tbody>
</table>

**TABLE 2: HARDWARE LIST**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1&quot; Long Coarse Pocket Screws</td>
<td>48</td>
</tr>
<tr>
<td>2</td>
<td>1 1/4&quot; Long Wood Screws</td>
<td>Varies</td>
</tr>
<tr>
<td>3</td>
<td>17 Piece T-Track Kit</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Paddle Power Switch</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Dust Collector Port</td>
<td>1</td>
</tr>
</tbody>
</table>
Material Preparation:

Once you have purchased and received all the necessary lumber and hardware, the lumber can be cut to its finished dimensions. Refer to Table 3 for the dimensions and quantities of each part and please note that some parts are cut from ¾” thick plywood, some from ¼” thick melamine and some from ¼” thick hardwood. The “Angle Braces” and “Top 2” pieces will be cut from a larger piece using a drawing later in these procedures.

### TABLE 3: LUMBER DIMENSIONS

<table>
<thead>
<tr>
<th>Item</th>
<th>Width (in)</th>
<th>Length (in)</th>
<th>Thickness</th>
<th>Qty</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leg Boards</td>
<td>3 1/2</td>
<td>31 1/4</td>
<td>3/4</td>
<td>8</td>
<td>Plywood</td>
</tr>
<tr>
<td>Front/Back Braces</td>
<td>3 1/2</td>
<td>21</td>
<td>3/4</td>
<td>4</td>
<td>Plywood</td>
</tr>
<tr>
<td>Side Braces</td>
<td>3 1/2</td>
<td>5 1/2</td>
<td>3/4</td>
<td>4</td>
<td>Plywood</td>
</tr>
<tr>
<td>Sub Top</td>
<td>18</td>
<td>32</td>
<td>3/4</td>
<td>1</td>
<td>Plywood</td>
</tr>
<tr>
<td>Top 1</td>
<td>5</td>
<td>32</td>
<td>3/4</td>
<td>1</td>
<td>Melamine</td>
</tr>
<tr>
<td>Top 2*</td>
<td>11</td>
<td>12 1/4</td>
<td>3/4</td>
<td>2</td>
<td>Melamine</td>
</tr>
<tr>
<td>Top Insert</td>
<td>10</td>
<td>12 1/4</td>
<td>3/4</td>
<td>1</td>
<td>Melamine</td>
</tr>
<tr>
<td>Front T-Track Shim</td>
<td>3/4</td>
<td>32</td>
<td>1/4</td>
<td>1</td>
<td>Hardwood</td>
</tr>
<tr>
<td>Rear T-Track Shim</td>
<td>3/4</td>
<td>8</td>
<td>1/4</td>
<td>2</td>
<td>Hardwood</td>
</tr>
<tr>
<td>Front/Back Alignment Braces</td>
<td>1</td>
<td>29 1/2</td>
<td>3/4</td>
<td>2</td>
<td>Plywood</td>
</tr>
<tr>
<td>Side Alignment Braces</td>
<td>1</td>
<td>14</td>
<td>3/4</td>
<td>1</td>
<td>Plywood</td>
</tr>
<tr>
<td>Fence Front</td>
<td>5 1/2</td>
<td>28</td>
<td>3/4</td>
<td>1</td>
<td>Melamine</td>
</tr>
<tr>
<td>Fence Back</td>
<td>4 1/2</td>
<td>28</td>
<td>3/4</td>
<td>1</td>
<td>Melamine</td>
</tr>
<tr>
<td>Angle Braces</td>
<td>See Drawing</td>
<td></td>
<td>3/4</td>
<td>2</td>
<td>Plywood</td>
</tr>
<tr>
<td>Dust Port Cover</td>
<td>6 1/2</td>
<td>7</td>
<td>3/4</td>
<td>1</td>
<td>Plywood</td>
</tr>
</tbody>
</table>

*Will be modified later
To make the material preparation easier, you can refer to the cut sheets for the plywood and melamine in Figures 1 and 2, respectively.

**Figure 1: Plywood Cut Sheet**
Figure 2: Melamine Cut Sheet
Once the major components have been cut from the sheet goods, two parts need to be further modified: the Angle Braces and the Top 2. The Angle Braces can be cut from the ¾” thick plywood sheet, although they are not specifically called out on the cut sheet. Figure 3 shows the Angle Braces. Figure 4 shows the two Top 2 parts. The Top 2 boards can be cut from 11” x 12-1/4” rectangles.

![Figure 3: Angle Brace]
Figure 4: Top 2 Boards

8”

10-1/4”

12-1/4”

11”
Assembly:

With all of the material cut to their final dimensions, the assembly process can begin. Start with the legs. Each leg section is made from two leg boards fastened together at a 90 degree angle (Figure 5). The leg boards can be fastened together using a thin bead of wood glue and four pocket screws.

Figure 5: The Legs
Build four leg assemblies. Refer to Figure 6.

Figure 6: Assembled Legs

After the legs have all been built, they can be joined together using the braces. Using pocket screws and wood glue, join the legs together using the front and side braces. The top set of braces should be flush to the top of the legs and the bottom set of braces should be 4-1/4” up from the bottom of the legs. Refer to Figures 7 and 8.
Figure 7: Top Leg Braces

Figure 8: Bottom Leg Braces
The top assembly can be either built separately or while attached to the base. I’ve designed the entire top assembly to be completely removable from the base to make removing the router considerably easier. Start by placing the Sub Top over the base and centering it. It can be temporarily attached to the base with a couple of pocket screws from the legs or support braces. See Figure 9. Those pocket screws can be removed later.

Figure 9: Sub Top
After the Sub Top has been centered and attached, a hole needs to be cut into it for the router base. The hole should be placed in the center of the top’s width and 9-5/8” from the front edge. The router itself can be used to trace a circle and it can be cut out using a hand held jigsaw. See Figure 10.

Figure 10: Tracing the Router Base
With the hole in the Sub Top cut out, the finished top can be assembled and attached. Use Figure 11 as a reference. Each finished top piece can be fastened to the Sub Top using wood glue or construction adhesive and wood screws from below. The Top Insert board should not be glued, however. A hole can be drilled into the Top Insert 9-5/8” from the front edge. This hole can be dimensioned to accommodate any router bit you plan on using. For varying bit sizes, you can have multiple Top Insert boards.

The T-Track pieces should rest on ¼” hardwood strips and can be screwed to the Sub Top with wood screws from the top. Each T-Track section will need to be cut from the main piece using a hack saw.

Figure 11: Finished Top
With the router table top finished, the alignment braces can be fastened to the table top assembly using wood screws. These braces should wrap tightly against the base. Once secured, the alignment braces will allow the top assembly to lift off when needed. The pocket screws that were holding the top assembly to the base can be removed at this point. See Figure 12.

Figure 12: Alignment Braces

At this point, the table construction is complete. The Paddle Switch can now be attached to the front of the base assembly.
To build the fence, first cut a 2” x 4” rectangular hole in the Fence Front and Fence Back boards. The Fence Back board can be secured to the Fence Front using glue and pocket screws. See Figures 13 and 14.

![Figure 13: Fence Front](image)

![Figure 14: Fence Assembly](image)
Next, fasten the Angle Braces ¾” out from the hole in the fence assembly. See Figure 15.

**Figure 15: Angle Braces Attached to the Fence**

Attach the Dust Cover over the Angle Braces using glue and brad nails or wood screws. See Figure 16. Drill a hole in the center of the Dust Cover to accommodate the Dust Cover Port.
Figure 16: Completed Fence Assembly

To get the fence to function with the table, drill a small hole on each side of the Fence Back for T-Track bolts. Make sure they are aligned with the T-Tracks on the table top.

Figure 17: Completed Router Table
Resources

That’s it. If you find any errors, have any suggestions for improvement or any questions, drop me a line at John@ourhomefromscratch.com

Thanks!!