Kitchen island

Overall size: 60" W × 36" D × 36" H



Parts	Sheets and boards	Saw kerf	Units
53 (33 different)	**10**	**1/8"**	**Inches**

Materials to buy

Qty	Material	Label in plan	Board feet
6	3/4" Birch Plywood, 4' × 8'	Sheet A, Sheet B, Sheet C, Sheet G, Sheet H, Sheet I	
1	1/4" Birch Plywood, 4' × 8'	Sheet D	
1	1/2" Baltic Birch Plywood, 5' × 5'	Sheet E	
1	1/4" Baltic Birch Plywood, 5' × 5'	Sheet F	
1	4/4 Red Oak, 5-1/2" × 8'	Board J	3.7
20	Domino tenons 6 × 40	Hardware	
4	Drawer slides, 18" (457 mm), full-extension, side-mount (pair)	Hardware	

Qty	Material	Label in plan	Board feet
4	Hinges, 35 mm cup, full overlay, soft-close	Hardware	
6	Knobs	Hardware	
36	Kreg pocket screws 1-1/4" coarse thread	Hardware	
4	Shelf pins 1/4"	Hardware	

Cost

In USD, at this project's prices

Qty	Item	Price	Per	Total
1	4/4 Red Oak, 5-1/2" × 8' (3.7 board feet)	$6.00	a board foot	$22.00
1	1/2" Baltic Birch Plywood, 5' × 5'	$84.00	a sheet	$84.00
1	1/4" Baltic Birch Plywood, 5' × 5'	$63.00	a sheet	$63.00
4	3/4" Birch Plywood, 4' × 8'	$75.00	a sheet	$300.00
1	1/4" Birch Plywood, 4' × 8'	$45.00	a sheet	$45.00
20	Domino tenons 6 × 40	$0.25	each	$5.00
4	Drawer slides, 18" (457 mm), full-extension, side-mount (pair)	$20.00	each	$80.00
4	Hinges, 35 mm cup, full overlay, soft-close	$4.00	each	$16.00
6	Knobs	$3.00	each	$18.00
36	Kreg pocket screws 1-1/4" coarse thread	$0.08	each	$2.88
4	Shelf pins 1/4"	$0.15	each	$0.60
Wood				**$514.00**
Hardware				**$122.48**
Total				**$636.48**
$181.90 of the wood is offcuts and kerf (35%), counted in Wood above.				
Priced at what Optimize sheets packs the parts onto: 8 instead of the 10 they're on now.				

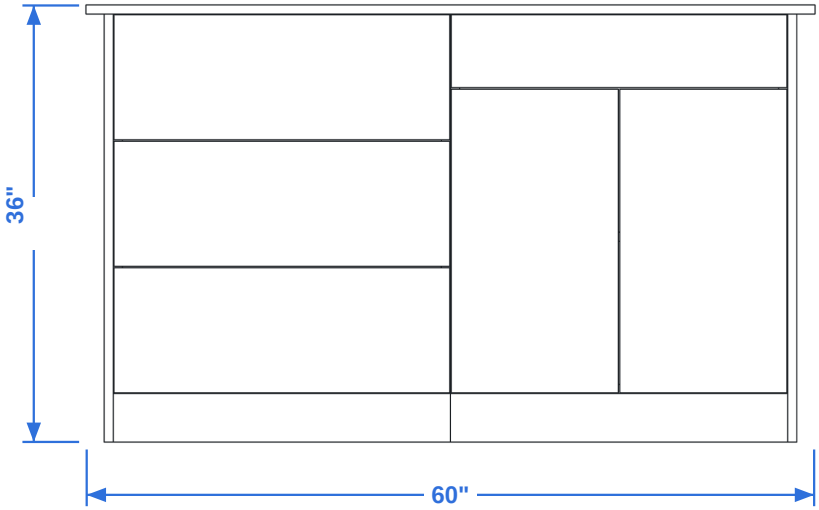
Views

Use the written dimensions; don't scale the drawing.

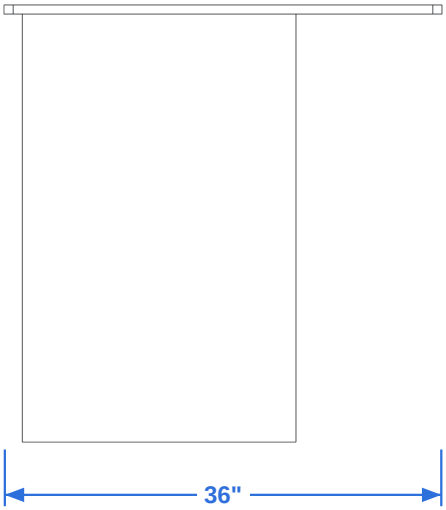
Top



Front

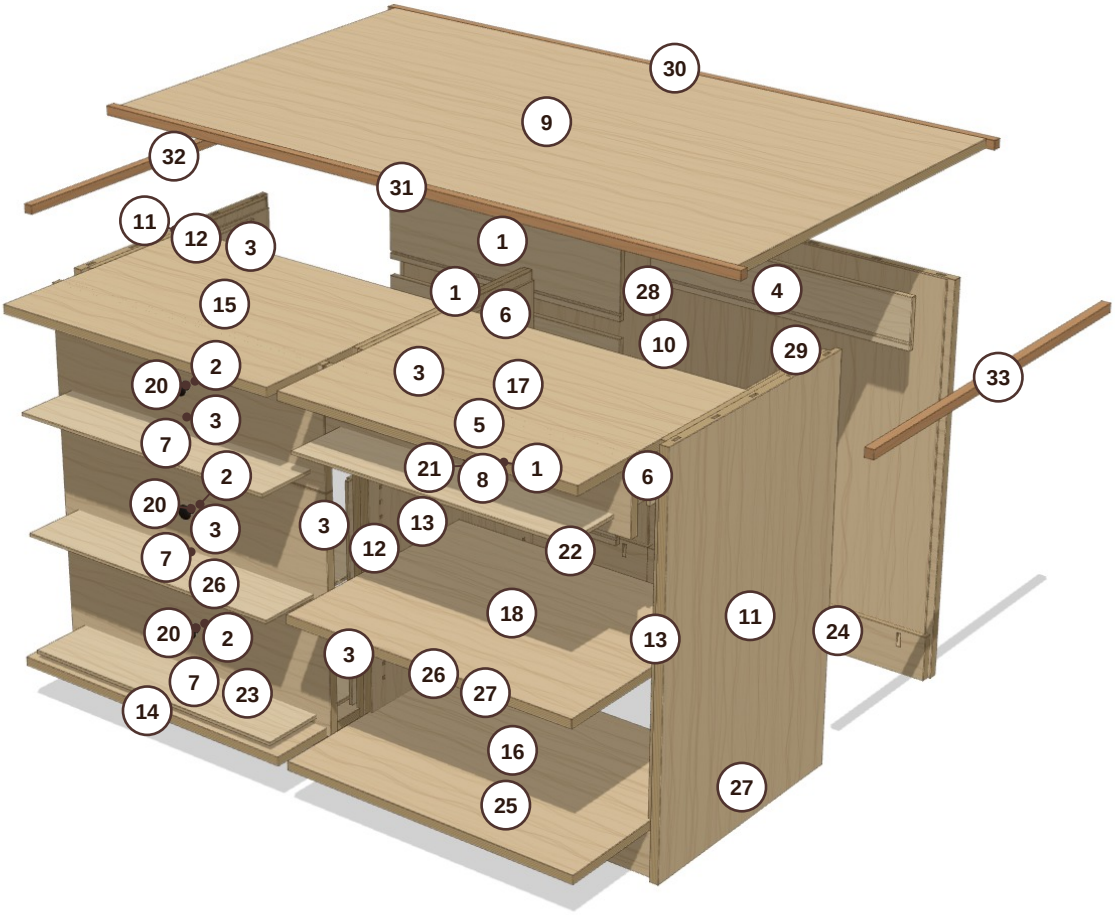


Right side



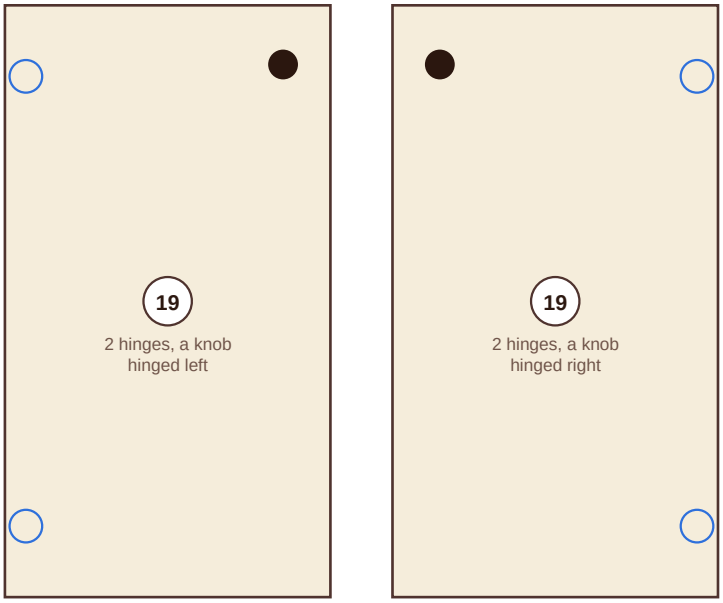
Exploded view: the carcase

Every part by its number in the cut list



Exploded view: doors and hardware

Seen from the front, spread apart



Cut list

Length runs with the grain

#	Part	Qty	Length	Width	Thick	Material	From	Grain
1	Left base drawer box back	3	24-3/4"	8-13/16"	1/2"	Baltic Birch Plywood	E	Length
2	Left base drawer box front	3	24-3/4"	8-13/16"	1/2"	Baltic Birch Plywood	E	Length
3	Left base drawer box side	6	18"	8-13/16"	1/2"	Baltic Birch Plywood	E	Length
4	Right base drawer box back	1	24-3/4"	4-1/2"	1/2"	Baltic Birch Plywood	E	Length
5	Right base drawer box front	1	24-3/4"	4-1/2"	1/2"	Baltic Birch Plywood	E	Length
6	Right base drawer box side	2	18"	4-1/2"	1/2"	Baltic Birch Plywood	E	Length
7	Left base drawer box bottom	3	24-3/4"	17-1/2"	1/4"	Baltic Birch Plywood	F	Length
8	Right base drawer box bottom	1	24-3/4"	17-1/2"	1/4"	Baltic Birch Plywood	F	Length
9	Top	1	58-1/2"	34-1/2"	3/4"	Birch Plywood	I	Length
10	Finished back	1	56"	35-1/4"	3/4"	Birch Plywood	H	Length
11	End panel	2	35-1/4"	22-1/2"	3/4"	Birch Plywood	G	Length
12	Left base side	2	31-1/4"	21"	3/4"	Birch Plywood	A	Length
13	Right base side	2	31-1/4"	21"	3/4"	Birch Plywood	A	Length
14	Left base bottom	1	26-3/4"	20-3/4"	3/4"	Birch Plywood	B	Length
15	Left base top	1	26-3/4"	20-3/4"	3/4"	Birch Plywood	B	Length
16	Right base bottom	1	26-3/4"	20-3/4"	3/4"	Birch Plywood	B	Length
17	Right base top	1	26-3/4"	20-3/4"	3/4"	Birch Plywood	B	Length
18	Right base shelf	1	26-3/16"	20-3/4"	3/4"	Birch Plywood	B	Length
19	Right base door	2	25"	13-3/4"	3/4"	Birch Plywood	C	Length, keep
20	Left base drawer front	3	27-5/8"	10-5/16"	3/4"	Birch Plywood	C	Length, keep
21	Right base drawer front	1	27-5/8"	6"	3/4"	Birch Plywood	B	Length, keep
22	Left base toe-kick back rail	1	27-3/4"	4"	3/4"	Birch Plywood	A	Length
23	Left base toe-kick front rail	1	27-3/4"	4"	3/4"	Birch Plywood	A	Length
24	Right base toe-kick back rail	1	27-3/4"	4"	3/4"	Birch Plywood	A	Length
25	Right base toe-kick front rail	1	27-3/4"	4"	3/4"	Birch Plywood	C	Length
26	Left base toe-kick cross rail	2	16-1/2"	4"	3/4"	Birch Plywood	C	Length
27	Right base toe-kick cross rail	2	16-1/2"	4"	3/4"	Birch Plywood	C	Length
28	Left base back	1	31-1/4"	27"	1/4"	Birch Plywood	D	Length
29	Right base back	1	31-1/4"	27"	1/4"	Birch Plywood	D	Length
30	Top back edging	1	60"	3/4"	3/4"	Red Oak	J	Length
31	Top front edging	1	60"	3/4"	3/4"	Red Oak	J	Length

#	Part	Qty	Length	Width	Thick	Material	From	Grain
32	Top left edging	1	34-1/2"	3/4"	3/4"	Red Oak	J	Length
33	Top right edging	1	34-1/2"	3/4"	3/4"	Red Oak	J	Length

Assembly

Which parts join, and how

Part	Joins	Joinery	Each	Where
Left base side ×2	Left base bottom	Rabbet	1	at the left end
Left base side ×2	Left base top	Rabbet	1	at the right end
Left base side ×2	Left base back	Rabbet	1	on the top edge
Right base side ×2	Right base bottom	Rabbet	1	at the left end
Right base side ×2	Right base top	Rabbet	1	at the right end
Right base side ×2	Right base back	Rabbet	1	on the top edge
Left base toe-kick back rail	Left base bottom	Kreg pocket screws 1-1/4" coarse	5	top edge
Left base toe-kick front rail	Left base bottom	Kreg pocket screws 1-1/4" coarse	5	top edge
Right base toe-kick back rail	Right base bottom	Kreg pocket screws 1-1/4" coarse	5	top edge
Right base toe-kick front rail	Right base bottom	Kreg pocket screws 1-1/4" coarse	5	top edge
Left base toe-kick cross rail ×2	Left base toe-kick back rail	Kreg pocket screws 1-1/4" coarse	2	back end
Left base toe-kick cross rail ×2	Left base toe-kick front rail	Kreg pocket screws 1-1/4" coarse	2	front end
Right base toe-kick cross rail ×2	Right base toe-kick back rail	Kreg pocket screws 1-1/4" coarse	2	back end
Right base toe-kick cross rail ×2	Right base toe-kick front rail	Kreg pocket screws 1-1/4" coarse	2	front end
Left base drawer box back ×3	Left base drawer box bottom	Groove	1	8-1/16" from the top edge
Left base drawer box front ×3	Left base drawer box bottom	Groove	1	8-1/16" from the top edge
Left base drawer box side ×6	Left base drawer box back	Rabbet	1	at the left end
Left base drawer box side ×6	Left base drawer box front	Rabbet	1	at the right end
Left base drawer box side ×6	Left base drawer box bottom	Groove	1	8-1/16" from the top edge
Right base drawer box back	Right base drawer box bottom	Groove	1	3-3/4" from the top edge
Right base drawer box front	Right base drawer box bottom	Groove	1	3-3/4" from the top edge

Part	Joins	Joinery	Each	Where
Right base drawer box side ×2	Right base drawer box back	Rabbet	1	at the left end
Right base drawer box side ×2	Right base drawer box front	Rabbet	1	at the right end
Right base drawer box side ×2	Right base drawer box bottom	Groove	1	3-3/4" from the top edge
End panel ×2	Finished back	Rabbet	1	on the top edge
End panel ×2	Top	Domino DF 500, 6 × 40 tenons	5	top end
Finished back	Top	Domino DF 500, 6 × 40 tenons	10	top edge
Right base shelf	both Right base sides	Shelf pins 1/4"	4	any hole in the rows

Joinery

From the left end and top edge as drawn in the diagrams

#	Part	Joint	Size	Where	Face
1	Left base drawer box back ×3	Groove	1/4" wide × 1/4" deep	8-1/16" from the top edge	Inside
2	Left base drawer box front ×3	Groove	1/4" wide × 1/4" deep	8-1/16" from the top edge	Inside
3	Left base drawer box side ×6	Rabbet	1/2" wide × 1/4" deep	at the left end	Mirror pair
3	Left base drawer box side ×6	Groove	1/4" wide × 1/4" deep	8-1/16" from the top edge	Mirror pair
3	Left base drawer box side ×6	Rabbet	1/2" wide × 1/4" deep	at the right end	Mirror pair
4	Right base drawer box back	Groove	1/4" wide × 1/4" deep	3-3/4" from the top edge	Inside
5	Right base drawer box front	Groove	1/4" wide × 1/4" deep	3-3/4" from the top edge	Inside
6	Right base drawer box side ×2	Rabbet	1/2" wide × 1/4" deep	at the left end	Mirror pair
6	Right base drawer box side ×2	Groove	1/4" wide × 1/4" deep	3-3/4" from the top edge	Mirror pair
6	Right base drawer box side ×2	Rabbet	1/2" wide × 1/4" deep	at the right end	Mirror pair
9	Top	Loose tenon mortises	5 for 6 × 40 tenons (DF 500), 15 mm deep	1" from the left end, 12-5/16" from the top edge	Underside

#	Part	Joint	Size	Where	Face
9	Top	Loose tenon mortises	10 for 6 × 40 tenons (DF 500), 15 mm deep	2-5/16" from the left end, 11-1/2" from the top edge	Underside
9	Top	Loose tenon mortises	5 for 6 × 40 tenons (DF 500), 15 mm deep	57-1/4" from the left end, 12-5/16" from the top edge	Underside
10	Finished back	Loose tenon mortises	10 for 6 × 40 tenons (DF 500), 25 mm deep	on the top edge	Centered
11	End panel ×2	Rabbet	3/4" wide × 1/4" deep	on the top edge	Mirror pair
11	End panel ×2	Loose tenon mortises	5 for 6 × 40 tenons (DF 500), 25 mm deep	at the right end	Mirror pair
12	Left base side ×2	Rabbet	3/4" wide × 1/4" deep	at the left end	Mirror pair
12	Left base side ×2	Rabbet	1/4" wide × 3/8" deep	on the top edge	Mirror pair
12	Left base side ×2	Rabbet	3/4" wide × 1/4" deep	at the right end	Mirror pair
13	Right base side ×2	Rabbet	3/4" wide × 1/4" deep	at the left end	Mirror pair
13	Right base side ×2	Rabbet	1/4" wide × 3/8" deep	on the top edge	Mirror pair
13	Right base side ×2	Shelf pin holes	2 rows of 20, 1/4" holes 5/16" deep, every 1-1/4"	7-1/4" to 31-3/16" up from the floor, 1-7/16" in from the front and back edges	Mirror pair
13	Right base side ×2	Rabbet	3/4" wide × 1/4" deep	at the right end	Mirror pair
22	Left base toe-kick back rail	Pocket holes	5 for 1-1/4" coarse screws, Kreg 3/4" setting	on the top edge	Top
23	Left base toe-kick front rail	Pocket holes	5 for 1-1/4" coarse screws, Kreg 3/4" setting	on the top edge	Underside
24	Right base toe-kick back rail	Pocket holes	5 for 1-1/4" coarse screws, Kreg 3/4" setting	on the top edge	Top
25	Right base toe-kick front rail	Pocket holes	5 for 1-1/4" coarse screws, Kreg 3/4" setting	on the top edge	Underside
26	Left base toe-kick cross rail ×2	Pocket holes	2 for 1-1/4" coarse screws, Kreg 3/4" setting	at the left end	Mirror pair
26	Left base toe-kick cross rail ×2	Pocket holes	2 for 1-1/4" coarse screws, Kreg 3/4" setting	at the right end	Mirror pair
27	Right base toe-kick cross rail ×2	Pocket holes	2 for 1-1/4" coarse screws, Kreg 3/4" setting	at the left end	Mirror pair

#	Part	Joint	Size	Where	Face
27	Right base toe-kick cross rail ×2	Pocket holes	2 for 1-1/4" coarse screws, Kreg 3/4" setting	at the right end	Mirror pair
19	Right base door	Hinge cups	2 × 35 mm, 1/2" deep	7/8" in from the left edge; 3" from the top (22" from the bottom), 22" from the top (3" from the bottom)	Inside
19	Right base door	Hinge cups	2 × 35 mm, 1/2" deep	7/8" in from the right edge; 3" from the top (22" from the bottom), 22" from the top (3" from the bottom)	Inside

Hardware

Tenons, screws, hinges, knobs, drawer slides and shelf pins

Qty	Item	On parts
20	Domino tenons 6 × 40	
4	Drawer slides, 18" (457 mm), full-extension, side-mount (pair)	20, 21
4	Hinges, 35 mm cup, full overlay, soft-close	19
6	Knobs	19, 20, 21
36	Kreg pocket screws 1-1/4" coarse thread	
4	Shelf pins 1/4"	18

Leftovers

Usable offcuts after cutting

Piece	Length	Width	Thick	Material
Offcut A1	96"	1-5/8"	3/4"	Birch Plywood
Offcut A2	1-7/8"	21"	3/4"	Birch Plywood
Offcut A3	64-5/8"	21"	3/4"	Birch Plywood
Offcut A4	12-3/8"	4"	3/4"	Birch Plywood
Offcut B1	96"	1/8"	3/4"	Birch Plywood
Offcut B2	15-3/8"	20-3/4"	3/4"	Birch Plywood
Offcut B3	42-13/16"	20-3/4"	3/4"	Birch Plywood
Offcut B4	68-1/4"	6"	3/4"	Birch Plywood
Offcut C1	96"	19-9/16"	3/4"	Birch Plywood
Offcut C2	45-3/4"	13-3/4"	3/4"	Birch Plywood
Offcut C3	12-3/4"	10-5/16"	3/4"	Birch Plywood
Offcut C4	1-5/8"	4"	3/4"	Birch Plywood
Offcut D1	96"	20-7/8"	1/4"	Birch Plywood
Offcut D2	33-1/4"	27"	1/4"	Birch Plywood
Offcut E1	60"	6-3/16"	1/2"	Baltic Birch Plywood

Piece	Length	Width	Thick	Material
Offcut E2	10-1/4"	8-13/16"	1/2"	Baltic Birch Plywood
Offcut E3	10-1/4"	8-13/16"	1/2"	Baltic Birch Plywood
Offcut E4	10-1/4"	8-13/16"	1/2"	Baltic Birch Plywood
Offcut E5	5-5/8"	8-13/16"	1/2"	Baltic Birch Plywood
Offcut E6	5-5/8"	8-13/16"	1/2"	Baltic Birch Plywood
Offcut E7	10-1/4"	4-1/2"	1/2"	Baltic Birch Plywood
Offcut E8	23-3/4"	4-1/2"	1/2"	Baltic Birch Plywood
Offcut F1	60"	24-3/4"	1/4"	Baltic Birch Plywood
Offcut F2	10-1/4"	17-1/2"	1/4"	Baltic Birch Plywood
Offcut F3	10-1/4"	17-1/2"	1/4"	Baltic Birch Plywood
Offcut G1	96"	25-3/8"	3/4"	Birch Plywood
Offcut G3	25-1/4"	22-1/2"	3/4"	Birch Plywood
Offcut H2	39-7/8"	35-1/4"	3/4"	Birch Plywood
Offcut H1	96"	12-5/8"	3/4"	Birch Plywood
Offcut I2	37-3/8"	34-1/2"	3/4"	Birch Plywood
Offcut I1	96"	13-3/8"	3/4"	Birch Plywood
Offcut J1	96"	3-3/4"	3/4"	Red Oak
Offcut J4	1-1/4"	3/4"	3/4"	Red Oak
Offcut J5	1-1/4"	3/4"	3/4"	Red Oak

Layout

Where each shelf and divider goes, from one edge

Mark mating parts together from the same reference edge, or use a story stick or a spacer block, so each pair matches even if your tape is off.

12 Left base side: up from the bottom edge (31-1/4" long)

Same marks as Left base side, Right base side, Right base side: mark them together.

#	Part	On	Bottom of shelf	Top of shelf
14	Left base bottom	Right face	0"	3/4"
15	Left base top	Right face	30-1/2"	31-1/4"



12 Left base side: up from the bottom edge (31-1/4" long)

Same marks as Left base side, Right base side, Right base side: mark them together.

#	Part	On	Bottom of shelf	Top of shelf
14	Left base bottom	Left face	0"	3/4"
15	Left base top	Left face	30-1/2"	31-1/4"



13 Right base side: up from the bottom edge (31-1/4" long)

Same marks as Left base side, Left base side, Right base side: mark them together.

#	Part	On	Bottom of shelf	Top of shelf
16	Right base bottom	Right face	0"	3/4"
17	Right base top	Right face	30-1/2"	31-1/4"

Shelf pin holes on the right face: 1/4" every 1-1/4", 3-1/4" to 27-3/16", 1-7/16" in from the front and back edges.



13 Right base side: up from the bottom edge (31-1/4" long)

Same marks as Left base side, Left base side, Right base side: mark them together.

#	Part	On	Bottom of shelf	Top of shelf
16	Right base bottom	Left face	0"	3/4"
17	Right base top	Left face	30-1/2"	31-1/4"

Shelf pin holes on the left face: 1/4" every 1-1/4", 3-1/4" to 27-3/16", 1-7/16" in from the front and back edges.



3 Left base drawer box side: up from the bottom edge (8-13/16" long)

The other Left base drawer box side has the same marks: mark them together.

#	Part	On	Bottom of shelf	Top of shelf
7	Left base drawer box bottom	Right face	1/2"	3/4"



3 Left base drawer box side: up from the bottom edge (8-13/16" long)

The other Left base drawer box side has the same marks: mark them together.

#	Part	On	Bottom of shelf	Top of shelf
7	Left base drawer box bottom	Left face	1/2"	3/4"



3 Left base drawer box side: up from the bottom edge (8-13/16" long)

The other 3 have the same marks: mark them together.

#	Part	On	Bottom of shelf	Top of shelf
7	Left base drawer box bottom	Right face	1/2"	3/4"



3 Left base drawer box side: up from the bottom edge (8-13/16" long)

The other 3 have the same marks: mark them together.

#	Part	On	Bottom of shelf	Top of shelf
7	Left base drawer box bottom	Left face	1/2"	3/4"



3 Left base drawer box side: up from the bottom edge (8-13/16" long)

The other 3 have the same marks: mark them together.

#	Part	On	Bottom of shelf	Top of shelf
7	Left base drawer box bottom	Right face	1/2"	3/4"



3 Left base drawer box side: up from the bottom edge (8-13/16" long)

The other 3 have the same marks: mark them together.

#	Part	On	Bottom of shelf	Top of shelf
7	Left base drawer box bottom	Left face	1/2"	3/4"



6 Right base drawer box side: up from the bottom edge (4-1/2" long)

The other Right base drawer box side has the same marks: mark them together.

#	Part	On	Bottom of shelf	Top of shelf
8	Right base drawer box bottom	Right face	1/2"	3/4"



6 Right base drawer box side: up from the bottom edge (4-1/2" long)

The other Right base drawer box side has the same marks: mark them together.

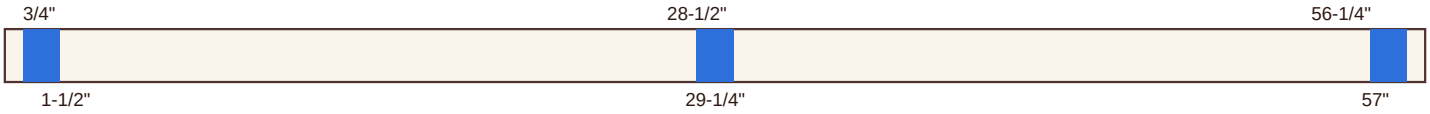
#	Part	On	Bottom of shelf	Top of shelf
8	Right base drawer box bottom	Left face	1/2"	3/4"



Bottom edge Top

9 Top: in from the left edge (58-1/2" long)

#	Part	On	Left face	Right face
11	End panel	Underside	3/4"	1-1/2"
12	Left base side	Underside	1-1/2"	2-1/4"
12	Left base side	Underside	28-1/2"	29-1/4"
13	Right base side	Underside	29-1/4"	30"
13	Right base side	Underside	56-1/4"	57"
11	End panel	Underside	57"	57-3/4"



Left edge Right

32 Top left edging: up from the bottom edge (3/4" long)

Same marks as Top right edging: mark them together.

#	Part	On	Bottom of shelf	Top of shelf
9	Top	Right face	0"	3/4"



Bottom edge Top

33 Top right edging: up from the bottom edge (3/4" long)

Same marks as Top left edging: mark them together.

#	Part	On	Bottom of shelf	Top of shelf
9	Top	Left face	0"	3/4"



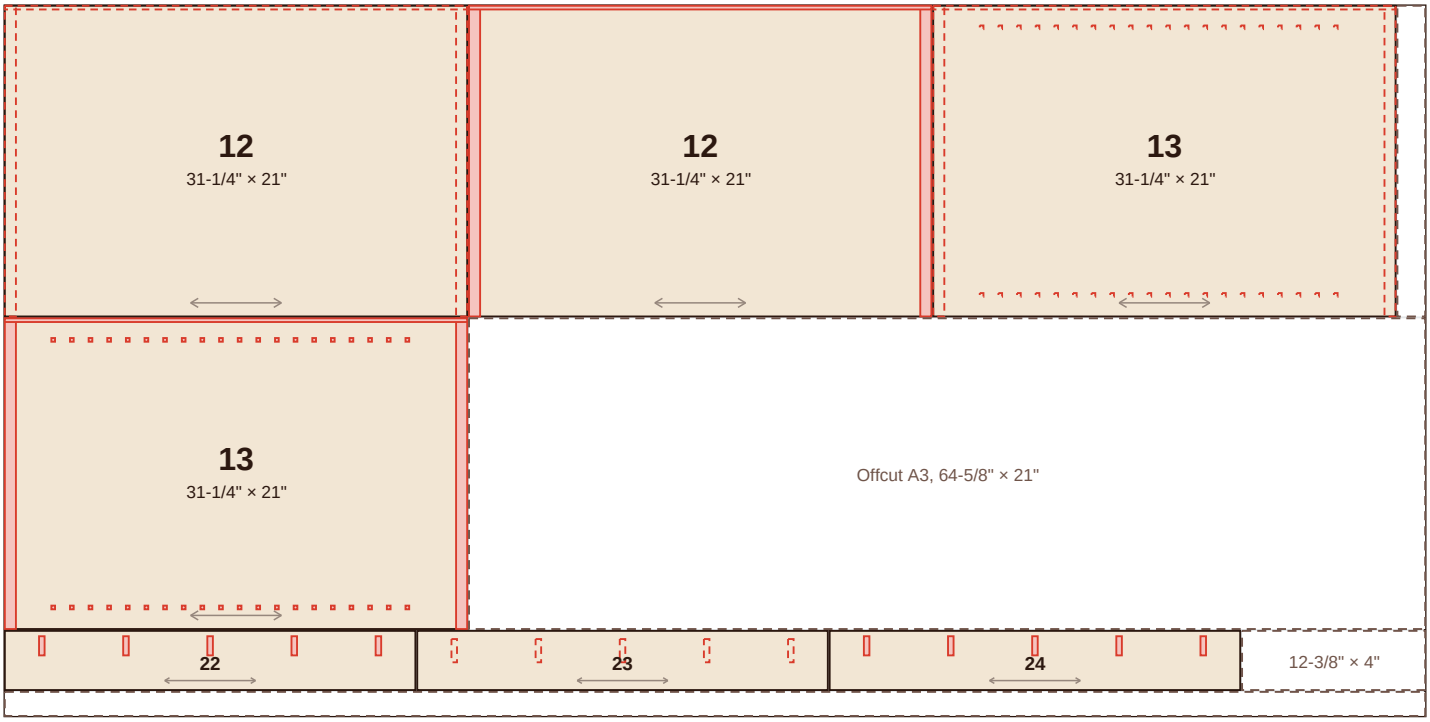
Bottom edge Top

Cutting diagrams

Grey gaps are saw kerf (1/8"). Red is joinery.

Sheet A 3/4" Birch Plywood, 4' × 8'

64% used



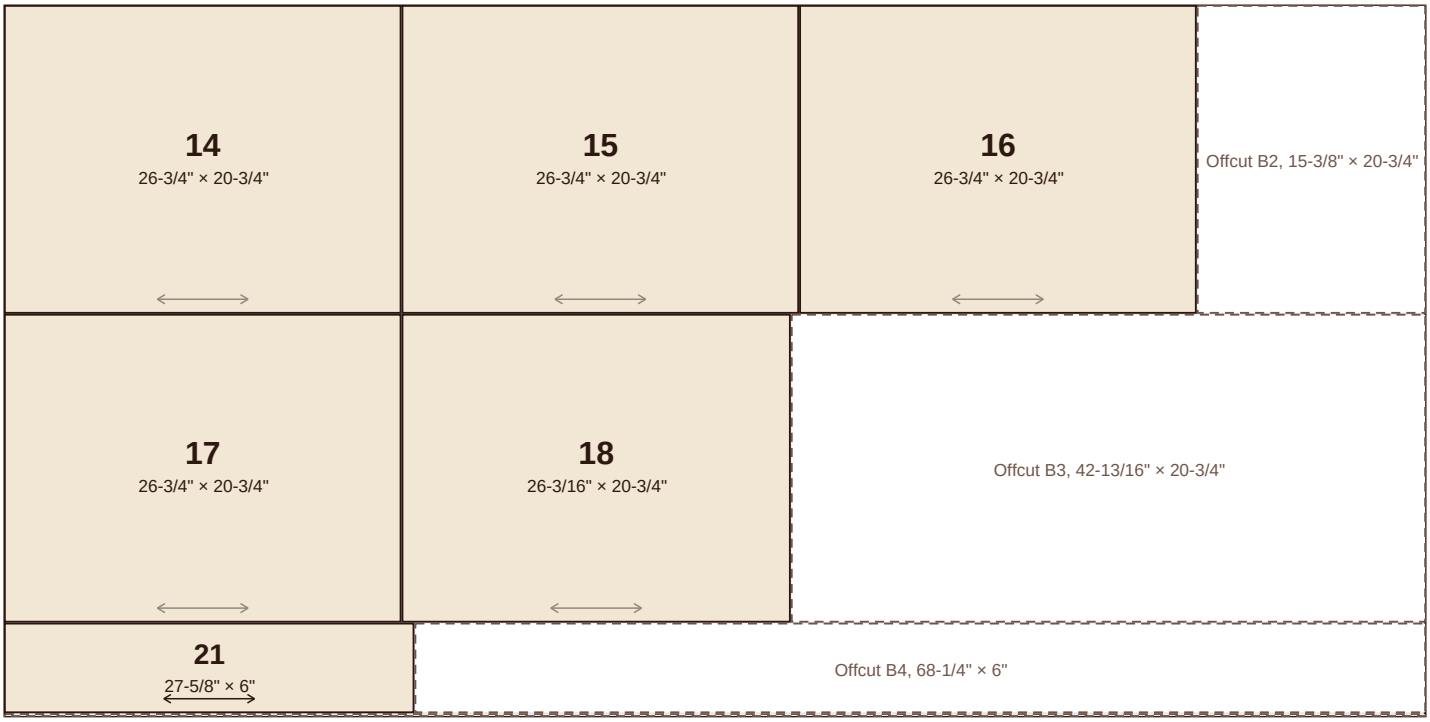
96" long, grain runs left to right

48" wide

12	Left base side ×2	31-1/4" × 21"	**13**	Right base side ×2	31-1/4" × 21"
22	Left base toe-kick back rail	27-3/4" × 4"	**23**	Left base toe-kick front rail	27-3/4" × 4"
24	Right base toe-kick back rail	27-3/4" × 4"			

Sheet B 3/4" Birch Plywood, 4' × 8'

64% used

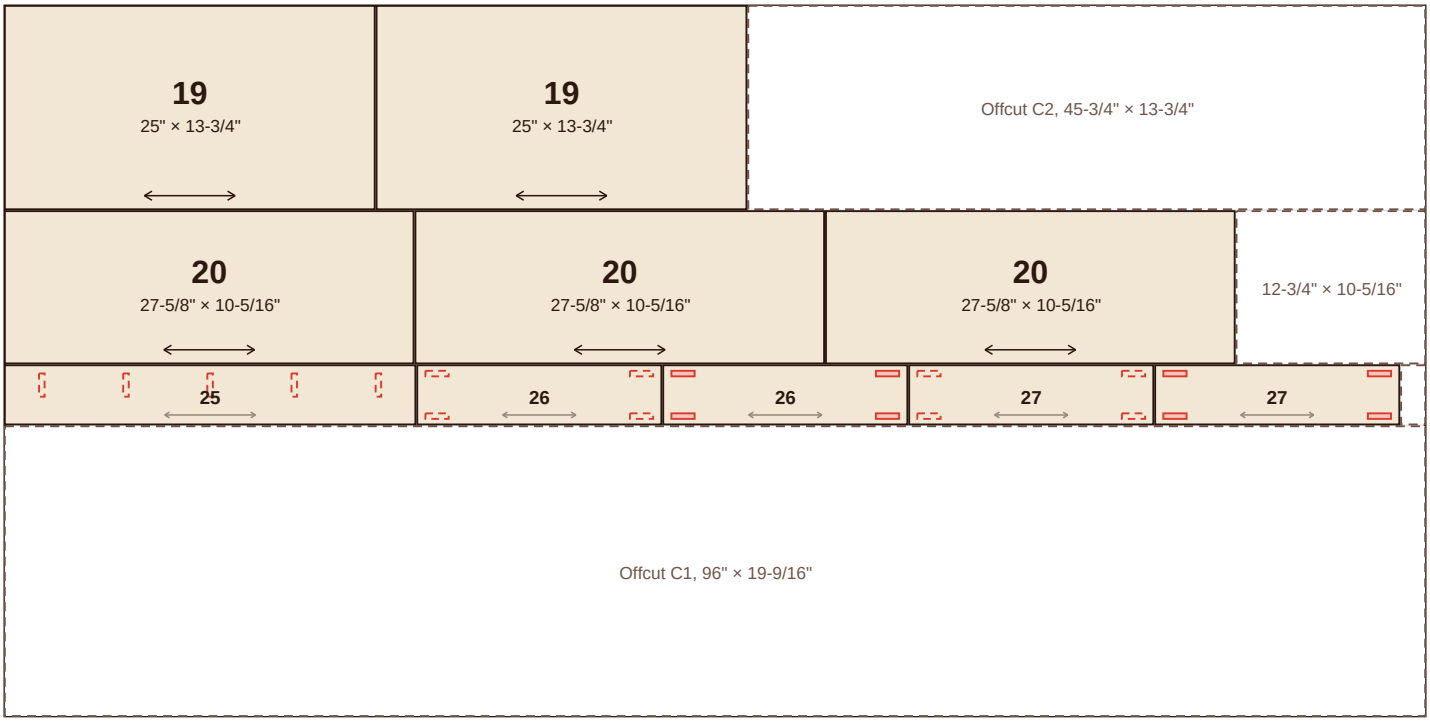


96" long, grain runs left to right

48" wide

14	Left base bottom	26-3/4" × 20-3/4"	**15**	Left base top	26-3/4" × 20-3/4"
16	Right base bottom	26-3/4" × 20-3/4"	**17**	Right base top	26-3/4" × 20-3/4"
18	Right base shelf	26-3/16" × 20-3/4"	**21**	Right base drawer front	27-5/8" × 6"

Sheet C 3/4" Birch Plywood, 4' × 8' 42% used

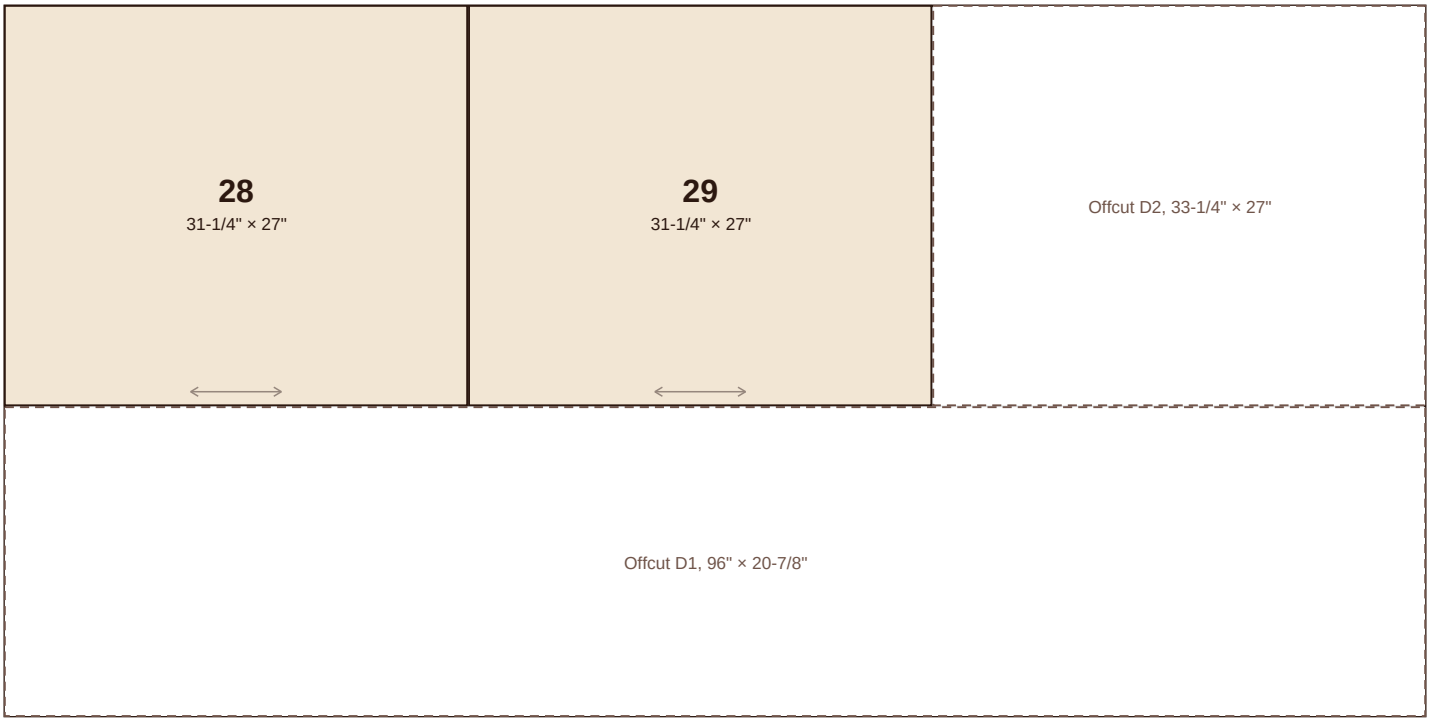


96" long, grain runs left to right 48" wide

19	Right base door ×2	25" × 13-3/4"	**20**	Left base drawer front ×3	27-5/8" × 10-5/16"
25	Right base toe-kick front rail	27-3/4" × 4"	**26**	Left base toe-kick cross rail ×2	16-1/2" × 4"
27	Right base toe-kick cross rail ×2	16-1/2" × 4"			

Sheet D 1/4" Birch Plywood, 4' × 8'

37% used



96" long, grain runs left to right

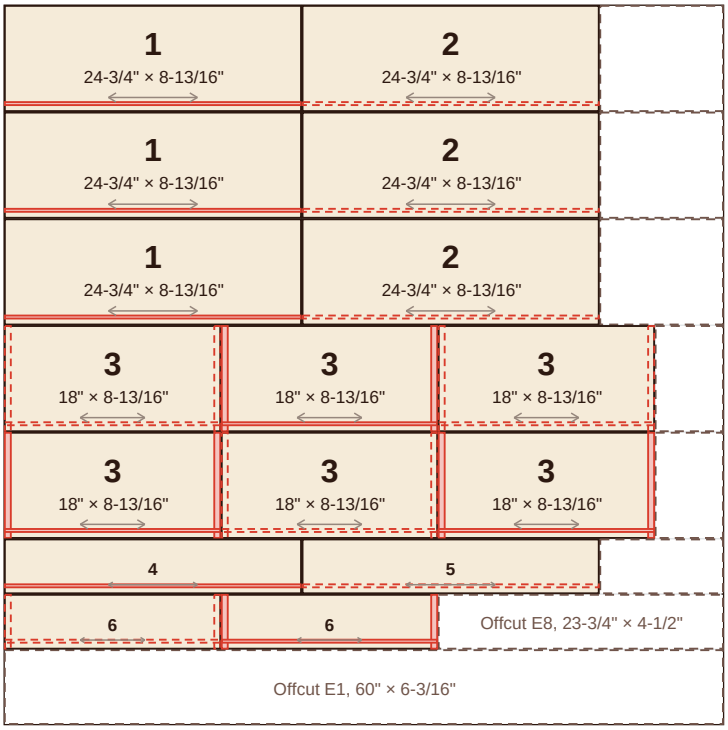
48" wide

28 Left base back 31-1/4" × 27"

29 Right base back 31-1/4" × 27"

Sheet E 1/2" Baltic Birch Plywood, 5' × 5'

73% used



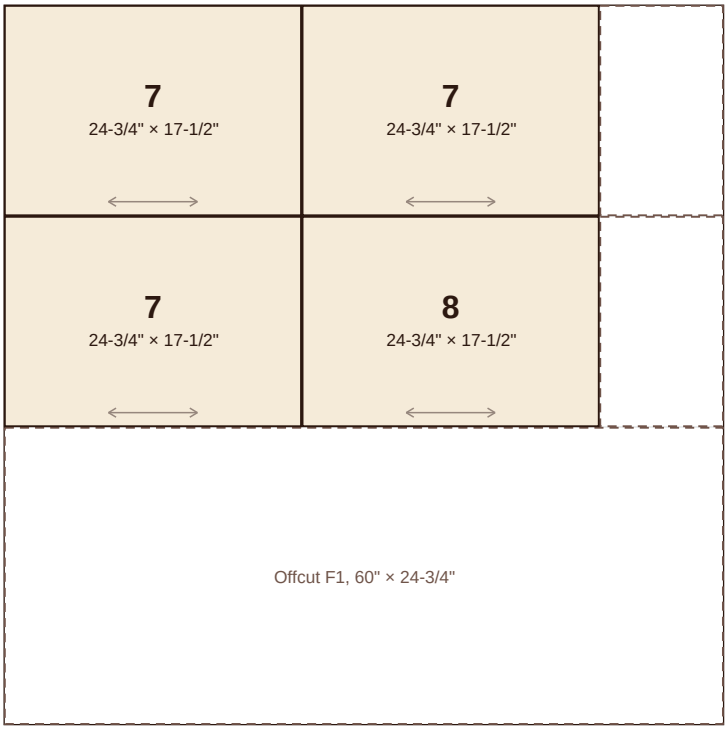
60" long, grain runs left to right

60" wide

1	Left base drawer box back ×3	24-3/4" × 8-13/16"	**2**	Left base drawer box front ×3	24-3/4" × 8-13/16"
3	Left base drawer box side ×6	18" × 8-13/16"	**4**	Right base drawer box back	24-3/4" × 4-1/2"
5	Right base drawer box front	24-3/4" × 4-1/2"	**6**	Right base drawer box side ×2	18" × 4-1/2"

Sheet F 1/4" Baltic Birch Plywood, 5' × 5'

48% used

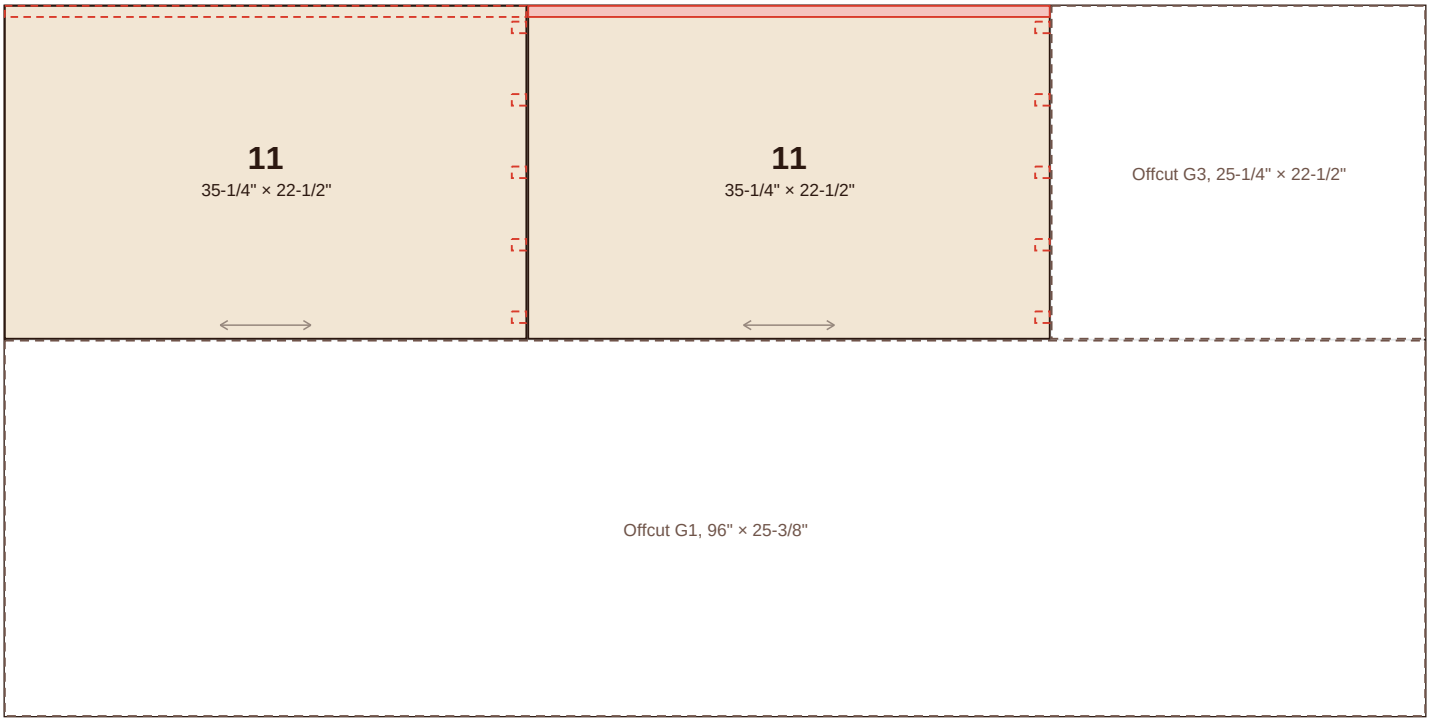


60" long, grain runs left to right

60" wide

7	Left base drawer box bottom ×3	24-3/4" × 17-1/2"	**8**	Right base drawer box bottom	24-3/4" × 17-1/2"

Sheet G 3/4" Birch Plywood, 4' × 8' 34% used

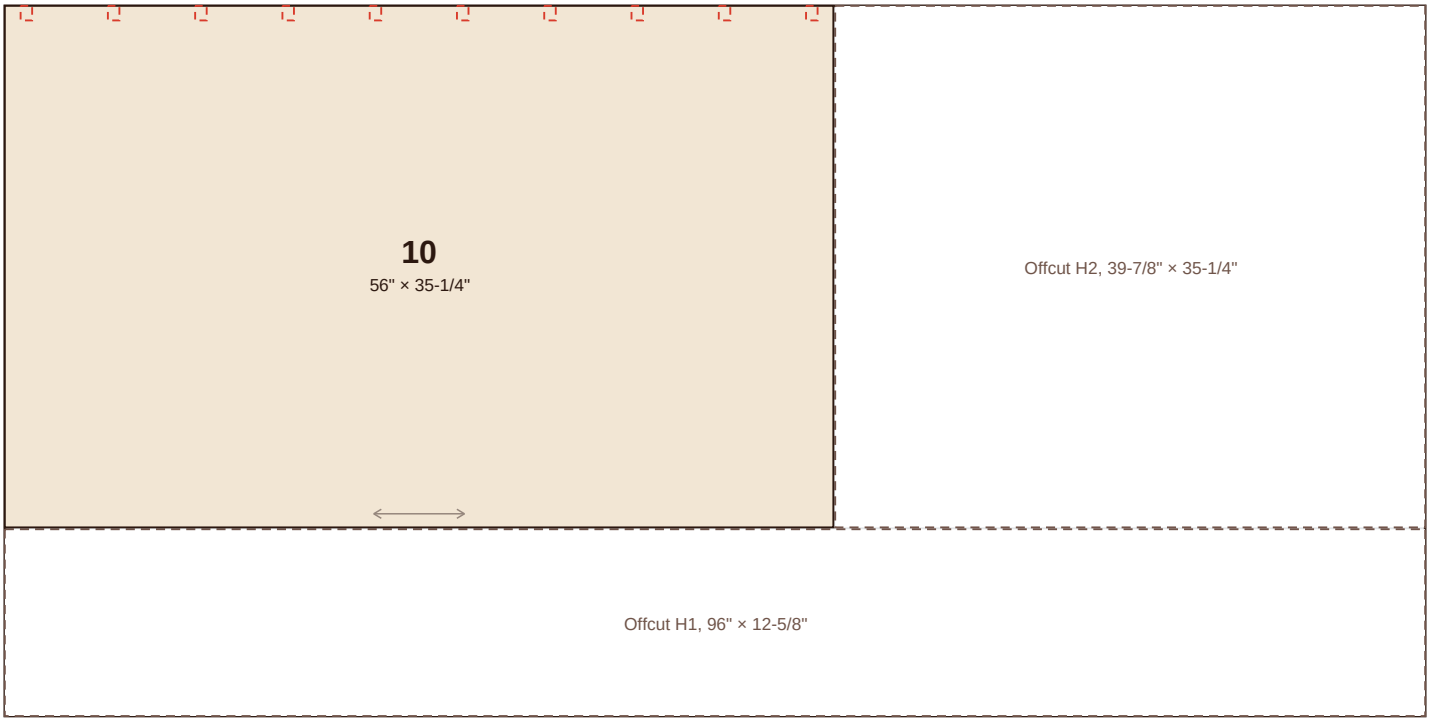


96" long, grain runs left to right 48" wide

11 End panel ×2 35-1/4" × 22-1/2"

Sheet H 3/4" Birch Plywood, 4' × 8'

43% used

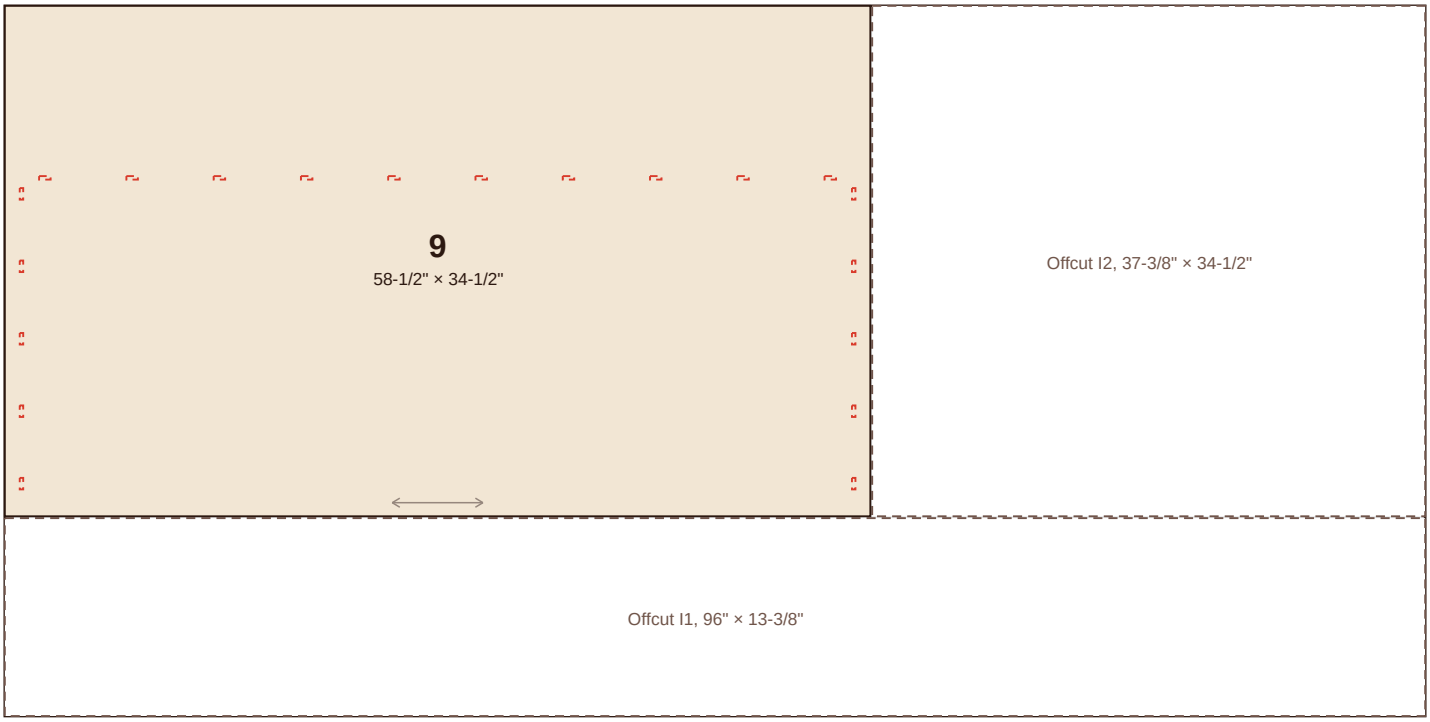


96" long, grain runs left to right

48" wide

10 Finished back 56" × 35-1/4"

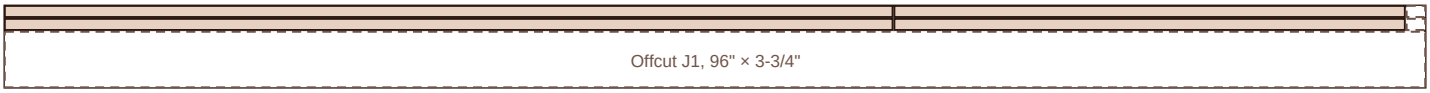
Sheet I 3/4" Birch Plywood, 4' × 8' 44% used



96" long, grain runs left to right 48" wide

9	Top	58-1/2" × 34-1/2"

Board J 4/4 Red Oak, 5-1/2" × 8' 27% used



96" long, grain runs left to right 5-1/2" wide

30	Top back edging	60" × 3/4"	**31**	Top front edging	60" × 3/4"
32	Top left edging	34-1/2" × 3/4"	**33**	Top right edging	34-1/2" × 3/4"

Cut sequence

Check off each step as you go

- [ ] **1** Get Sheet A: 3/4" Birch Plywood, 4' × 8'.
- [ ] **2** From Sheet A, rip a strip 21" wide for Strip.
- [ ] **3** From Strip (Sheet A), crosscut a piece 31-1/4" long for Left base side.
- [ ] **4** From Offcut A2, crosscut a piece 31-1/4" long for Left base side.
- [ ] **5** From Offcut A2, crosscut a piece 31-1/4" long for Right base side.
- [ ] **6** From Offcut A1, rip a strip 21" wide for Strip.
- [ ] **7** From Strip (Sheet A), crosscut a piece 31-1/4" long for Right base side.
- [ ] **8** From Offcut A1, rip a strip 4" wide for Strip.
- [ ] **9** From Strip (Sheet A), crosscut a piece 27-3/4" long for Left base toe-kick back rail.
- [ ] **10** From Offcut A4, crosscut a piece 27-3/4" long for Left base toe-kick front rail.
- [ ] **11** From Offcut A4, crosscut a piece 27-3/4" long for Right base toe-kick back rail.
- [ ] **12** Get Sheet B: 3/4" Birch Plywood, 4' × 8'.
- [ ] **13** From Sheet B, rip a strip 20-3/4" wide for Strip.
- [ ] **14** From Strip (Sheet B), crosscut a piece 26-3/4" long for Left base bottom.
- [ ] **15** From Offcut B2, crosscut a piece 26-3/4" long for Left base top.
- [ ] **16** From Offcut B2, crosscut a piece 26-3/4" long for Right base bottom.
- [ ] **17** From Offcut B1, rip a strip 20-3/4" wide for Strip.
- [ ] **18** From Strip (Sheet B), crosscut a piece 26-3/4" long for Right base top.
- [ ] **19** From Offcut B3, crosscut a piece 26-3/16" long for Right base shelf.
- [ ] **20** From Offcut B1, rip a strip 6" wide for Strip.
- [ ] **21** From Strip (Sheet B), crosscut a piece 27-5/8" long for Right base drawer front.
- [ ] **22** Get Sheet C: 3/4" Birch Plywood, 4' × 8'.
- [ ] **23** From Sheet C, rip a strip 13-3/4" wide for Strip.
- [ ] **24** From Strip (Sheet C), crosscut a piece 25" long for Right base door.
- [ ] **25** From Offcut C2, crosscut a piece 25" long for Right base door.
- [ ] **26** From Offcut C1, rip a strip 10-5/16" wide for Strip.
- [ ] **27** From Strip (Sheet C), crosscut a piece 27-5/8" long for Left base drawer front.
- [ ] **28** From Offcut C3, crosscut a piece 27-5/8" long for Left base drawer front.
- [ ] **29** From Offcut C3, crosscut a piece 27-5/8" long for Left base drawer front.

- [ ] **30** From Offcut C1, rip a strip 4" wide for Strip.
- [ ] **31** From Strip (Sheet C), crosscut a piece 27-3/4" long for Right base toe-kick front rail.
- [ ] **32** From Offcut C4, crosscut a piece 16-1/2" long for Left base toe-kick cross rail.
- [ ] **33** From Offcut C4, crosscut a piece 16-1/2" long for Left base toe-kick cross rail.
- [ ] **34** From Offcut C4, crosscut a piece 16-1/2" long for Right base toe-kick cross rail.
- [ ] **35** From Offcut C4, crosscut a piece 16-1/2" long for Right base toe-kick cross rail.
- [ ] **36** Get Sheet D: 1/4" Birch Plywood, 4' × 8'.
- [ ] **37** From Sheet D, rip a strip 27" wide for Strip.
- [ ] **38** From Strip (Sheet D), crosscut a piece 31-1/4" long for Left base back.
- [ ] **39** From Offcut D2, crosscut a piece 31-1/4" long for Right base back.
- [ ] **40** Get Sheet E: 1/2" Baltic Birch Plywood, 5' × 5'.
- [ ] **41** From Sheet E, rip a strip 8-13/16" wide for Strip.
- [ ] **42** From Strip (Sheet E), crosscut a piece 24-3/4" long for Left base drawer box back.
- [ ] **43** From Offcut E2, crosscut a piece 24-3/4" long for Left base drawer box front.
- [ ] **44** From Offcut E1, rip a strip 8-13/16" wide for Strip.
- [ ] **45** From Strip (Sheet E), crosscut a piece 24-3/4" long for Left base drawer box back.
- [ ] **46** From Offcut E3, crosscut a piece 24-3/4" long for Left base drawer box front.
- [ ] **47** From Offcut E1, rip a strip 8-13/16" wide for Strip.
- [ ] **48** From Strip (Sheet E), crosscut a piece 24-3/4" long for Left base drawer box back.
- [ ] **49** From Offcut E4, crosscut a piece 24-3/4" long for Left base drawer box front.
- [ ] **50** From Offcut E1, rip a strip 8-13/16" wide for Strip.
- [ ] **51** From Strip (Sheet E), crosscut a piece 18" long for Left base drawer box side.
- [ ] **52** From Offcut E5, crosscut a piece 18" long for Left base drawer box side.
- [ ] **53** From Offcut E5, crosscut a piece 18" long for Left base drawer box side.
- [ ] **54** From Offcut E1, rip a strip 8-13/16" wide for Strip.
- [ ] **55** From Strip (Sheet E), crosscut a piece 18" long for Left base drawer box side.
- [ ] **56** From Offcut E6, crosscut a piece 18" long for Left base drawer box side.
- [ ] **57** From Offcut E6, crosscut a piece 18" long for Left base drawer box side.
- [ ] **58** From Offcut E1, rip a strip 4-1/2" wide for Strip.
- [ ] **59** From Strip (Sheet E), crosscut a piece 24-3/4" long for Right base drawer box back.

- [ ] **60** From Offcut E7, crosscut a piece 24-3/4" long for Right base drawer box front.
- [ ] **61** From Offcut E1, rip a strip 4-1/2" wide for Strip.
- [ ] **62** From Strip (Sheet E), crosscut a piece 18" long for Right base drawer box side.
- [ ] **63** From Offcut E8, crosscut a piece 18" long for Right base drawer box side.
- [ ] **64** Get Sheet F: 1/4" Baltic Birch Plywood, 5' × 5'.
- [ ] **65** From Sheet F, rip a strip 17-1/2" wide for Strip.
- [ ] **66** From Strip (Sheet F), crosscut a piece 24-3/4" long for Left base drawer box bottom.
- [ ] **67** From Offcut F2, crosscut a piece 24-3/4" long for Left base drawer box bottom.
- [ ] **68** From Offcut F1, rip a strip 17-1/2" wide for Strip.
- [ ] **69** From Strip (Sheet F), crosscut a piece 24-3/4" long for Left base drawer box bottom.
- [ ] **70** From Offcut F3, crosscut a piece 24-3/4" long for Right base drawer box bottom.
- [ ] **71** In Left base side (Sheet A), cut 3 rabbets to fit the mating parts (sizes under Joinery).
- [ ] **72** In Left base side (Sheet A), cut 3 rabbets to fit the mating parts (sizes under Joinery).
- [ ] **73** In Left base drawer box side (Sheet E), cut 2 rabbets and a groove to fit the mating parts (sizes under Joinery).
- [ ] **74** In Left base drawer box side (Sheet E), cut 2 rabbets and a groove to fit the mating parts (sizes under Joinery).
- [ ] **75** In Left base drawer box front (Sheet E), cut a groove to fit the mating parts (sizes under Joinery).
- [ ] **76** In Left base drawer box back (Sheet E), cut a groove to fit the mating parts (sizes under Joinery).
- [ ] **77** In Left base drawer box side (Sheet E), cut 2 rabbets and a groove to fit the mating parts (sizes under Joinery).
- [ ] **78** In Left base drawer box side (Sheet E), cut 2 rabbets and a groove to fit the mating parts (sizes under Joinery).
- [ ] **79** In Left base drawer box front (Sheet E), cut a groove to fit the mating parts (sizes under Joinery).
- [ ] **80** In Left base drawer box back (Sheet E), cut a groove to fit the mating parts (sizes under Joinery).
- [ ] **81** In Left base drawer box side (Sheet E), cut 2 rabbets and a groove to fit the mating parts (sizes under Joinery).
- [ ] **82** In Left base drawer box side (Sheet E), cut 2 rabbets and a groove to fit the mating parts (sizes under Joinery).
- [ ] **83** In Left base drawer box front (Sheet E), cut a groove to fit the mating parts (sizes under Joinery).
- [ ] **84** In Left base drawer box back (Sheet E), cut a groove to fit the mating parts (sizes under Joinery).
- [ ] **85** In Right base side (Sheet A), cut 3 rabbets to fit the mating parts (sizes under Joinery).
- [ ] **86** In Right base side (Sheet A), cut 3 rabbets to fit the mating parts (sizes under Joinery).
- [ ] **87** In Right base drawer box side (Sheet E), cut 2 rabbets and a groove to fit the mating parts (sizes under Joinery).

- [ ] **88** In Right base drawer box side (Sheet E), cut 2 rabbets and a groove to fit the mating parts (sizes under Joinery).
- [ ] **89** In Right base drawer box front (Sheet E), cut a groove to fit the mating parts (sizes under Joinery).
- [ ] **90** In Right base drawer box back (Sheet E), cut a groove to fit the mating parts (sizes under Joinery).
- [ ] **91** In Right base side (Sheet A), cut shelf pin holes to fit the mating parts (sizes under Joinery).
- [ ] **92** In Right base side (Sheet A), cut shelf pin holes to fit the mating parts (sizes under Joinery).
- [ ] **93** In Left base toe-kick front rail (Sheet A), cut 5 pocket holes (Kreg 3/4" setting) to fit the mating parts (sizes under Joinery).
- [ ] **94** In Left base toe-kick back rail (Sheet A), cut 5 pocket holes (Kreg 3/4" setting) to fit the mating parts (sizes under Joinery).
- [ ] **95** In Left base toe-kick cross rail (Sheet C), cut 2 pocket holes (Kreg 3/4" setting) to fit the mating parts (sizes under Joinery).
- [ ] **96** In Left base toe-kick cross rail (Sheet C), cut 2 pocket holes (Kreg 3/4" setting) to fit the mating parts (sizes under Joinery).
- [ ] **97** In Left base toe-kick cross rail (Sheet C), cut 2 pocket holes (Kreg 3/4" setting) to fit the mating parts (sizes under Joinery).
- [ ] **98** In Left base toe-kick cross rail (Sheet C), cut 2 pocket holes (Kreg 3/4" setting) to fit the mating parts (sizes under Joinery).
- [ ] **99** In Right base toe-kick front rail (Sheet C), cut 5 pocket holes (Kreg 3/4" setting) to fit the mating parts (sizes under Joinery).
- [ ] **100** In Right base toe-kick back rail (Sheet A), cut 5 pocket holes (Kreg 3/4" setting) to fit the mating parts (sizes under Joinery).
- [ ] **101** In Right base toe-kick cross rail (Sheet C), cut 2 pocket holes (Kreg 3/4" setting) to fit the mating parts (sizes under Joinery).
- [ ] **102** In Right base toe-kick cross rail (Sheet C), cut 2 pocket holes (Kreg 3/4" setting) to fit the mating parts (sizes under Joinery).
- [ ] **103** In Right base toe-kick cross rail (Sheet C), cut 2 pocket holes (Kreg 3/4" setting) to fit the mating parts (sizes under Joinery).
- [ ] **104** In Right base toe-kick cross rail (Sheet C), cut 2 pocket holes (Kreg 3/4" setting) to fit the mating parts (sizes under Joinery).
- [ ] **105** Get Sheet G: 3/4" Birch Plywood, 4' × 8'.
- [ ] **106** From Sheet G, cut End panel to 35-1/4" long × 22-1/2" wide.
- [ ] **107** From Offcut G2, cut End panel to 35-1/4" long × 22-1/2" wide.
- [ ] **108** Get Sheet H: 3/4" Birch Plywood, 4' × 8'.
- [ ] **109** From Sheet H, rip a strip 12-5/8" wide for Offcut H1.

- [ ] **110** From Offcut H2, crosscut a piece 56" long for Finished back.
- [ ] **111** In End panel (Sheet G), cut a rabbet to fit the mating parts (sizes under Joinery).
- [ ] **112** In End panel (Sheet G), cut a rabbet to fit the mating parts (sizes under Joinery).
- [ ] **113** Get Sheet I: 3/4" Birch Plywood, 4' × 8'.
- [ ] **114** From Sheet I, rip a strip 13-3/8" wide for Offcut I1.
- [ ] **115** From Offcut I2, crosscut a piece 58-1/2" long for Top.
- [ ] **116** In End panel (Sheet G), cut 5 loose tenon mortises (DF 500, 6 × 40) to fit the mating parts (sizes under Joinery).
- [ ] **117** In Top (Sheet I), cut 5 loose tenon mortises (DF 500, 6 × 40) to fit the mating parts (sizes under Joinery).
- [ ] **118** In End panel (Sheet G), cut 5 loose tenon mortises (DF 500, 6 × 40) to fit the mating parts (sizes under Joinery).
- [ ] **119** In Top (Sheet I), cut 5 loose tenon mortises (DF 500, 6 × 40) to fit the mating parts (sizes under Joinery).
- [ ] **120** In Finished back (Sheet H), cut 10 loose tenon mortises (DF 500, 6 × 40) to fit the mating parts (sizes under Joinery).
- [ ] **121** In Top (Sheet I), cut 10 loose tenon mortises (DF 500, 6 × 40) to fit the mating parts (sizes under Joinery).
- [ ] **122** Get Board J: 4/4 Red Oak, 5-1/2" × 8'.
- [ ] **123** From Board J, cut Top front edging to 60" long × 3/4" wide.
- [ ] **124** From Offcut J1, cut Top back edging to 60" long × 3/4" wide.
- [ ] **125** From Offcut J2, cut Top left edging to 34-1/2" long × 3/4" wide.
- [ ] **126** From Offcut J3, cut Top right edging to 34-1/2" long × 3/4" wide.
- [ ] **127** Bore 2 hinge cups in Right base door: 35 mm across, 1/2" deep, 7/8" in from the left edge to the centre, 3" and 22" from the top.
- [ ] **128** Bore 2 hinge cups in Right base door: 35 mm across, 1/2" deep, 7/8" in from the right edge to the centre, 3" and 22" from the top.
- [ ] **129** Glue up Top: Top, Top front edging, Top back edging, Top left edging and Top right edging.

Setup sheets

Set each machine once, then make every cut on its list

Setup 1 Get the stock

- [ ] Sheet A: 3/4" Birch Plywood, 4' × 8' — step 1
- [ ] Sheet B: 3/4" Birch Plywood, 4' × 8' — step 12
- [ ] Sheet C: 3/4" Birch Plywood, 4' × 8' — step 22
- [ ] Sheet D: 1/4" Birch Plywood, 4' × 8' — step 36
- [ ] Sheet E: 1/2" Baltic Birch Plywood, 5' × 5' — step 40
- [ ] Sheet F: 1/4" Baltic Birch Plywood, 5' × 5' — step 64
- [ ] Sheet G: 3/4" Birch Plywood, 4' × 8' — step 105
- [ ] Sheet H: 3/4" Birch Plywood, 4' × 8' — step 108
- [ ] Sheet I: 3/4" Birch Plywood, 4' × 8' — step 113
- [ ] Board J: 4/4 Red Oak, 5-1/2" × 8' — step 122

Setup 2 Table saw: rip fence at 27"

Measure from the fence to the nearest tooth of the blade, and make a test cut in scrap.

- [ ] Sheet D: a strip for Left base back — #28 step 37

Setup 3 Table saw: rip fence at 13-3/4"

Measure from the fence to the nearest tooth of the blade, and make a test cut in scrap.

- [ ] Sheet C: a strip for Right base door — #19 step 23

Setup 4 Table saw: rip fence at 13-3/8"

Measure from the fence to the nearest tooth of the blade, and make a test cut in scrap.

- [ ] Sheet I: a strip for Offcut I1 — step 114

Setup 5 Table saw: rip fence at 12-5/8"

Measure from the fence to the nearest tooth of the blade, and make a test cut in scrap.

- [ ] Sheet H: a strip for Offcut H1 — step 109

Setup 6 Table saw: rip fence at 10-9/32"

Measure from the fence to the nearest tooth of the blade, and make a test cut in scrap.

- [ ] Offcut C1: a strip for Left base drawer front — #20 step 26

Setup 7 Table saw: rip fence at 22-1/2"

Measure from the fence to the nearest tooth of the blade, and make a test cut in scrap.

- [ ] Sheet G: End panel to width — #11 step 106

Setup 8 Table saw: rip fence at 21"

Measure from the fence to the nearest tooth of the blade, and make a test cut in scrap.

- [ ] Sheet A: a strip for Left base side and Right base side — #12, #13 step 2
- [ ] Offcut A1: a strip for Right base side — #13 step 6

Setup 9 Table saw: rip fence at 4"

Measure from the fence to the nearest tooth of the blade, and make a test cut in scrap.

- [ ] Offcut A1: a strip for Left base toe-kick back rail — #22 step 8
- [ ] Offcut C1: a strip for Right base toe-kick front rail — #25 step 30

Setup 10 Table saw: rip fence at 20-3/4"

Measure from the fence to the nearest tooth of the blade, and make a test cut in scrap.

- [ ] Sheet B: a strip for Left base bottom and Right base top — #14, #17 step 13
- [ ] Offcut B1: a strip for Right base top — #17 step 17

Setup 11 Table saw: rip fence at 6"

Measure from the fence to the nearest tooth of the blade, and make a test cut in scrap.

- [ ] Offcut B1: a strip for Right base drawer front — #21 step 20

Setup 12 Table saw: rip fence at 17-1/2"

Measure from the fence to the nearest tooth of the blade, and make a test cut in scrap.

- [ ] Sheet F: a strip for Left base drawer box bottom — #7 step 65
- [ ] Offcut F1: a strip for Left base drawer box bottom — #7 step 68

Setup 13 Table saw: rip fence at 8-25/32"

Measure from the fence to the nearest tooth of the blade, and make a test cut in scrap.

- [ ] Sheet E: a strip for Left base drawer box back and Left base drawer box side — #1, #3 step 41
- [ ] Offcut E1: a strip for Left base drawer box back and Left base drawer box side — #1, #3 step 44
- [ ] Offcut E1: a strip for Left base drawer box back and Left base drawer box side — #1, #3 step 47
- [ ] Offcut E1: a strip for Left base drawer box side — #3 step 50
- [ ] Offcut E1: a strip for Left base drawer box side — #3 step 54

Setup 14 Table saw: rip fence at 4-1/2"

Measure from the fence to the nearest tooth of the blade, and make a test cut in scrap.

- [ ] Offcut E1: a strip for Right base drawer box back and Right base drawer box side — #4, #6 step 58
- [ ] Offcut E1: a strip for Right base drawer box side — #6 step 61

Setup 15 Table saw: rip fence at 3/4"

Measure from the fence to the nearest tooth of the blade, and make a test cut in scrap.

- [ ] Board J: Top front edging to width — #31 step 123

Setup 16 Track saw: crosscut at 58-1/2"

Mark 58-1/2" from the squared end at both edges and lay the track's edge on the marks.

- [ ] Offcut I2: a piece for Top — #9 step 115

Setup 17 Track saw: crosscut at 56"

Mark 56" from the squared end at both edges and lay the track's edge on the marks.

- [ ] Offcut H2: a piece for Finished back — #10 step 110

Setup 18 Table saw: crosscut sled, stop at 35-1/4"

Clamp a stop block on the sled's fence 35-1/4" from the kerf, and square one end of each piece first.

- [ ] End panel: to length — #11 step 106
- [ ] End panel: to length — #11 step 107

Setup 19 Table saw: rip fence at 22-1/2"

Same setting as setup 7.
Measure from the fence to the nearest tooth of the blade, and make a test cut in scrap.

- [ ] Offcut G2: End panel to width — #11 step 107

Setup 20 Table saw: crosscut sled, stop at 31-1/4"

Clamp a stop block on the sled's fence 31-1/4" from the kerf, and square one end of each piece first.

- [ ] Strip (Sheet A): a piece for Left base side — #12 step 3
- [ ] Offcut A2: a piece for Left base side — #12 step 4
- [ ] Offcut A2: a piece for Right base side — #13 step 5
- [ ] Strip (Sheet A): a piece for Right base side — #13 step 7

Setup 21 Table saw: crosscut sled, stop at 26-3/4"

Clamp a stop block on the sled's fence 26-3/4" from the kerf, and square one end of each piece first.

- [ ] Strip (Sheet B): a piece for Left base bottom — #14 step 14
- [ ] Offcut B2: a piece for Left base top — #15 step 15
- [ ] Offcut B2: a piece for Right base bottom — #16 step 16
- [ ] Strip (Sheet B): a piece for Right base top — #17 step 18

Setup 22 Table saw: crosscut sled, stop at 26-3/16"

Clamp a stop block on the sled's fence 26-3/16" from the kerf, and square one end of each piece first.

- [ ] Offcut B3: a piece for Right base shelf — #18 step 19

Setup 23 Table saw: crosscut sled, stop at 25"

Clamp a stop block on the sled's fence 25" from the kerf, and square one end of each piece first.

- [ ] Strip (Sheet C): a piece for Right base door — #19 step 24
- [ ] Offcut C2: a piece for Right base door — #19 step 25

Setup 24 Table saw: crosscut sled, stop at 24-3/4"

Clamp a stop block on the sled's fence 24-3/4" from the kerf, and square one end of each piece first.

- [ ] Strip (Sheet F): a piece for Left base drawer box bottom — #7 step 66
- [ ] Offcut F2: a piece for Left base drawer box bottom — #7 step 67
- [ ] Strip (Sheet F): a piece for Left base drawer box bottom — #7 step 69
- [ ] Offcut F3: a piece for Right base drawer box bottom — #8 step 70

Setup 25 Miter saw: stop block at 60"

Clamp a stop block on the fence 60" from the blade, and square one end of each piece before it goes to the stop.

- [ ] Top front edging: to length — #31 step 123
- [ ] Top back edging: to length — #30 step 124

Setup 26 Table saw: rip fence at 3/4"

Same setting as setup 15.
Measure from the fence to the nearest tooth of the blade, and make a test cut in scrap.

- [ ] Offcut J1: Top back edging to width — #30 step 124
- [ ] Offcut J2: Top left edging to width — #32 step 125

Setup 27 Miter saw: stop block at 34-1/2"

Clamp a stop block on the fence 34-1/2" from the blade, and square one end of each piece before it goes to the stop.

- [ ] Top left edging: to length — #32 step 125
- [ ] Top right edging: to length — #33 step 126

Setup 28 Table saw: rip fence at 3/4"

Same setting as setup 15.
Measure from the fence to the nearest tooth of the blade, and make a test cut in scrap.

- [ ] Offcut J3: Top right edging to width — #33 step 126

Setup 29 Miter saw: stop block at 27-3/4"

Clamp a stop block on the fence 27-3/4" from the blade, and square one end of each piece before it goes to the stop.

- [ ] Strip (Sheet A): a piece for Left base toe-kick back rail — #22 step 9
- [ ] Offcut A4: a piece for Left base toe-kick front rail — #23 step 10
- [ ] Offcut A4: a piece for Right base toe-kick back rail — #24 step 11

Setup 30 Miter saw: stop block at 27-5/8"

Clamp a stop block on the fence 27-5/8" from the blade, and square one end of each piece before it goes to the stop.

- [ ] Strip (Sheet B): a piece for Right base drawer front — #21 step 21
- [ ] Strip (Sheet C): a piece for Left base drawer front — #20 step 27
- [ ] Offcut C3: a piece for Left base drawer front — #20 step 28
- [ ] Offcut C3: a piece for Left base drawer front — #20 step 29

Setup 31 Miter saw: stop block at 27-3/4"

Same setting as setup 29.
Clamp a stop block on the fence 27-3/4" from the blade, and square one end of each piece before it goes to the stop.

- [ ] Strip (Sheet C): a piece for Right base toe-kick front rail — #25 step 31

Setup 32 Miter saw: stop block at 24-3/4"

Clamp a stop block on the fence 24-3/4" from the blade, and square one end of each piece before it goes to the stop.

- [ ] Strip (Sheet E): a piece for Left base drawer box back — #1 step 42
- [ ] Offcut E2: a piece for Left base drawer box front — #2 step 43
- [ ] Strip (Sheet E): a piece for Left base drawer box back — #1 step 45
- [ ] Offcut E3: a piece for Left base drawer box front — #2 step 46
- [ ] Strip (Sheet E): a piece for Left base drawer box back — #1 step 48
- [ ] Offcut E4: a piece for Left base drawer box front — #2 step 49

Setup 33 Miter saw: stop block at 18"

Clamp a stop block on the fence 18" from the blade, and square one end of each piece before it goes to the stop.

- [ ] Strip (Sheet E): a piece for Left base drawer box side — #3 step 51
- [ ] Offcut E5: a piece for Left base drawer box side — #3 step 52
- [ ] Offcut E5: a piece for Left base drawer box side — #3 step 53
- [ ] Strip (Sheet E): a piece for Left base drawer box side — #3 step 55
- [ ] Offcut E6: a piece for Left base drawer box side — #3 step 56
- [ ] Offcut E6: a piece for Left base drawer box side — #3 step 57

Setup 34 Miter saw: stop block at 24-3/4"

Same setting as setup 32.
Clamp a stop block on the fence 24-3/4" from the blade, and square one end of each piece before it goes to the stop.

- [ ] Strip (Sheet E): a piece for Right base drawer box back — #4 step 59
- [ ] Offcut E7: a piece for Right base drawer box front — #5 step 60

Setup 35 Miter saw: stop block at 18"

Same setting as setup 33.
Clamp a stop block on the fence 18" from the blade, and square one end of each piece before it goes to the stop.

- [ ] Strip (Sheet E): a piece for Right base drawer box side — #6 step 62
- [ ] Offcut E8: a piece for Right base drawer box side — #6 step 63

Setup 36 Miter saw: stop block at 16-1/2"

Clamp a stop block on the fence 16-1/2" from the blade, and square one end of each piece before it goes to the stop.

- [ ] Offcut C4: a piece for Left base toe-kick cross rail — #26 step 32
- [ ] Offcut C4: a piece for Left base toe-kick cross rail — #26 step 33
- [ ] Offcut C4: a piece for Right base toe-kick cross rail — #27 step 34
- [ ] Offcut C4: a piece for Right base toe-kick cross rail — #27 step 35

Setup 37 Track saw: crosscut at 31-1/4"

Mark 31-1/4" from the squared end at both edges and lay the track's edge on the marks.

- [ ] Strip (Sheet D): a piece for Left base back — #28 step 38
- [ ] Offcut D2: a piece for Right base back — #29 step 39

Setup 38 Table saw: dado stack 1/4" wide, 1/4" high

The two outside blades alone.
Blade 1/4" above the table. Fence to the near side of the cut, as each row says. Test the fit in scrap first.

- [ ] Left base drawer box back ×3: groove 1/2" from the bottom edge — #1 steps 76, 80, 84
- [ ] Left base drawer box front ×3: groove 1/2" from the bottom edge — #2 steps 75, 79, 83
- [ ] Left base drawer box side ×6: groove 1/2" from the bottom edge — #3 steps 73, 74, 77, 78, 81, 82
- [ ] Right base drawer box back: groove 1/2" from the bottom edge — #4 step 90
- [ ] Right base drawer box front: groove 1/2" from the bottom edge — #5 step 89
- [ ] Right base drawer box side ×2: groove 1/2" from the bottom edge — #6 steps 87, 88

Setup 39 Table saw: rabbet 3/4" wide, blade 1/4" high

A dado stack 13/16" wide: both outside blades, four 1/8" chippers and a 1/16" chipper.
Bury it in a sacrificial fence so 3/4" of it shows, and raise it 1/4" above the table.

- [ ] End panel ×2: rabbet on the top edge — #11 steps 111, 112

- [ ] Left base side ×2: rabbet at the left end — #12 steps 71, 72
- [ ] Left base side ×2: rabbet at the right end — #12 steps 71, 72
- [ ] Right base side ×2: rabbet at the left end — #13 steps 85, 86
- [ ] Right base side ×2: rabbet at the right end — #13 steps 85, 86

Setup 40 Table saw: rabbet 1/2" wide, blade 1/4" high

A dado stack 9/16" wide: both outside blades, two 1/8" chippers and a 1/16" chipper.
Bury it in a sacrificial fence so 1/2" of it shows, and raise it 1/4" above the table.

- [ ] Left base drawer box side ×6: rabbet at the left end — #3 steps 73, 74, 77, 78, 81, 82
- [ ] Left base drawer box side ×6: rabbet at the right end — #3 steps 73, 74, 77, 78, 81, 82
- [ ] Right base drawer box side ×2: rabbet at the left end — #6 steps 87, 88
- [ ] Right base drawer box side ×2: rabbet at the right end — #6 steps 87, 88

Setup 41 Table saw: rabbet 1/4" wide, blade 3/8" high

A dado stack 5/16" wide: both outside blades and a 1/16" chipper.
Bury it in a sacrificial fence so 1/4" of it shows, and raise it 3/8" above the table.

- [ ] Left base side ×2: rabbet on the top edge — #12 steps 71, 72
- [ ] Right base side ×2: rabbet on the top edge — #13 steps 85, 86

Setup 42 Domino DF 500: 6 × 40 tenons, 25 mm deep

The 6 mm cutter, the depth stop at 25 mm.
Height to the centre of the 3/4" stock: 3/8" (9.5 mm).
Width: the tightest setting for the first mortise of each joint, the next wider for the rest.

- [ ] Finished back: 10 mortises on the top edge — #10 step 120
- [ ] End panel ×2: 5 mortises at the right end — #11 steps 116, 118

Setup 43 Domino DF 500: 6 × 40 tenons, 15 mm deep

The 6 mm cutter, the depth stop at 15 mm.
Plunge into the face on the layout marks, the base flat on the part.
Width: the tightest setting for the first mortise of each joint, the next wider for the rest.

- [ ] Top: 5 mortises 1" from the left end, 12-5/16" from the top edge — #9 step 117
- [ ] Top: 10 mortises 2-5/16" from the left end, 11-1/2" from the top edge — #9 step 121
- [ ] Top: 5 mortises 57-1/4" from the left end, 12-5/16" from the top edge — #9 step 119

Setup 44 Kreg pocket-hole jig: jig at 3/4"

Set the drill guide and the bit's stop collar for 3/4" stock.
Screws: 1-1/4" coarse.

- [ ] Left base toe-kick back rail: 5 pocket holes on the top edge, on the face — #22 step 94
- [ ] Left base toe-kick front rail: 5 pocket holes on the top edge, on the back — #23 step 93

- [ ] Right base toe-kick back rail: 5 pocket holes on the top edge, on the face #24 step 100
- [ ] Right base toe-kick front rail: 5 pocket holes on the top edge, on the back #25 step 99
- [ ] Left base toe-kick cross rail: 2 pocket holes at the left end, on the back #26 step 95
- [ ] Left base toe-kick cross rail: 2 pocket holes at the left end, on the face #26 step 97
- [ ] Left base toe-kick cross rail: 2 pocket holes at the right end, on the back #26 step 96
- [ ] Left base toe-kick cross rail: 2 pocket holes at the right end, on the face #26 step 98
- [ ] Right base toe-kick cross rail: 2 pocket holes at the left end, on the back #27 step 101
- [ ] Right base toe-kick cross rail: 2 pocket holes at the left end, on the face #27 step 103
- [ ] Right base toe-kick cross rail: 2 pocket holes at the right end, on the back #27 step 102
- [ ] Right base toe-kick cross rail: 2 pocket holes at the right end, on the face #27 step 104

Setup 45 Shelf pin jig: 1/4" holes every 1-1/4"

A 1/4" bit with its stop collar at 11/32" deep.
The rows 1-15/32" in from the front and back edges.
Index the jig off the bottom of each part so the rows line up across the case.

- [ ] Right base side ×2: two rows of 20, 7-9/32" to 31-7/32" up from the floor #13 steps 91, 92

Setup 46 Drill press or hinge jig: 35 mm cups, 15/32" deep

A 35 mm Forstner bit. The fence so the cup's centre is 7/8" in from the edge: a 3/16" boring distance.
The depth stop at 15/32". Bore a test cup in scrap and check the hinge.

- [ ] Right base door: 2 cups on the left edge, 3" and 22" from the top #19 step 127
- [ ] Right base door: 2 cups on the right edge, 3" and 22" from the top #19 step 128

Setup 47 Glue-ups

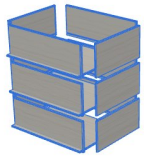
Dry fit each one first, then glue and clamp it.

- [ ] Glue up Top: Top, Top front edging, Top back edging, Top left edging and Top right edging. step 129

Assembly steps

The order it goes together

You need at least 20 clamps: 5 of 72" and 15 of 48".



1 Glue up Left base drawer box ×3

Parts Left base drawer box back ×3 (part 1), Left base drawer box front ×3 (part 2), Left base drawer box side ×6 (part 3), Left base drawer box bottom ×3 (part 7)

Order Start with Left base drawer box side. Add Left base drawer box back, Left base drawer box bottom and Left base drawer box front. Close it with Left base drawer box side.

Joints Left base drawer box back and Left base drawer box bottom: 1 groove, no glue, it floats

Left base drawer box front and Left base drawer box bottom: 1 groove, no glue, it floats

Left base drawer box side and Left base drawer box back: 2 rabbets, glue

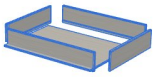
Left base drawer box side and Left base drawer box front: 2 rabbets, glue

Left base drawer box side and Left base drawer box bottom: 2 grooves, no glue, it floats

Glue Glue every joint. Left base drawer box bottom floats in its grooves: no glue on it.

Clamps 4 clamps of 36".

Glue them up one at a time: the clamps are for one.



2 Glue up Right base drawer box

Parts Right base drawer box back (part 4), Right base drawer box front (part 5), Right base drawer box side ×2 (part 6), Right base drawer box bottom (part 8)

Order Start with Right base drawer box side. Add Right base drawer box back, Right base drawer box bottom and Right base drawer box front. Close it with Right base drawer box side.

Joints Right base drawer box back and Right base drawer box bottom: 1 groove, no glue, it floats

Right base drawer box front and Right base drawer box bottom: 1 groove, no glue, it floats

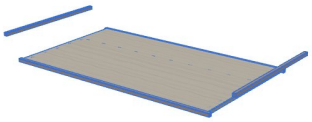
Right base drawer box side and Right base drawer box back: 2 rabbets, glue

Right base drawer box side and Right base drawer box front: 2 rabbets, glue

Right base drawer box side and Right base drawer box bottom: 2 grooves, no glue, it floats

Glue Glue every joint. Right base drawer box bottom floats in its grooves: no glue on it.

Clamps 2 clamps of 36".



3 Glue up Top

Parts Top (part 9), Top back edging (part 30), Top front edging (part 31), Top left edging (part 32), Top right edging (part 33)

Joints Top and Top front edging: 1 edge joint, glue

Top and Top back edging: 1 edge joint, glue

Top and Top left edging: 1 edge joint, glue

Top and Top right edging: 1 edge joint, glue

Top front edging and Top left edging: 1 edge joint, glue

Top front edging and Top right edging: 1 edge joint, glue

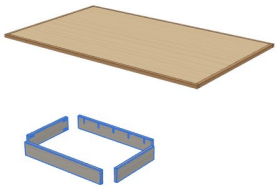
Top back edging and Top left edging: 1 edge joint, glue

Top back edging and Top right edging: 1 edge joint, glue

Glue Glue every joint.

Clamps 20 clamps: 5 of 72" and 15 of 48", and 2 cauls across the ends to keep it flat.

8 joints close in this glue-up: spreading the glue and setting the clamps takes about 6 minutes, and ordinary yellow glue (Titebond Original) gives you about 5 before it skins. Dry-fit it with the clamps set first, have a helper, and use a glue with more open time (Titebond III, about 10 minutes; Titebond Extend, about 15).



4 Screw together Left base toe-kick

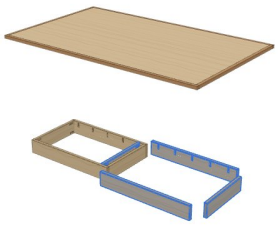
Parts Left base toe-kick back rail (part 22), Left base toe-kick front rail (part 23), Left base toe-kick cross rail ×2 (part 26)

Joints Left base toe-kick cross rail and Left base toe-kick back rail: 4 Kreg pocket screws 1-1/4" coarse thread, no glue

Left base toe-kick cross rail and Left base toe-kick front rail: 4 Kreg pocket screws 1-1/4" coarse thread, no glue

Glue No glue: the pocket screws hold it.

Clamps No clamps.



5 Screw together Right base toe-kick

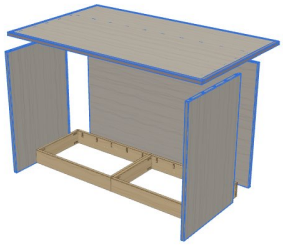
Parts Right base toe-kick back rail (part 24), Right base toe-kick front rail (part 25), Right base toe-kick cross rail ×2 (part 27)

Joints Right base toe-kick cross rail and Right base toe-kick back rail: 4 Kreg pocket screws 1-1/4" coarse thread, no glue

Right base toe-kick cross rail and Right base toe-kick front rail: 4 Kreg pocket screws 1-1/4" coarse thread, no glue

Glue No glue: the pocket screws hold it.

Clamps No clamps.



6 Glue up Case

Parts Top (part 9), Finished back (part 10), End panel ×2 (part 11), Top back edging (part 30), Top front edging (part 31), Top left edging (part 32), Top right edging (part 33)

Order Start with Top. Add End panel, Finished back, End panel, Top back edging, Top left edging, Top front edging and Top right edging.

Joints End panel and Finished back: 2 rabbets, glue

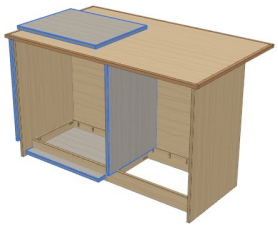
End panel and Top: 2 joints, 10 domino tenons 6 × 40, glue

Finished back and Top: 1 joint, 10 domino tenons 6 × 40, glue

Glue Glue every joint.

Clamps 8 clamps: 3 of 60" and 5 of 48".

5 joints close in this glue-up: spreading the glue and setting the clamps takes about 8 minutes, and ordinary yellow glue (Titebond Original) gives you about 5 before it skins. Dry-fit it with the clamps set first, have a helper, and use a glue with more open time (Titebond III, about 10 minutes; Titebond Extend, about 15).



7 Glue up Left base

Parts Left base side ×2 (part 12), Left base bottom (part 14), Left base top (part 15)

Order Start with Left base side. Add Left base bottom and Left base top. Close it with Left base side.

Joints Left base side and Left base bottom: 2 rabbets, glue

Left base side and Left base top: 2 rabbets, glue

Glue Glue every joint.

Clamps 4 clamps of 36".

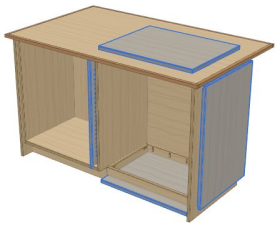


8 Back on Left base

Parts Left base back (part 28)

Glue Glue in the rabbets, then brads every 6" into the sides and the back edges of what it covers. Square the case first: the back holds it.

Clamps No clamps.



9 Glue up Right base

Parts Right base side ×2 (part 13), Right base bottom (part 16), Right base top (part 17)

Order Start with Right base side. Add Right base bottom and Right base top. Close it with Right base side.

Joints Right base side and Right base bottom: 2 rabbets, glue

Right base side and Right base top: 2 rabbets, glue

Glue Glue every joint.

Clamps 4 clamps of 36".

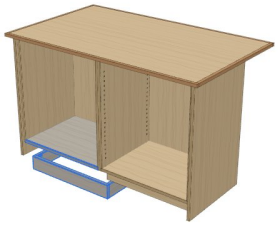


10 Back on Right base

Parts Right base back (part 29)

Glue Glue in the rabbets, then brads every 6" into the sides and the back edges of what it covers. Square the case first: the back holds it.

Clamps No clamps.



11 Screw Left base toe-kick to Left base

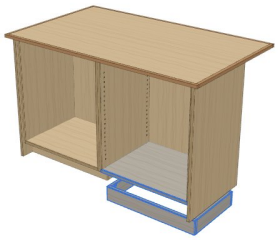
Parts Left base bottom (part 14), Left base toe-kick back rail (part 22), Left base toe-kick front rail (part 23), Left base toe-kick cross rail ×2 (part 26)

Joints Left base toe-kick back rail and Left base bottom: 5 Kreg pocket screws 1-1/4" coarse thread, no glue

Left base toe-kick front rail and Left base bottom: 5 Kreg pocket screws 1-1/4" coarse thread, no glue

Glue No glue: the pocket screws hold it.

Clamps No clamps.



12 Screw Right base toe-kick to Right base

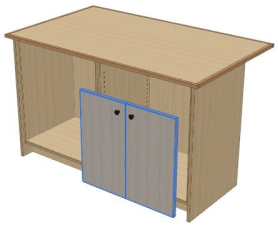
Parts Right base bottom (part 16), Right base toe-kick back rail (part 24), Right base toe-kick front rail (part 25), Right base toe-kick cross rail ×2 (part 27)

Joints Right base toe-kick back rail and Right base bottom: 5 Kreg pocket screws 1-1/4" coarse thread, no glue

Right base toe-kick front rail and Right base bottom: 5 Kreg pocket screws 1-1/4" coarse thread, no glue

Glue No glue: the pocket screws hold it.

Clamps No clamps.



13 Hang the doors

Parts Right base door ×2 (part 19)

What Right base door: 2 hinges into the cups, hung on the left.

Right base door: 2 hinges into the cups, hung on the right.

Glue No glue.

Clamps No clamps.

Screw the mounting plates to the case, press each hinge into its cup and screw it, clip the door on, then set the gaps even with the hinges' screws.



14 Fit the drawers

Parts Left base drawer front ×3 (part 20), Right base drawer front (part 21), each with its drawer box

What Left base drawer front ×3: Drawer slides, 18" (457 mm), full-extension, side-mount (pair)

Right base drawer front: Drawer slides, 18" (457 mm), full-extension, side-mount (pair)

Glue No glue.

Clamps No clamps.

Screw the slides to the case sides and the drawer box sides at the same heights, set each box in, then screw its front on from inside the box with the gaps even.



15 Knobs

Parts Right base door ×2 (part 19), Left base drawer front ×3 (part 20), Right base drawer front (part 21)

What 6 knobs on 6 fronts.

Glue No glue.

Clamps No clamps.

Drill from the front with a block clamped behind, so the back face doesn't tear out.



16 Shelf on its pins

Parts Right base shelf (part 18)

What 4 shelf pins.

Glue No glue.

Clamps No clamps.

Push the pins into the holes at the same height each side, then set the shelf on them.