Butterfly Leaf Dining Table Plans

An attractive dining table with a secret:
the leaf folds and stores inside the table.

WOODCADEMY
Build Your Skills

Season 1, Episodes 7 & 8

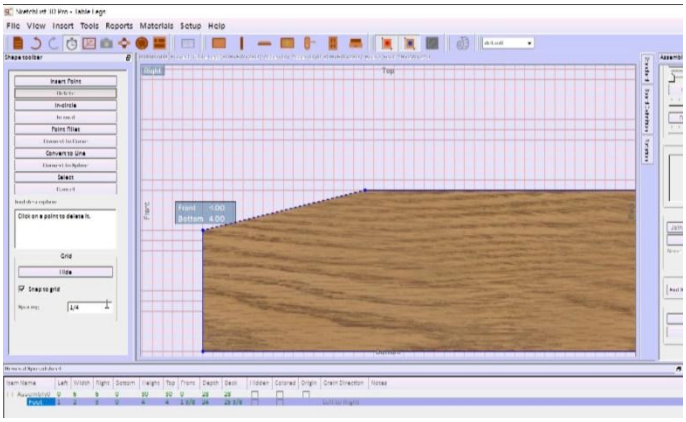
I first saw a butterfly leaf table in a back corner of an antique shop in Savannah in 2006. The table was missing its top and some other pieces, but after a few moments, I figured out what the strange mechanism was designed for. Since then, building a butterfly leaf table has been on my list. I have a penchant for "convertible" furniture to begin with, and not having to find a place to store the leaf when not in use is a big bonus.

My research found several designs for both the table and the folding/pivot mechanism. On YouTube, Guy's Woodshop has an excellent 10-part series on his version, and Fine Woodworking Magazine has a very good article by Michael Fortune in their July/August 2011 issue. But the most interesting part of my research was the variety of solutions for both the leaf pivot mechanism and how the slides for the top were built into the table.

Designing the Table

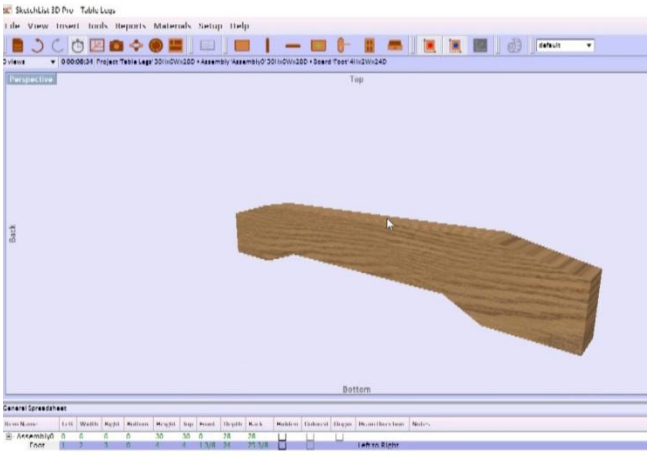
The size and style of the table **must** be the first consideration of the design process. The most beautiful table with the most ingenious mechanism is a failure if it does not fit the space, seat the right number of people, or match the existing décor. Knowing this allowed me to quickly decide the basic look and dimensions for our table. We chose seating for four with the table closed and wanted seating for as many as eight with the table open. Those numbers determined the size of the table top.

The style of the table was also largely predetermined; we wanted a simple mission style with a lighter than typical finish. This style was set by the sofa tables I built as well as the dining chairs from Woodcademy Episodes 5 and 6.

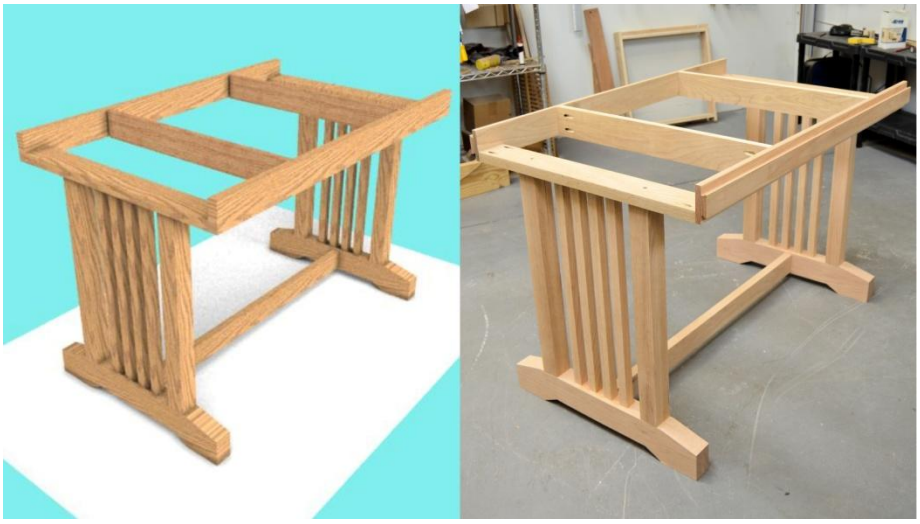


With the basic table parameters fixed, I built the table virtually in SketchList 3D Pro. I have a lot of experience in 3D modeling software and own several programs, but I prefer SketchList for how it works.

With most systems, parts are drawn to shape, and then given thickness to create a 3D model. SketchList works by creating a 3D blank the size needed, and then marking out and removing those bits that are unwanted. This is a VERY comfortable way for woodworkers to design, since it is exactly how we create pieces in the shop.



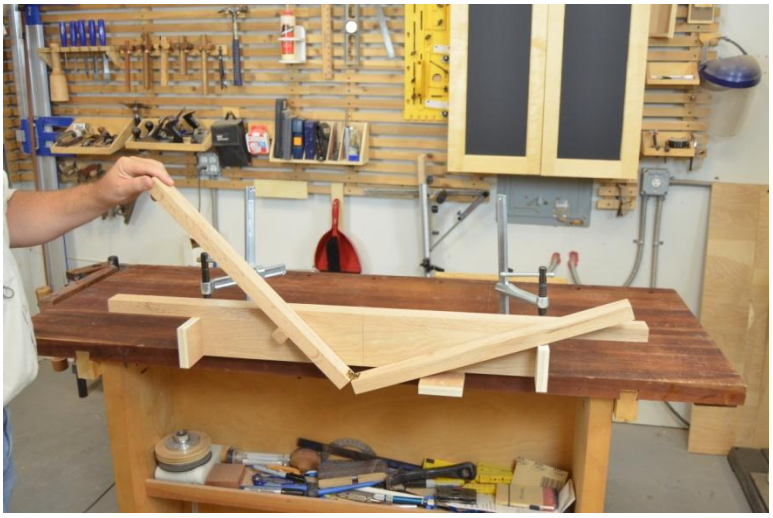
For example, I started with a 24 x 4 x 2" blank to make the foot of the table, marked the top corners for bevels, marked out the cutaway on the underside, etc., in the same manner and even the same steps as it will be made in the shop.



3D modeling the project also allows for assembling the parts inside the software, allowing for a virtual build of the entire project before cutting any wood. SketchList 3D Pro also creates material lists and cut sheets for sheet goods and solid lumber.

Mock-Up

While building my table within the software was helpful for determining the location of the pivot point for the folding leaf, what I really wanted to verify was the dimensions. I have enough experience with 3D modeling to know this is absolutely necessary. Because the leaf mechanism will be built and added late in the build, I didn't want to wait until then to find out that something was off. As a simple full scale mock-up of the leaf is a quick and inexpensive way to check everything, I decided to go ahead and build one.

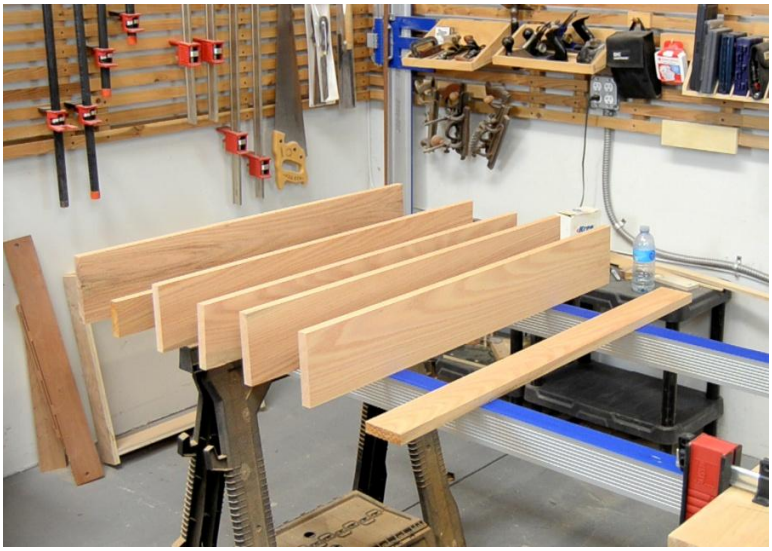


I cut two pieces of oak at 20" by 1-1/2" wide to represent the leaf halves. Another cut at 40" long represented the table top. Scrap plywood was ripped to the 3" wide that the apron frame would finish at, and cross cut. One piece was cut at 24-3/4" for the stretcher that holds the leaf pivot, and two short sections were cut to represent the apron sides. There is no need to make this wider, we only need it wide enough to see it work. The pivot location has to allow the folded leaf halves to fit inside the apron and below the top, but also set the opened leaves level with the top and cantered side to side. There are two points to determine, the pivot in the leaf stretcher and the pivot on the leaf itself.

If you follow these plans exactly, you can skip this mock-up step. However; if you are adapting them to your own design, I highly recommend you take the time to build your own mock-up and verify your setup.

Leg Subassemblies

The design allows for two leg subassemblies that are joined together with a stretcher between the feet and the apron slides at the top. I use solid red oak in this build. The leg posts and feet need to be 2 inches thick, but everything else can be made from 5/4 stock. Rather than buying some 10/4 stock for these parts, I decided to glue up the blanks needed. These parts are run through the jointing, planing and cutting sequence to provide two foot blanks and four leg post blanks, as called out in the cut list.



A note about lumber: Not everyone has a lumber yard close by, I certainly don't, so I rarely get to hand-select my lumber. This is when having a good relationship with your lumber yard pays off. I ordered all of the oak needed for the chairs and this table from Advantage Trim and Lumber; they selected excellent quality boards for me and even made sure that my 5/4 stock ran on the "plump" side so I was able to get all the chair legs without needing to glue them up.

The feet are shaped next. The top corners are marked at 4" in and 1" down to get beveled. The bottom edge has the center removed to create 4"-wide pads at each end. This is marked out too. Note that marking out this part pretty much exactly follows the design process earlier in SketchList.

The feet are then roughed out on the band saw and cleaned up using a hand plane, rasps and files. For just the two feet, this is much faster than making up a template and flush trimming with a router, especially with 2" thick stock. Hand tools are often a faster solution for simple tasks.

Now the feet need to be mortised. The top between the bevels get a 1-1/2” square leg post mortise at each end 3/4" deep, and a 7” by 1” slot mortise in the center 1/2" deep for the slats. Since I do not own a mortising machine, these are marked out, the waste drilled from the center, and the edges squared up using chisels.

The inside face of each foot also receives a mortise, 1-3/4” tall, 1/2" wide and 1” deep, centered on the face to accept the stretcher. It is positioned 5/8" down from the top to avoid the slat mortise in the top.

The leg posts are cross cut to 23-1/2, and get a tenon cut on each end. The shoulders are cut 1/4" deep by 3/4" wide on all four faces. An accurate and stable miter gauge, like my Osborne EB3, ensures that the shoulders are square. Eight slats, 1” square by 23” long, also need to be cut. These don’t need tenons as they simply sit in the mortise.

Because I clean up all of my mortises by hand, they are never all exactly the same. When cutting the tenons, I always mill them just a bit oversize. This allows me to then shave the shoulders to precisely fit the mortise; a shoulder plane is perfect for this task. It takes a little more work, but each joint can be adjusted for a perfect fit. Be sure to mark the matching joints so that they go back together during assembly.

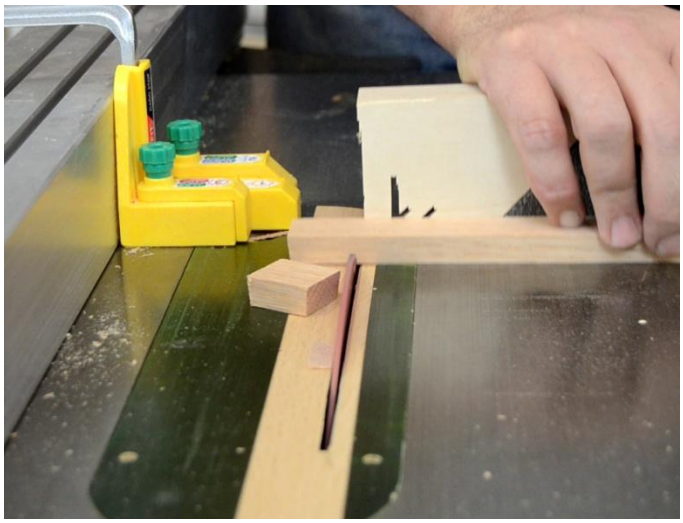
The underside of the top rail also needs to receive the same mortises as the top of the foot; be sure to mark it out carefully. The mortises are the same as the foot, but the top rail is longer, so follow the locations shown in the measured drawings. Last, the top rail needs to be drilled for pocket screws on both top ends. Set the drill jig for 7/8”, rather than the typical 3/4", because the apron rail is only 1/2" where the screws are set to keep them from breaking through the profile.

The leg assemblies are built next. The leg posts are glued and inserted into the foot, the four slats are placed into the mortise slot, and the top rail is added to the top. The leg posts are glued into their mortises, but the slats are simply trapped within their mortise slots without glue.

This assembly should be clamped in line with the leg posts, but the cutout at the bottom of the foot prevents this. A caul added to span the foot provides a place to clamp onto. A pair of Bessey Revo parallel clamps, along with the square shoulders on the leg posts, will hold the assembly square while the glue cures.

Tapered square plugs are used to set the slats in position and fill the gaps between them. Prep some 1/2" thick stock that matches the feet, and rip it into 1” wide strips with the edges beveled to 10 degrees.

This stock is then cross cut into 1” pieces, again with the blade set to 10 degrees. **The sequence is important here.** The end must be beveled first with the wide face on the strip on the table. Then the part is flipped over, set to the stop, and cut off the blank. Then the strip must be flipped again and have the end trimmed before cutting the next plug. This keeps all the tapers in the proper direction.

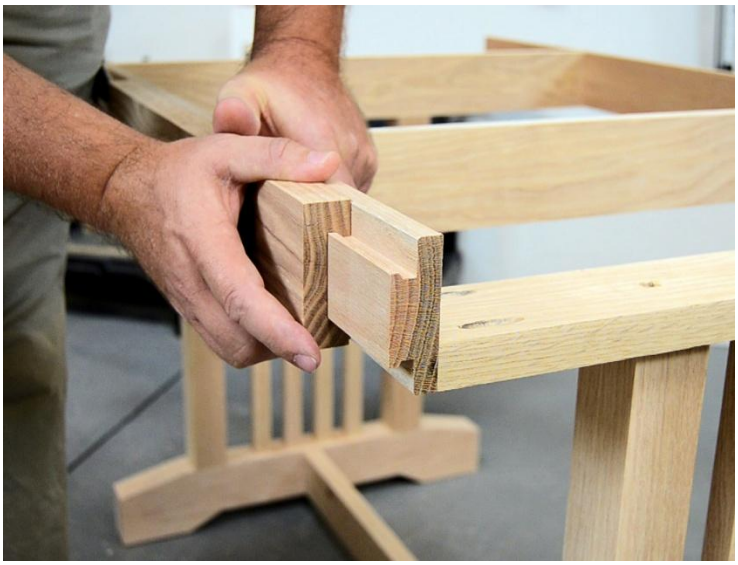


Cutting these plugs on the taper allows them to be wedged into place. The sharp edge at the top of the bevel can crush slightly to provide a gap-free fit on all sides. Just add a bit of glue to the plugs and tap them into place.

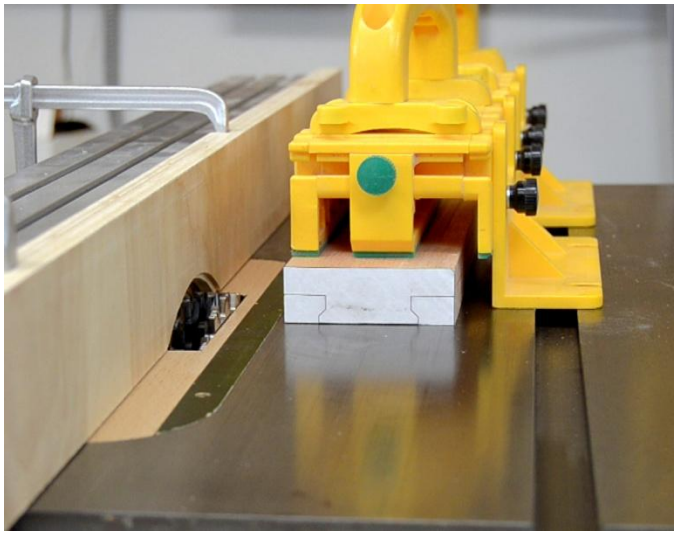
Apron Slides

While the two leg subassemblies dry, the apron slides can be milled. My initial research showed several options for how the top slides could be worked into the table design, but being inside the table, they were in the way and had to be designed around.

I hit upon a bit of a unique solution: rather than having slides inside the table structure, I decided to build the slides into the aprons. The positive side of the slide is actually the apron of the frame, and the negative sections will be attached to the tops.



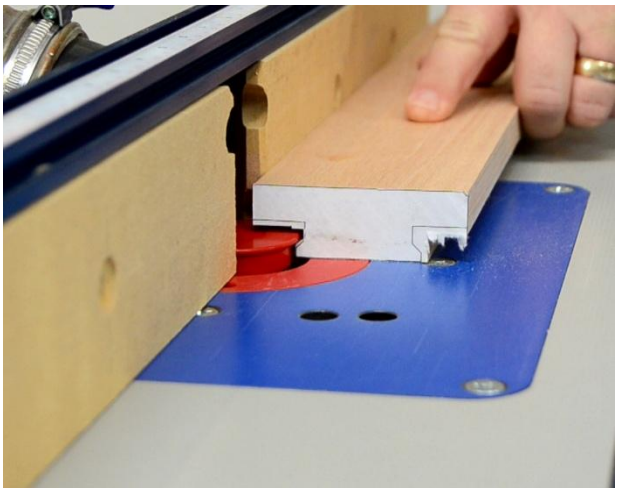
This removes the slides from inside the apron and greatly simplifies the leaf mechanism. The positive slide sections are milled now to build into the table base. The negative half of the slides will be created later with the tops.

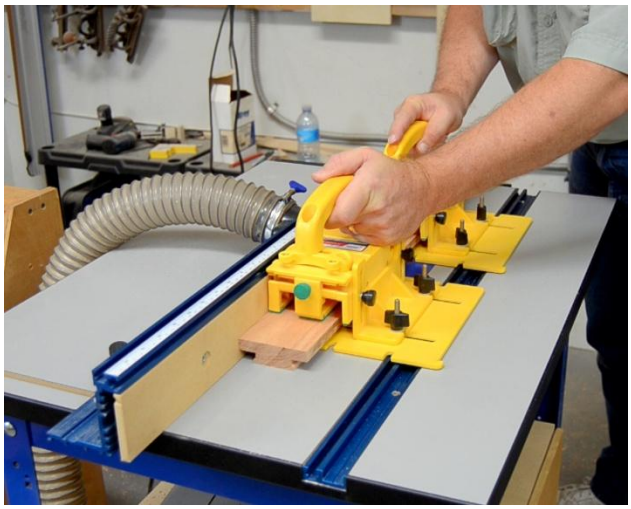


This is a bit of precision milling, but not too difficult to do with a bit of care. The easy way is to print out the slide profile drawing from these plans at full scale, cut the positive side out, and paste it to the end of your slide stock. This allows for very precise setting of the bit in the router table.

The first step is to remove most of the waste using a dado blade on the table saw by cutting a rabbet into both edges of each apron slide. You can cut the entire profile using the bit, but the dado blade is faster, has less tear-out, reduces the router table setups and saves a lot of wear and tear on expensive bits.

A drawer lock bit is set up in the router table, and adjusted so that the bit is aligned to cut the lower part of the profile printed on the paper. All four sides are run through with this setup. Without changing the fence position, the bit is raised up to meet the top of the slide profile and all four sides run again.





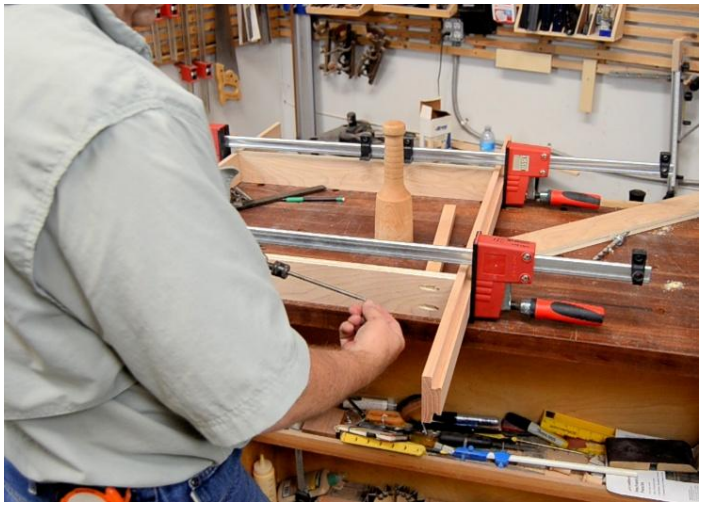
These profiles need to be as smooth as possible to allow the slides to move properly. This is best accomplished with good pressure kept above the cutter, good dust collection at the fence and a smooth pass across the bit without pauses. Good push blocks, like the MicroJig GRR-RIPPERs shown, make this easy to do while keeping hands well clear of the cutter.

It is good practice to make the apron rail stock a bit long and wait until after the milling to cross-cut to length. Any errors, snipe or adjustments are likely to be at the ends, so being able to cut these off afterward will come in handy.

Apron Frame Assembly

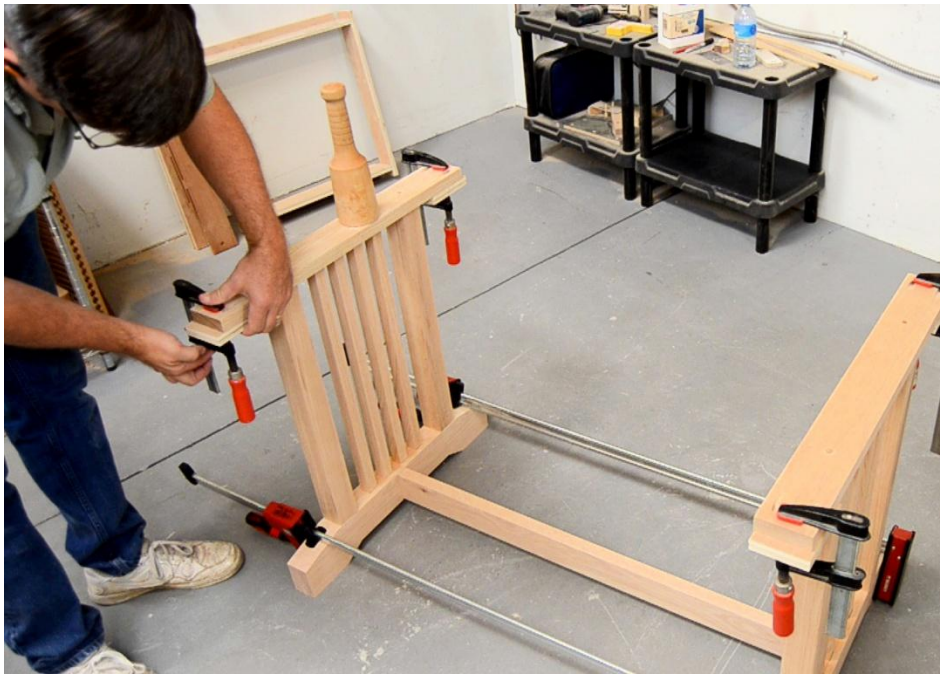
The apron frame is a separate assembly that is attached to the legs. The apron slides are held apart by a pair of leaf stretchers that provide the pivot location for the leaves. These are cut to 3” wide and 24-3/4” long. Each end gets a pair of pocket holes at the same 7/8” setting as the top rail and a 1/4" diameter hole is drilled through them for the pivot rod. This hole on my table is located 1/2" down from the top and 5-3/4” back from the center line (see measured drawings). If you built your own mock-up, use the setup you determined in your mock-up.

The apron slides are marked on the back to locate the stretchers. Find the center and strike a line 10” to each side of the center. Setting the stretchers 20” apart allows room for the 18”-wide folding leaves with extra clearance for the table pins.



Position the stretchers between the apron slides and clamp them, checking to see that the assembly is square. Secure the joints with pocket screws.

Assembling the Base



The stretcher is glued and inserted into the mortises in the leg subassemblies. Setting a long clamp on each side of the leg posts allows you to secure the joints and keep the legs square.

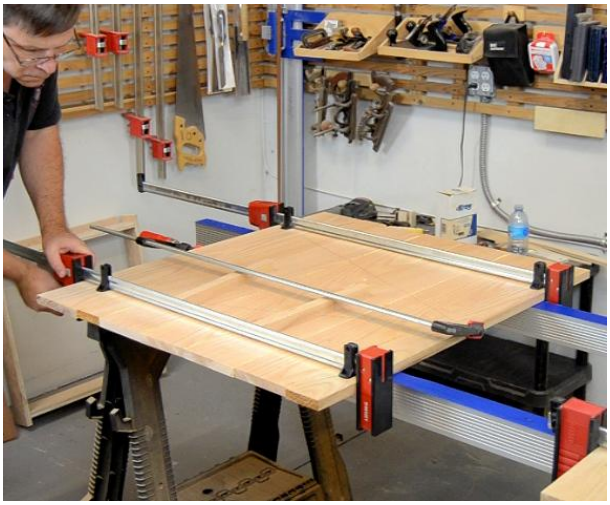
Attach the apron frame with the ends of the top rails between the apron slides. A scrap of ply clamped to each corner can provide a temporary shelf for the apron assembly to rest on before securing it in place. Set the ends of the apron slides and top rails flush at each end, and then screw them together.

Ensure that the base assembly is still square and that the apron slides are parallel to each other along their length. This is critical for the slides to operate without binding.

With all of this secured, the table base is completed. All of the previous information is shown in Episode 7 of Woodcademy Season 1 on Amazon Prime. The information from this point forward is included in Episode 8.

Gluing the Tops

While the overall table will finish at 80" long by 40" wide, the panels that need to be made are only 35" by 31" and 15-1/2" by 18", so they are manageable even in a smaller shop. Stock should be selected for color and grain so that the two tops not only will blend well when the table is closed, but the leaf also needs to blend with the tops when the table is expanded. It is best to machine all the stock in one session, finishing out at 7/8" thick. Taking the time to level all the joints when clamping will save a lot of time as the panels are sanded and flattened.



The dimensions above are given with the grain direction first. While most tables will have the grain oriented along the long axis, tables with leaves typically reverse this. A long narrow leaf with the grain running side to side would be weak, so the entire table is oriented side to side. The edges of our table will also be dressed up with breadboard edges; this too is reflected in the above dimensions.

If your shop is not set up to make and flatten large panels, they can be purchased already glued up. I have bought premade panels from Advantage Trim and Lumber on other projects with most excellent results. Meanwhile, while our glued up panels are curing, the top slides can be milled.

Top Slides

The top slides are milled to fit closely with the apron slides shaped earlier. The stock should be ripped to 3-1/8" wide rather than 3". The added width prevents the table tops from binding on the table frame by raising them up 1/16" above the apron.

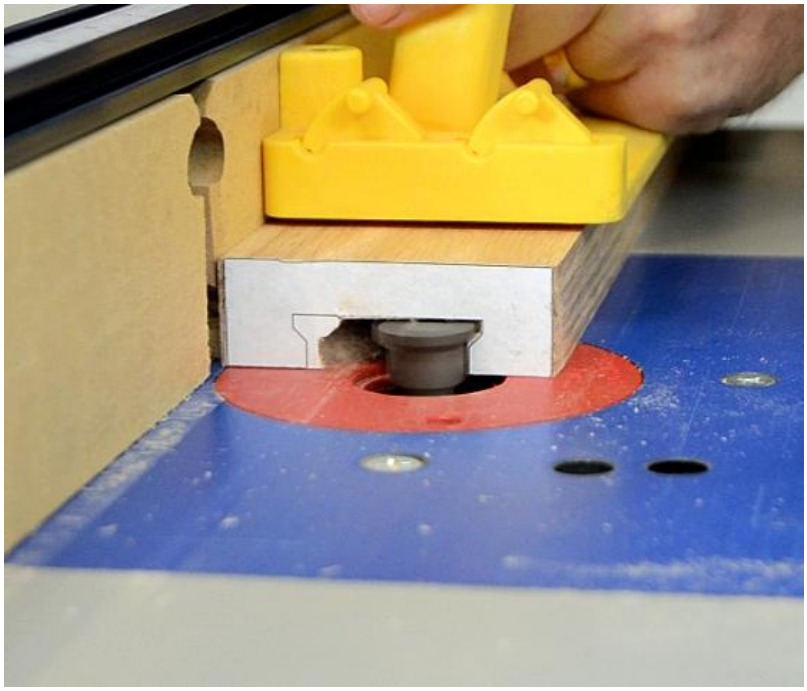
As with the apron slides, printing out the templates provided on page 34 and gluing them to the end of one of the stock pieces will help to ensure accurate milling.

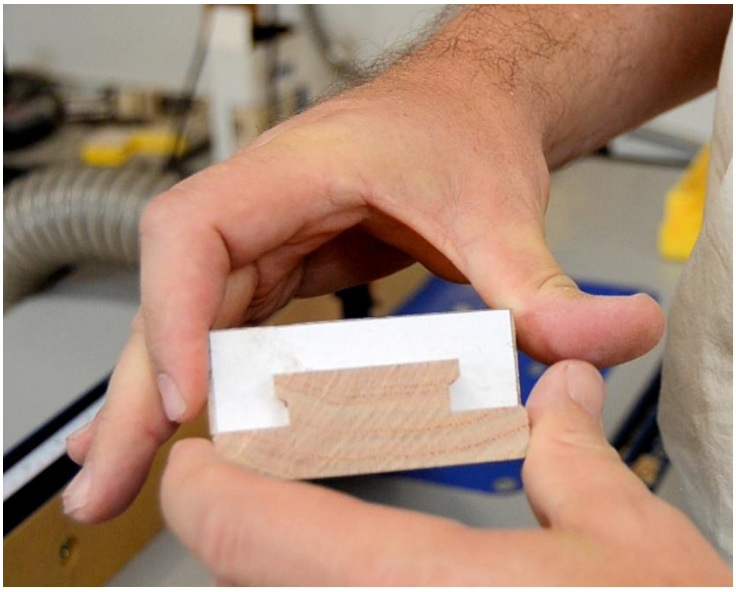
The center waste section of the profile is removed at the table saw using a dado stack, staying well within the lines. This step speeds the milling process, extends the life of the router bits to be used, and allows for a finer surface finish, which is important in these parts that need to mesh smoothly.

Next, the router table is set up with a drawer lock bit to mill the final shape. I used Freud's 2" diameter bit to mill the apron slides, but this bit will not fit inside the profile on the template provided. However, this doesn't necessarily mean two bits are needed. Drawer lock bits, like the one pictured here, are available in a 1" diameter. This smaller bit can be used for milling both halves of the slides.

The lock miter bit is set up in the router table with the height set to match the top of the profile cut. The fence is set to cut the center line to remove any leftover waste. This also sets the actual height of cut.

Without changing the height, the fence is reset so that the bit will cut the outside of the profile furthest from the fence. This position ensures that the cut is made against the bit rotation and is the only safe way to make this cut.





All four top slide pieces should be milled in each of these set ups before setting the next in order to ensure that all the parts are exactly the same.

A cut off from the apron slides should be used to check the fit of the profiles. The width will be set first, and then the bit can be lowered to remove the remainder of the profile as shown on the template. Work carefully until the apron slide sample moves smoothly inside the top slide.

Once successfully milled, the top slides can be cut to length and set aside for later use.

Leaf Hinges

The two leaf halves should be mortised for hinges at this point. The blanks are cross cut and ripped to size as shown on the cut list. Hidden hinges are used to fold the leaves as needed without being visible when the leaf is in use. Start by aligning the two halves and marking across the joint line at 4” in from each end.

These hinges require a specific two-step mortise that is easy to make using a drill. The instruction sheet contains a printed template for the mortise. This is cut out and folded over the edge of the part and the center points transferred using an awl or center punch.

Tip: Cutting a small hole along the template center line allows for fast and accurate alignment of the template.

The two outer holes are drilled to the exact depth called for in the instructions. For this hinge, the depth is 1/4". This depth sets how the hinge mounts, so it must be accurate.

The center two holes accommodate the body of the hinge so they are deeper, but can be drilled deeper than needed without issue. Once the four holes are drilled out, the waste between them can be chiseled away. Remove the waste between the inner and outer holes only to the depth of the outer hole. The waste between the two center holes is removed completely. The mortise will be a two-step hole with straight sides and rounded ends.

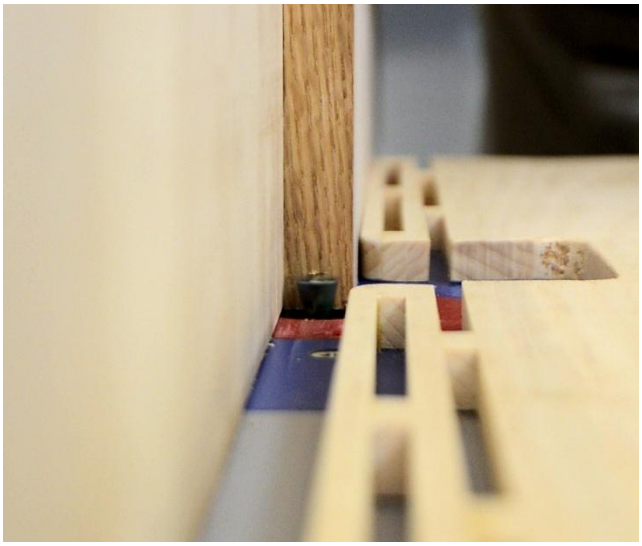
Test fit the hinges, but be careful; the body is tapered, so they fit tight and are not easy to remove once seated fully.

Breadboard Edges

While there are many ways to dress the ends of the table sections, a breadboard edge was chosen for this table to manage wood movement issues. Wood moves across the grain, so the field and edge need to be able to move against each other. A butterfly spline mechanically holds the parts better than a mortise and tenon with little extra effort.

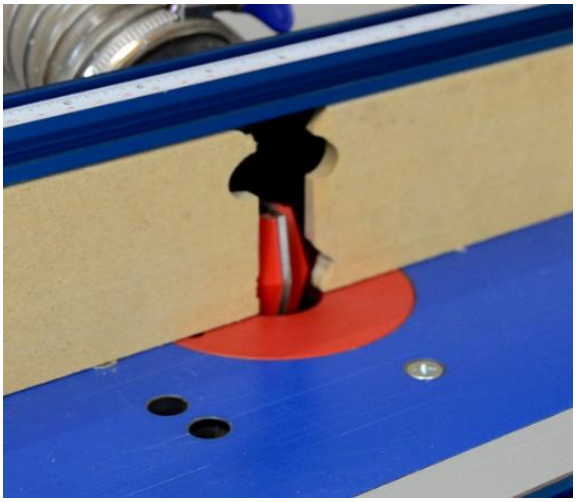
The top blanks were trimmed to length using a circular saw, then ripped to final width on the table saw.

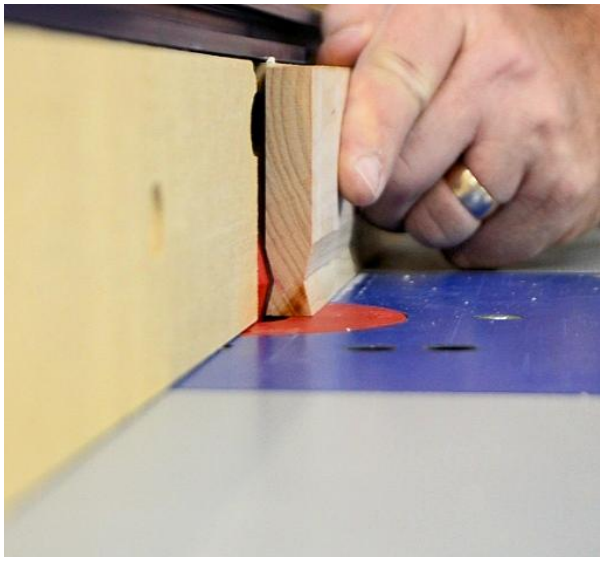
The dovetail is an undercut. The opening is smaller than the body of the slot. This hinders chip removal which leads to burning bits and poor cut quality. So, a 1/4” wide by 5/16” deep relief groove was cut into all the mating edges first to minimize the stress on the dovetail bit.



The relief slot and dovetail grooves are centered on the edges but, to ensure proper alignment, all parts were marked on the face and milled with this face toward the fence so any variation is matched between parts. A tall auxiliary fence was fixed on the saw and/or the router table to steady the large panels during cutting. A 1/2", 14 degree dovetail bit set to 3/8" deep is used to groove all the mating edges. A pressure board helps control the parts during this operation.

A butterfly or bowtie spline is used to lock the two dovetail grooves together, holding the breadboard edges to the top panels. These splines can be milled quickly using a butterfly spline bit. It must match the angle of the dovetail bit used, 14 degrees in this case.





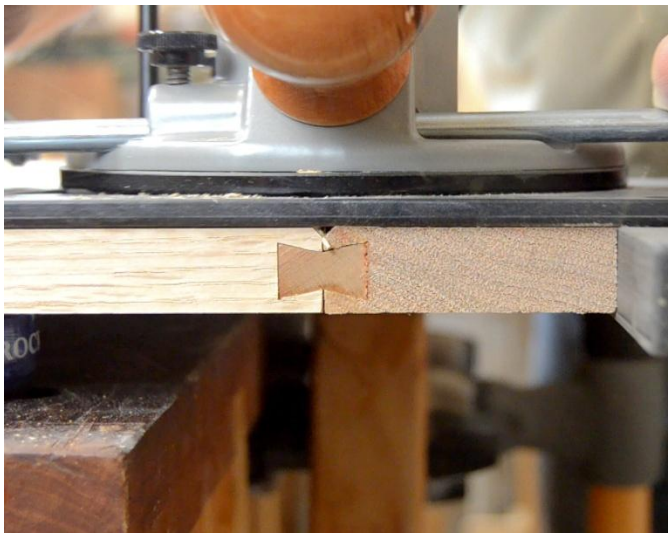
The height of the bit is set so that the center point is 3/8" above the table, the same as the depth of the dovetail slot. The fence is then set to expose the bit to the overall spline height of 3/4". It is useful to start with the bit exposed a bit less and adjusting to fit. The spline stock is run across the bit on both faces to produce the bowtie shape. Test the fit in one of the dovetail grooves and adjust the fence as needed.

These splines are milled from 1/2" thick hardwood stock about 3” wide, and the splines ripped off afterward. This is safer and more accurate than cutting the butterfly profile into strips prepared to 3/4” by 1/2". Using a pair of MicroJig GRR-RIPPERs allows for safe ripping of these parts against the fence so each is exactly the same. These splines will be visible at the table ends so oak can be chosen to minimize the look, or a contrasting wood will make this a feature. Cherry was chosen for its strength and look.

This dovetail spline joint is designed to be entirely mechanical, using no glue, but while this is perfectly workable, glue was applied to the spline before it was inserted into the breadboard edge stock. The grains are running the same way so this is safe to do and it will prevent the spline from possibly moving separately from both the top and edge, sticking out on its own. A very light coat of glue is applied to one edge and the splines tapped fully into the breadboard edges with a mallet.

Inserting the splined breadboard edges into the top panels is a bit tougher. These are, and should be, quite tight fitting. Bessey bar clamps can be used to press them into place without risking damage that may result from using a mallet to drive them in place.

Quirks and Bevels



The human eye can see very small differences in joints that are touching, but with even a small gap between, minor variations are very hard to spot. This is why many furniture pieces are designed with aprons set back from the leg face, and why many inset drawers have small moldings around them. These details hide minor imperfections in the build or those that may show due to seasonal wood movement.

This table has panels that will move relative to the edges and joints between the top sections and leaf that will be set and reset many times. It is unlikely that all of these moving joints will remain perfect over the decades of hard use a dining table may encounter. A small "V" detail milled along the joints of this table will camouflage any movement, making it appear that they are correct even if a little off. These are called "quirks" and are readily found on many furniture pieces.

A router fitted with a V-bit is mounted to the M-Power CRB7 base set up as an edge guide. The bit is positioned to cut along the seam between the breadboard edge and the top panels. This is a small "V" cut, about 3/16" wide. To keep things balanced, mill both sides of each joint.

This detail is also carried all around the edge of the top using a small bearing guided chamfer bit and the CRB7 now configured as an offset base. Be sure to bevel the edges of the tops and leaf that joint together within the top as well.

Folding Leaf

The folding leaf halves are joined together with the hidden hinges. It is important to ensure that the leaves are arranged so that the top faces fold together. Once the leaves are connected, the underside of one is marked across the width, 5-3/4” in from one end. This is where the pivot blocks will mount.

The blocks start as a 1” by 1” strip of hardwood that has two holes drilled into it. (see measured drawings)

These 1/4” pivot holes must be centered exactly 1/2" from one edge. This strip is then cross cut 1” on each side of each hole. The top corners are rounded over and two mounting holes centered on each side of the pivot hole.

The pivot blocks are then aligned on the marks made earlier on the leaf half and screwed in place. The exact dimensions of the blocks are not critical, as long as the pivot hole is exactly 1/2" above the leaf.

Leaf Pins

Like most expandable dining tables, this one uses pins to align the tops and leaf where they join together. The pins chosen for this project are two part consisting of a steel pin that mates with a steel sleeve. This prevents the holes from wearing over time and has the added advantage of only needing one size hole for each side. The trick is to drill all the holes so that both sides of all three possible joints always line up accurately. A properly designed drill jig simplifies this task.

The drill jig is a cleat running along the center of a strip of 1/2" plywood to form a *T-bar* shape. The strip and cleat are 42" long and have a stop on both sides of the cleat at one end. Holes are drilled through the cleat at intervals that will locate the pins in the center of each breadboard edge and two more at equal spacing in the table field. With this design, as long as the jig is referenced off the same edge as the tops and leaf are drilled, all the pins will line up even if the holes are not perfectly spaced (see measured drawing).

The drill guide is two-sided with through holes to guide the bit. It is clamped along one side of each top section and drilled through, then clamped to the side of the mating piece, referencing off the same edge, and then drilled through from the other direction. It is important to limit the drill depth to match the leaf pins. You want them to seat fully in the edge, but not so deep that they get lost inside the top. The pins and sleeves are simply tapped into their proper holes.

Assembly

This is where the frame and top begin to come together. The first step is to attach the leaf to the frame. 1/4" pivot holes need to be drilled into the two apron stretchers 5-3/4" to one side of the center point, and a line marked vertically down the stretcher face. The pivot point needs to be 1/2" below the top of the table but the top stretchers were milled to keep the top 1/16" above the frame, so the hole should be centered 7/16" down from the top of the stretcher and bored through.

Note that the top slides have been drill for pocket screws and mated with the apron slides as well. The design of the top slides allows for pocket holes using the standard 3/4" settings and will not interfere with the internal slide profile.

The top, minus the leaf, is set on a work surface face down and the frame centered on top of it. The two top slides on each side should meet directly above the joint between the top halves. Secure the top slides to the tops with 1-1/4" pocket screws only, no glue. Because these drive in at an angle, all the screws were just engaged with the top, then each secured. This helps prevent unwanted movement which would cause binding in the slides.

A pair of Bessey strap clamps are more than long enough to wrap around the 62" long top to hold it firmly together during this step.

The table assembly should be set on the legs and the tops tested for binding as they slide open and closed. Some drag is to be expected as the slides are bare wood at this point. The two top halves should move without too much binding. The slides will be waxed after finishing which will greatly improve the sliding action.

The folding leaf is installed next. It will require a cleat across the underside of the leaf stretchers to prevent it from falling out from under the table when stored. This is just a 2" by 1" by 21-1/2" long piece of wood screwed to the stretcher bottoms. Attaching this cleat 6" beyond the center of the stretcher on the opposite side of the pivot will not only support the leaf when folded, but also act as a guide, raising the leaf above the apron as it unfolds.

With the tops moved out of the way, the leaf can be attached to the frame. A 22-1/2" section of 1/4-20 threaded rod is used as the pivot rod. This is covered with sections of tube that hide the rod and act as spacers. A 30" section of plastic water supply line is inexpensive and fits the rod well. Two 1" sections are cut for spacers and a 15-1/2" section covers the rod between the pivot blocks.

The rod is threaded through one stretcher, a spacer tube slipped over it, then threaded through the first pivot block. The long tube is added next, the rod is then passed through the second pivot block, through another spacer, and then finally through the other stretcher. A washer and nut are added to each end of the threaded rod outside the two stretchers.

The table, expanded to include the leaf, is once again set upside-down on a work surface. Two stops are added to the underside of each half of the top to limit how far they can open. These are simply 1/2" diameter by 3/8” tall round nylon spacers screwed in near the inside edge of the tops. They will stop the top from opening past the pivot stretcher. And can easily be removed to allow the tops to be removed if the table needs to be moved.

Apron top ends are mounted to the outer ends of each table half, capping the ends of the top slides. These keep the tops from closing beyond the center line, and dress the exposed ends of the slide profiles. They are secured in place with a pair of pocket screws on the inside face and one screw on each outer corner securing them to the top slides.

The final step is to plug these screw holes and all of the exposed pocket screw holes, then trim and sand the plugs smooth. The table is now ready for finishing.

Finishing

Red oak has visible open pores. The look is what was wanted, but as a dining table, the pores need to be fully sealed to present a smooth surface that is impervious to stains. Grain filler was applied to the entire top surface prior to finishing. Water-based filler was used as I chose to use a water-based finish on this table. The filler is applied to the surface very much like grouting tile; it is applied with a squeegee, working diagonally across the grain and working it into the pores.

Any excess is removed and the filler is allowed to dry thoroughly. It is then sanded smooth and a second coat applied if needed. The tops and leaf were removed for applying the top coat. Six layers of finish were applied, sanding between each coat.

Note: Mask off the mating sections of both the apron slides and top slides during finishing to prevent the finish from building up and possibly compromising the fit between the slides.

Once the finishing is complete and fully cured, three to four coats of paste wax are applied to the mating faces of the slides, buffing between coats. This protects these surfaces and helps them slide smoothly during operation.

The butterfly leaf dining table is now complete and ready to serve for generations to come. It matches perfectly with the dining chairs built in Episodes 5 and 6 of Woodcademy Season 1.

Dining Table Cut List

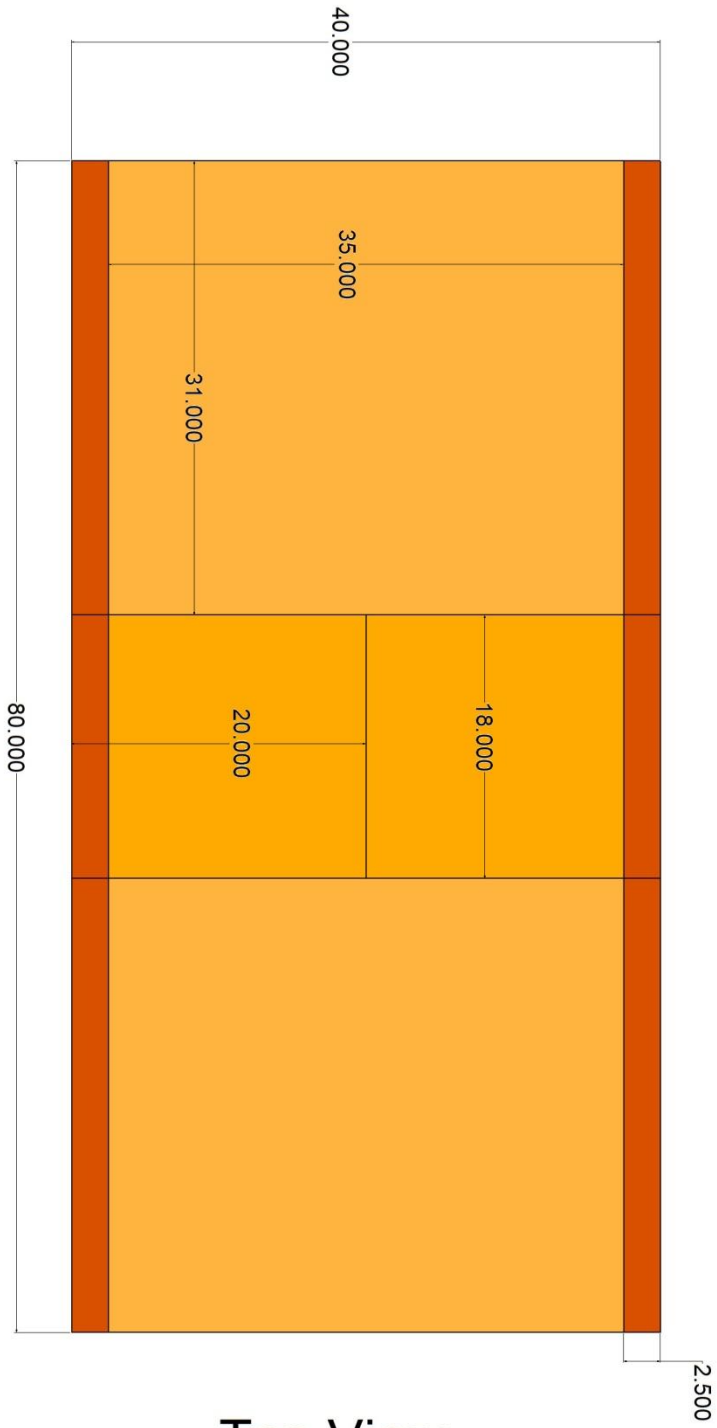
All measurements in inches unless otherwise stated

Base:

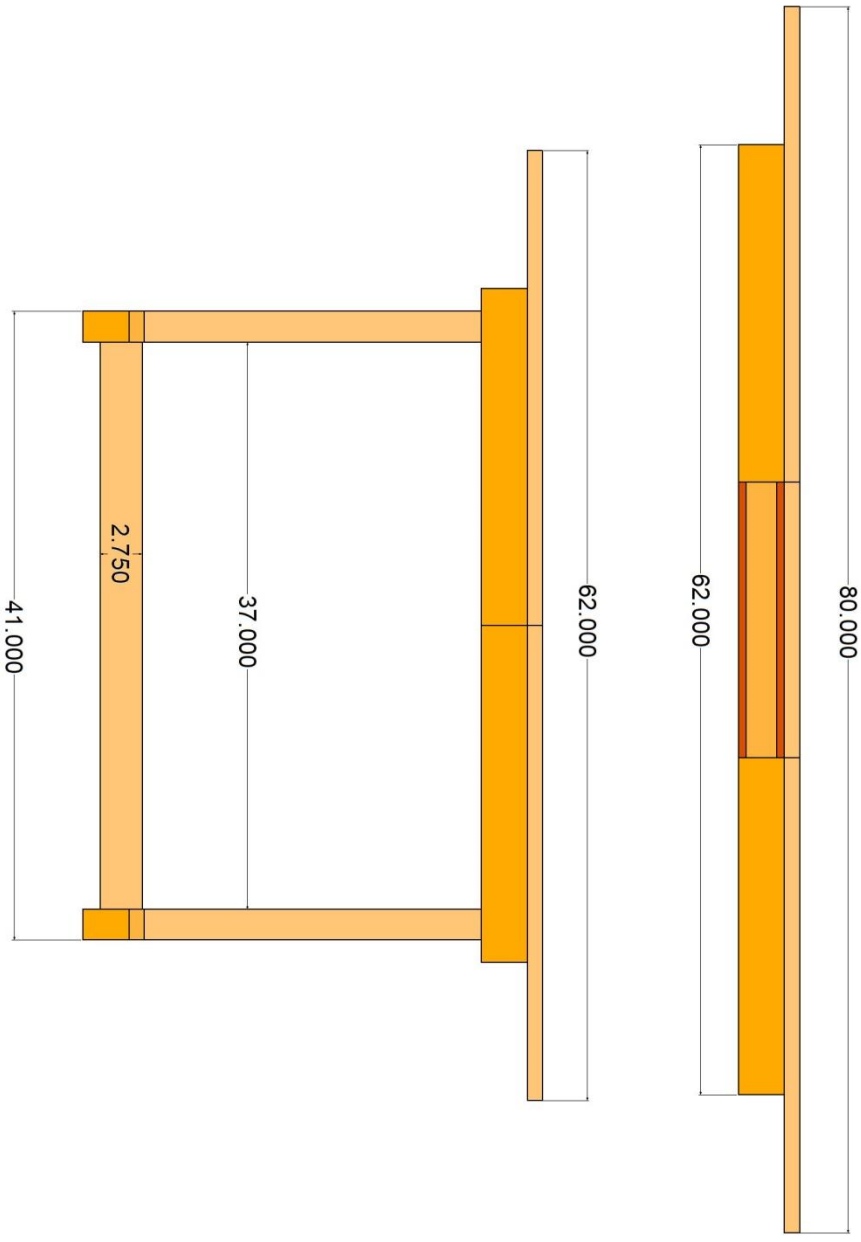
Feet (2)	24 x 4 x 2
Leg Posts (4)	23-1/2 x 2 x 2
Top Rail (2)	24-3/4 x 3 x 1
Stretcher (1)	39 x 2-3/4 x 1
Leaf Stretchers (2)	24-3/4 x 3 x 3/4
Apron Slides (2)	42 x 3 x 1
Leaf Support (1)	28 x 2 x ¾
Leg Slats (8)	23 x 1 x 1

Top:

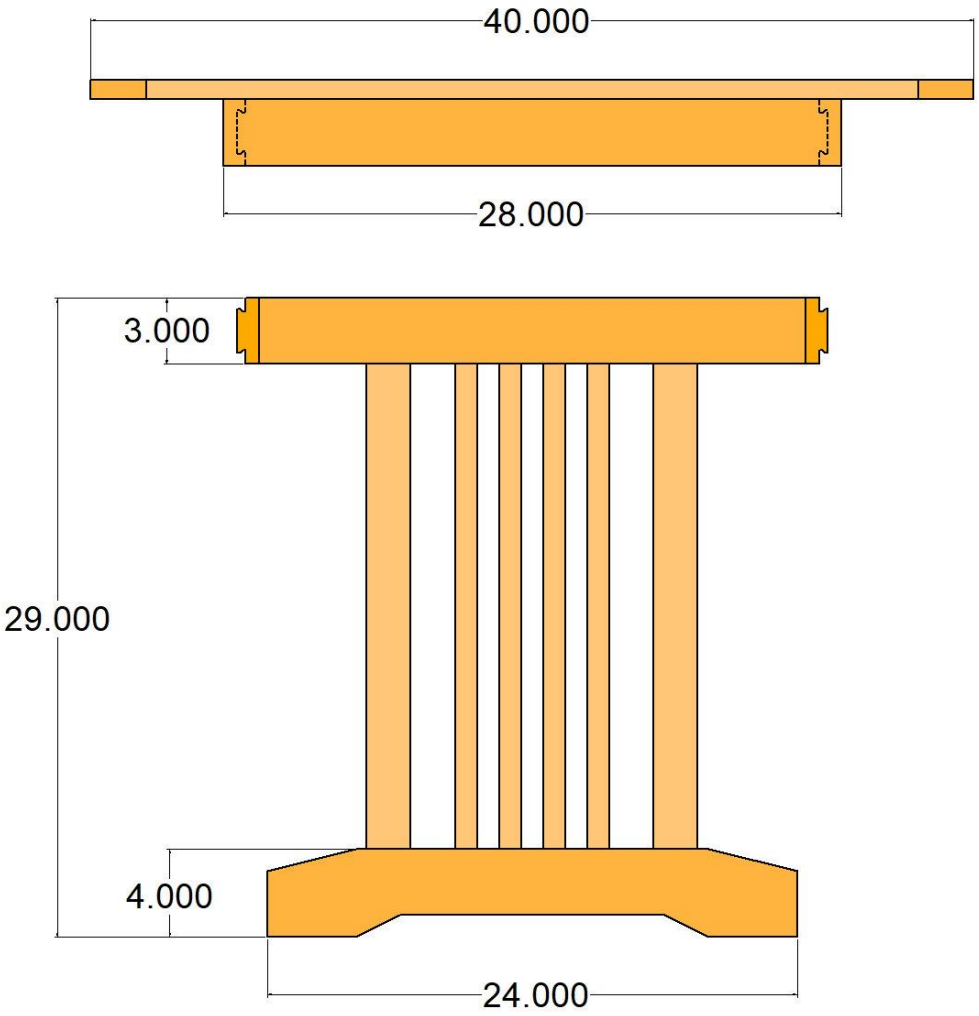
Main Top (2)	35 x 31 x 3/4
Top Breadboard Edges (4)	31 x 2-1/2 x 3/4
Leaf Sides (2)	17-1/2 x 18 x 3/4
Leaf Breadboard Edges (2)	18 x 2-1/2 x 3/4
Top Apron Ends (2)	28 x 3 x 1
Top Apron Slides (4)	21-1/8 x 3-1/8 x 1



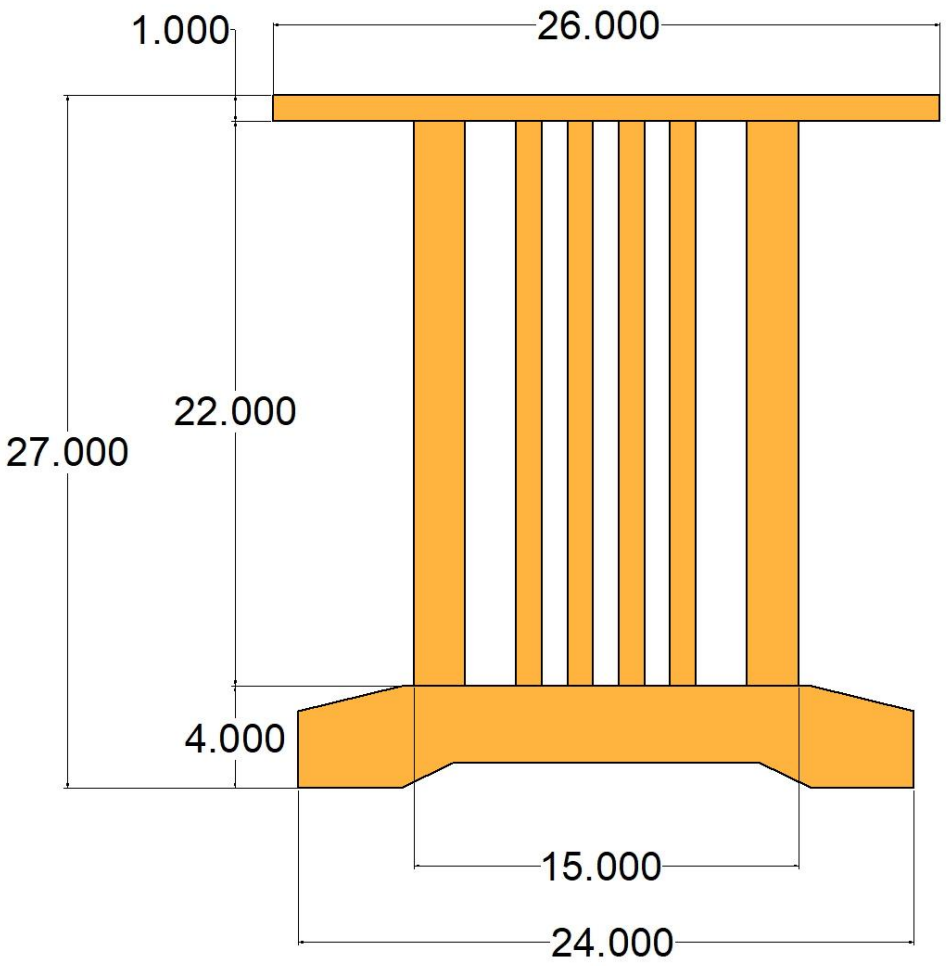
Top View
Extended



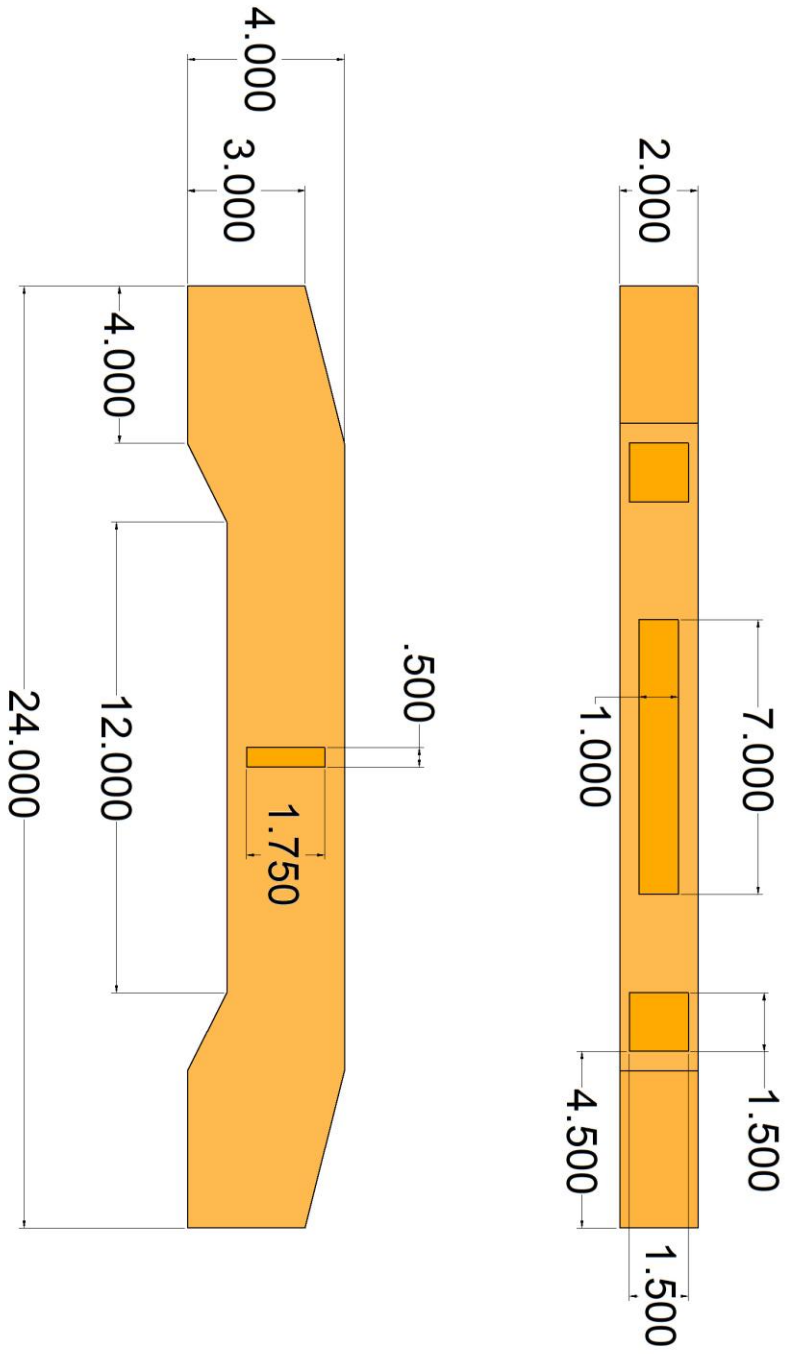
Side View



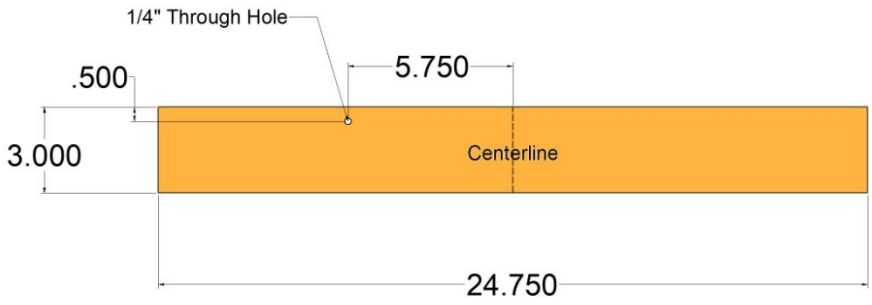
End View



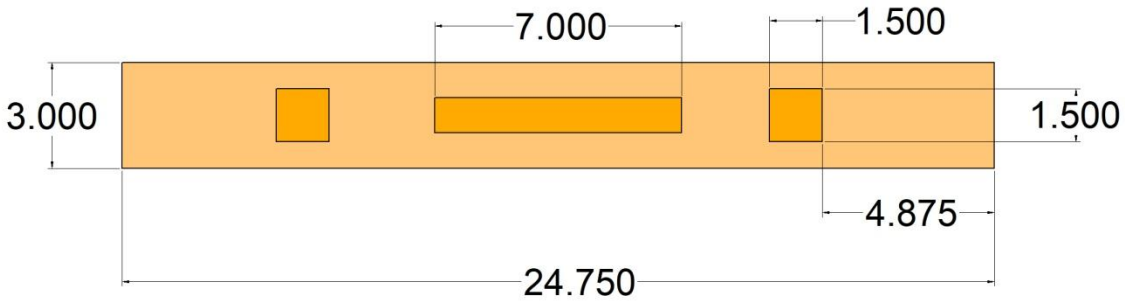
Leg Subassembly



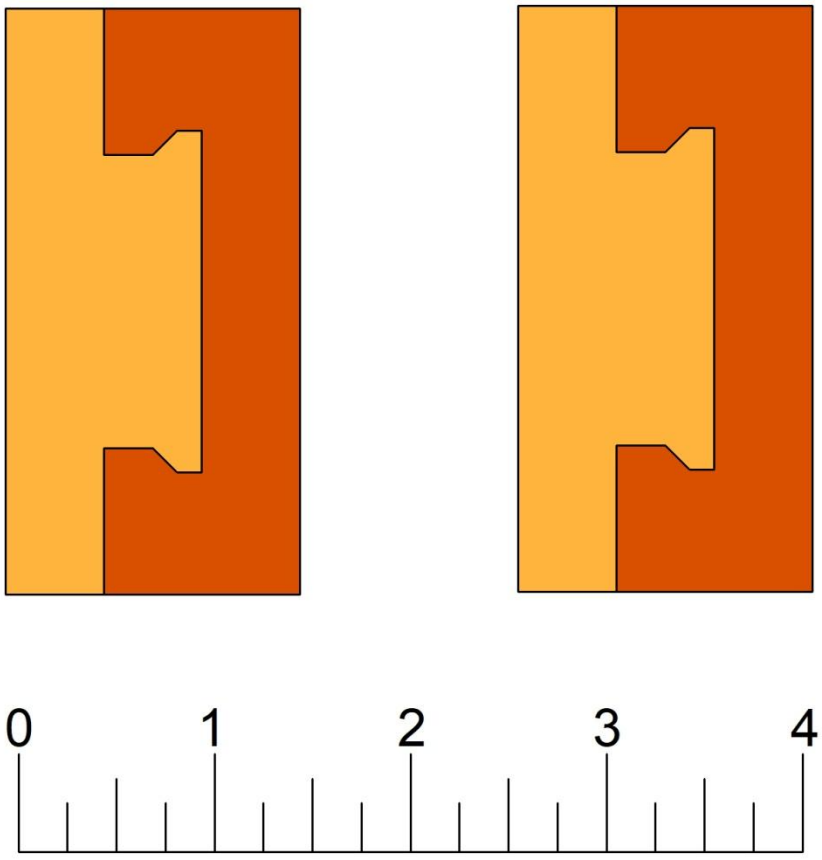
Foot



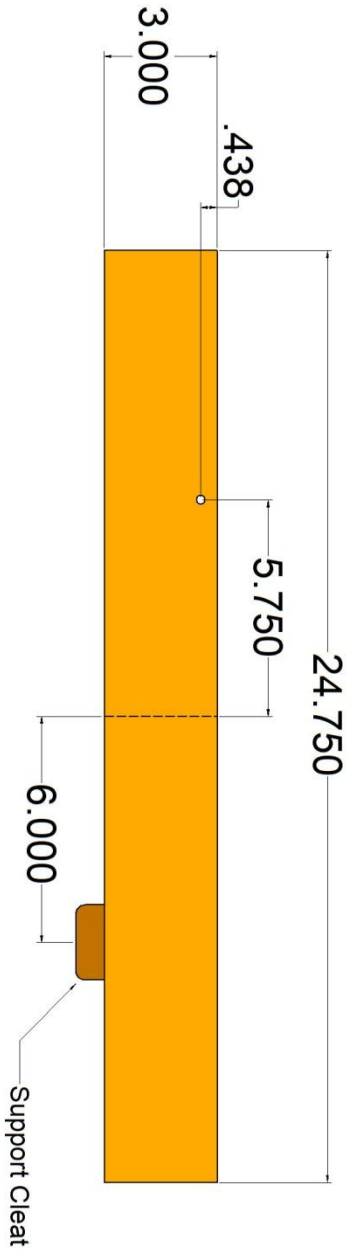
Leaf Stretcher



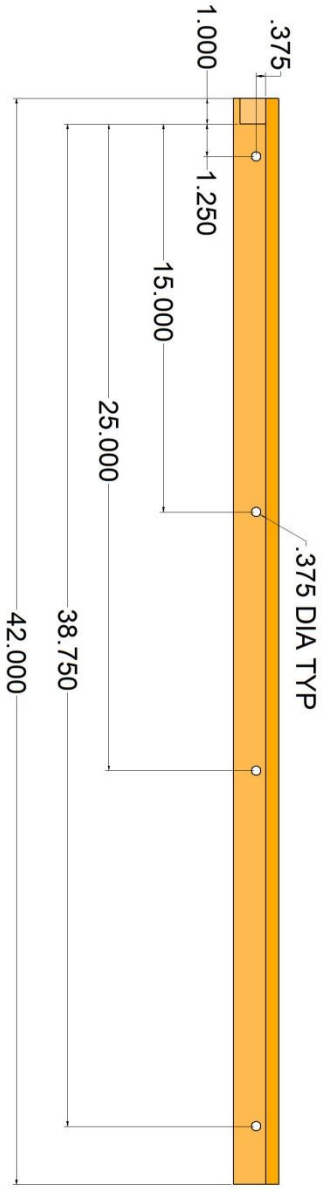
Top Rail



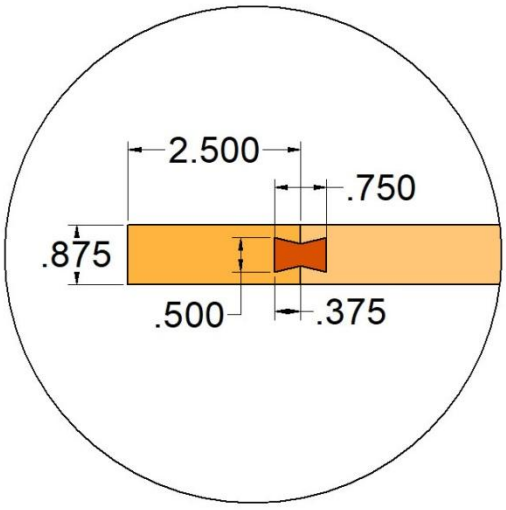
Slide Profile Template



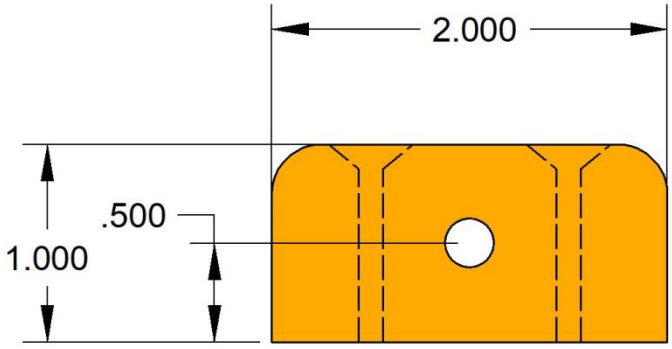
Leaf Stretcher



Leaf Pin Drill Jig



Butterfly Key Detail



Pivot Block

Sources

Bessey- REVO Clamps, Bar Clamps, Strap Clamps

MicroJig- GRR-RIPPERs, GRR-RIP BLOCKs, Dovetail Clamps

Advantage Trim and Lumber

SketchList 3D Pro

Osborne EB-3 Miter Gauge

M-Power Tools CRB7 Router Base

Hidden Hinges

Table Leaf Pins

Nylon Spacers

Water Supply Line

Our sponsors provide the support that allows us to bring you free programming and plans. Please be sure to visit their websites and let them know how much you appreciate it.