

PROJECT

Castle USA TSM-12

TITLE

TSM-12 Wide Cabinet

APPROVED	1		SIZE	CODE	I	DWG NO		REV
CHECKED			Α					
DRAWN	Phil Johson	11/26/2025	SCAL	_E 1/2" = 1'-0"	WEI	GHT	SHEET 1/19	

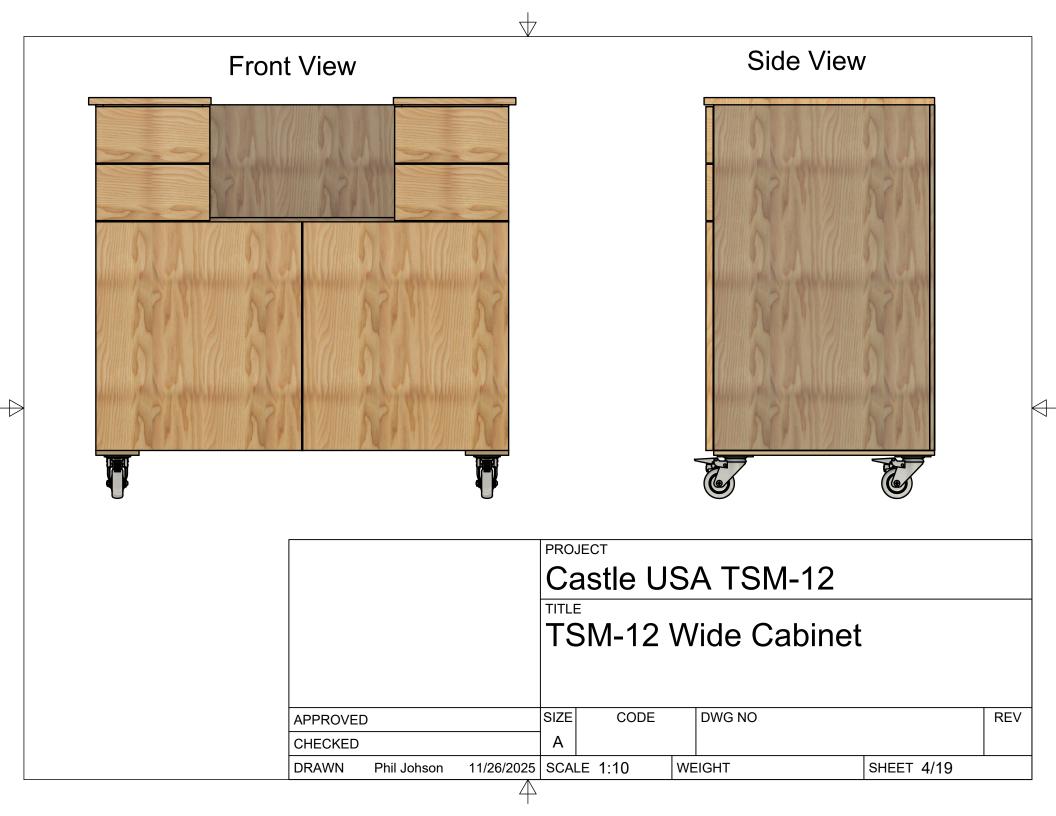


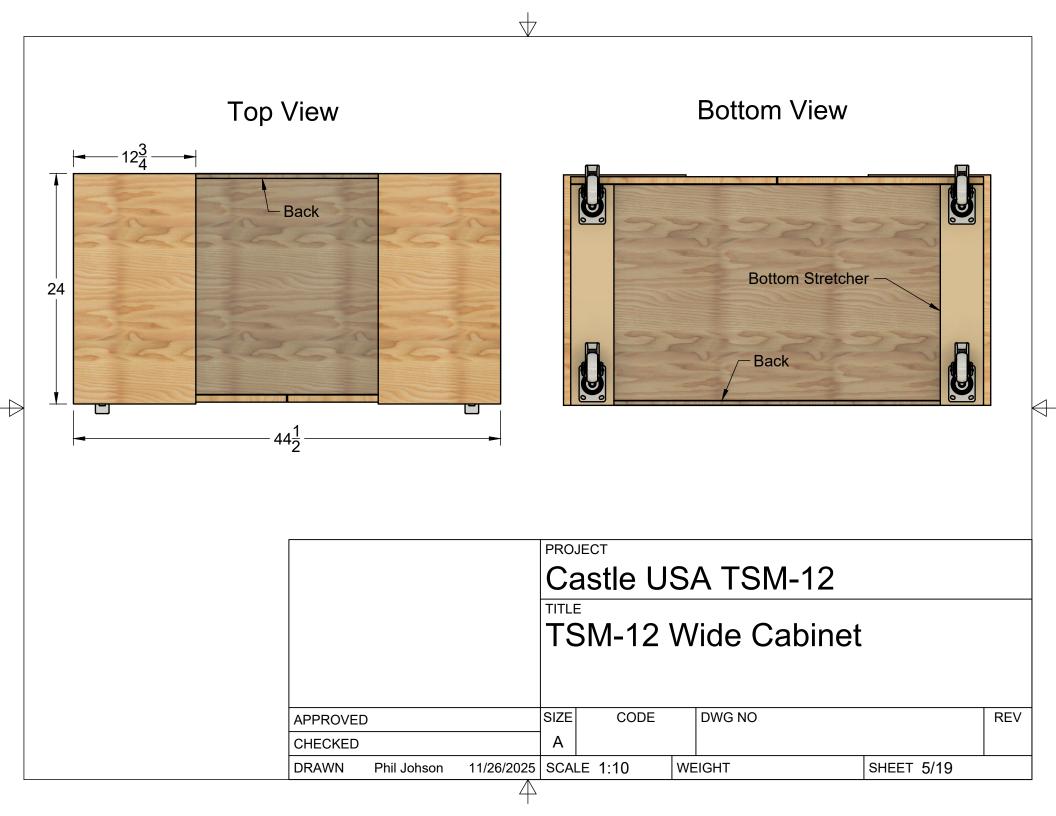






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The original TSM-12 wide cabinet design was by Chris Waller our Product Manager (as shown on first page). We took his design and simplified it by using only 4 drawers, an applied back, and applied drawer bottoms. Chris also has an extra compartment on his version for the Castle 110 and its Systainer. Add of course, construction of the cabinet is mainly done with screw pocket joinery.

Note: Please read and study the entire set of plans before starting the build. Over the years there have been different heights of works decks on our benchtop pocket cutter. Those include the TSM-10, TSM-11, TSM-12v1, TSM-12v2, and the Porter Cable 552. Make any necessary changes based your model so that the work deck will be flush with the counter tops. Cut lists and panel cut layouts are included. While the dimensions of the drawing have been verified, it is up to the builder to make sure they are correct. If you want to make any changes, do that now before jumping into construction. It's advisable to rough cut the back, drawer bottoms, applied drawer fronts, doors and use the actual finished dimensions of the cabinet and drawer frames. While sheet stock is used for the construction (3/4" is used in the drawings), take into account the actual sheet thickness being used as the drawing and cut list may need to be modified to compensate. Most plywood is closer to .71" thick not actually .75". Products that are actually 3/4" can be used such as MDF and Melamine. Edge banding is not required but you may want to add it for aesthetics and edge protection. Take that extra dimension of the edge banding into account.

Case Construction

Construction is mainly done with screw pocket joinery. The back is applied directly to case parts, no recess or grooves needed. Use screw pockets for attaching the shelf bottom, top shelf, center divider, upper dividers, sides, and all 4 upper stretchers. Before assemble, decide on whether you want the back screw pocketed on the case or you want to use screws, staples, or finish nails as you'll want to cut the screw pockets before starting assembly. Once the case is constructed, trim the back to fit the overall dimensions of the case. The back is applied directly to case parts, fully overlayed. You can also apply the back a bit oversized and then simply use a router with a flush trim bit to remove the overhang.

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Castors and bottom stretchers

Now is good time to go ahead and install the castors. The particular castors shown in the drawing have 3" wheels and have a total height of 4 ½". Feel free to use a different size/style. Take note in a possible change in overall height of the cabinet with a different sized castor. The ½" bottom stretchers are first applied to the bottom of the cabinet as show in the drawing. Use your favorite attachment method here. Castors can then be installed using through bolts, washers, and nuts, or use good construction screws/small lags.

Drawer Boxes

See our video on assembling the drawers here at this link, h*ttps://www.youtube.com/watch?v=0anPWYB3n8M*. In the video, we grooved the front, and sides to accept the bottom. For this cabinet we have simplified the drawer construction with an applied full overlayed bottom, no grooves needed. The cool jig in the video works great for the applied bottom as well. I think you'll really like the drawer assembly jig. Each frame is screw pocketed together, including the drawer sides, fronts and backs. The bottoms are cut to final size and attached to the bottom of the frames with staples, screws, or brad nails. Use standard side mount drawer slides (like KV) to mount the drawer into the carcass.

Counters Tops

Temporarily remove the drawers by using the release levers on the side mount drawers. The top is listed in the panel cut list, but you may want to use a different material like solid wood, or maybe even something like HDPE plastic. That's up to you. Plywood, MDF, Melamine, and solid wood tops can be attached to the upper stretchers using standard construction screws. Position the top with the overhangs as listed on the drawings and attach by screwing through the stretchers up into the tops. Materials like HDPE, or similar, can just be through bolted to the stretchers using machine screws, washers, and nuts.

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Drawer Fronts and Doors

Cut the drawer fronts and doors to their final dimensions based on the actual cabinet dimensions. Reinstall the drawer boxes. Install the doors first using either butt hinges or even better, full overlay euro hinges. Install door fronts using screws through the drawer box front into the applied drawer front. Keep in mind the noted gaps between the applied drawer fronts and the doors. All gaps can be adjusted to suit your needs and the type of hardware you are using.

Finish

No Paint or finish is required but use your imagination. If your interested in that Castle green color, John Deere green is the closet readily available paint color that matches. We would love to see your version of this cabinet. Send us an email with your pictures and we'll share them on social media.

Happy building!

The Castle Crew

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Parts List #1	³ / ₄ " Sheet Stock		
Part Name	Length	Width	Qty
Side	43	22.5	2
Top Stretcher	10 3"	4	4
Upper Shelf/Bottom	41 ½"	22 ½"	2
Upper Divider	11 3 "	22 ½"	2
Center Divider	22 3 "	22 ½"	1
Lower Shelf	20 3"	22 <u>1</u> "	2
Lower Doors	23 13 "	21 7 16"	2
Drawer Fronts	11 7/8"	5 7 8"	4
Тор	12 ³ / ₄ "	24	2

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Parts List #2	½" Sheet Stock		
Part Name	Length	Width	Qty
Back	36	43	1
Drawer Sides	22	4	8
Drawer Front/Back	8 3 "	4	8
Drawer Bottom	22	9 3"	4
Center Divider	22 ³ / ₄ "	22 ½"	1
Bottom Stretcher	23	5	2

Parts List #3	Misc. Items
Part Name	Qty
Castors	4
`	8

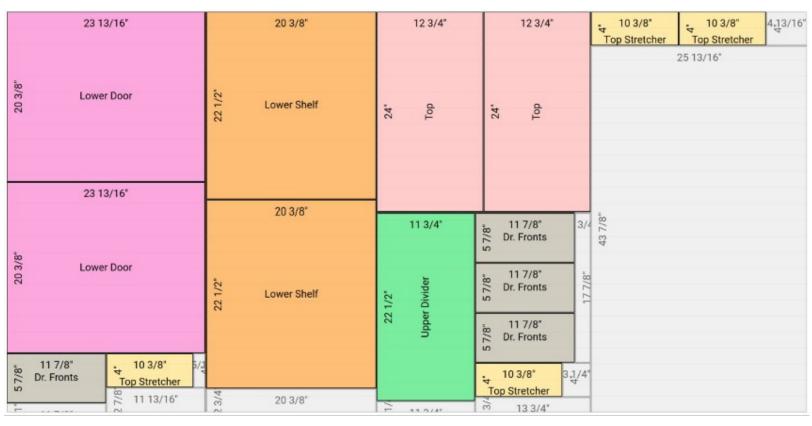
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Sheet Layout #1, $\frac{3}{4}$ " Sheet Stock



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Sheet Layout #2, $\frac{3}{4}$ " Sheet Stock



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Sheet Layout #3, ½" Sheet Stock

	36"		.8/	22" Drawer Bottom	41/2"	23* Bottom Stretchers	8 3/8" Drawer Frt/Bac	₹ 4 €6 1/8"
			8/8/6	Diawer Bottom	.4	22" Drawer Sides	9 3/8" Drawer Frt/Back	7 1/8"
				22" Drawer Bottom	.4	22" Drawer Sides	8 3/8" Drawer Frt/Back	
					*4	22" Drawer Sides	8 3/8" Drawer Frt/Back	24 5/8"
43	Back		.8/8.6	22"	22' Drawer Sides	Drawer Frt/Back	24	
,				Drawer Bottom	*4	22" Drawer Sides	8 3/8" Drawer Frt/Back	
				22"	.4	22" Drawer Sides	7 8 3/8" Drawer Frt/Back	
			9.3/8,	Drawer Bottom		37 3/	4*	
			-4	22" Drawer Sides	18 5/8"			
4 1/2"	23"	8 3/8" 4-3/8 Drawer Frt/Back 4	*4	22" Drawer Sides				
4	Bottom Stretchers Drawer Frt/Ba		3/2	22"				

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