

Drawing Parts to Rough Dimensions

One of the more important steps in beginning a project is laying your parts out on a board. This accomplishes several things;

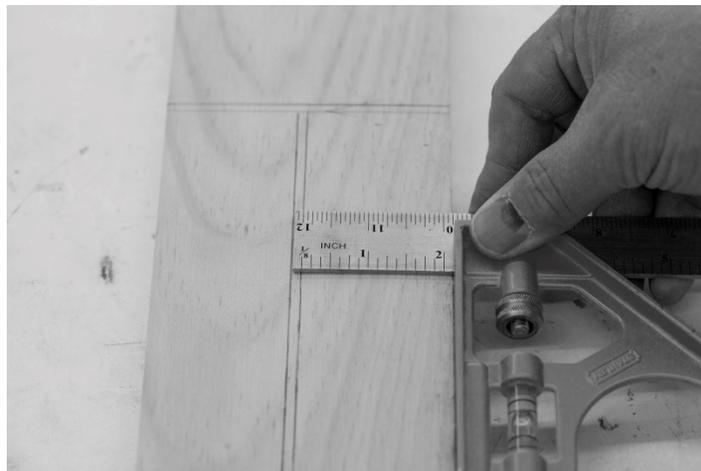
1. Arranges your parts on a large board so that you get the most efficient use of your material.
2. Allows you to take grain direction and appearance into consideration.
3. Minimizes mistakes and waste of material.

One of the things you will do when you draw your parts on a large board is to draw them to what is called "*Rough Dimensions*". Basically, you will be drawing them a little longer and a little wider than is stated in your cut list.

Not only that, but you will also draw what we call the "*Blade Kerf*" at the ends and the edges of all of your parts. The table saw and the miter saw blades are 1/8" thick, so when you make a cut with either of these machines you will lose 1/8" of material with each and every cut. If you don't account for this loss you are going to end up with parts that are too short and too skinny for use in your project.

So here's what you need to do;

1. Add a quarter of an inch (1/4") to the length and the width of each and every part that is listed in your cut list.



The above part is drawn to "*Rough Dimensions*". The cut list says the part should be 1 3/4" wide but the part is drawn 2" wide. You can also see that there is a "*Blade Kerf*" along the edge and at the end of the part.

Why do we draw parts to "*Rough Dimensions*" and add a "*Blade Kerf*" to all of our parts? Well, if you follow the *Order of Operations* that we use in the shop, you'll realize that you have to joint one edge of a board before you can rip it to final width on the table saw. You also need to trim and square one end of a board before you cut it to final length. If you didn't add a little width and length to the parts you draw on a larger board, you may not have enough material left after jointing and squaring to get the part to the final size that you need.

Two more things you need to do before you "**Rough Cut**" your board into smaller, more manageable pieces.

1. Label all of the parts you draw on the board. Do this according to the plans. For example, if your cut list reads "Part A: Legs", write this on each piece.

2. Most importantly, **SHOW THE BOARD WITH ALL OF YOUR PARTS DRAWN ON IT TO YOUR INSTRUCTOR!!!** You are not allowed to simply begin cutting a board up without your instructors permission!!!

Again...

- When drawing parts to rough dimensions on a larger board, don't scatter the parts all over the board. Parts should be placed right up against each other, otherwise you are wasting material.
- When drawing parts to rough dimensions, add $1/4$ " to the length and the width of each and every part.
- Don't forget to draw the blade kerfs along the edges and the ends of all the parts!
- Don't forget to label all of your parts according to the cut list!
- Don't forget to show your completed layout to your instructor!!! DO NOT CUT A BOARD INTO SMALLER PIECES UNTIL YOUR INSTRUCTOR INSPECTS YOUR WORK!!!

