

A person wearing a brown beanie, glasses, and a plaid shirt is working in a workshop. They are standing at a wooden workbench, focused on a task. The workbench has a large roll of white material, possibly fabric or paper, and some tools. In the background, there are various workshop items, including a first aid kit on the wall and a piece of machinery. The scene is dimly lit, with a dark overlay on the image.

Building a Stretcher

By Alex Renbarger For UNL FabLab Use

Building a Stretcher in 3 Parts



Cutting Wood



Assembling



Canvas

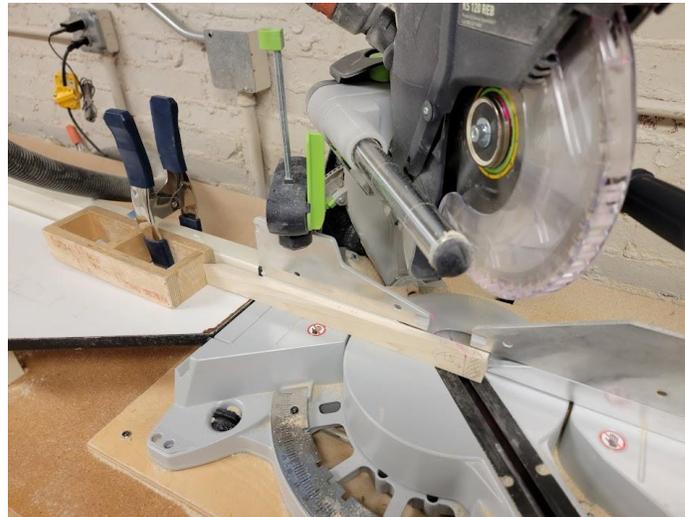
Intended as a reminder of the order of the steps. **Not** as a replacement to a hands-on demonstration

Tools mentioned

Table Saw



Miter Saws



Combination Square





Cutting Wood

Step 1:

Use miter saw to cut wood to size leaving an extra half inch

example: if doing a 15x17 stretcher, cut two pieces of wood to 15.5 inches and two pieces to 17.5 inches



Cutting Wood

Step 2:

Set the table saw to 15 degrees and 3.0 cm. Then cut all four pieces to create the beveled edge



Cutting Wood

Step 3:

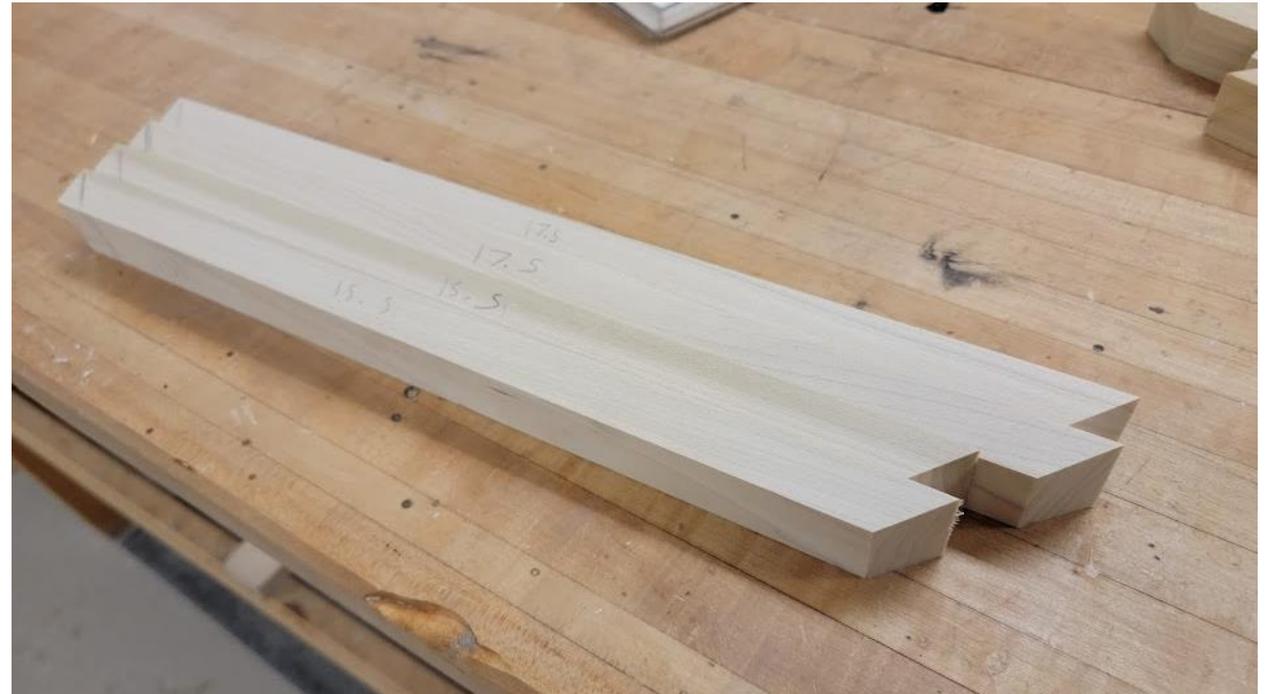
Lay them out to draw your angle lines without measuring! (that is a future step)



Cutting Wood

Step 4:

Using the miter saw,
Cut a 45-degree angle
into one side of all
four pieces of wood



Measuring Part 1

Step 5:

Using a tape measure draw a line at the intended measurement on one of each of your differently sized pieces.

Example: if you are building a 15x17 inch canvas, you need to draw this line on one of your 15inch pieces and one of your 17inch pieces.



Measuring Part 2

Step 5 continued:

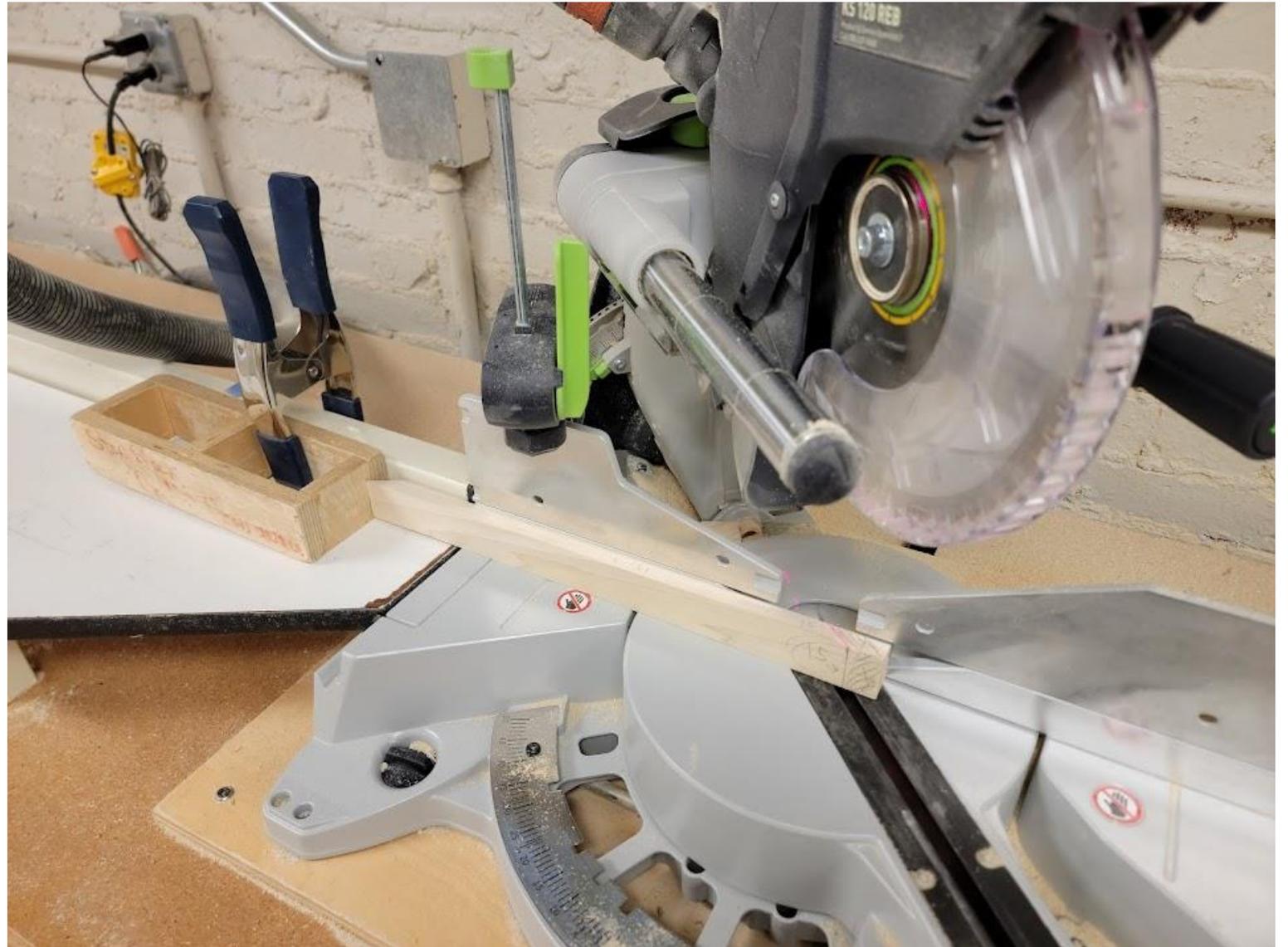
Continue this line all the way around the wood using the combination square



Cutting Wood

Step 6:

Using the stop block method, cut your four pieces of wood to size at a 45-degree angle.



End of Cutting Wood

You should now have all four pieces of wood at the size you need them and are ready to move on to assembling your stretcher





Assembling

Step 1:

Lay them out and label which end goes with which end.

The image to the right uses A on two ends, B on two ends, C on two ends, and D on two ends.



Assembling

Step 2:

Wood glue two of your pieces together using the corner clamp in preparation for using the staple gun for stretcher corners



Assembling

Step 3:

Place 2 staples on one side and 1 staple on the other to connect your two pieces of wood into a corner.



Assembling

Step 4:

Move on to another corner, place glue, and staple the corners. Repeat this until all four of your corners are together

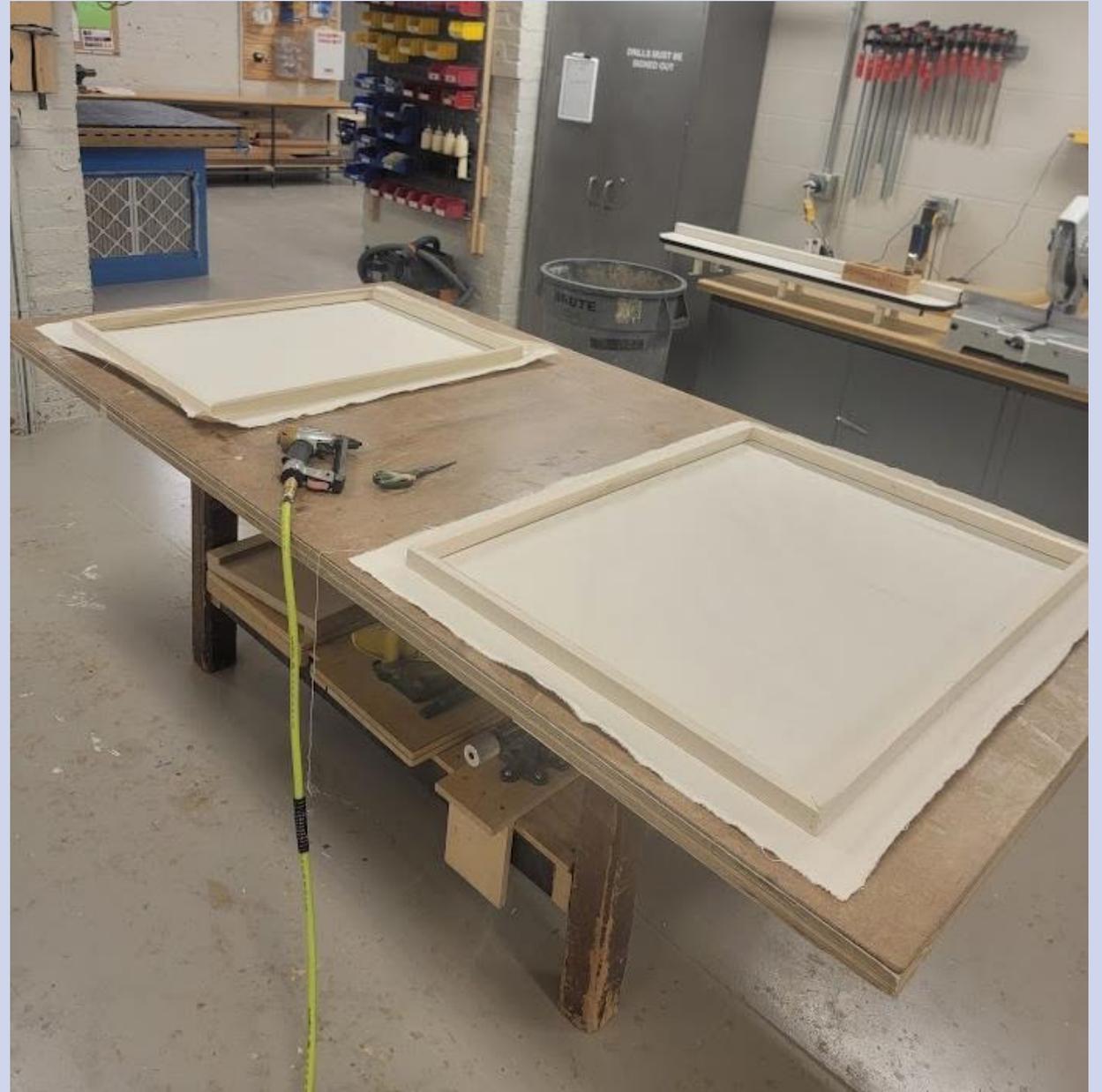
Step 5: Sand sides/sharp corners gently so that they do not cut through the canvas





Canvas Setup

You will need your frame, canvas, scissors, and the staple gun for canvas corners.



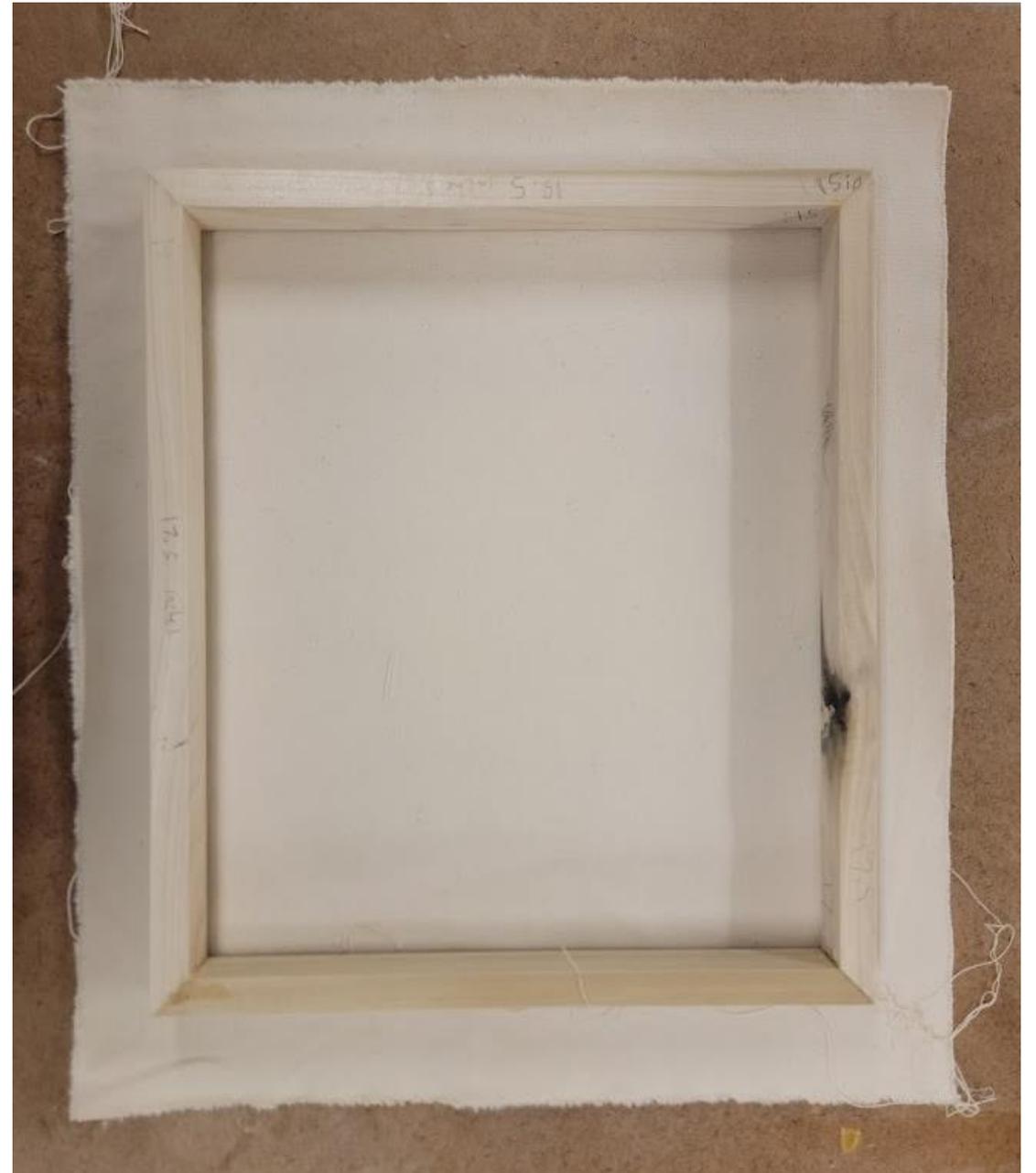
Canvas

Step 1:

Rip canvas to size by placing the frame bevel side down on top of your canvas and getting rid of any extra material

Tips

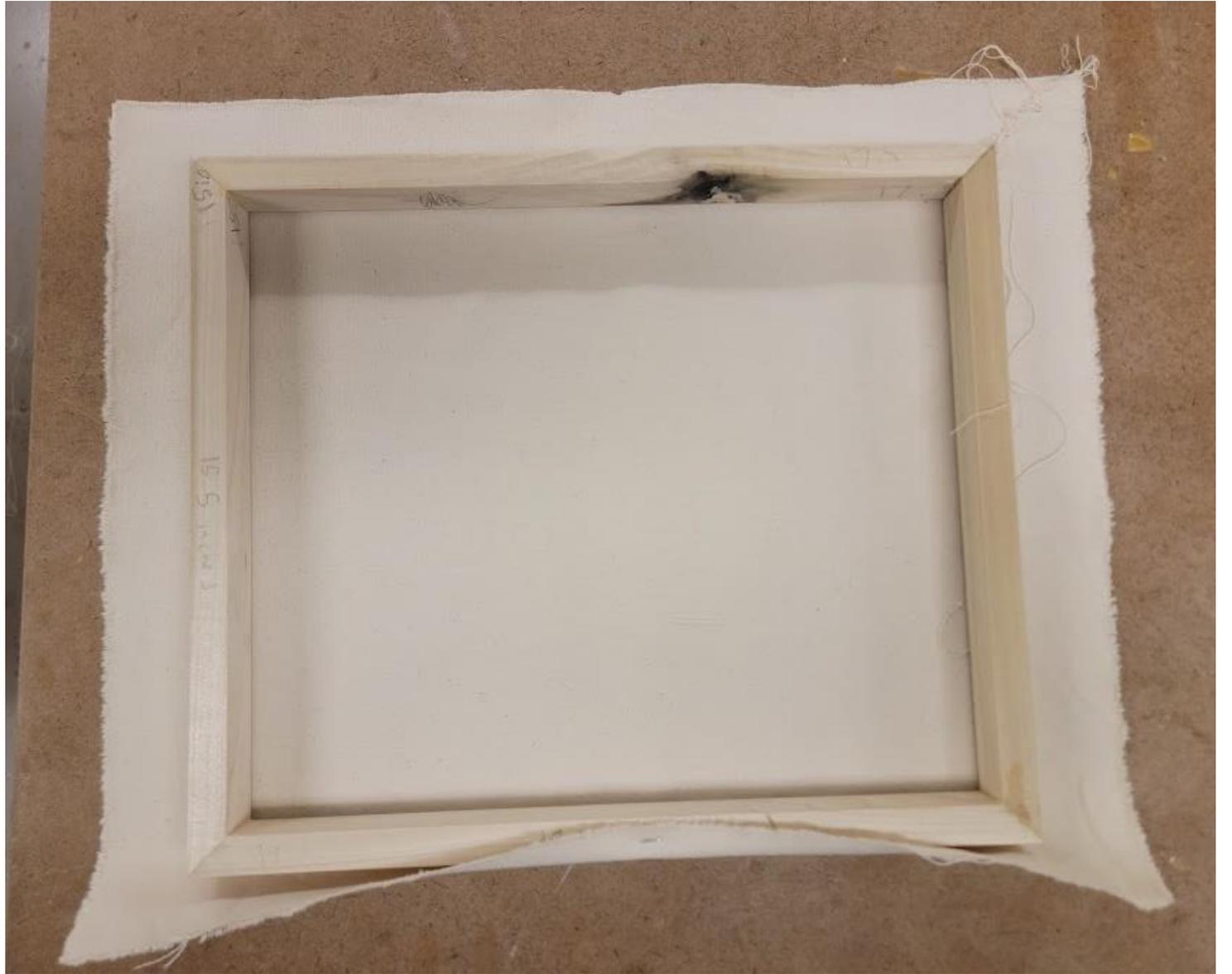
- Use scissors to make a small initial cut before using your hands to rip the rest of the way.
- You only need about three-four inches of canvas on each side to be able to stretch it well. When the frame is on the canvas like pictured you can fold the canvas over the edges to see if it is enough



Canvas

Step 2:

Place your first staple
in the middle of your
longest edge.

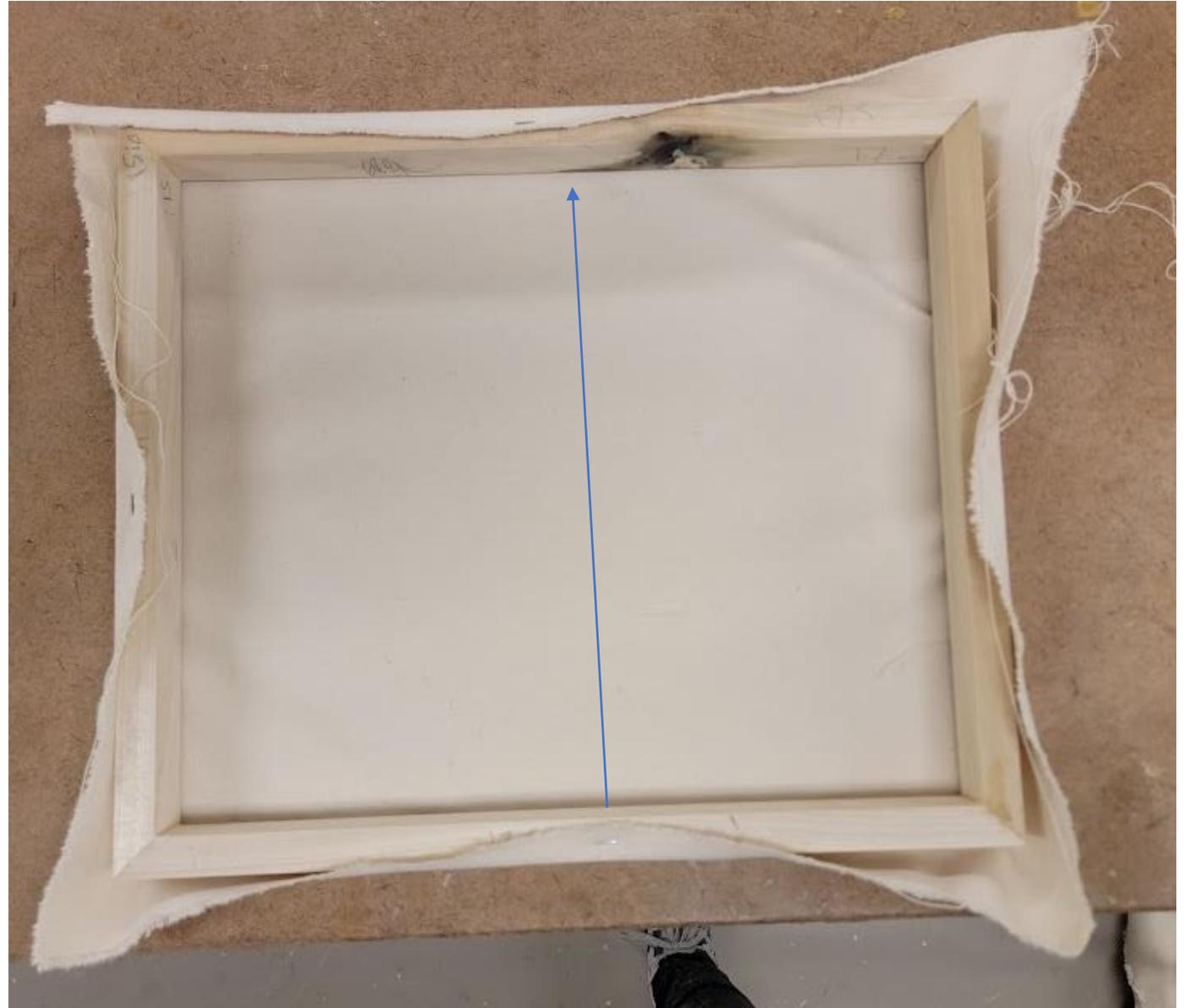


Canvas

Step 3:

Place your second staple in the same place on the opposite side.

Pull the canvas taught while you staple for this one and everyone after that to create a tightly stretched canvas

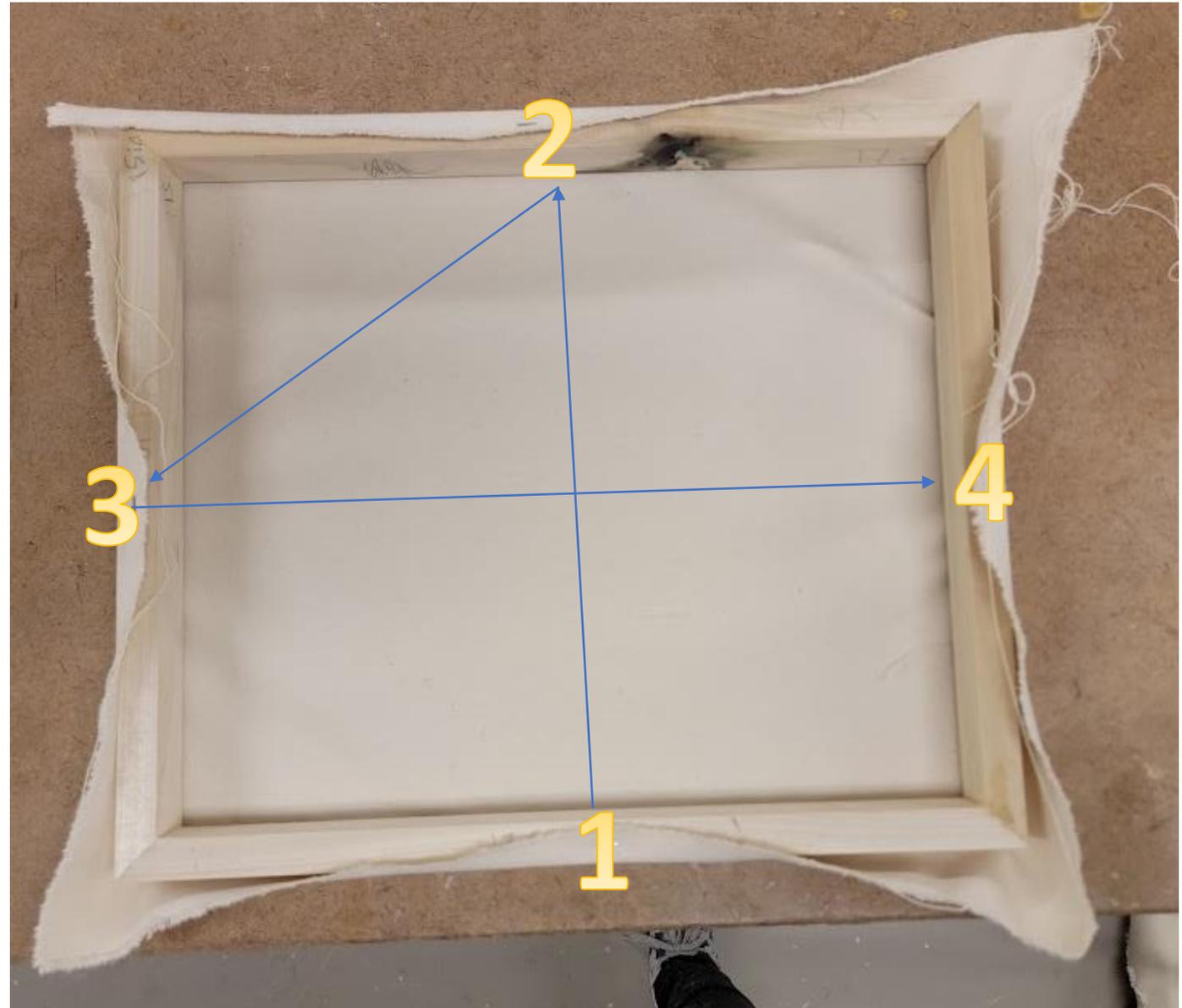


Canvas

Step 4:

Your third staple should be placed in the middle on either side and then the fourth on the last middle side.

Your goal is to divide tension evenly like when changing a tire. You will continue this diamond pattern for the rest of the stapling process.

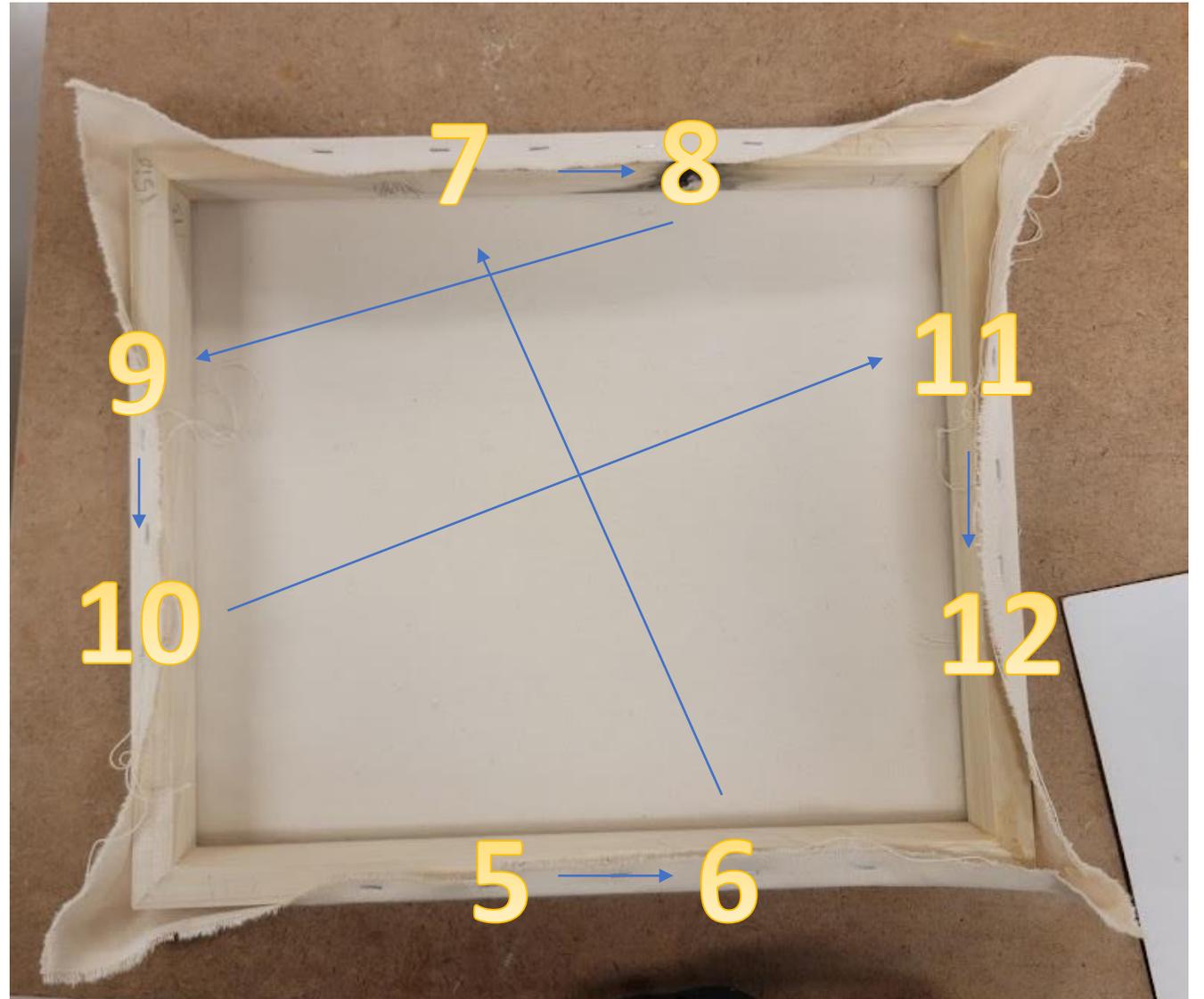


Canvas

Step 5:

Continue placing staples in this diamond pattern placing the staples about two inches away from each other until you get about 4-6 inches away from the corner.

Tip: Follow the arrows in the image to see what order I placed the next few staples, starting with the fifth.



Canvas

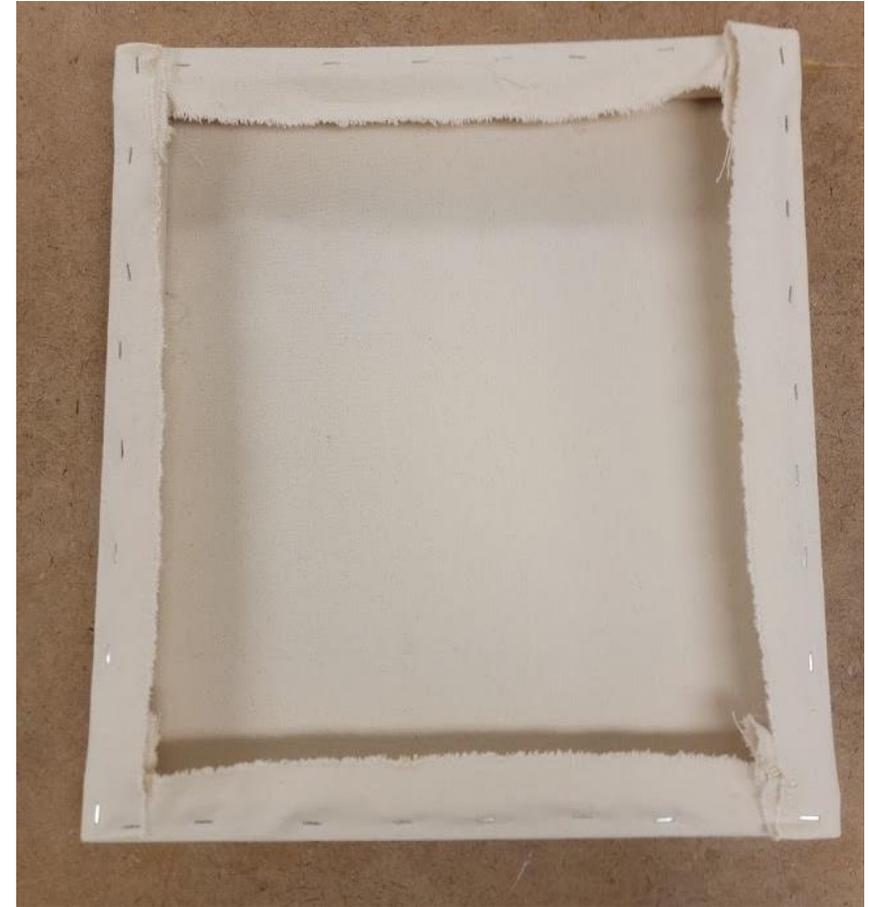
Step 6:

At this point you can fold down and staple your hospital corners, keeping in mind what orientation you want your final painting to be.

Tip: Stapling all the way to the corners on the two sides of your canvas can make hospital corners easier



Before



After

Finished!

Now you should have a finished stretched canvas that is ready to be gessoed!

Tip: Make sure to tap the front lightly and listen for a drum sound. This means your canvas is tight enough to work on.

