Introduction

My name is Emil Sennholz. I graduated from Slippery Rock University in 2012 with a degree in Art, and I had of course had art lessons and been interested in art long before that as well. While I'm a person of many interests and I love to learn from a variety of fields, art is one of the fields that really interests me. I did some traveling in Germany and Taiwan, and learned about local cultures and artistic styles before returning to the United States. Since my return, I have been working hard on my artistic endeavors, building a reputation locally and on the internet. I have learned many things in my search for artistic enlightenment.

While I was unsure of my path, I had several artist friends encouraging me, even going as far as giving me free canvases. These canvases were large: one was six feet by four feet, and the other was five feet by four feet! I was at first hesitant to use something so large, but after giving it a try, I found that I enjoyed it. For painting, I've been using canvases anywhere between two feet by three feet, and four feet by six feet.

Using such canvas sizes makes it difficult to have proper frames. Such frames are difficult to find, and costly to buy, so a better option is to make your own, or hire a handyman to make them for you. Hiring a handyman can, of course, gets expensive, even if you pitch in your own time to help. So I thought I would put together a little article on how I do it myself, and maybe help out some fellow artists who understand that (canvas) size matters.

Most artists use an easily-assembled pine frame to stretch their canvas over, but for someone like me, a cheap $10 pine frame doesn't cut it. I use a heavy canvas material, which means the frame needs to be extra strong to handle the extra pressure. I also prefer larger works, which makes it doubly important that I have a sturdy frame, which is why I make my own. If you are working large, or with heavy canvas material, or there's just something you hate about store bought frames, keep reading to learn how you can make your own industrial strength artwork frames.

A final note on cost: it may sound expensive to make your own frames, but they cost less than store bought ones or ones built by a handyman, and they will probably last the rest of your life. The price may vary a bit depending on where you go for the materials and supplies; if you already have all the tools and just need the wood and screws, these frames should cost less than $40. Of course if you need to buy the tools, it will cost you up front, but those tools should last you a long time.

Tools and supplies you'll need:

1. Table saw & saw blades
2. Arm saw & saw blades
3. Tap Measure
4. Pen or Pencil
5. Wood
6. 6x2 Deck Screws
7. Drill and bits
8. Time... lots of it.

These are must-have tools and supplies you'll need for building your own frame. For putting the canvas onto the frame, you'll need different tool which I'll go over later. For now, lets get started on how to build these frames.

I'd like to first address the issue of wood. While it is possible to use a cheap wood like pine and have the frames come out nicely, they can easily be warped and bent, which is something that I personally don't like. It's not a big deal when the canvas is stretched over it, because the constant pressure keeps everything in place. Of course, over time the pressure might change the structure of the painting, so it's really about preference here. There are many choices when it comes to wood, and I'll list which woods I prefer.

1. Pine

Pine is a easy wood to work with, fairly soft, light weight, and cheap. Do not get weather treated pine, the chemicals used for that could damage the canvas over time. Pine doesn't wear on tools as much as hard woods do, but you get what you pay for. The wood is brittle, easily split, and is fairly flexible.

2. Hardwoods

While using hardwoods is ironically hard on your tools, they are sturdier, harder to damage and not very flexible. While there are many hardwoods that work well, like Wormwood, or Ash, they aren't available in all stores. Maple and Oak are more common, and you can use either one. Maple might be slightly easier to work with, but Oak hardens as it ages.

Once you've decided which wood to use, you'll need to know what size of frame you are making. Stores generally sell wood in 6, 8, 10, and 12 foot segments so depending on what you are building, you might want to buy different lengths. If the store you go to cuts them for you, or sells 1 inch by 1 inch strips, then you won't even need a table saw.

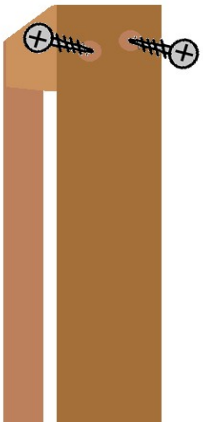
You'll want to have a little extra for 4 corner braces, so if you're making a frame that is 6 x 4 feet, get two 10 foot pieces (1”x 1”x 10'), and a 6 foot piece (1”x 1”x 6'). With the two 10 foot segments, make two 6 footers, and two 4 footers. Cut the 6 foot piece to 4 feet, and use the extra two feet for braces.

If you aren't so lucky as to have a store that sells 1”x 1” boards, then you'll need the table saw and ask for a 1 x 6 **true cut.** If it's not true cut, then the board will be ¾ of an inch thick and only 5½ inches wide, which doesn't work. If they don't have true cuts, (most places don't) then ask for a 2 x 6, which will come up to being 1½ inches thick and 5½ inches wide. Because the board is 1½ inches thick, it is easier to make the boards square, so you can either cut everything to 1 inch or 1½ inch standards; you may have left overs if you cut to a 1 inch standard, though.

After getting the board, use your table saw to strip the wood into 1½ inch strips that reach the entire 10 foot length of the board. Once you have these strips, use the arm saw to cut the strips to length: Two 6 foot pieces, and three 3 foot 10 inch pieces.

That's right, you guessed it, the two 6 footers go on the ends of the three strips that are 3 feet 10 inches. However, to make things easier, you'll want to pre-drill the holes into the wood strips before you screw everything together. The bit you'll use is called a bevel drill bit. Use it to make two craters (indents) side-by-side in the wood, large enough so a screw head will sink below the surface of the wood, two on different angles. Make sure that the craters aren't too close and are on different angles, or when you put the screws in, they might run into each other. This should keep the

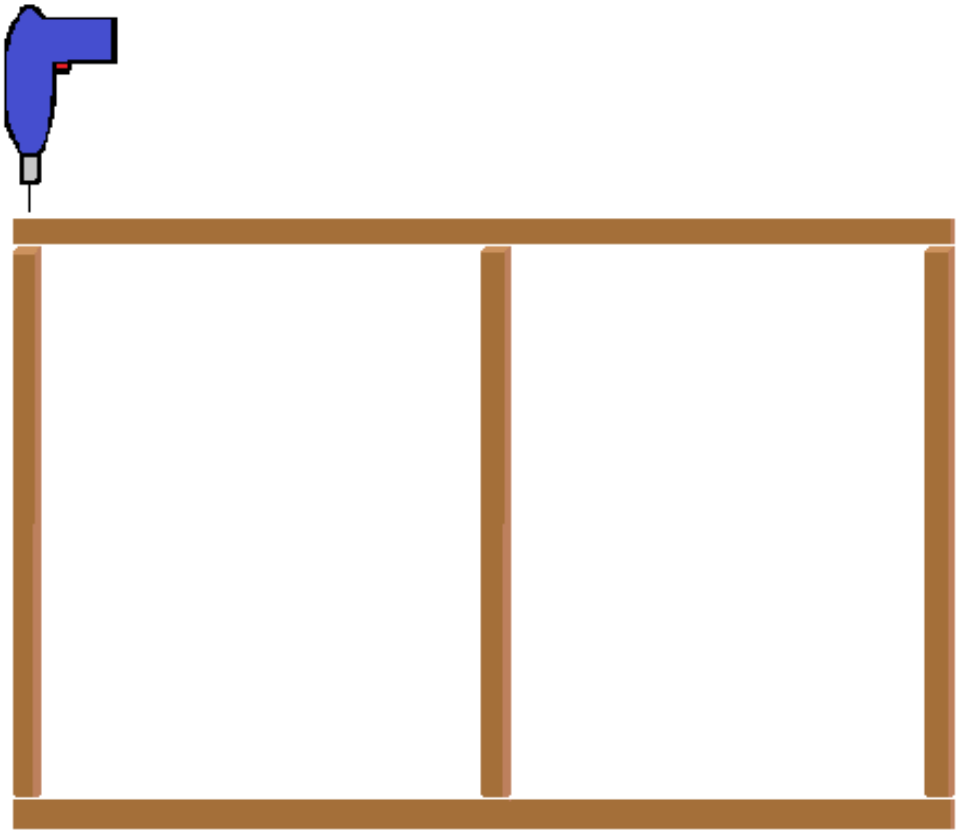
boards from twisting later, which can be a disaster if not addressed in the production of the frame.



Afterward, a small 5/16 drill bit will be needed to drill a hole in the bottom of each crater so a screw can fit snugly inside. The pre-drilled hole is to keep your screws from breaking off, since using a hardwood can apply lots of stress on the screws when you are trying to put them in.

A very important part of this step is to make sure that after the holes are drilled, and when the boards line up, the face of the frame (the part that will have the canvas on it) is flush. If the boards don't line up and aren't flush with each other, then you will need to re-drill the holes and try again.

After the holes have been drilled into the three areas of each 6 foot piece, you can begin using a screwdriver or drill to twist screws through the holes.



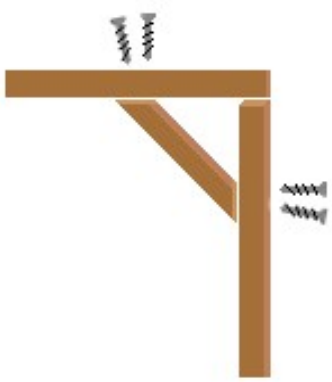
When you screw into a hardwood, the strips might separate, which isn't wanted. Remove the screw and try again until it is tight against the other wood segment. The second time should bring the boards tightly together because of the grooves made by the first attempt.

Screw in the other two shorter strips just like the first one, tightening them if needed. Once the three short pieces are in position and everything has been tightened, make sure the face of what will be the canvas doesn't have any ridges. The boards should be flush with each other. If they aren't flush, when you stretch the canvas over the face of the frame, the ridges will be obvious. Attempt to readjust the boards so they are flush.

Now the other side of the frame is ready to be screwed into place. Screw the second six foot piece to the short boards like you did on the other side, while making sure everything is flush, and tight. Now your frame should look like the picture above.

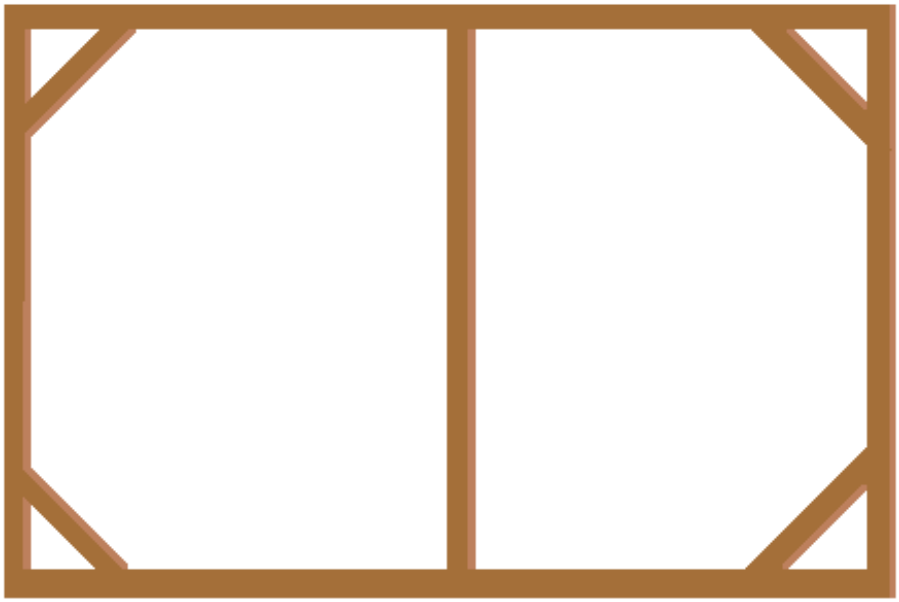
With your leftover two foot segment, use the arm saw to cut each end on a 45 degree angle, making four boards roughly six inches long each. The ends should be cut on a 45 degree angle looks like a roof or a trapezoid, allowing it to fit in a 90 degree corner perfectly.

Take one of these boards and put it in a corner of your frame and make sure it fits properly. Mark the frame for a screw to hold the corner brace in place. Make sure that the screw comes through at the thickest point of contact, otherwise you'll have a sharp point sticking out.



Like before, use the bevel drill bit to allow screw heads to sink in, and then pre-drill holes into it so the screws can easily go in. Do this for all four corners before switching out the bit again. When you screw in the brace and tighten it, make sure the brace is flush or below the face of your frame on the side that will have the canvas.

It should lay down flat on the floor unless the boards you used are warped. The frame is a solid construction with all the boards tight, making it fairly hard to twist or bend. As a test, you could throw the frame against the floor or wall, and nothing will happen to it. The finished frame should look like this:



If there is a way for me to make my instructions clearer, please visit my website (emilsennholz.com) and email a comment.

Learn more about the processes of artwork! Read more of my “how to” articles, or if you want personal lessons, that is an option as well! Thank you for reading! Enjoy making art!