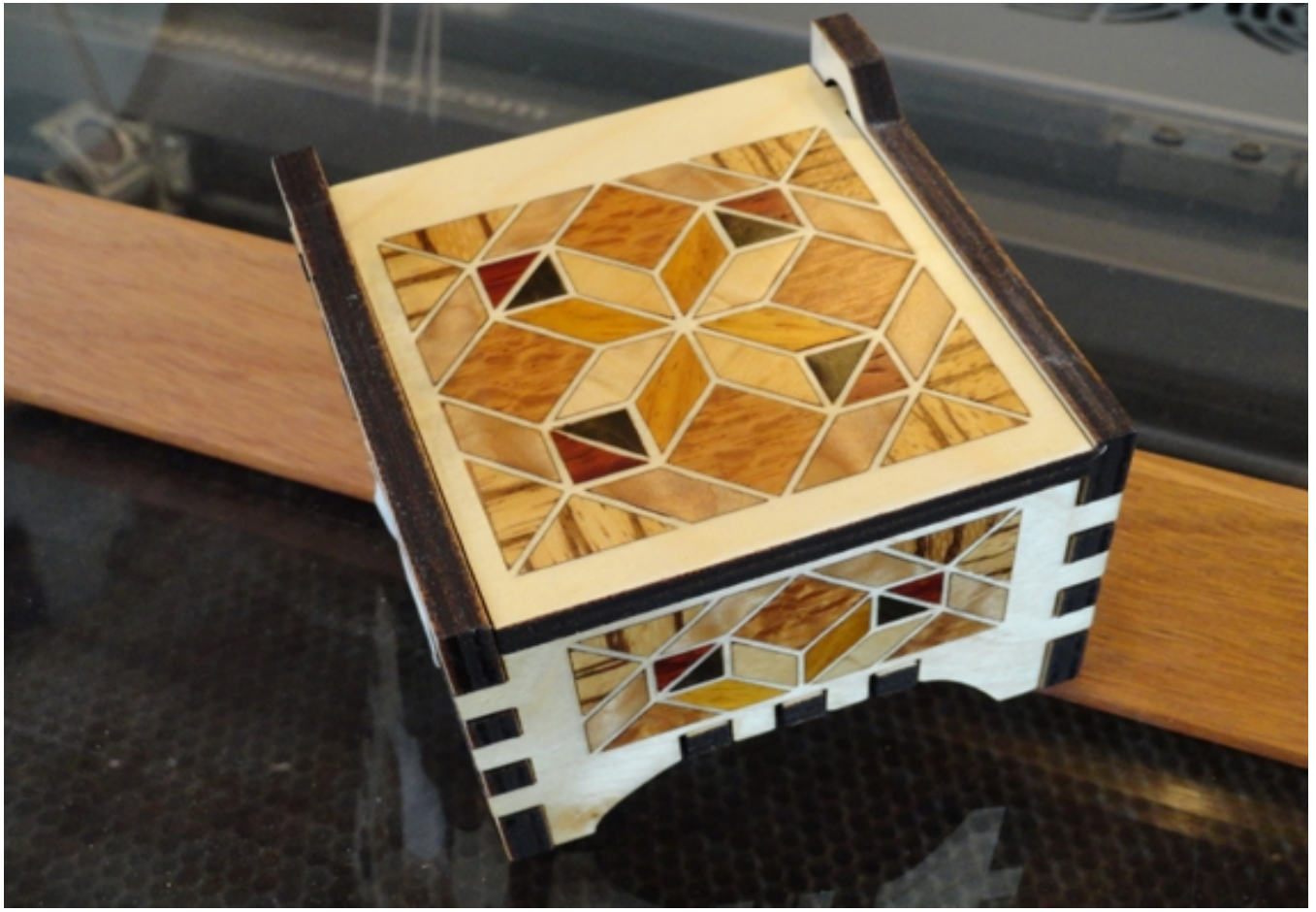
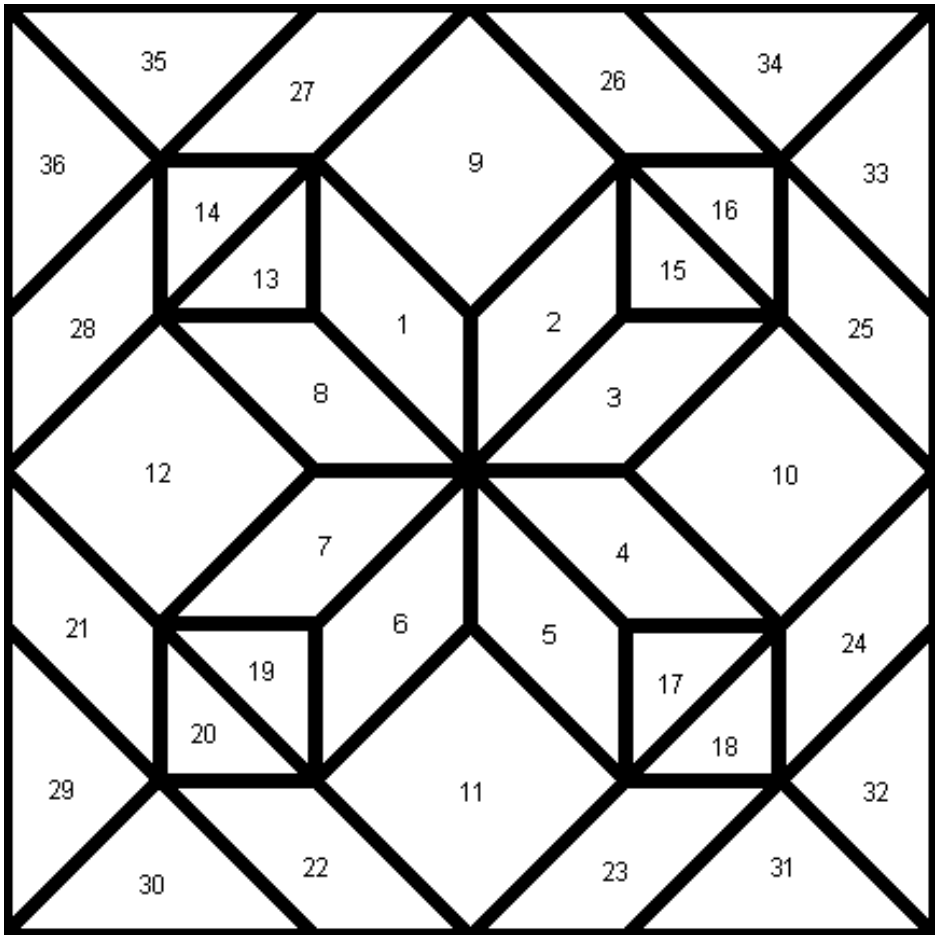
How to make a box with Inlay

by Terry Beauchamp

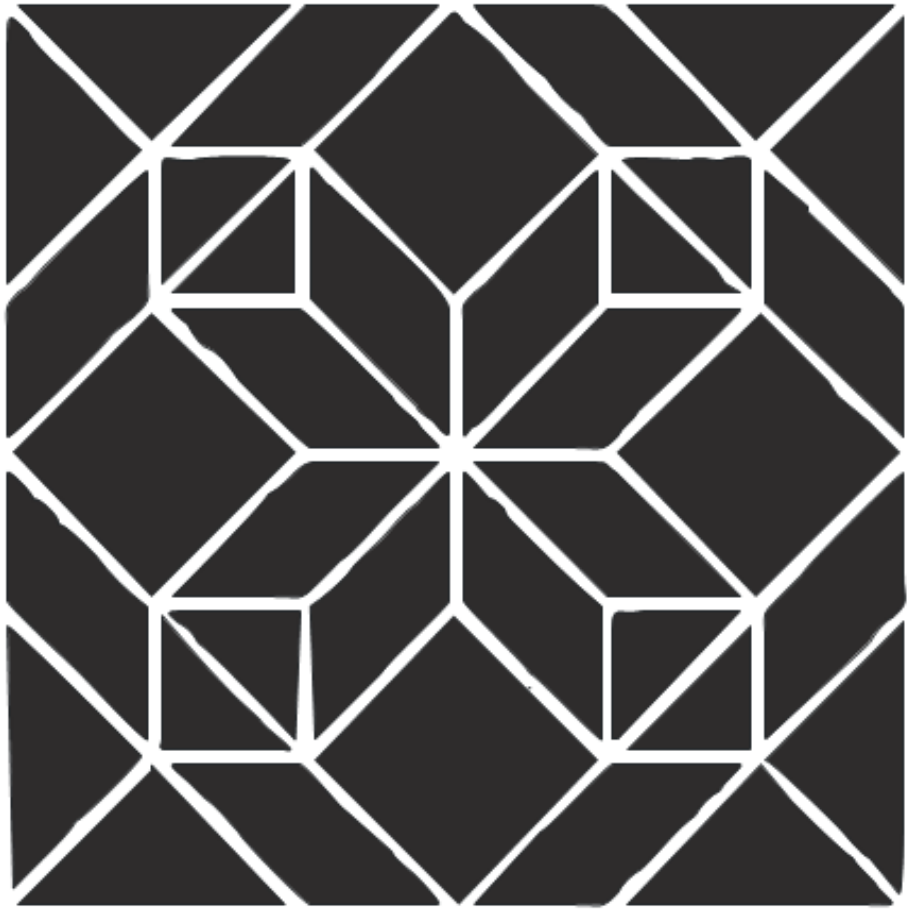


Choosing the graphic



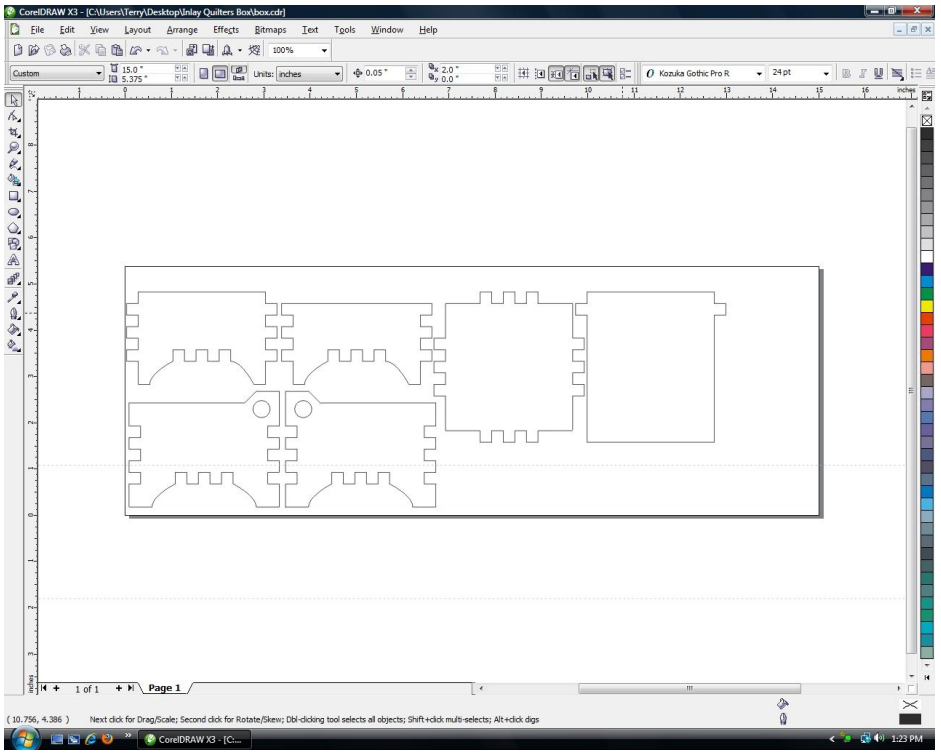
- It starts with an idea and a little computer know how.
- You find your graphic, now you have to convert it to a usable form (bitmap) and clean it up so you will be able to break it apart or ungroup it later for the inlay. (this is a whole other topic on it's own, to save time – I've already cleaned up this graphic).

The cleaned up graphic



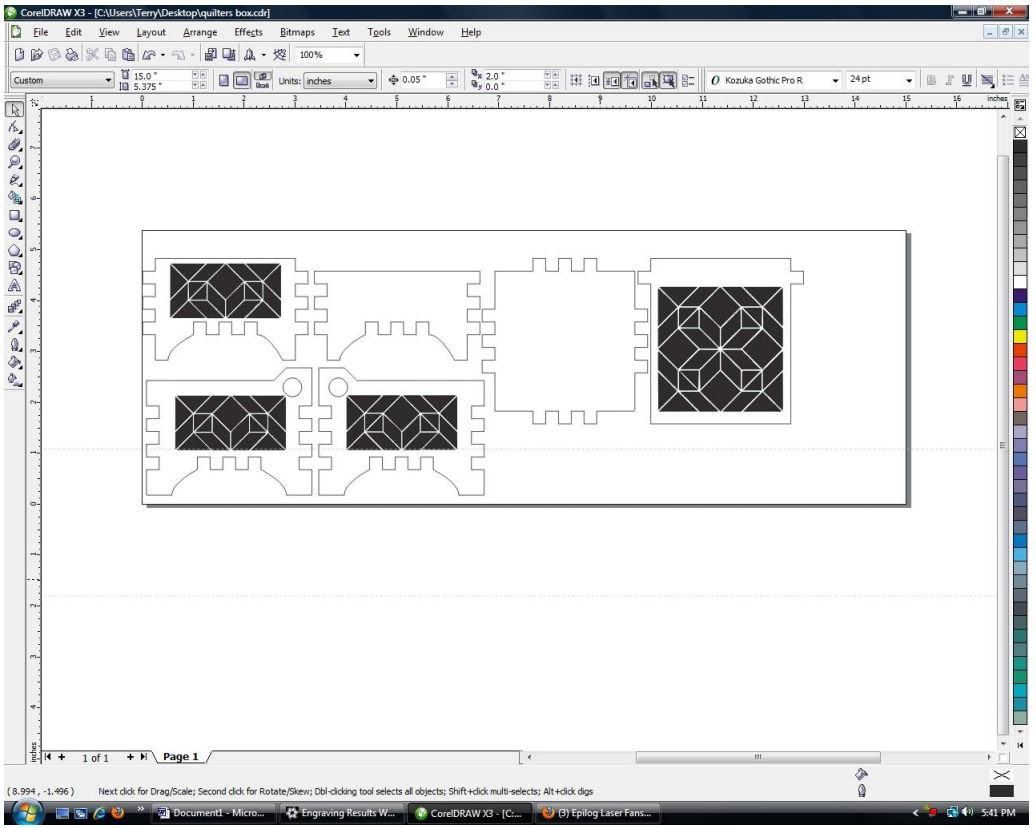
- I could have spent more time on this graphic smoothing some of the lines, but it is only going to be a 2 1/2” big and it's a personal choice on how much time you want to spend on the graphics. I like a little rustic charm for this quilter's block.

Open box to CorelDRAW



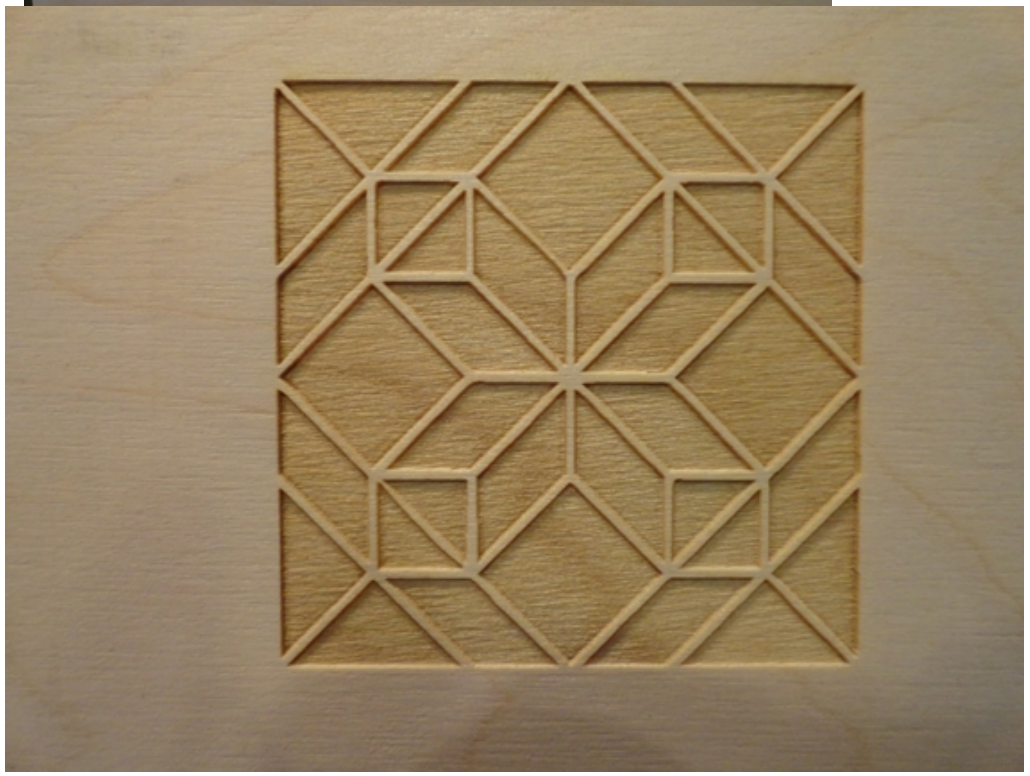
- Open the box pattern in CorelDRAW (to download this pattern go to: http://www.epiloglaser.com/sc_musicbox.htm)
- At this point you can remove the graphics that are on the music box and add your own.
- Save Your Work!
- I save two, one that I'm currently using for the new project and one as my blank master. (as long as you do not move these boxes around, you can use your master for your final vector cutting.)

Adding the graphic to the box pattern



- At this point you can remove the graphics that are on the music box and add your own.
- Import the graphics you want to use and scale the size to fit the box.
- This is how my project looks so far.
- Be sure to SAVE your project!!!
- At this point, your layout is done and you are ready to run the raster ONLY portion of this job. I run it twice since the part you are removing will be filled with veneers.

Raster your work



- I run this 2 or 3 times so I have the depth I need for my veneer for the inlay. Use the settings that are right for your machine and wattage.
- Once this is done, you do not need to do any cleaning of anything just yet.
- Set this board aside...
- We are now going to get ready to inlay, but first let me talk a little bit about veneer...

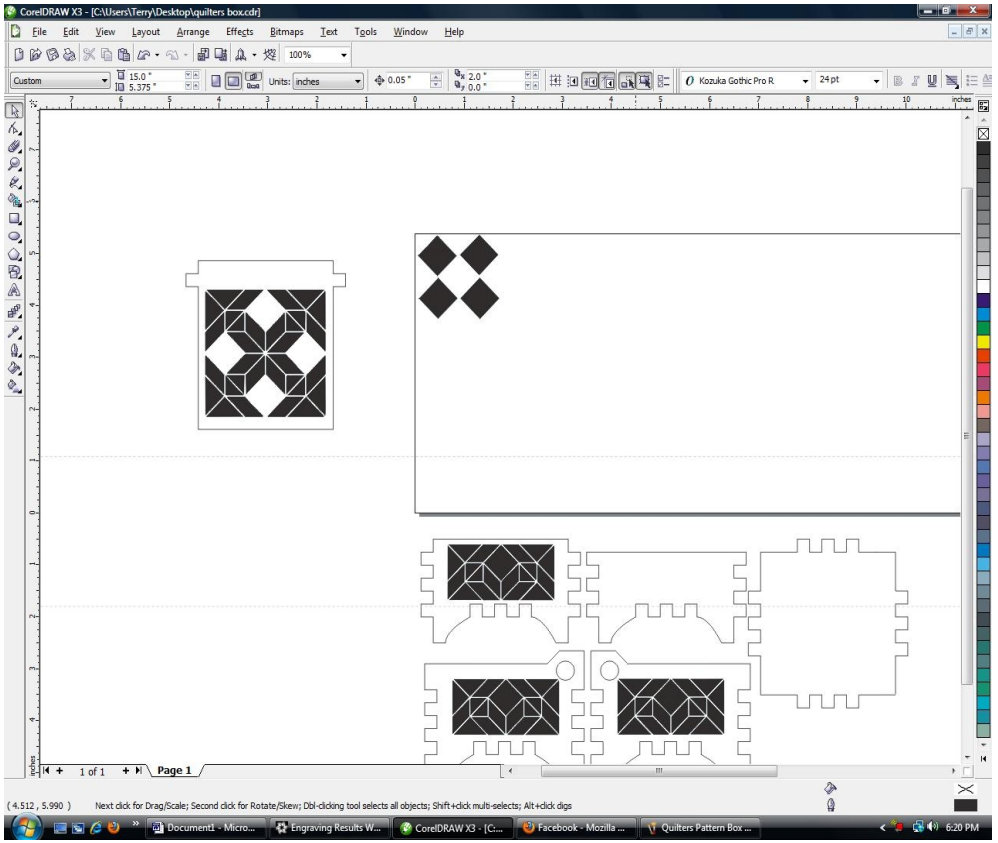
Veneers

- Since I do a lot of Inlay, I chose to take the time and make myself a veneer board. What it is, is a collection of some of the veneers we have, one side is unfinished and the other side is finished. This way it makes it easier for me to choose a particular wood for inlay for any project I have in mind. Wood has may beautiful qualities and some can be more special after finish has been applied.
- I'm not suggesting everyone should do this, it just makes it easier for me.

Choosing the Veneer

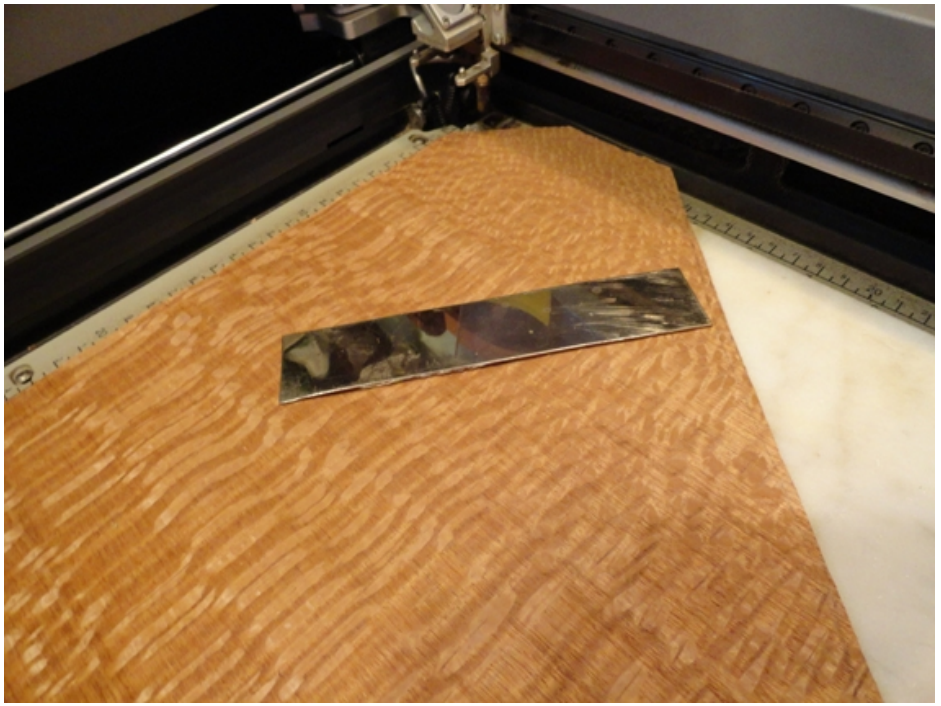
- Veneers are very thin sheets of wood, come in many sizes and colors. Some come with paper backs or adhesive backs (like peel and stick), these are not what I use – I use just plain wood veneer.
- I've chosen 7 veneers for color variation (just like a quilt). From left to right they are: vermillion, birds-eye maple, poplar burl, naria, blister maple, zebra wood and blister elm.
- Below, is me holding a piece of veneer to show just how thin it is.

Vector cutting the veneer



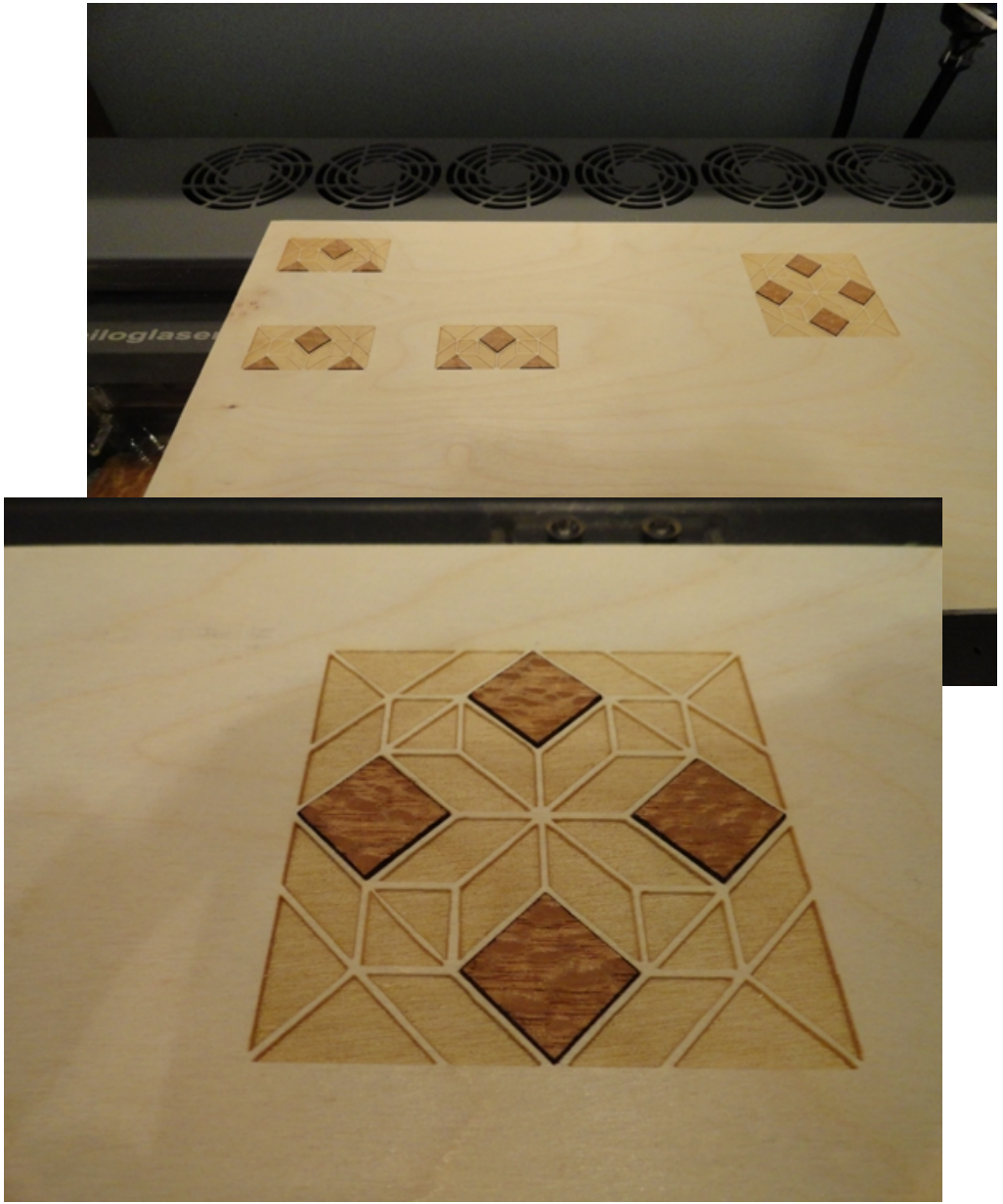
- I use the same box layout as we used earlier, only this time I don't save this – you can if you want, just be sure to give it another name.
- I pull all the boxes off to the side of my work surface. This is where you ungroup your pattern, so you can select one piece at a time.
- As you can see I now have 4 squares on my work surface, because they are going to be cut from the same veneer. Since this is a blister veneer, you don't have to pay attention to the grain of the wood (that is very important if your wood has grain lines).
- For the 4 squares, you need to make sure you have clicked at the bottom right of CorelDRAW to outline your pieces – I choose .001 for my vector cut to recognize. (You'll need to do this for every piece that you want to cut out!)

Preparing the veneer to cut



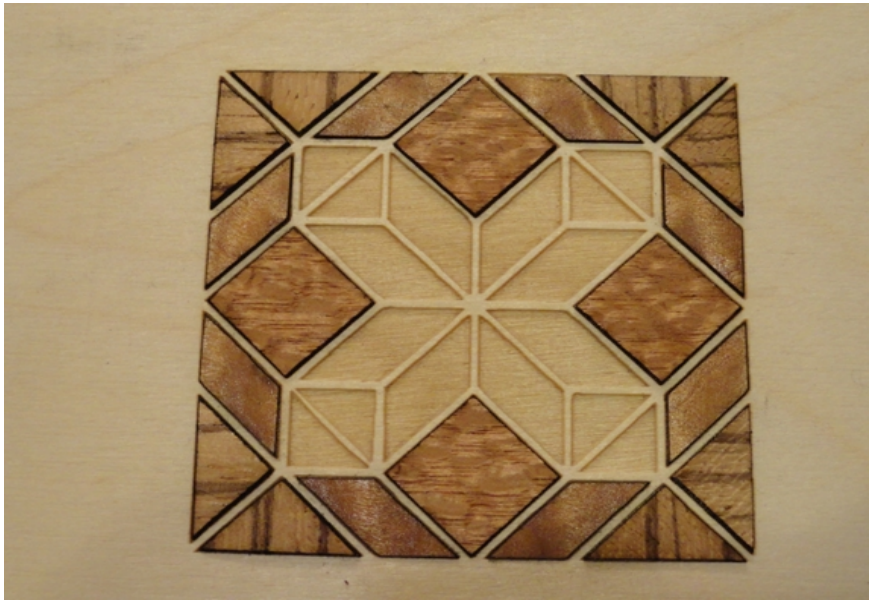
- I cut my veneer on a marble slab and hold it down with something flat and heavy. With my blower on, it wants to suck my veneer out with the smoke or lift and move – and this is also why I don't cut very many pieces at a time, once they are cut out, they are small and light weight and sometimes migrate.
- Okay, we are ready to make our cuts!!!!
- For veneer cutting, you'll have to experiment with your settings. We have a 75W and the settings I use are 16s 12p 500freq. I found that the lower speed and power, I end up with a closer fitting piece.

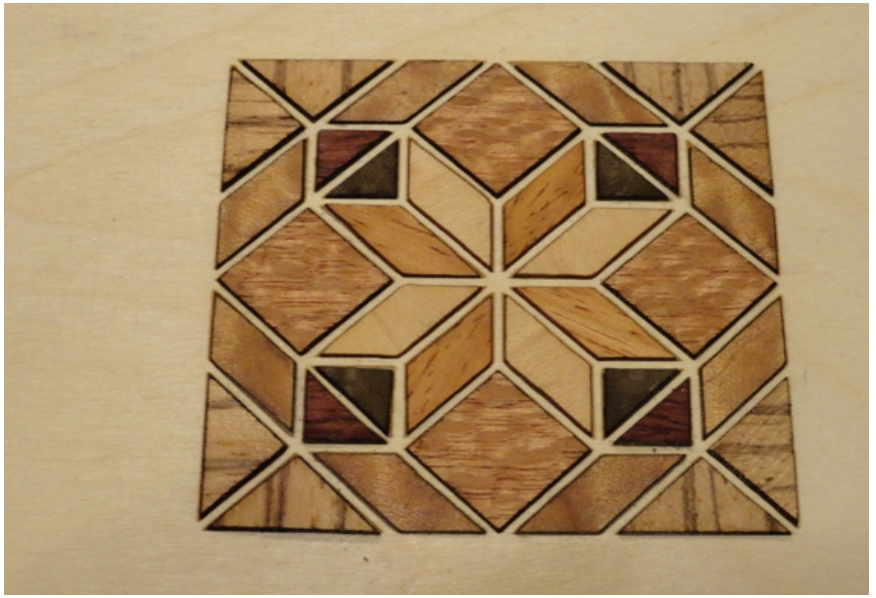
First pieces cut out and in place



- Now is the perfect time to check your work and see if the pieces need to be altered.
- Since I'm happy with this fit, on to the next.
- I do not glue at this point, but you can if you want to. I wait to make sure I'm happy with all the colors and fit. If your fit is really close, but not quite close enough you can do one of two things: 1) rerun the piece over again or 2) after all the pieces are glued in place and sanded, use wood filler. I prefer option 2 – looks really clean this way.

Still vectoring... and finish





- The top photo shows my progression and my attention to detail. Remember earlier I was explaining about veneer and grains, well the corners were done with zebra wood and it has obvious stripes. I wanted the stripes to meet each other. How to accomplish this is not hard. Set your veneer in your laser with the stripes running from the top to the bottom. In CorelDraw when you add the triangles, turn the shapes so the bottom of the triangle is at the top and your point is pointing to the bottom.
- The bottom photo shows all my pieces cut out and in place – I like it!
- Now on to gluing... and gluing and gluing

Glue

- This is the glue we use and it's pretty fast drying, you have to hold it for maybe 30 seconds. It's also gap filling and that is really great. Be careful, I can't tell you how many times I have glued my fingers together or to my wood pieces – not good! To make it easier use tweezers or a good dental pick!
- We've tried wood glue, but it is really thick and after you glue your piece in place, you need to weight it down until it dries

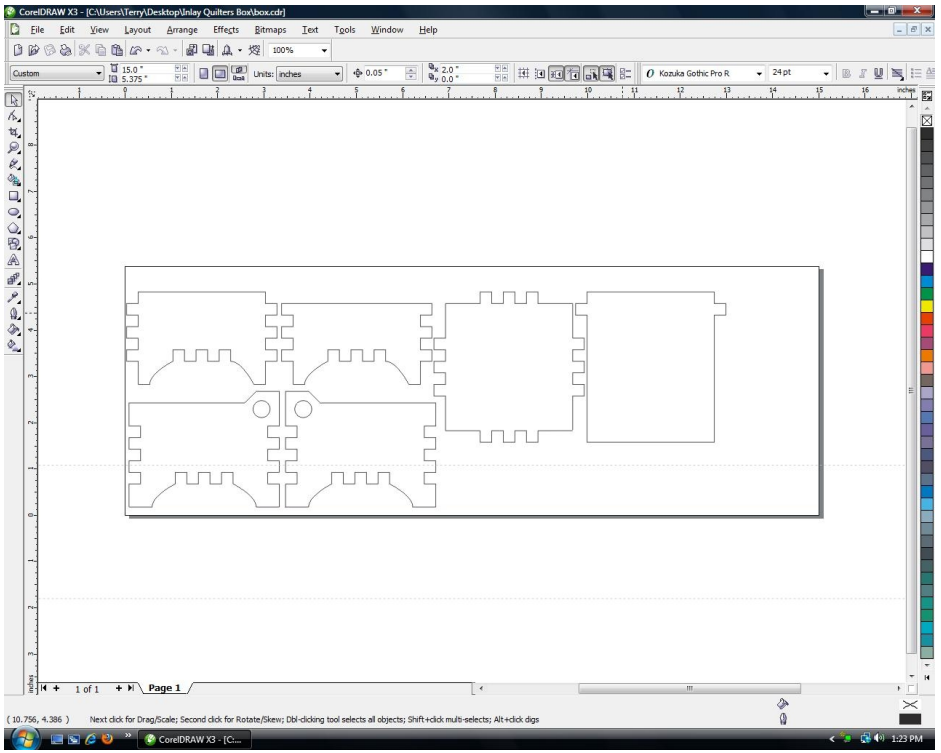
Sanding

- Sand the veneers flush with the project board. At this time, check the veneers for any chip outs – you still can repair and sand – and check for any glue failures and reglue.
- If you want, now is the time to use wood filler, let it dry and sand.
- If your happy with the project, on to the next step

Spray Finish

- We prefer to do the finish before we cut out the box, makes for easier clean up!
- You can already see the colors in the veneer pop!
- We also take the time to finish the back side so when your ready to assemble the box the inside of the box is also finished.

Open Your Master Box Layout

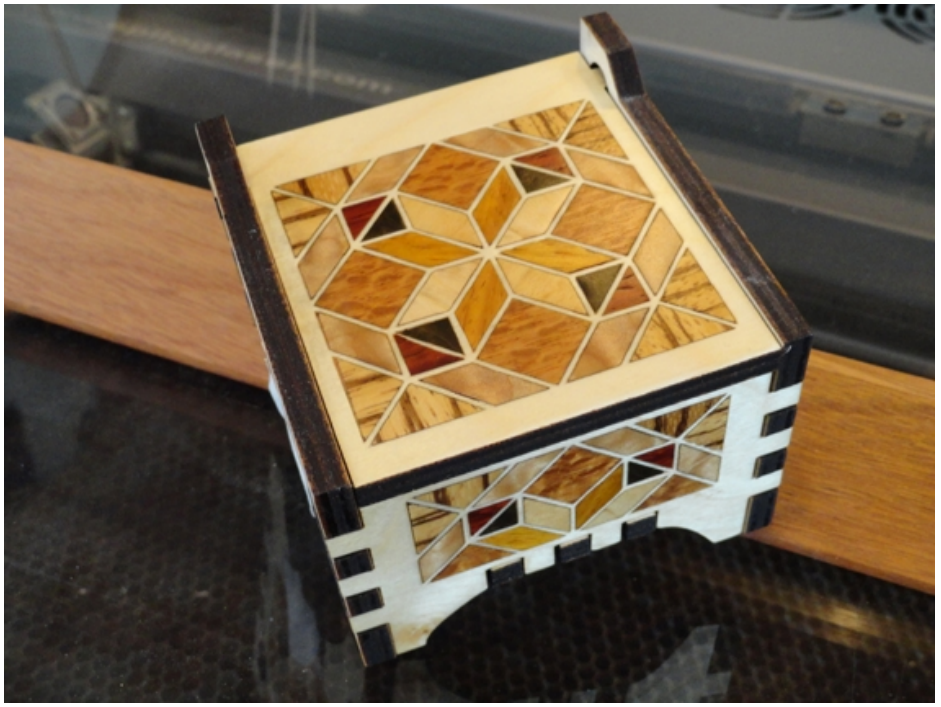


- To make this very easy – I open my Master Box Layout and use this for my vector cutting. If you want to use your patterned box layout you can, just remember to remove all the pattern pieces – or remember to change any line changes for the pattern back to none so you don't get any cuts in your newly done inlay!

Vector cutting out the box

- Now we cut out our box – for this step you'll need to check the settings for your laser and wattage.
- As you may notice, I've got a little bit of touch up coming my way, since I got a little scorch on my lid – no fear, with a light sanding and a light coat of spay, it will be like it was never there!
- After my touch up, we are now ready to glue our box together.

The Quilter's Box



- Well here is the finished product. I hope you enjoy this as much as I do. If you have any questions, please feel free to contact me: Terry Beauchamp, terry.beauchamp@comcast.net

The Quilter's Box Lid

- Don't let nothing but fear hold you back. Enjoy!!!