

Bedside Cabinet

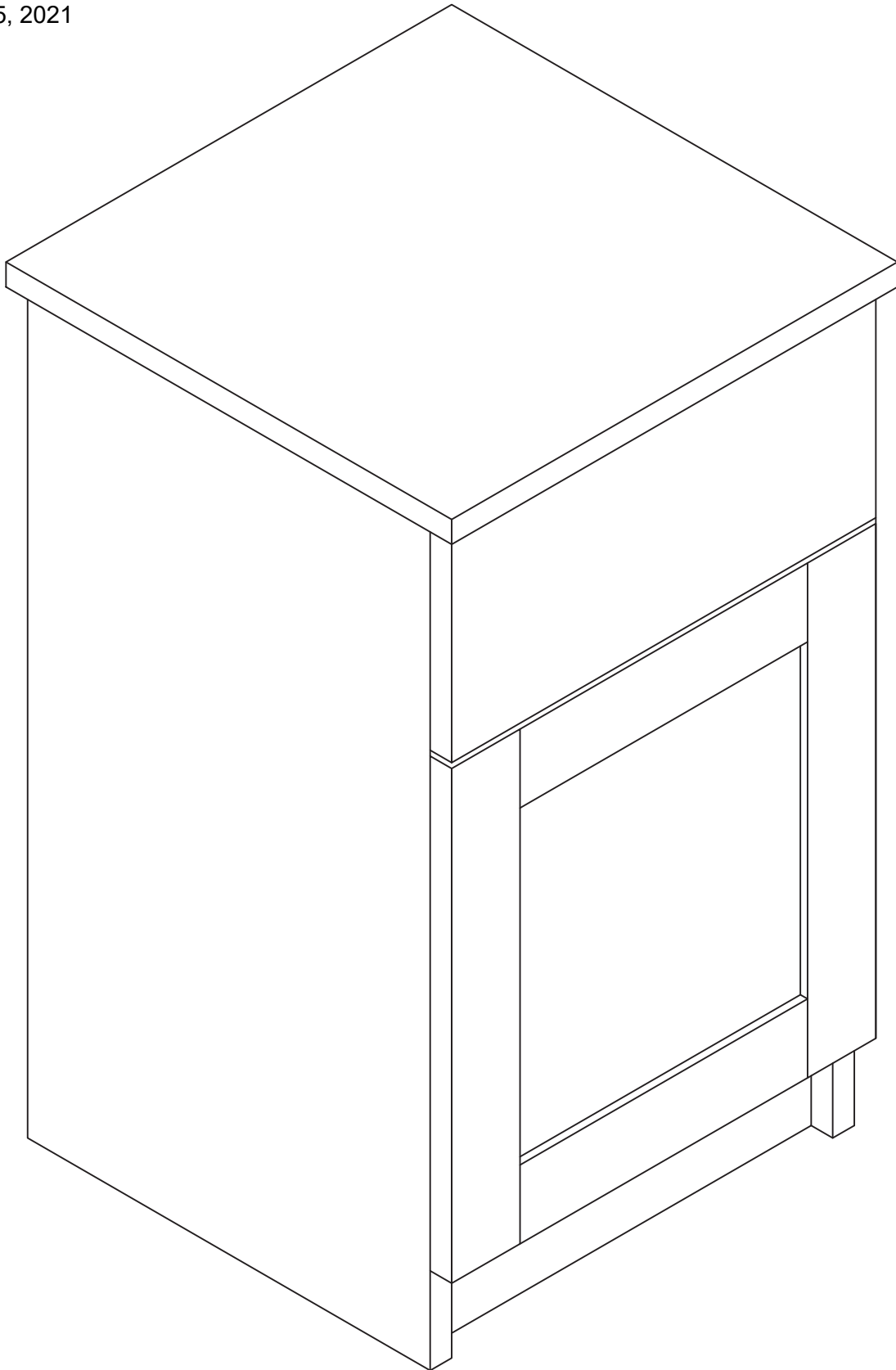
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EDUC-3225

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Safety

General Safety

- If a tool is not working properly, notify the teacher immediately and do not use
- Only use a tool after you have passed the appropriate safety test and received verbal permission from the teacher
- Always wear safety glasses and hearing protection
- If you have long hair, tie it back
- If you have baggy clothing, tuck it in
- If you have jewelry or a watch, take it off

Mitre Saw Safety

- Keep all guards in place
- Keep hands at least four inches away from the blade
- If you don't need the sliding function, lock it
- Wait for the saw to stop moving before removing material
- Material must always be in contact with the fence

Jointer Safety

- Keep all guards in place
- Keep hands at least four inches away from the cutter head on either side
- Use a push stick when stock is shorter than the fence
- Do not joint end grain
- Never cut deeper than 1/16" in one pass
- Never adjust the outfeed table

Planer Safety

- Be aware of pinch points where the wood contacts the table
- Do not plane any stock less than 12 inches
- Never increase the cut by more than half a turn

Table Saw Safety

- Keep all guards in place
- Keep the dust collector on and open the dust chute
- Use all anti-kickback devices whenever possible
- Use a push stick when ripping narrow or short stock
- Keep hands out of the danger zone - 4 inches from the blade
- Keep your body and face outside of the zone of kickback
- Never use the mitre gauge and fence at the same time
- Always use either a fence or mitre gauge, no freehand cuts!

Router Safety

- Keep all guards in place
- Always unplug the router before adjusting
- Allow the router to come to full speed before contacting the blade with material
- Use a push stick whenever possible
- Keep fingers at least four inches away from the cutter

Cabinet Carcass Construction Path

Step	Operation or Process	Material Required	Tools Required
1	Obtain $\frac{3}{4}$ " plywood with the veneer of your choice and $\frac{1}{4}$ " baltic birch. Determine the order of cuts that will use the material most efficiently.	$\frac{3}{4}$ " Plywood $\frac{1}{4}$ " Baltic birch plywood	Tape Measure Pencil
2	Using the table saw, cut the sides, supports, toekick and bottom shelf from the $\frac{3}{4}$ " plywood and back from the $\frac{1}{4}$ " plywood.	$\frac{3}{4}$ " Plywood $\frac{1}{4}$ " Baltic birch plywood	Table saw
3	Obtain enough hardwood to laminate the top and drawer face. Cut the pieces to rough length using the mitre saw	Hardwood	Mitre Saw Tape Measure Pencil
4	Use the jointer and planer to mill the hardwood pieces flat so they can be safely cut on the table saw.	Hardwood	Jointer Planer
5	Use the tablesaw to cut the hardwood into strips. These should all be the same size, and wide or narrow enough to make efficient use of the material.	Hardwood	Table saw
6	Lay out the hardwood strips to determine the best looking grain pattern. Glue up the strips in two parts. One for the top and one for the drawer front.	Glue Hardwood Strips Paper towel	Clamps Glue brush or roller
7	Once the glue is dry, use a scraper to remove excess glue from the top and drawer front	Drawer front Top	Scraper
8	Use the planer to get the top and drawer front to final thickness	Drawer front Top	Planer
9	Use the tablesaw to get the top and drawer front to final length and width	Drawer Front Top	Table saw Mitre sled
10	Use the router table to cut the various dados and rabbets into the sides. Use a stop block for the stopped dados.	Sides	Router table $\frac{3}{4}$ " router bit $\frac{1}{4}$ " router bit
11	Do a dry fit of the cabinet carcass to ensure everything fits properly	Sides Supports Bottom shelf Back	
12	Glue up the cabinet carcass. Use clamps to glue up the sides, supports and shelf. Ensure all parts of the cabinet are square. Use the air nailer to attach the back panel.	Sides Supports Bottom shelf Back Glue Brad nails.	Clamps Air nailer

Door Construction Path

Step	Operation or Process	Material Required	Tools Required
1	Obtain enough hardwood for the rails and the styles. Use the mitre saw to cut the pieces to rough length.	Hardwood	Mitre saw Tape measure
2	Use the jointer and planer to mill the hardwood pieces to their final thickness.	Hardwood	Table saw
3	Use the table saw to cut the pieces to final width and the mitre saw to trim them to final length	Hardwood	Table saw Mitre saw
4	Use the router table to cut the dado in the rails and styles	Rails Styles	Router table 1/4" router bit
5	Use a knife to score the edges of the wood to reduce tearout. Use the router table to cut the modified tenons on the rails.	Rails	Knife Router Table 3/8" or 3/4" router bit
6	Cut the panel out of baltic birch plywood using the table saw. It should be very slightly smaller than the space provided by the grooves.	Baltic birch plywood	Table saw
7	Assemble the door without glue to ensure everything fits tightly	Rails Styles Pannel	
8	Apply a small dot of glue to the middle of the dado on the rails and styles to stop the panel from rattling. Glue up the door. Make sure the door is square and the joints are tight.	Rails Styles Pannel Glue	Clamps
9	Scrape off excess glue and sand the joints until they are smooth.	Door	Scraper Random orbit sander or drum sander

Drawer Construction Path

Step	Operation or Process	Material Required	Tools Required
1	Obtain ½" baltic birch plywood and use the table saw to cut it to length and width for the drawer back and sides.	½" baltic birch plywood	Table saw
2	Use the router table to cut the dados for the back of the drawer.	Drawer sides	Router table ½" Router bit
3	Use the router table to cut a dovetail socket into the drawer front. Make sure to set a stop block.	Drawer front	Router table Dovetail router bit
4	Use the router table to cut the dovetail tail into the drawer sides	Drawer sides	Router table Dovetail router bit
5	Use the router table to cut the dado in the drawer sides and back for the drawer bottom	Drawer sides	Router table ¼" router bit
6	Obtain ¼" baltic birch plywood. Use the table saw to cut it to size for the back panel.	¼" Baltic birch	Table saw
7	Layout and drill the holes for the handle on the drawer front.		Tape measure Pencil Drill Drill bit
8	Assemble the drawer without glue to ensure it fits.	Drawer front Drawer sides Drawer back Drawer bottom	
9	Glue up the drawer. Ensure everything is square	Drawer front Drawer sides Drawer back Drawer bottom Glue	Clamps
10	Sand off any extra glue	Sandpaper	

Final Assembly Construction Path

Step	Operation or Process	Material Required	Tools Required
1	Layout and drill the holes for the door hinges on the door and carcass.	Carcass Door	Hinge hole template Drill bits
2	Layout and drill the holes for the drawer slides.	Carcass Drawer	Drawer slide template Drawer slides spacer
3	Use the jointer, planer, and table saw to cut $\frac{1}{4}$ " thick, $\frac{3}{4}$ " wide strips of hardwood. Use the mitre saw to cut these to length.	Hardwood	Jointer Planer Table Saw Mitre Saw
4	Glue the hardwood strips onto the exposed plywood edges of the carcass. Masking tape can be used in addition to clamps.	Hardwood strips Glue	Clamps Masking tape
5	Attach the top to the carcass with screws.	Screws Carcass Top	Impact Driver
6	Sand the cabinet	Sandpaper	
7	*Optional* Apply stain as per directions on the container	Stain Gloves	Brush or rag Tack cloth
8	Apply varnish as per directions on the container. Lightly sand in between coats	Varnish Gloves Sandpaper	Brush or rag
9	Attach the door and drawer handles	Door handles	Screwdriver
10	Attach the drawer slides and hinges	Drawer Slides Hinges	Screwdriver
11	Admire your finished project!		

Cut List

Cabinet Carcass

Quantity	Name of Part	Size			Type of Material
		Length	Width	Thickness	
2	Sides	25 ¼"	13 ¾"	¾"	Plywood
1	Top	15 ½"	15 ½"	¾"	Hardwood
1	Bottom Shelf	13 ½"	13 ¼"	¾"	Plywood
1	Back	25 ¼"	13 ¼"	¼"	Baltic Birch Plywood
3	Supports	13 ¼"	3"	¾"	Plywood
1	Toekick	13 ¼"	3"	¾"	Plywood
5	Face	Various	¾"	¼"	Hardwood

Door

Quantity	Name of Part	Size			Type of Material
		Length	Width	Thickness	
2	Styles	15 ½"	2 ⅜"	¾"	Hardwood
2	Rails	10"	2 ⅜"	¾"	Hardwood
1	Panel	11 ½"	10"	¼"	Plywood

Drawer

Quantity	Name of Part	Size			Type of Material
		Length	Width	Thickness	
1	Front	14"	6 ½"	¾"	Hardwood
2	Sides	12 ½"	5"	½"	Baltic Birch Plywood
1	Back	11"	5"	½"	Baltic Birch Plywood
1	Bottom	11 ¾"	11	¼"	Baltic Birch Plywood

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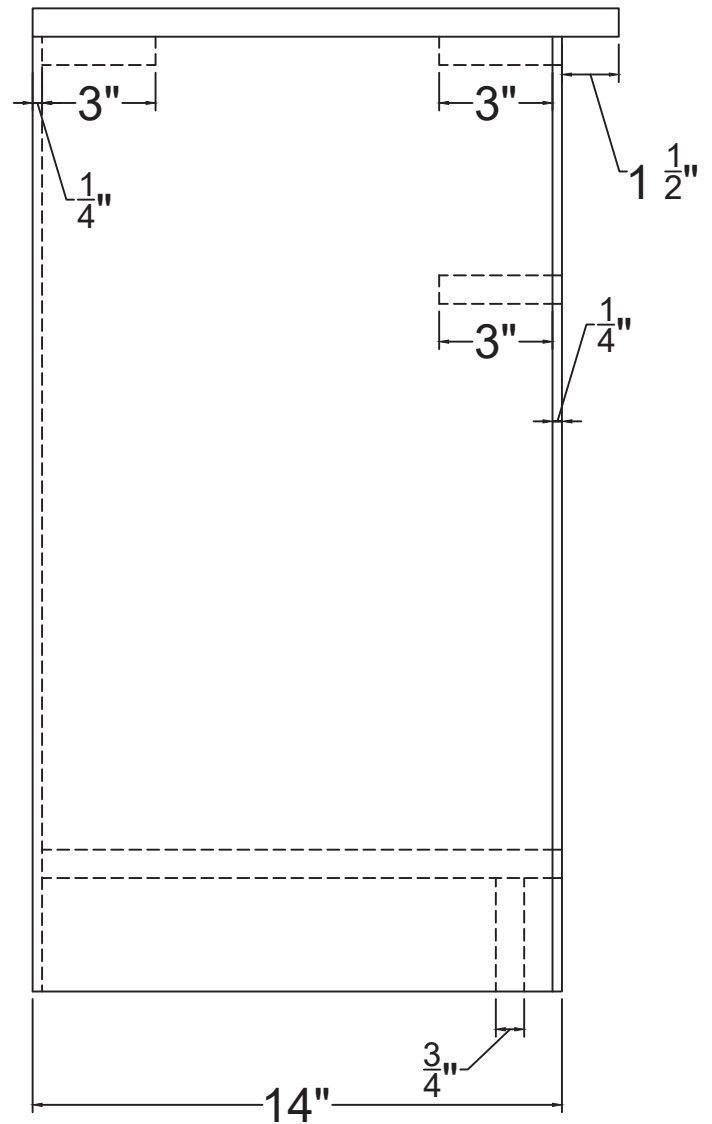
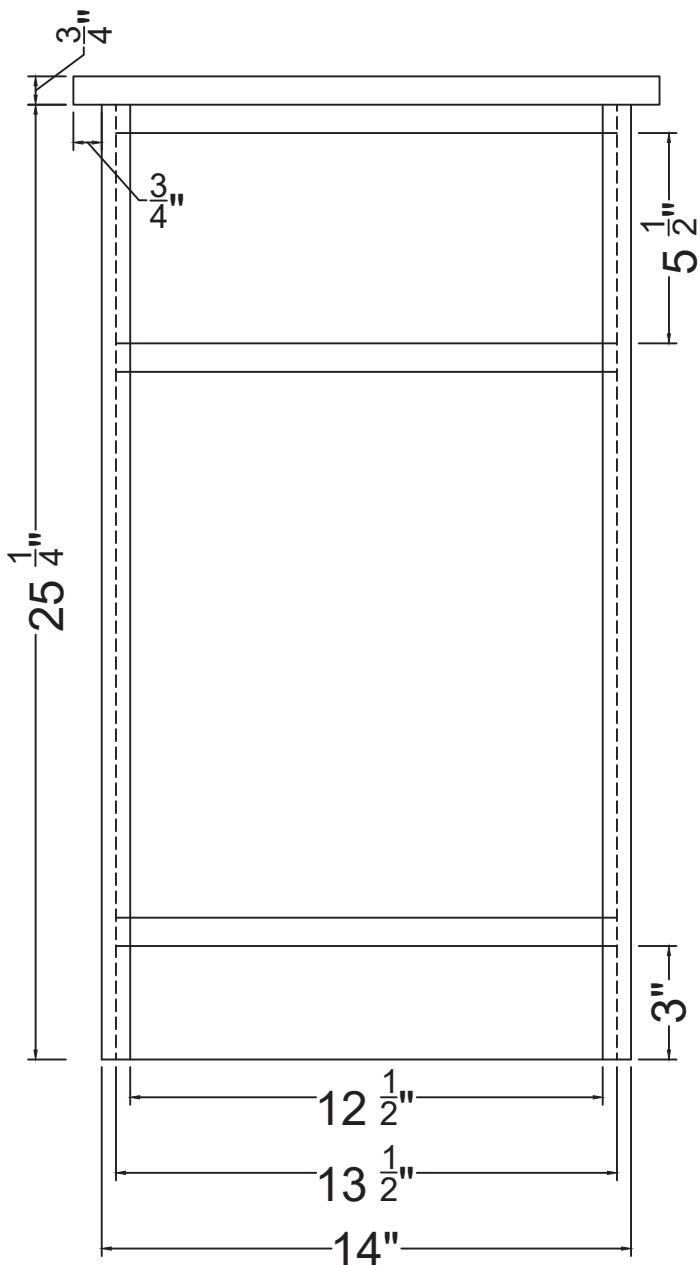
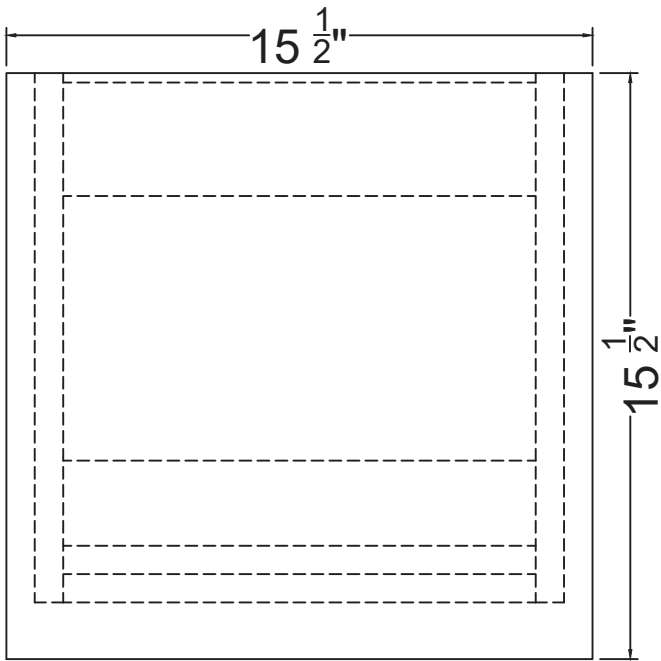
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Not To Scale

1/3

All material is $\frac{3}{4}$ " thick
except for back panel



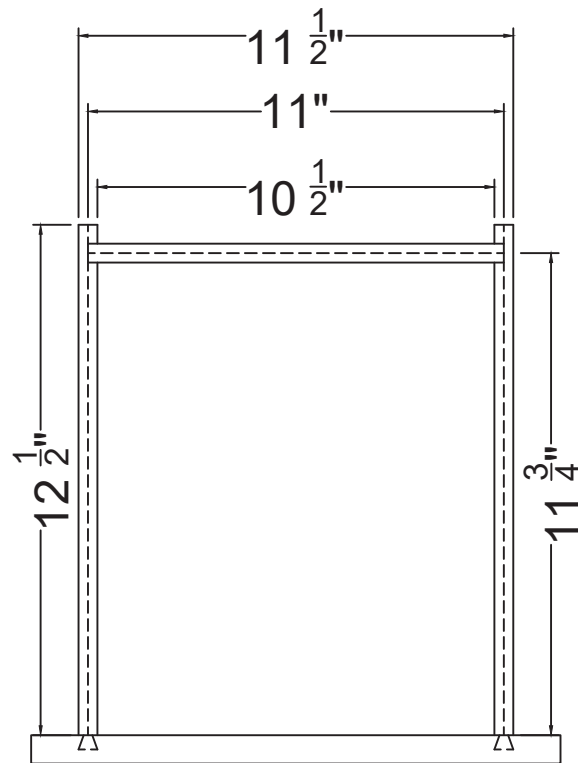
Bedside Drawers

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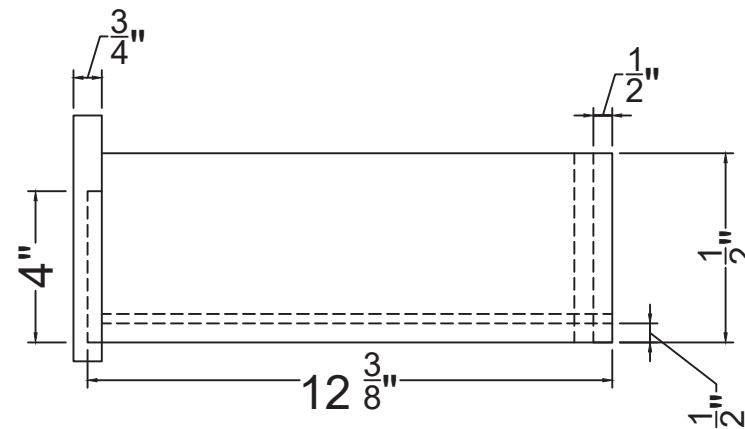
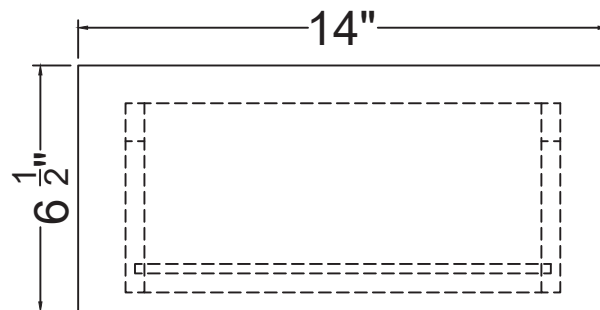
2/3



Front is $\frac{3}{4}$ " thick

Sides and back are $\frac{1}{2}$ " thick

Bottom is $\frac{1}{4}$ " thick



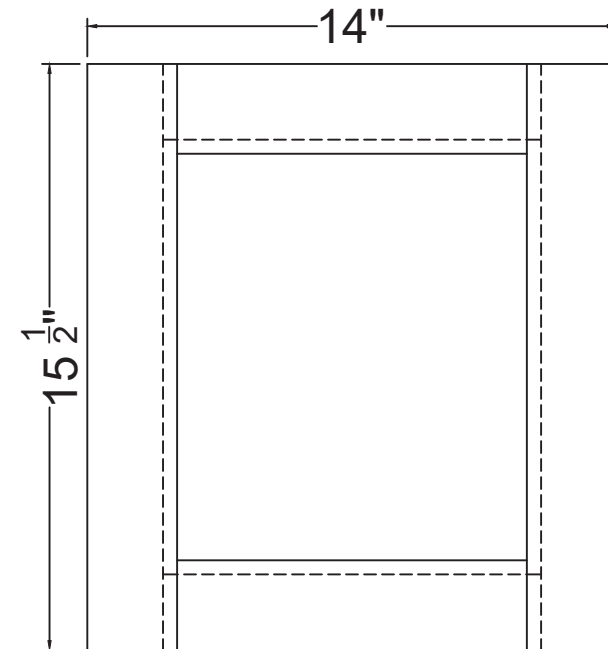
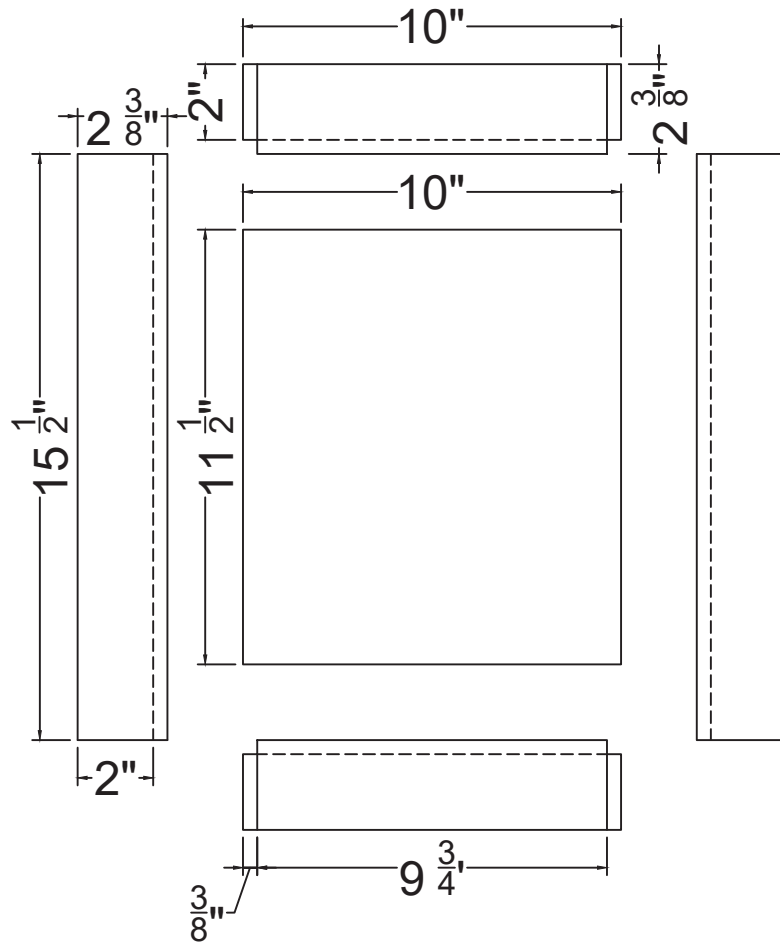
Bedside Door

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Not To Scale

3/3



Rails and styles are $\frac{3}{4}$ " thick
Panel is $\frac{1}{4}$ " thick