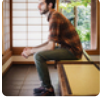




How to Make Asanoha Kumiko - Japanese Woodworking



by JT Woodworks

Japanese woodworking is mostly done with softwood and kumiko is no exception. Here I'm using basswood which is a great starting point to learn kumiko. Its soft fibers and forgiving nature allow you to work it quite easily and hide those unforeseen mistakes.

Kumiko is an ancient Japanese woodworking tradition and this asanoha pattern is certainly the most popular. This instructable breaks down the four main parts of this pattern into small, digestible sections. The four parts that make up this pattern are the grid, diagonals, these pieces that make up these diamonds, and short diagonals.

You will need kumiko jigs to make this project:

You can [buy a kumiko start kit here!](#) It includes all the

jigs and pieces you need to make this pattern. The only thing you need to provide is a chisel.

You can [buy kumiko jigs here](#) or find out [how to make them here](#) and [watch a video on them here](#).

Tools that I used:

This can all be done with chisels and a handsaw. The table saw simply speeds things up.

Sawstop table saw - <https://amzn.to/2ILhw5L>

Chisels - <https://amzn.to/2ILhw5L>

Japanese handsaw - <https://amzn.to/2ILhw5L>

<https://www.youtube.com/watch?v=NSYw87j2kV8>

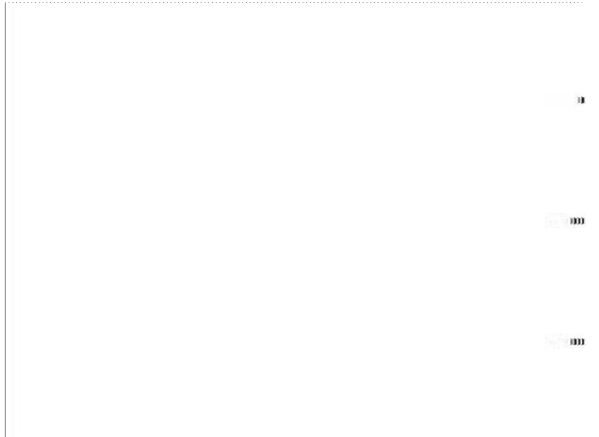
Step 1: The Grid

The stock I'm using is 1 1/2" by 1/2" and we'll be making a 6" square pattern. Rough cut six pieces to just over 6" long and trim them to exactly 6" using your table saw and crosscut sled with a stop block.

The next thing to do is cut the half lap joints that will tie this grid together. Start by laying out where you need to cut the half laps. One will go directly in the center of these pieces and another on either side of

fit. Now we can assemble the grid.

the strips 1/2" in from the edge. Use a marking knife to get sharp lines and mark out the width of the half laps which are 1/2" wide. We do this so we can line up those marks with the table saw blade and have it cut the joints since it too is 1/2". Adjust your stop block accordingly. Since we're using 1/2" wide strips, our blade needs to be sticking up 1/4" to cut halfway through the material. Start slightly lower, testing the fit, and slightly raising the blade until you get a perfect





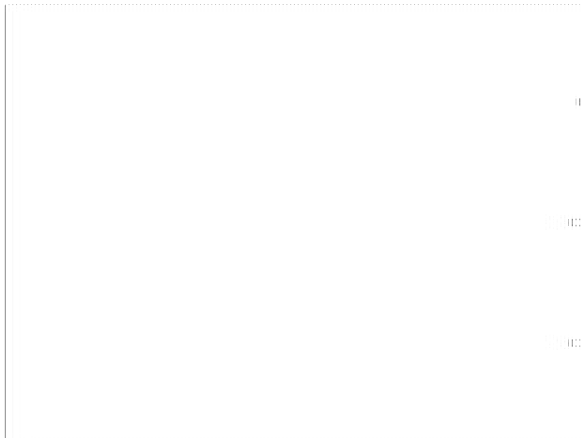
Step 2: Diagonals

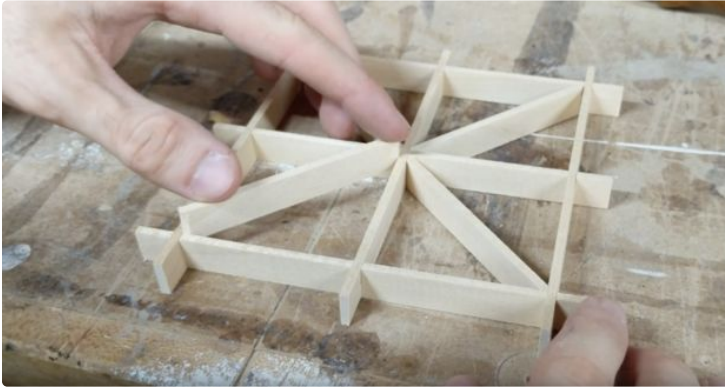
Roughly measure out the length needed for these four diagonal pieces and cut them slightly oversized. Now we can take out our kumiko jigs and cut the 45 degree angles needed on the ends of the pieces.

Each end of these pieces gets a 45 degrees cut resulting in a 90 degree point. Adjust your jigs to sneak up on the proper length needed for a snug fit in

your grid.

Find out [how to make these jigs here](#) or [watch a video here](#). and also in the description. You can also [buy these jigs here](#) if you didn't want to make them yourself.





Step 3: Diamonds

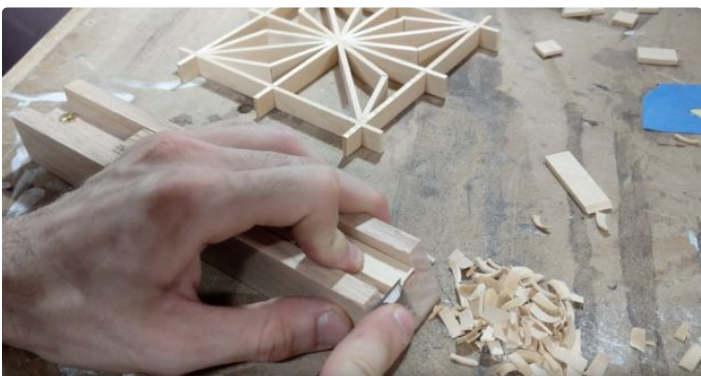
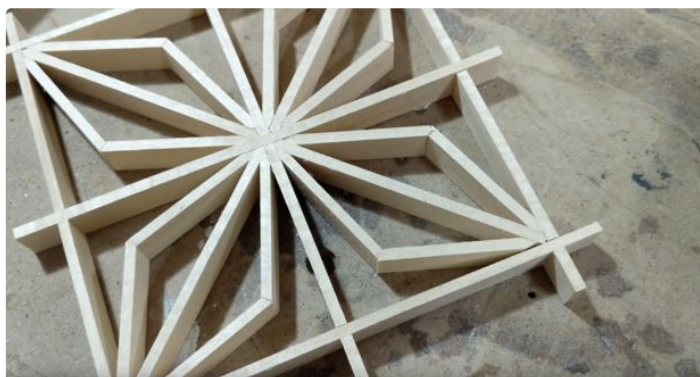
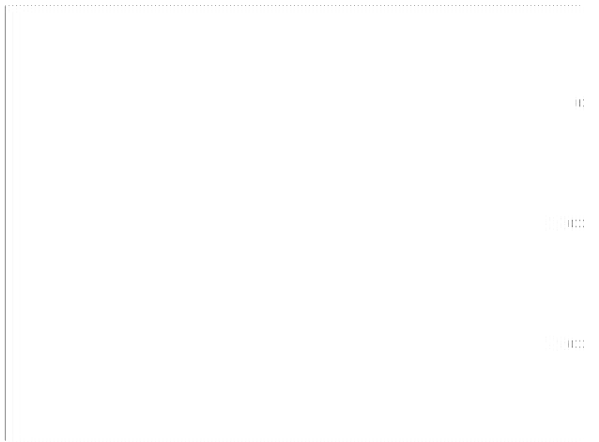
There are sixteen pieces that make up this section and these are the pieces that intimidate me the most. But with a firm understanding and a bit of patience, you can get a nice, snug fit.

Start with your 67.5 degree jig cutting a point on one end of each piece. This is the end that will fit in the corner of the diagonal pieces we just added and the grid. The opposite end of these pieces get a 22.5 degree cut. This is the area where patience is required to achieve the proper length. Dry fit two of these pieces in place and ideally there should not be a gap between the 22.5 degree bevels and corners.

There is still one more cut needed on these on these

pieces and for that we need to move the stop block on our 22.5 degree jig, in just the smallest amount. Here we have to remove two thirds of the pointy end of the bevel we just created to create an asymmetrical point. This might take some trial and error so start taking off less material than needed and sneaking up on the fit.

If you haven't noticed by now that's the name of the game when it comes to kumiko. Sneaking up on the perfect fit. These two pieces are fit into place with the one third, smaller of the asymmetric bevels meeting each other.





Step 4: Small Diagonals

These small diagonal pieces are cut just like the larger ones in step 2. Rough cutting your pieces to length and using your 45 degree jig to cut points on the ends of all pieces and, you guessed it, sneak up on a nice snug fit.



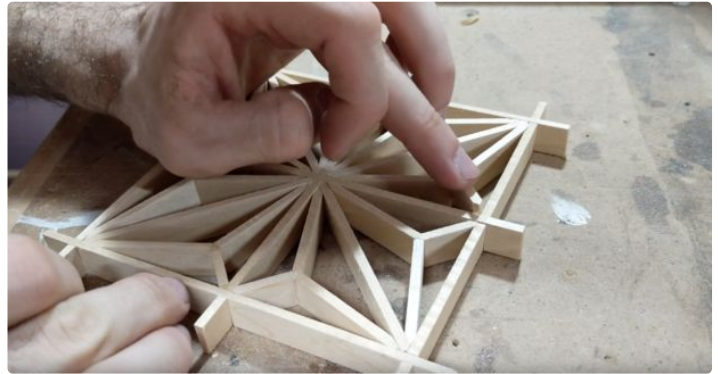
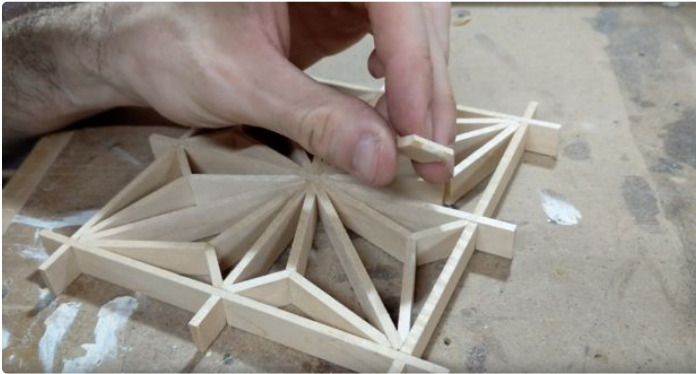
Step 5: Finishing Touches

With that the pattern is completed. At this point I like to take everything apart and add a small dab of wood glue to each joint to secure all the pieces. You can also do this during the process but I like to make sure everything fits properly before it's permanently attached.

as there might be some uneven joints. Start with 220 grit wrapped around a wooden block and move up through the grits. You can take this as high as you'd like. Just make sure you do both sides.

And with that it's all done.

The final thing to do is sand the faces of this pattern



Step 6: You're Done!

I hope this gave you a bit of insight on how kumiko patterns are made and inspired you to try it out yourself. If you have any questions, leave them down below and I'd be happy to answer them. Thank you for sticking around and I hope to see you in the next instructable!

[Kumiko jigs for sale here.](#)

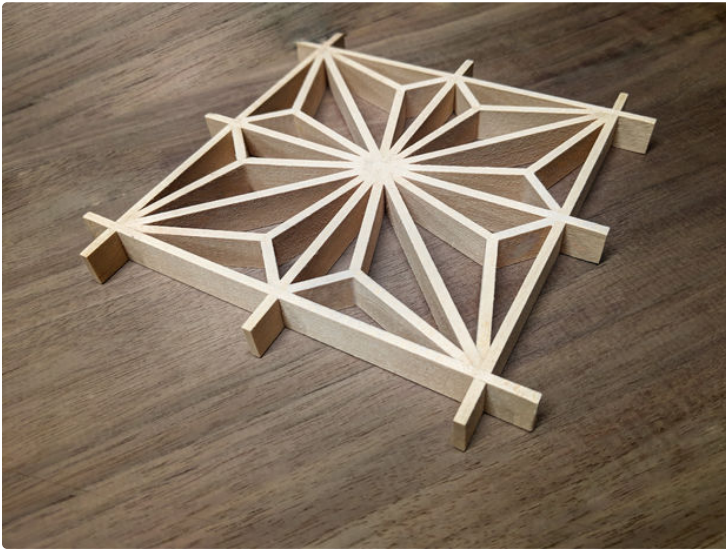
You can [watch the video here on how make this pattern.](#)

You can also find me on [Youtube](#)

[Instagram](#) to see what I'm currently working on

[Facebook](#) and [Twitter](#) for behind the scenes shots

Note: This post includes affiliate links. Thank you for your support!



"Japanese woodworking is mostly done with softwood and kumiko is no exception. Here I'm using basswood which is a great starting point to learn kumiko."

Except using basswood is an exception. Basswood may be a 'soft wood' but it is not a 'softwood'.



True but it's a softwood in my book. It acts like one and works like one. Semantics



I am very much intrigued. Would you mind elaborating a bit on the pattern? Is there "only" this one? Are there different ones or is it basically one pattern just in different sizes etc? I tried to google it, but couldn't really find anything. And a word about basswood? Is it easy to get? Thank you, and really great instructable!!



Oh wait, i think I got it. asa-no-ha is the name of this particular pattern, right? I found some other cool designs by just looking up "Japanese wood patterns". One problem solved. :-) Now where do I find basswood?



A search for "kumiko" in the search box at the top of this page came up with a link for various patterned coasters (trivets?) <https://www.instructables.com/id/Japanese-Latticework-Inspired-Kumiko-Coasters/>

They are laser-cut as one piece but it would be easy to adapt them to a more "traditional" method



Thanks for providing that link! Those are great examples of various patterns and the meaning behind. I just bookmarked it



Yes, asa-no-ha is the name of this particular pattern. There are hundreds, if not thousands, of other types of kumiko patterns. Kumiko (translated to lattice) is the name of this type of woodworking and it comes from Japan. You might be able to find basswood at your local lumberyard. Call them in advance to see if they carry it. You don't absolutely need basswood to make this. Any type of softwood would work. You can probably find poplar at Home Depot or Lowe's and a 2x4 might even work. Just experiment and have fun.



Thank you! I have a starting point now and can't wait to get started. Thank you so much for your help, really appreciate it!



Balsa works good too, you can pick up balsa at your local model car_airplane_railroad_craft shop. Home Depot and Lowes have small sized boards to use for smaller projects. My local HD store has Maple, Red Oak, Poplar, and Black Walnut in 1/8", 1/4" and 3/8" sizes, so there are plenty of places to get wood. Granted, those are hard woods, but if you call around to your local woodworking shops you should be able to find Basswood if that's what you're after.



Balsa is a great option!! Completely forgot about that. I wouldn't recommend hardwoods for starting out with kumiko. They are much more difficult to work with. Basswood can also be found at Michael's craft stores. They sell carving blocks at the one in my area (about 4" x 9" x 2" I think) and that's what I started with.



I think basswood is an excellent choice. I have several window blinds made using basswood, one is six feet wide. They are over twenty years old and none of the slats, not even one, has warped at all. Very stable wood.



Painstakingly perfectly executed. Great precision you have. Excellent Instructable. Really enjoyed it. -- Kink



Thanks Kink! I'm glad you enjoyed it. The jigs make it a much simpler process than you might think



Nice clear instructions for an interesting little project. Thank you.



My pleasure! I'm glad you enjoy it