

Maroon & Maple – A Mobile BT3 Cabinet

By Sam Conder

Ever since my first BT3000, I have wanted a large mobile cabinet for it and an accompanying wide table kit. It took me almost seven years, and an upgrade to my BT3100, but I finally got around to constructing my cabinet. This document gives the reader some construction notes to go on, as well as some photos.

I am no means a CAD expert. I have "owned" a copy of the free version of [IMSI TurboCAD](#) 2-D for about four years. Unfortunately the version I have is no longer available, but the do still have a free learning edition available at <http://nct.digitalriver.com/fulfill/0002.16>. I have no formal CAD training, I am *completely* self-taught. So, any and all CAD drawings in this document are purely for display purposes and are not guaranteed accurate.

This cabinet is constructed entirely of 3/4" MDF. I bought mine at Home Depot. It required 5 sheets. Attached is a cut list and cut diagrams for my cabinet. My cabinet has an overall height of 37". It is a comfortable working height for me, and it is the same height as my [Ultimate Tool Stand](#). The depth of the cabinet is 20 7/8". It is built upon a torsion box in the same manner as the [Ultimate Tool Stand](#).

All dados are 3/4" wide by 3/8" deep. All joints were glued using Elmer's Glue-all white PVA glue. The extension table is topped with a remnant of 1/8" plastic laminate that I bought from a local laminate shop. I think the piece cost me \$5.00.

The edge banding is 3/4" wide by 1/4" thick maple that I had left over from a previous project. Before cutting to length and attaching, I applied three coats of Minwax satin polyurethane to the maple. I attached it with Elmer's Glue-all white PVA glue and 1" brads. Here is a list of the other hardware I used:

- Four sets of Liberty 20" White European Side Mount Drawer Slides for all drawers. (Home Depot SKU #385531)
- One pair of Liberty 20" Zinc Plated Ball Bearing Full Extension Drawer Slide for the blade caddy. (Home Depot SKU #432718)
- Six Liberty 3" Polished Chrome Wire Pulls. (Home Depot SKU #806283)
- Four 3" Rubber Wheel Swivel Casters with Brakes. (Home Depot SKU #433039)
- One pair 4" door hinges for flip-top.
- Four 1/4" x 5/16" t-nuts for mounting the BT3 to the cabinet. (Home Depot SKU #254827)

In hindsight, there are a couple of things I would change. First, I didn't leave enough room to be able to unplug the motor's power cord from the side of the BT3's body. When changing blades, I have to unplug the saw at the wall. Second, I also didn't leave quite enough room between the accessory table and the top of the extension table. It's actually a pretty "spot on" fit, but it's so snug that I cannot remove the accessory table without flipping up the saw. Both of these problems can be corrected by making the entire left side of the cabinet (the part that the saw actually sits on) about 1" longer.

If you have any questions about this cabinet, feel free to email me at sam@samconder.com. Below are some photos, a measured CAD drawing for reference, and a copy of my cut list and cut layouts, made with [Cutlist Plus](#), for my MDF.



Most of the work I did by myself, but on one Saturday I had help from my boys, David age 6 and Chase age 4.



Figure One: Front View

Here is an overall view of the cabinet. The mitre fence is stored along the lower rail using the hooks from the BT3100's stand. I attached the other pair of hooks to the left side of the cabinet to hold the rip fence when it's not in use.

Figure Two: Top View

Here you see the overall length of the saw's table and the full rip capacity.



Figure Three: Flip-Top

The flip-top idea was conceived by a man named Roy Dean. It is a great way to allow you to get in and clean the "guts" of the saw.



Figure Four: Blade Caddy—Blade Side

I wanted to have all of my blades easily accessible and nearby. I liked some of the designs I had seen, but [Jeff Browning's](#) really stuck out in my mind. This full extension pull-out design really makes organizing your blades simple.

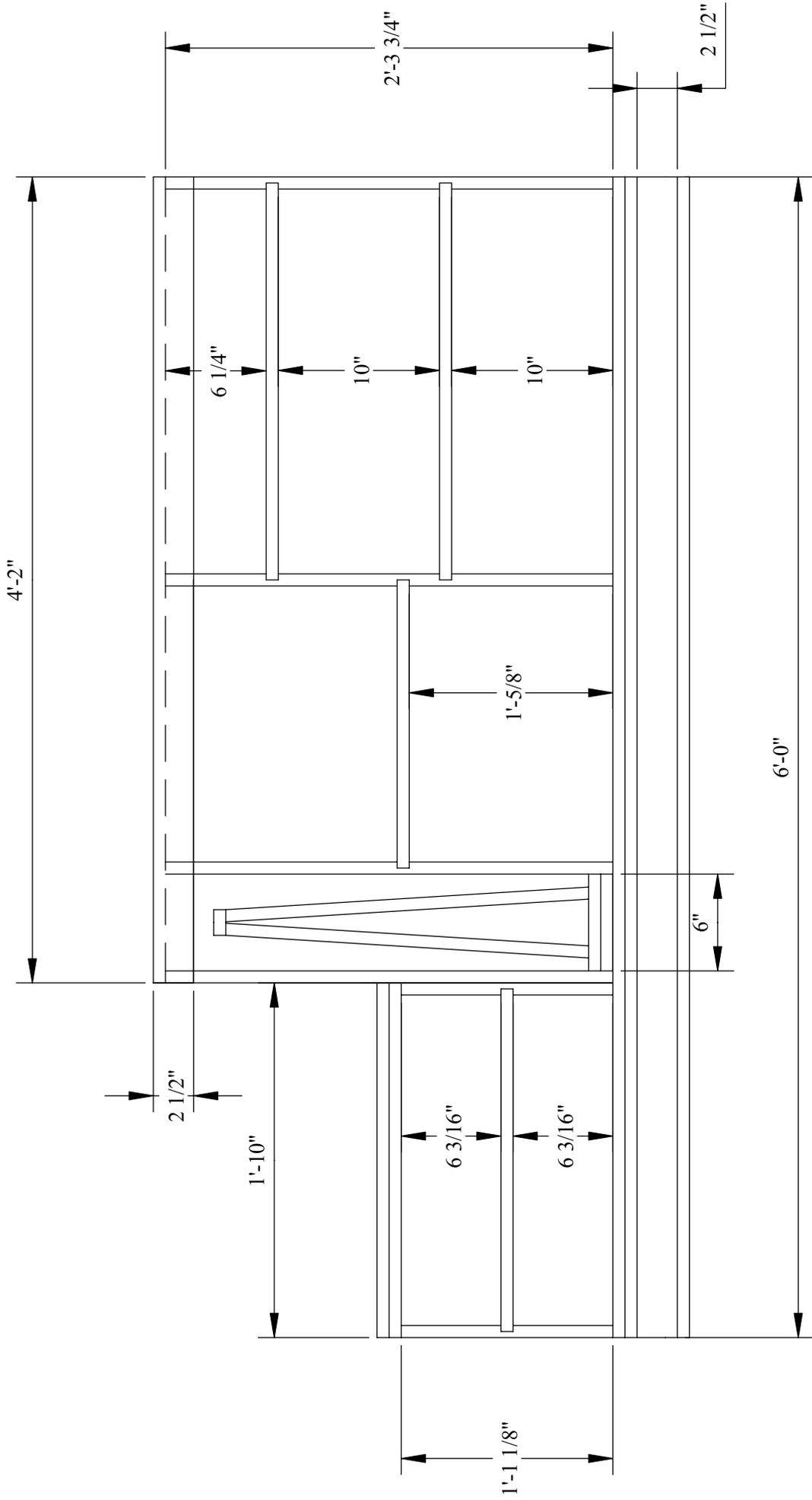
Figure Five: Blade Caddy—Dado Side

The dado is the blade I seem to switch to most frequently, so I put it and the blade changing wrenches on the side facing the saw.



Figure Six: Blade Caddy—Chipper Holder

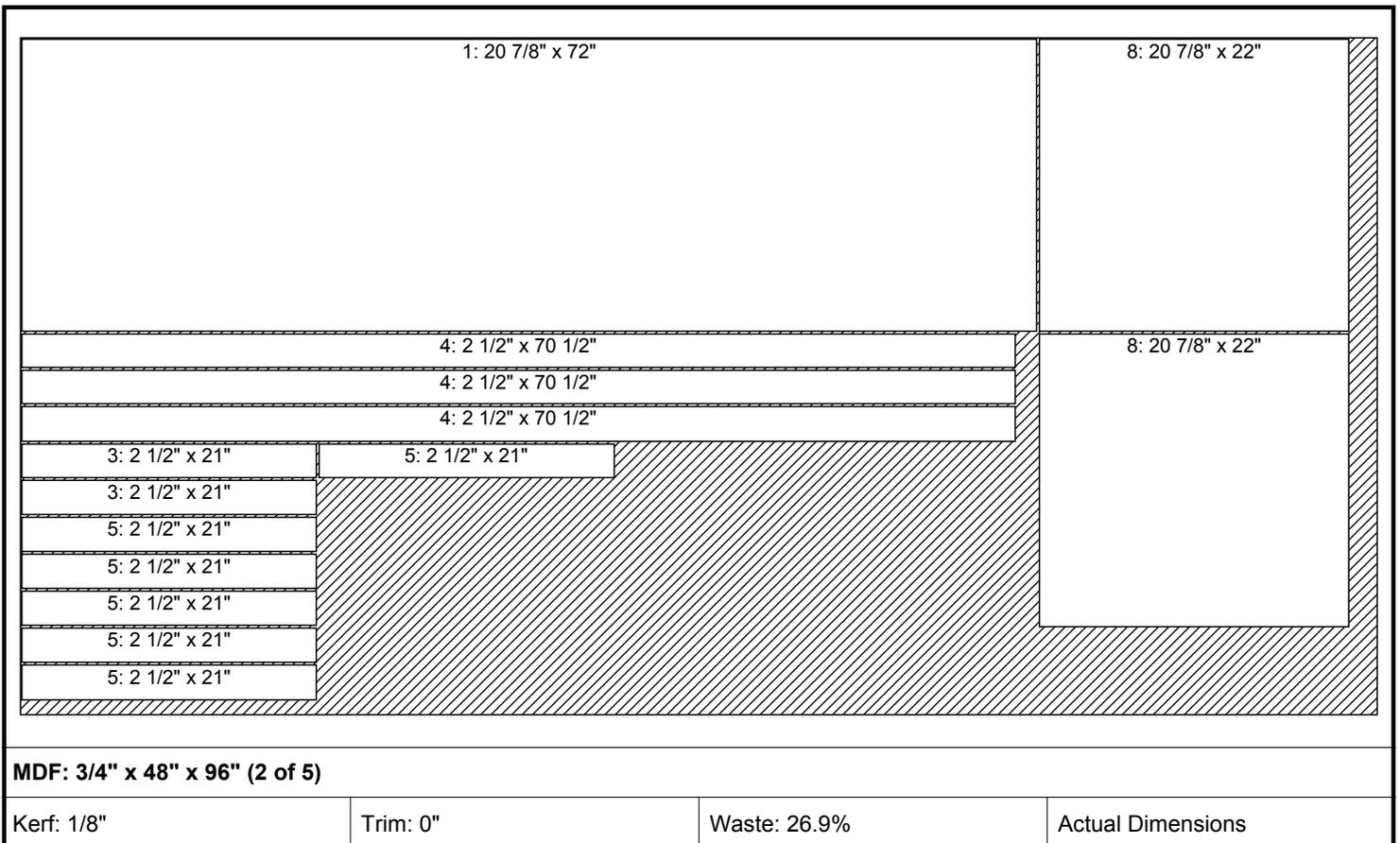
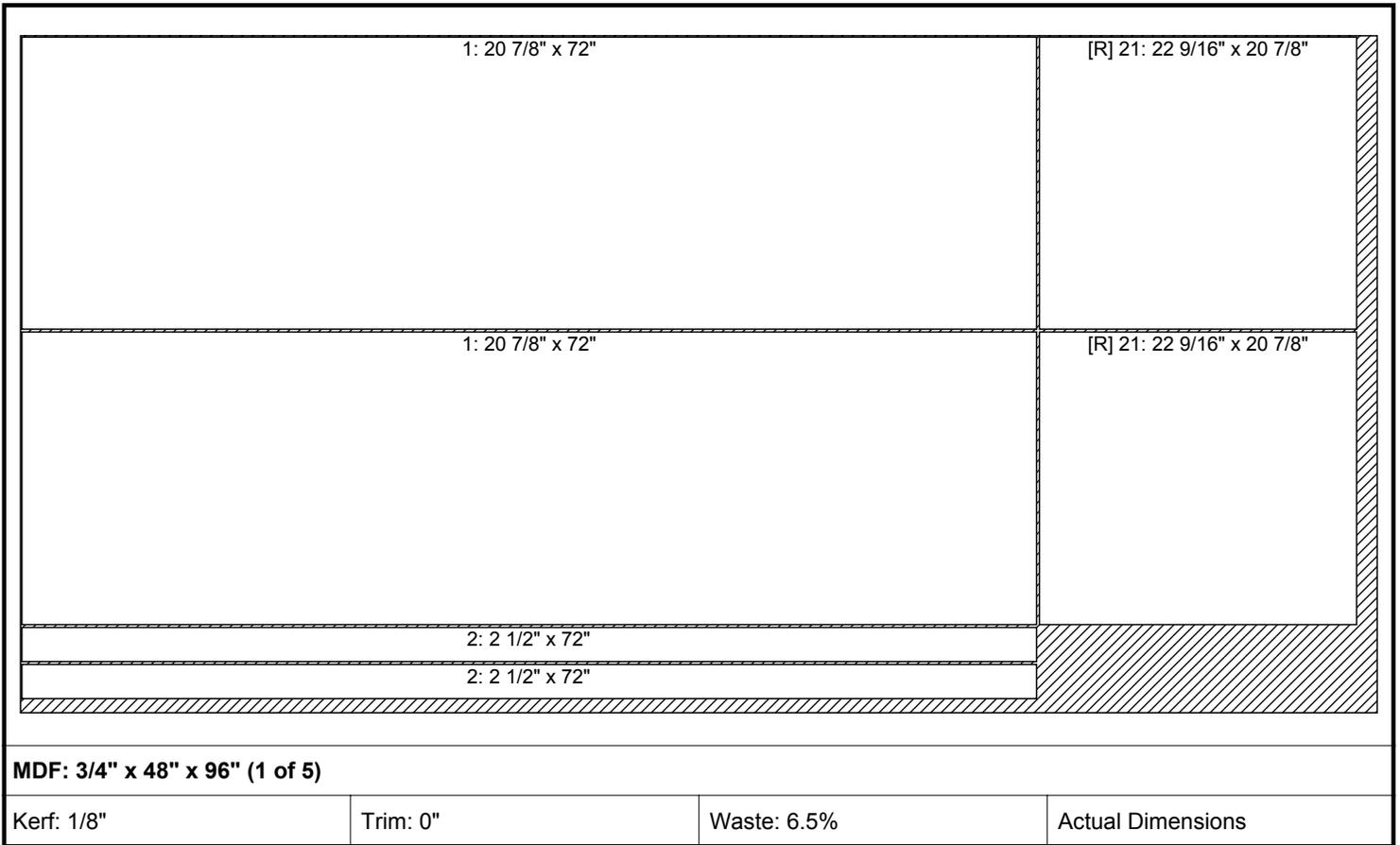
Storing the chippers so the carbide teeth do not contact each other is important. I made 5 kerf cuts in two scrap pieces of MDF with one of the dado blades and then attached them using my Kreg Jig and pocked hole screws.



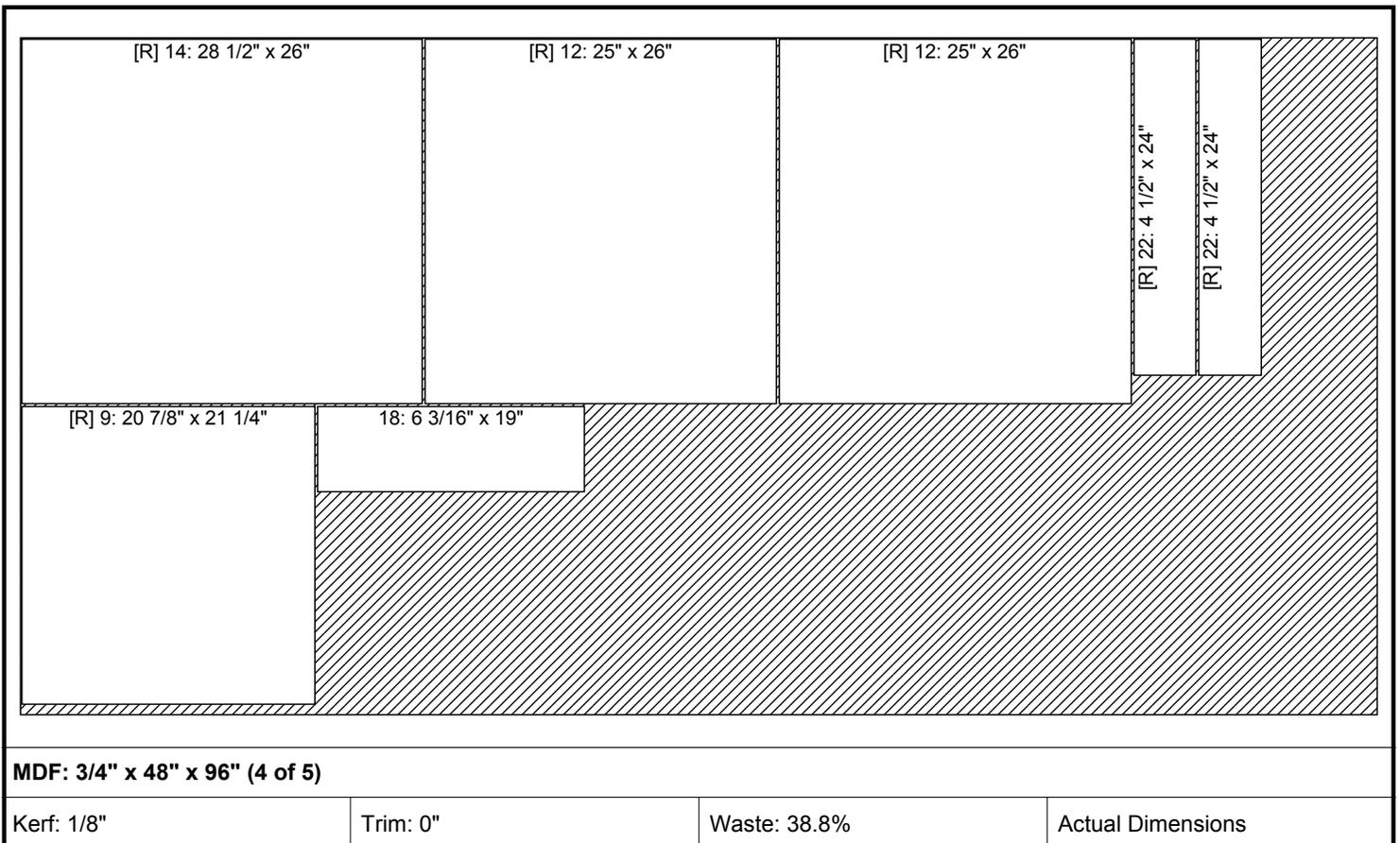
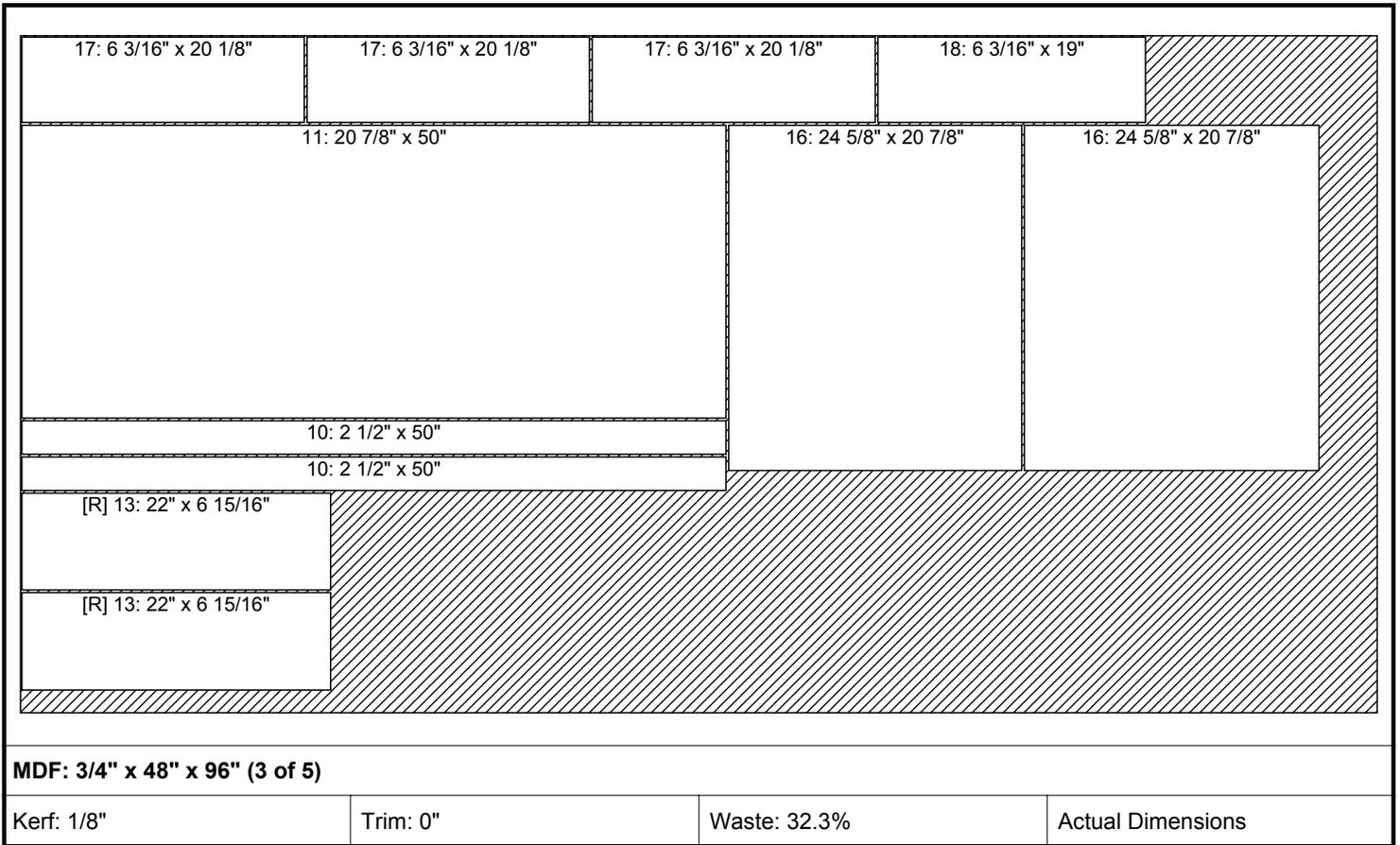
Cut List:

Part #	Sub-Assembly	Description	Copies	Thick	Width	Length	Material Type	Material Name	Can Rotate
1	Torsion Box	Top & Bottom	3	3/4"	20 7/8"	72"	Sheet Good	MDF	<input checked="" type="checkbox"/>
2	Torsion Box	Sides	2	3/4"	2 1/2"	72"	Sheet Good	MDF	<input checked="" type="checkbox"/>
3	Torsion Box	Ends	2	3/4"	2 1/2"	21"	Sheet Good	MDF	<input checked="" type="checkbox"/>
4	Torsion Box	Long Core	3	3/4"	2 1/2"	70 1/2"	Sheet Good	MDF	<input checked="" type="checkbox"/>
5	Torsion Box	Short Core	7	3/4"	2 1/2"	21"	Sheet Good	MDF	<input checked="" type="checkbox"/>
6	Carcass	Sides & Dividers	4	3/4"	20 7/8"	27 3/4"	Sheet Good	MDF	<input checked="" type="checkbox"/>
7	Carcass	TS Support Dividers	2	3/4"	20 7/8"	13 1/8"	Sheet Good	MDF	<input checked="" type="checkbox"/>
8	Carcass	TS Supports	2	3/4"	20 7/8"	22"	Sheet Good	MDF	<input checked="" type="checkbox"/>
9	Carcass	TS Shelf	1	3/4"	20 7/8"	21 1/4"	Sheet Good	MDF	<input checked="" type="checkbox"/>
10	Carcass	Rails	2	3/4"	2 1/2"	50"	Sheet Good	MDF	<input checked="" type="checkbox"/>
11	Carcass	Top	1	3/4"	20 7/8"	50"	Sheet Good	MDF	<input checked="" type="checkbox"/>
12	Carcass	Large Doors	2	3/4"	25"	26"	Sheet Good	MDF	<input checked="" type="checkbox"/>
13	Carcass	Drawer Fronts	2	3/4"	22"	6 15/16"	Sheet Good	MDF	<input checked="" type="checkbox"/>
14	Carcass	Back	1	3/4"	28 1/2"	26"	Sheet Good	MDF	<input checked="" type="checkbox"/>
15	Carcass	Center Shelf	1	3/4"	17 7/8"	20 7/8"	Sheet Good	MDF	<input checked="" type="checkbox"/>
16	Carcass	Right Shelves	2	3/4"	24 5/8"	20 7/8"	Sheet Good	MDF	<input checked="" type="checkbox"/>
17	Carcass	Drawer Sides	4	3/4"	6 3/16"	20 1/8"	Sheet Good	MDF	<input checked="" type="checkbox"/>
18	Carcass	Drawer Backs	2	3/4"	6 3/16"	19"	Sheet Good	MDF	<input checked="" type="checkbox"/>
19	Blade Caddy	Blade Caddy Bottom	2	3/4"	6"	20 7/8"	Sheet Good	MDF	<input checked="" type="checkbox"/>
20	Blade Caddy	Blade Caddy Top	1	3/4"	1 9/16"	20 7/8"	Sheet Good	MDF	<input checked="" type="checkbox"/>
21	Blade Caddy	Blade Caddy Faces	2	3/4"	22 9/16"	20 7/8"	Sheet Good	MDF	<input checked="" type="checkbox"/>
22	Blade Caddy	Blade Caddy Sides	2	3/4"	4 1/2"	24"	Sheet Good	MDF	<input checked="" type="checkbox"/>

Layouts:



Layouts:



Layouts:

