Deck

Overall size: 179-5/8" W × 123-1/2" D × 66" H



Parts	Sheets and boards	Saw kerf	Units
141 (23 different)	**58**	**1/8"**	**Inches**

Dry Fit lays out the framing you choose. It doesn't check spans, footings, loads or your local building code. Check the joist, beam and post sizes, the footings and the ledger attachment with your building department before you build. Many places need a permit for a deck or a shed.

Materials to buy

Qty	Material	Label in plan	Board feet
3	2×8 PT Pine, 16'	Board A, Board B, Board C	64.0
2	2×8 PT Pine, 12'	Board D, Board E	32.0
12	2×8 PT Pine, 10'	Board F, Board G, Board H, Board I, Board J, Board K, Board L, Board M, Board N, Board O, Board P, Board Q	160.0
1	6×6 PT Pine, 8'	Board R	24.0

Qty	Material	Label in plan	Board feet
16	5/4×6 PT Pine, 12'	Board S, Board Z, Board AA, Board AB, Board AC, Board AD, Board AE, Board AF, Board AG, Board AH, Board AI, Board AJ, Board AK, Board AL, Board AM, Board AN	88.0
6	5/4×6 PT Pine, 16'	Board T, Board U, Board V, Board W, Board X, Board Y	44.0
2	5/4×6 PT Pine, 10'	Board AO, Board AP	9.2
1	2×12 PT Pine, 16'	Board AQ	32.0
3	4×4 PT Pine, 12'	Board AR, Board AS, Board AT	48.0
3	2×4 PT Pine, 14'	Board AU, Board AV, Board AW	28.0
1	2×4 PT Pine, 12'	Board AX	8.0
7	2×2 PT Pine, 16'	Board AY, Board AZ, Board BA, Board BB, Board BC, Board BD, Board BE	37.3
1	2×2 PT Pine, 14'	Board BF	4.7
3	Beam brackets, 6×6	Hardware	
18	Carriage bolts, 1/2" × 8"	Hardware	
716	Deck screws, 2-1/2" (3 boxes of 350)	Hardware	
54	Framing nails, 3-1/4" (1 box of 5 lb)	Hardware	
12	Hurricane ties	Hardware	
16	Joist hangers, 2×8	Hardware	
4	Joist hangers, double, 2×8	Hardware	
18	Ledger lag screws, 1/2" × 4" (or through-bolts)	Hardware	
3	Post bases, 6×6	Hardware	
4	Stair stringer brackets	Hardware	
74	Structural screws, 1/4" × 3-1/2" (2 boxes of 50)	Hardware	

Cost

In USD, at this project's prices

Qty	Item	Price	Per	Total
1	6×6 PT Pine, 8' (24.0 board feet)	$21.60	a board	$21.60
16	5/4×6 PT Pine, 12' (88.0 board feet)	$4.95	a board	$79.20
6	5/4×6 PT Pine, 16' (44.0 board feet)	$6.60	a board	$39.60
2	5/4×6 PT Pine, 10' (9.2 board feet)	$4.13	a board	$8.26

Qty	Item	Price	Per	Total
3	2×8 PT Pine, 16' (64.0 board feet)	$19.20	a board	$57.60
2	2×8 PT Pine, 12' (32.0 board feet)	$14.40	a board	$28.80
12	2×8 PT Pine, 10' (160.0 board feet)	$12.00	a board	$144.00
1	2×12 PT Pine, 16' (32.0 board feet)	$28.80	a board	$28.80
3	2×4 PT Pine, 14' (28.0 board feet)	$8.40	a board	$25.20
1	2×4 PT Pine, 12' (8.0 board feet)	$7.20	a board	$7.20
7	2×2 PT Pine, 16' (37.3 board feet)	$4.80	a board	$33.60
1	2×2 PT Pine, 14' (4.7 board feet)	$4.20	a board	$4.20
3	4×4 PT Pine, 12' (48.0 board feet)	$14.40	a board	$43.20
3	Beam brackets, 6×6	$22.00	each	$66.00
18	Carriage bolts, 1/2" × 8"	$3.00	each	$54.00
3	Deck screws, 2-1/2" (716 needed)	$21.00	a pack of 350	$63.00
1	Framing nails, 3-1/4" (54 needed)	$7.50	a pack of 250	$7.50
12	Hurricane ties	$1.00	each	$12.00
16	Joist hangers, 2×8	$2.50	each	$40.00
4	Joist hangers, double, 2×8	$6.00	each	$24.00
18	Ledger lag screws, 1/2" × 4" (or through-bolts)	$1.80	each	$32.40
3	Post bases, 6×6	$18.00	each	$54.00
4	Stair stringer brackets	$4.00	each	$16.00
2	Structural screws, 1/4" × 3-1/2" (74 needed)	$30.00	a pack of 50	$60.00
Wood				**$521.26**
Hardware				**$428.90**
Total				**$950.16**

$36.55 of the wood is offcuts and kerf (7%), counted in Wood above.

Buy list

The lengths that waste least

Qty	Lumber	Cut into
1	6×6 PT Pine, 8'	Post ×3
1	2×12 PT Pine, 16'	Stringer ×4
3	4×4 PT Pine, 12'	Rail post ×9
3	2×8 PT Pine, 16'	Ledger, Blocking ×9, Rim joist, Beam
2	2×8 PT Pine, 12'	Beam ×2
12	2×8 PT Pine, 10'	Joist ×12
6	5/4×6 PT Pine, 16'	Decking ×6, Tread ×6
16	5/4×6 PT Pine, 12'	Border, Decking ×15
2	5/4×6 PT Pine, 10'	Border ×2
3	2×4 PT Pine, 14'	Top rail ×6, Bottom rail ×4
1	2×4 PT Pine, 12'	Bottom rail ×3, Top rail
7	2×2 PT Pine, 16'	Baluster ×49
1	2×2 PT Pine, 14'	Baluster ×6

Notes

Footings: 3 posts, each on its own concrete footing, and a pad at the foot of the stairs. The concrete isn't sized here: ask your building department what your footings need.

Ledger: two lag screws or through-bolts every 16" is a count for the Hardware list, not a rating. Flash the ledger, and check how it fastens to the house with your building department.

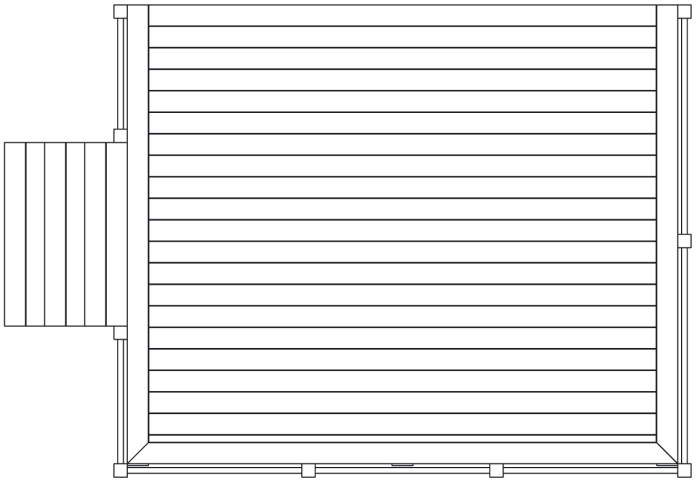
Stairs: 4 risers of 7-1/2" and 3 treads with a 10-1/2" run, 31-1/2" out from the deck. Set a framing square at 7-1/2" and 10-1/2" to lay out the stringers. Cut the top plumb, 35.5° off square, to hang on the rim. Cut the foot plumb at the last riser and level on the ground, so the bottom riser is 6-1/2" to the first seat and every step comes out 7-1/2".

Railing: posts at most 6' apart, balusters at most 4" apart, 36" high. Check the height and spacing your building department wants.

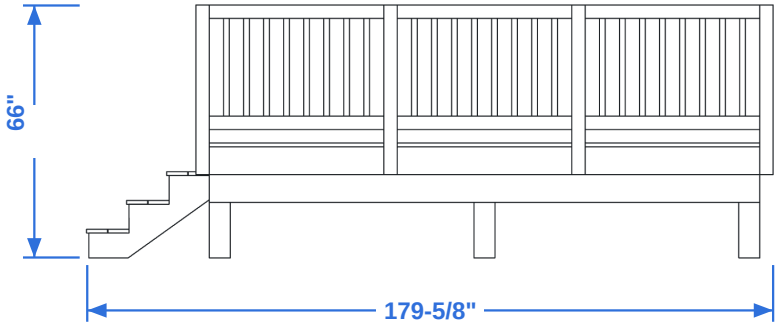
Views

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

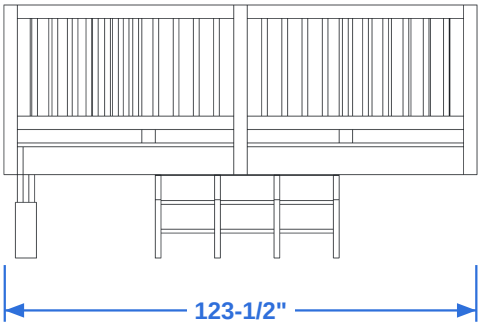
Top



Front

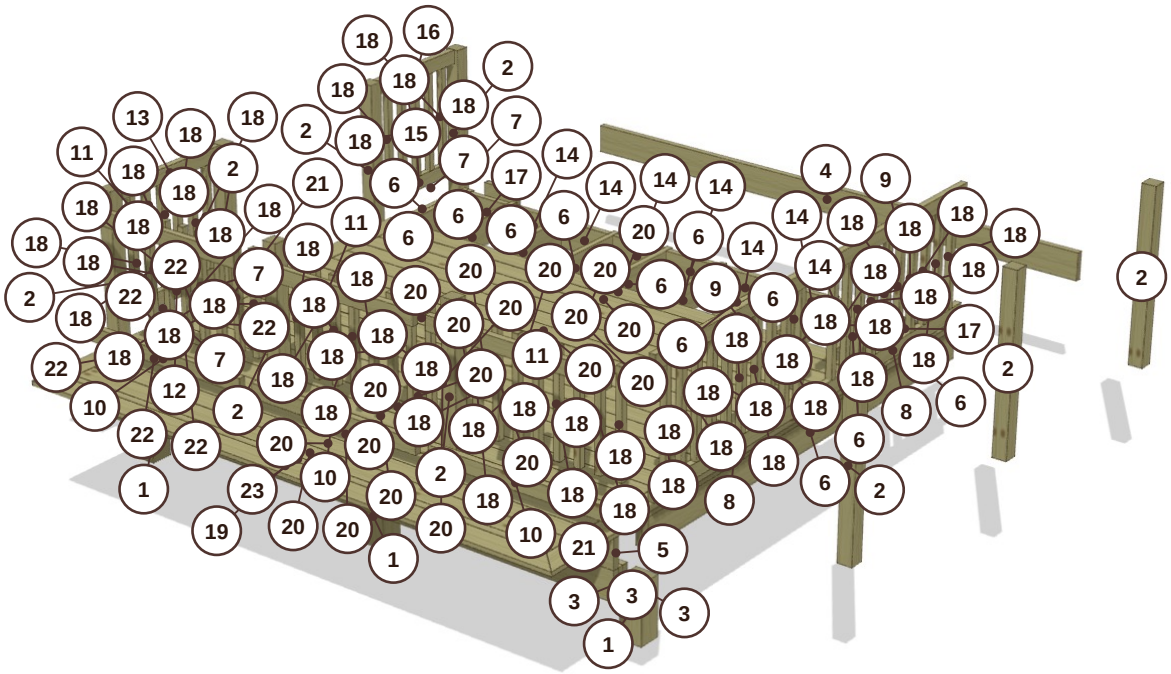


Right side



Exploded view

Every part by its number in the cut list



Cut list

Length runs with the grain

#	Part	Qty	Length	Width	Thick	Material	From	Angles	Grain
1	Post	3	14-1/2"	5-1/2"	5-1/2"	Pressure-Treated Pine	R		Length, moves 1/16"
2	Rail post	9	44-1/4"	3-1/2"	3-1/2"	Pressure-Treated Pine	AR, AS, AT		Length, moves 1/32"
3	Beam	3	144"	7-1/4"	1-1/2"	Pressure-Treated Pine	C, D, E		Length, moves 3/32"
4	Ledger	1	144"	7-1/4"	1-1/2"	Pressure-Treated Pine	A		Length, moves 3/32"
5	Rim joist	1	144"	7-1/4"	1-1/2"	Pressure-Treated Pine	B		Length, moves 3/32"
6	Joist	12	117"	7-1/4"	1-1/2"	Pressure-Treated Pine	F, G, H, I, J, K, L, M, N, O, P, Q		Length, moves 3/32"
7	Stringer	4	46-3/4"	11-1/4"	1-1/2"	Pressure-Treated Pine	AQ	Miter both ends 35.5°; taper one inside face from 11-1/4" to 2-1/4", starting 34-1/8" from the right end	Length, moves 1/8"
8	Bottom rail	2	56-1/2"	3-1/2"	1-1/2"	Pressure-Treated Pine	AU, AV		Length, moves 1/32"
9	Top rail	2	56-1/2"	3-1/2"	1-1/2"	Pressure-Treated Pine	AU, AV		Length, moves 1/32"
10	Bottom rail	3	45-11/16"	3-1/2"	1-1/2"	Pressure-Treated Pine	AV, AW, AX		Length, moves 1/32"
11	Top rail	3	45-11/16"	3-1/2"	1-1/2"	Pressure-Treated Pine	AU, AW		Length, moves 1/32"
12	Bottom rail	1	32-1/2"	3-1/2"	1-1/2"	Pressure-Treated Pine	AX		Length, moves 1/32"
13	Top rail	1	32-1/2"	3-1/2"	1-1/2"	Pressure-Treated Pine	AX		Length, moves 1/32"
14	Blocking	7	14-1/2"	7-1/4"	1-1/2"	Pressure-Treated Pine	A, B, C		Length, moves 3/32"
15	Bottom rail	1	29"	3-1/2"	1-1/2"	Pressure-Treated Pine	AX		Length, moves 1/32"

#	Part	Qty	Length	Width	Thick	Material	From	Angles	Grain
16	Top rail	1	29"	3-1/2"	1-1/2"	Pressure-Treated Pine	AW		Length, moves 1/32"
17	Blocking	2	12-1/4"	7-1/4"	1-1/2"	Pressure-Treated Pine	C		Length, moves 3/32"
18	Baluster	55	25-1/2"	1-1/2"	1-1/2"	Pressure-Treated Pine	AY, AZ, BA, BB, BC, BD, BE, BF		Length
19	Border	1	144"	5-1/2"	1"	Pressure-Treated Pine	S	Miter both ends 45°	Length, moves 1/16"
20	Decking	20	132-3/4"	5-1/2"	1"	Pressure-Treated Pine	T, U, V, W, X, Y, Z, AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, AK, AL, AM		Length, moves 1/16"
21	Border	2	120"	5-1/2"	1"	Pressure-Treated Pine	AO, AP	Miter the front end 45°	Length, moves 1/16"
22	Tread	6	48"	5-1/2"	1"	Pressure-Treated Pine	T, U, V, W, X, Y		Length, moves 1/16"
23	Decking	1	132-3/4"	1-7/8"	1"	Pressure-Treated Pine	AN		Length

Angled parts: cut the blank to the size listed first, then make the cuts in the Angles column. Board feet and sheet use count the blank.

Joinery

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

#	Part	Joint	Size	Where	Face
7	Stringer ×4	Stringer notch	3 notches, rise 7-1/2", run 10-1/2"	0" from the left end, 0" from the top edge	Through

Hardware

Screws, nails, bolts and hangers, ties and brackets

Qty	Item	On parts
3	Beam brackets, 6×6	1
18	Carriage bolts, 1/2" × 8"	2
716	Deck screws, 2-1/2" (3 boxes of 350)	8, 9, 10, 11, 12, 13, 15, 16, 18, 19, 20, 21, 22, 23
54	Framing nails, 3-1/4" (1 box of 5 lb)	14, 17
12	Hurricane ties	6
16	Joist hangers, 2×8	6
4	Joist hangers, double, 2×8	6
18	Ledger lag screws, 1/2" × 4" (or through-bolts)	4
3	Post bases, 6×6	1

Qty	Item	On parts
4	Stair stringer brackets	7
74	Structural screws, 1/4" × 3-1/2" (2 boxes of 50)	3, 5, 6

Leftovers

Usable offcuts after cutting

Piece	Length	Width	Thick	Material
Offcut A1	4"	7-1/4"	1-1/2"	Pressure-Treated Pine
Offcut B1	4"	7-1/4"	1-1/2"	Pressure-Treated Pine
Offcut C1	8-1/2"	7-1/4"	1-1/2"	Pressure-Treated Pine
Offcut F1	2-7/8"	7-1/4"	1-1/2"	Pressure-Treated Pine
Offcut G1	2-7/8"	7-1/4"	1-1/2"	Pressure-Treated Pine
Offcut H1	2-7/8"	7-1/4"	1-1/2"	Pressure-Treated Pine
Offcut I1	2-7/8"	7-1/4"	1-1/2"	Pressure-Treated Pine
Offcut J1	2-7/8"	7-1/4"	1-1/2"	Pressure-Treated Pine
Offcut K1	2-7/8"	7-1/4"	1-1/2"	Pressure-Treated Pine
Offcut L1	2-7/8"	7-1/4"	1-1/2"	Pressure-Treated Pine
Offcut M1	2-7/8"	7-1/4"	1-1/2"	Pressure-Treated Pine
Offcut N1	2-7/8"	7-1/4"	1-1/2"	Pressure-Treated Pine
Offcut O1	2-7/8"	7-1/4"	1-1/2"	Pressure-Treated Pine
Offcut P1	2-7/8"	7-1/4"	1-1/2"	Pressure-Treated Pine
Offcut Q1	2-7/8"	7-1/4"	1-1/2"	Pressure-Treated Pine
Offcut R1	52-1/8"	5-1/2"	5-1/2"	Pressure-Treated Pine
Offcut T1	11"	5-1/2"	1"	Pressure-Treated Pine
Offcut U1	11"	5-1/2"	1"	Pressure-Treated Pine
Offcut V1	11"	5-1/2"	1"	Pressure-Treated Pine
Offcut W1	11"	5-1/2"	1"	Pressure-Treated Pine
Offcut X1	11"	5-1/2"	1"	Pressure-Treated Pine
Offcut Y1	11"	5-1/2"	1"	Pressure-Treated Pine
Offcut Z1	11-1/8"	5-1/2"	1"	Pressure-Treated Pine
Offcut AA1	11-1/8"	5-1/2"	1"	Pressure-Treated Pine
Offcut AB1	11-1/8"	5-1/2"	1"	Pressure-Treated Pine
Offcut AC1	11-1/8"	5-1/2"	1"	Pressure-Treated Pine
Offcut AD1	11-1/8"	5-1/2"	1"	Pressure-Treated Pine
Offcut AE1	11-1/8"	5-1/2"	1"	Pressure-Treated Pine

Piece	Length	Width	Thick	Material
Offcut AF1	11-1/8"	5-1/2"	1"	Pressure-Treated Pine
Offcut AG1	11-1/8"	5-1/2"	1"	Pressure-Treated Pine
Offcut AH1	11-1/8"	5-1/2"	1"	Pressure-Treated Pine
Offcut AI1	11-1/8"	5-1/2"	1"	Pressure-Treated Pine
Offcut AJ1	11-1/8"	5-1/2"	1"	Pressure-Treated Pine
Offcut AK1	11-1/8"	5-1/2"	1"	Pressure-Treated Pine
Offcut AL1	11-1/8"	5-1/2"	1"	Pressure-Treated Pine
Offcut AM1	11-1/8"	5-1/2"	1"	Pressure-Treated Pine
Offcut AN1	11-1/8"	5-1/2"	1"	Pressure-Treated Pine
Offcut AN2	132-3/4"	3-1/2"	1"	Pressure-Treated Pine
Offcut AQ1	4-1/2"	11-1/4"	1-1/2"	Pressure-Treated Pine
Offcut AR1	10-7/8"	3-1/2"	3-1/2"	Pressure-Treated Pine
Offcut AS1	10-7/8"	3-1/2"	3-1/2"	Pressure-Treated Pine
Offcut AT1	10-7/8"	3-1/2"	3-1/2"	Pressure-Treated Pine
Offcut AU1	8-15/16"	3-1/2"	1-1/2"	Pressure-Treated Pine
Offcut AV1	8-15/16"	3-1/2"	1-1/2"	Pressure-Treated Pine
Offcut AW1	1-1/2"	3-1/2"	1-1/2"	Pressure-Treated Pine
Offcut AX1	3-13/16"	3-1/2"	1-1/2"	Pressure-Treated Pine
Offcut AY1	12-5/8"	1-1/2"	1-1/2"	Pressure-Treated Pine
Offcut AZ1	12-5/8"	1-1/2"	1-1/2"	Pressure-Treated Pine
Offcut BA1	12-5/8"	1-1/2"	1-1/2"	Pressure-Treated Pine
Offcut BB1	12-5/8"	1-1/2"	1-1/2"	Pressure-Treated Pine
Offcut BC1	12-5/8"	1-1/2"	1-1/2"	Pressure-Treated Pine
Offcut BD1	12-5/8"	1-1/2"	1-1/2"	Pressure-Treated Pine
Offcut BE1	12-5/8"	1-1/2"	1-1/2"	Pressure-Treated Pine
Offcut BF1	14-1/4"	1-1/2"	1-1/2"	Pressure-Treated Pine

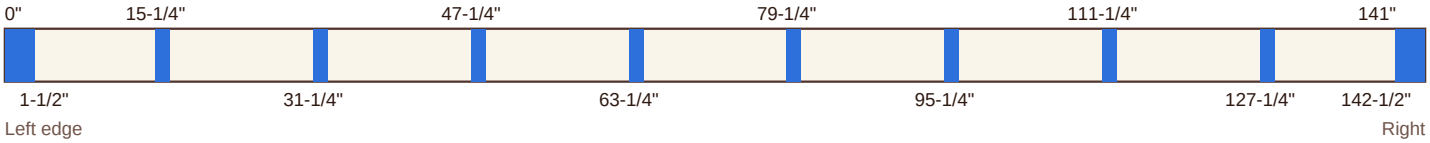
Layout

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.

19 Border: in from the left edge (144" long)

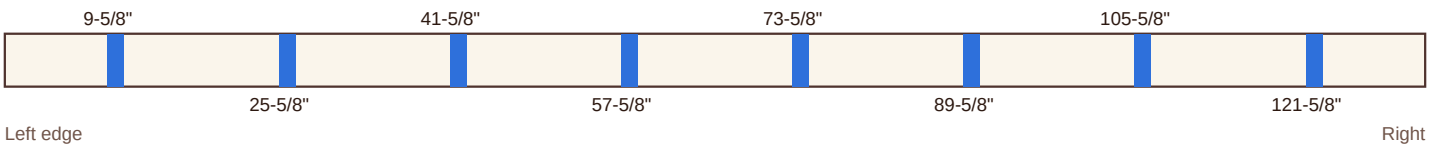
#	Part	On	Left face	Right face
6	Joist	Underside	0"	1-1/2"
6	Joist	Underside	1-1/2"	3"
6	Joist	Underside	15-1/4"	16-3/4"
6	Joist	Underside	31-1/4"	32-3/4"
6	Joist	Underside	47-1/4"	48-3/4"
6	Joist	Underside	63-1/4"	64-3/4"
6	Joist	Underside	79-1/4"	80-3/4"
6	Joist	Underside	95-1/4"	96-3/4"
6	Joist	Underside	111-1/4"	112-3/4"
6	Joist	Underside	127-1/4"	128-3/4"
6	Joist	Underside	141"	142-1/2"
6	Joist	Underside	142-1/2"	144"



20 Decking ×20: in from the left edge (132-3/4" long)

Same marks as the other one: mark all 21 together.

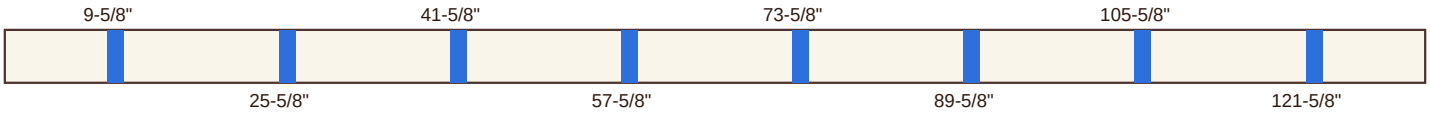
#	Part	On	Left face	Right face
6	Joist	Underside	9-5/8"	11-1/8"
6	Joist	Underside	25-5/8"	27-1/8"
6	Joist	Underside	41-5/8"	43-1/8"
6	Joist	Underside	57-5/8"	59-1/8"
6	Joist	Underside	73-5/8"	75-1/8"
6	Joist	Underside	89-5/8"	91-1/8"
6	Joist	Underside	105-5/8"	107-1/8"
6	Joist	Underside	121-5/8"	123-1/8"



23 Decking: in from the left edge (132-3/4" long)

The other 20 have the same marks: mark them together.

#	Part	On	Left face	Right face
6	Joist	Underside	9-5/8"	11-1/8"
6	Joist	Underside	25-5/8"	27-1/8"
6	Joist	Underside	41-5/8"	43-1/8"
6	Joist	Underside	57-5/8"	59-1/8"
6	Joist	Underside	73-5/8"	75-1/8"
6	Joist	Underside	89-5/8"	91-1/8"
6	Joist	Underside	105-5/8"	107-1/8"
6	Joist	Underside	121-5/8"	123-1/8"



Left edge Right

2 Rail post ×3: up from the bottom edge (44-1/4" long)

Same marks as the other 2: mark all 5 together.

#	Part	On	Bottom of shelf	Top of shelf
21	Border	Right face	7-1/4"	8-1/4"



Bottom edge Top

2 Rail post ×2: up from the bottom edge (44-1/4" long)

Same marks as the other 3: mark all 5 together.

#	Part	On	Bottom of shelf	Top of shelf
21	Border	Left face	7-1/4"	8-1/4"



Bottom edge Top

Cutting diagrams

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

Board A 2×8 PT Pine, 16'

98% used



192" long, grain runs left to right

7-1/4" wide

4	Ledger	144" × 7-1/4"	**14**	Blocking ×3	14-1/2" × 7-1/4"

Board B 2×8 PT Pine, 16'

98% used



192" long, grain runs left to right

7-1/4" wide

5	Rim joist	144" × 7-1/4"	**14**	Blocking ×3	14-1/2" × 7-1/4"

Board C 2×8 PT Pine, 16'

95% used



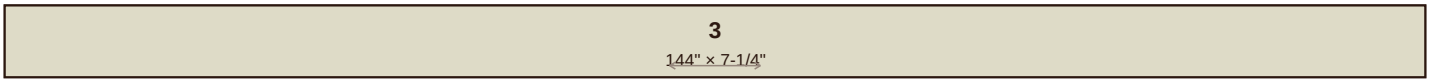
192" long, grain runs left to right

7-1/4" wide

3	Beam	144" × 7-1/4"	**14**	Blocking	14-1/2" × 7-1/4"
17	Blocking ×2	12-1/4" × 7-1/4"			

Board D 2×8 PT Pine, 12'

100% used



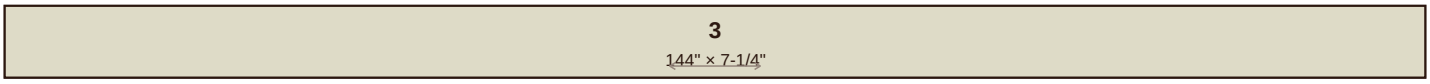
144" long, grain runs left to right

7-1/4" wide

3	Beam	144" × 7-1/4"

Board E 2×8 PT Pine, 12'

100% used



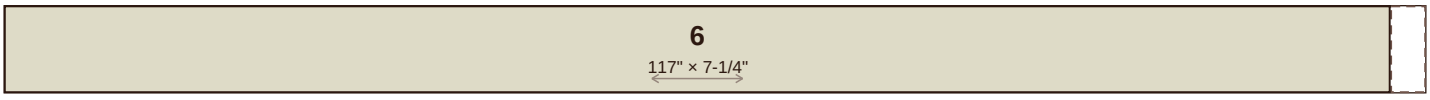
144" long, grain runs left to right

7-1/4" wide

3	Beam	144" × 7-1/4"

Board F 2×8 PT Pine, 10'

98% used

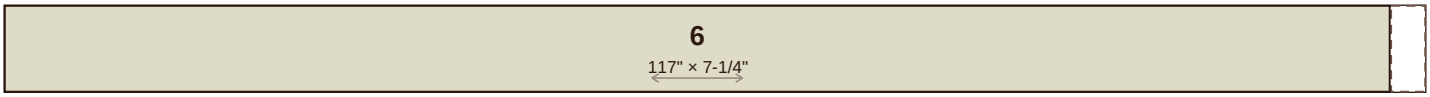


120" long, grain runs left to right

7-1/4" wide

6	Joist	117" × 7-1/4"

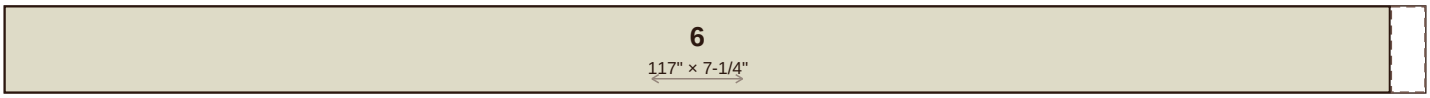
Board G 2×8 PT Pine, 10' 98% used



120" long, grain runs left to right 7-1/4" wide

6 Joist 117" × 7-1/4"

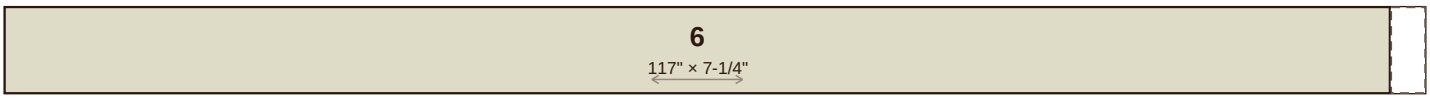
Board H 2×8 PT Pine, 10' 98% used



120" long, grain runs left to right 7-1/4" wide

6 Joist 117" × 7-1/4"

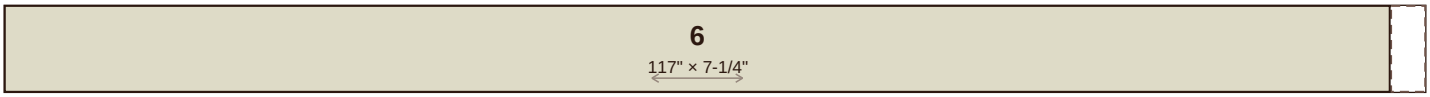
Board I 2×8 PT Pine, 10' 98% used



120" long, grain runs left to right 7-1/4" wide

6 Joist 117" × 7-1/4"

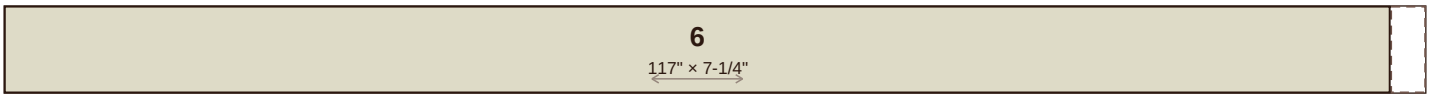
Board J 2×8 PT Pine, 10' 98% used



120" long, grain runs left to right 7-1/4" wide

6 Joist 117" × 7-1/4"

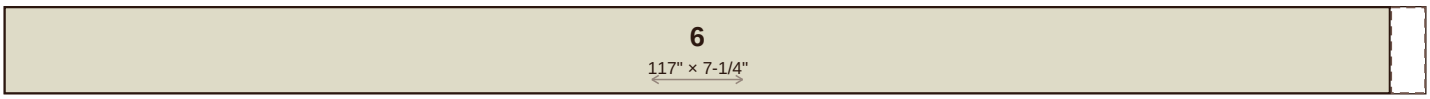
Board K 2×8 PT Pine, 10' 98% used



120" long, grain runs left to right 7-1/4" wide

6 Joist 117" × 7-1/4"

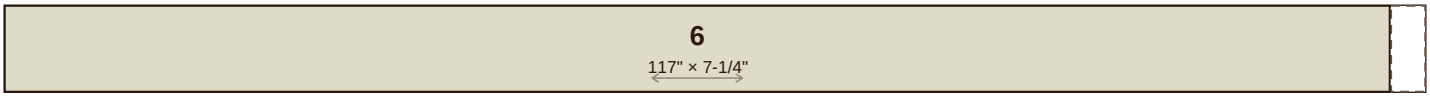
Board L 2×8 PT Pine, 10' 98% used



120" long, grain runs left to right 7-1/4" wide

6 Joist 117" × 7-1/4"

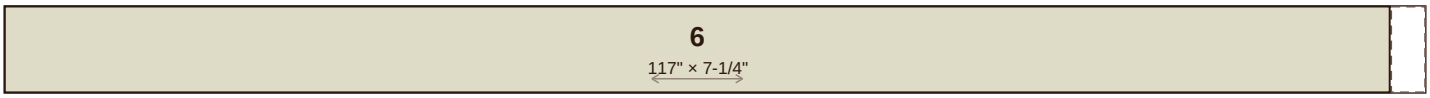
Board M 2×8 PT Pine, 10' 98% used



120" long, grain runs left to right 7-1/4" wide

6 Joist 117" × 7-1/4"

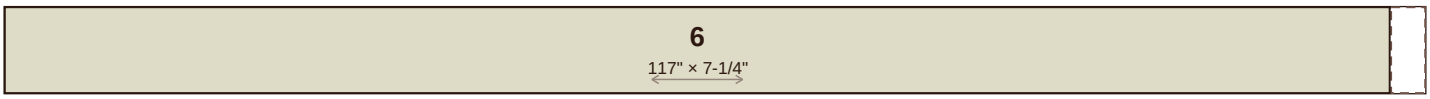
Board N 2×8 PT Pine, 10' 98% used



120" long, grain runs left to right 7-1/4" wide

6 Joist 117" × 7-1/4"

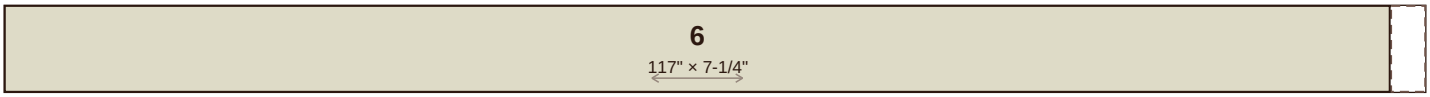
Board O 2×8 PT Pine, 10' 98% used



120" long, grain runs left to right 7-1/4" wide

6 Joist 117" × 7-1/4"

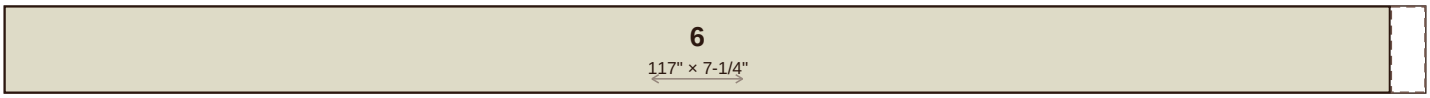
Board P 2×8 PT Pine, 10' 98% used



120" long, grain runs left to right 7-1/4" wide

6 Joist 117" × 7-1/4"

Board Q 2×8 PT Pine, 10' 98% used



120" long, grain runs left to right 7-1/4" wide

6 Joist 117" × 7-1/4"

Board R 6×6 PT Pine, 8' 45% used



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

1 Post ×3 14-1/2" × 5-1/2"

Board S 5/4×6 PT Pine, 12' — 100% used



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

19 Border — 144" × 5-1/2"

Board T 5/4×6 PT Pine, 16' — 94% used



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

20 Decking — 132-3/4" × 5-1/2" **22** Tread — 48" × 5-1/2"

Board U 5/4×6 PT Pine, 16' — 94% used



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

20 Decking — 132-3/4" × 5-1/2" **22** Tread — 48" × 5-1/2"

Board V 5/4×6 PT Pine, 16' — 94% used



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

20 Decking — 132-3/4" × 5-1/2" **22** Tread — 48" × 5-1/2"

Board W 5/4×6 PT Pine, 16' — 94% used



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

20 Decking — 132-3/4" × 5-1/2" **22** Tread — 48" × 5-1/2"

Board X 5/4×6 PT Pine, 16' — 94% used



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

20 Decking — 132-3/4" × 5-1/2" **22** Tread — 48" × 5-1/2"

Board Y 5/4×6 PT Pine, 16' — 94% used



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

20 Decking — 132-3/4" × 5-1/2" **22** Tread — 48" × 5-1/2"

Board Z 5/4×6 PT Pine, 12' — 92% used



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

20 Decking — 132-3/4" × 5-1/2"

Board AA 5/4×6 PT Pine, 12' 92% used



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

20 Decking 132-3/4" × 5-1/2"

Board AB 5/4×6 PT Pine, 12' 92% used



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

20 Decking 132-3/4" × 5-1/2"

Board AC 5/4×6 PT Pine, 12' 92% used



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

20 Decking 132-3/4" × 5-1/2"

Board AD 5/4×6 PT Pine, 12' 92% used



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

20 Decking 132-3/4" × 5-1/2"

Board AE 5/4×6 PT Pine, 12' 92% used



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

20 Decking 132-3/4" × 5-1/2"

Board AF 5/4×6 PT Pine, 12' 92% used



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

20 Decking 132-3/4" × 5-1/2"

Board AG 5/4×6 PT Pine, 12' 92% used



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

20 Decking 132-3/4" × 5-1/2"

Board AH 5/4×6 PT Pine, 12' 92% used



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

20 Decking 132-3/4" × 5-1/2"

Board AI 5/4×6 PT Pine, 12' 92% used



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

20 Decking 132-3/4" × 5-1/2"

Board AJ 5/4×6 PT Pine, 12' 92% used



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

20 Decking 132-3/4" × 5-1/2"

Board AK 5/4×6 PT Pine, 12' 92% used



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

20 Decking 132-3/4" × 5-1/2"

Board AL 5/4×6 PT Pine, 12' 92% used



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

20 Decking 132-3/4" × 5-1/2"

Board AM 5/4×6 PT Pine, 12' 92% used



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

20 Decking 132-3/4" × 5-1/2"

Board AN 5/4×6 PT Pine, 12' 31% used



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

23 Decking 132-3/4" × 1-7/8"

Board AO 5/4×6 PT Pine, 10' 100% used



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

21	Border	120" × 5-1/2"

Board AP 5/4×6 PT Pine, 10' 100% used



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

21	Border	120" × 5-1/2"

Board AQ 2×12 PT Pine, 16' 97% used



192" long, grain runs left to right 11-1/4" wide

7	Stringer ×4	46-3/4" × 11-1/4"

Board AR 4×4 PT Pine, 12' 92% used



144" long, grain runs left to right 3-1/2" wide

2	Rail post ×3	44-1/4" × 3-1/2"

Board AS 4×4 PT Pine, 12' 92% used



144" long, grain runs left to right 3-1/2" wide

2	Rail post ×3	44-1/4" × 3-1/2"

Board AT 4×4 PT Pine, 12' 92% used



144" long, grain runs left to right 3-1/2" wide

2	Rail post ×3	44-1/4" × 3-1/2"

Board AU 2×4 PT Pine, 14' 94% used



168" long, grain runs left to right 3-1/2" wide

8	Bottom rail	56-1/2" × 3-1/2"	**9**	Top rail	56-1/2" × 3-1/2"
11	Top rail	45-11/16" × 3-1/2"			

Board AV 2×4 PT Pine, 14' — 94% used



168" long, grain runs left to right — 3-1/2" wide

8	Bottom rail	56-1/2" × 3-1/2"	**9**	Top rail	56-1/2" × 3-1/2"
10	Bottom rail	45-11/16" × 3-1/2"			

Board AW 2×4 PT Pine, 14' — 99% used



168" long, grain runs left to right — 3-1/2" wide

10	Bottom rail	45-11/16" × 3-1/2"	**11**	Top rail ×2	45-11/16" × 3-1/2"
16	Top rail	29" × 3-1/2"			

Board AX 2×4 PT Pine, 12' — 97% used



144" long, grain runs left to right — 3-1/2" wide

10	Bottom rail	45-11/16" × 3-1/2"	**12**	Bottom rail	32-1/2" × 3-1/2"
13	Top rail	32-1/2" × 3-1/2"	**15**	Bottom rail	29" × 3-1/2"

Board AY 2×2 PT Pine, 16' — 93% used



192" long, grain runs left to right — 1-1/2" wide

18	Baluster ×7	25-1/2" × 1-1/2"

Board AZ 2×2 PT Pine, 16' — 93% used



192" long, grain runs left to right — 1-1/2" wide

18	Baluster ×7	25-1/2" × 1-1/2"

Board BA 2×2 PT Pine, 16' — 93% used



192" long, grain runs left to right — 1-1/2" wide

18	Baluster ×7	25-1/2" × 1-1/2"

Board BB 2×2 PT Pine, 16' — 93% used



192" long, grain runs left to right — 1-1/2" wide

18	Baluster ×7	25-1/2" × 1-1/2"

Board BC 2×2 PT Pine, 16' — 93% used



192" long, grain runs left to right — 1-1/2" wide

18	Baluster ×7	25-1/2" × 1-1/2"

Board BD 2×2 PT Pine, 16' 93% used

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

18 Baluster ×7 25-1/2" × 1-1/2"

Board BE 2×2 PT Pine, 16' 93% used

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

18 Baluster ×7 25-1/2" × 1-1/2"

Board BF 2×2 PT Pine, 14' 91% used

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

18 Baluster ×6 25-1/2" × 1-1/2"

Cut sequence

Check off each step as you go

- [ ] **1** Get Board A: 2×8 PT Pine, 16'.
- [ ] **2** From Board A, crosscut a piece 144" long for Ledger.
- [ ] **3** From Offcut A1, crosscut a piece 14-1/2" long for Blocking.
- [ ] **4** From Offcut A1, crosscut a piece 14-1/2" long for Blocking.
- [ ] **5** From Offcut A1, crosscut a piece 14-1/2" long for Blocking.
- [ ] **6** Get Board B: 2×8 PT Pine, 16'.
- [ ] **7** From Board B, crosscut a piece 144" long for Rim joist.
- [ ] **8** From Offcut B1, crosscut a piece 14-1/2" long for Blocking.
- [ ] **9** From Offcut B1, crosscut a piece 14-1/2" long for Blocking.
- [ ] **10** From Offcut B1, crosscut a piece 14-1/2" long for Blocking.
- [ ] **11** Get Board C: 2×8 PT Pine, 16'.
- [ ] **12** From Board C, crosscut a piece 144" long for Beam.
- [ ] **13** From Offcut C1, crosscut a piece 14-1/2" long for Blocking.
- [ ] **14** From Offcut C1, crosscut a piece 12-1/4" long for Blocking.
- [ ] **15** From Offcut C1, crosscut a piece 12-1/4" long for Blocking.
- [ ] **16** Get Board D: 2×8 PT Pine, 12'.
- [ ] **17** From Board D, crosscut a piece 144" long for Beam.
- [ ] **18** Get Board E: 2×8 PT Pine, 12'.
- [ ] **19** From Board E, crosscut a piece 144" long for Beam.
- [ ] **20** Get Board F: 2×8 PT Pine, 10'.
- [ ] **21** From Board F, crosscut a piece 117" long for Joist.
- [ ] **22** Get Board G: 2×8 PT Pine, 10'.
- [ ] **23** From Board G, crosscut a piece 117" long for Joist.
- [ ] **24** Get Board H: 2×8 PT Pine, 10'.
- [ ] **25** From Board H, crosscut a piece 117" long for Joist.
- [ ] **26** Get Board I: 2×8 PT Pine, 10'.
- [ ] **27** From Board I, crosscut a piece 117" long for Joist.
- [ ] **28** Get Board J: 2×8 PT Pine, 10'.
- [ ] **29** From Board J, crosscut a piece 117" long for Joist.

- [ ] **30** Get Board K: 2×8 PT Pine, 10'.
- [ ] **31** From Board K, crosscut a piece 117" long for Joist.
- [ ] **32** Get Board L: 2×8 PT Pine, 10'.
- [ ] **33** From Board L, crosscut a piece 117" long for Joist.
- [ ] **34** Get Board M: 2×8 PT Pine, 10'.
- [ ] **35** From Board M, crosscut a piece 117" long for Joist.
- [ ] **36** Get Board N: 2×8 PT Pine, 10'.
- [ ] **37** From Board N, crosscut a piece 117" long for Joist.
- [ ] **38** Get Board O: 2×8 PT Pine, 10'.
- [ ] **39** From Board O, crosscut a piece 117" long for Joist.
- [ ] **40** Get Board P: 2×8 PT Pine, 10'.
- [ ] **41** From Board P, crosscut a piece 117" long for Joist.
- [ ] **42** Get Board Q: 2×8 PT Pine, 10'.
- [ ] **43** From Board Q, crosscut a piece 117" long for Joist.
- [ ] **44** Get Board R: 6×6 PT Pine, 8'.
- [ ] **45** From Board R, crosscut a piece 14-1/2" long for Post.
- [ ] **46** From Offcut R1, crosscut a piece 14-1/2" long for Post.
- [ ] **47** From Offcut R1, crosscut a piece 14-1/2" long for Post.
- [ ] **48** Get Board S: 5/4×6 PT Pine, 12'.
- [ ] **49** From Board S, crosscut a piece 144" long for Border.
- [ ] **50** Get Board T: 5/4×6 PT Pine, 16'.
- [ ] **51** From Board T, crosscut a piece 132-3/4" long for Decking.
- [ ] **52** From Offcut T1, crosscut a piece 48" long for Tread.
- [ ] **53** Get Board U: 5/4×6 PT Pine, 16'.
- [ ] **54** From Board U, crosscut a piece 132-3/4" long for Decking.
- [ ] **55** From Offcut U1, crosscut a piece 48" long for Tread.
- [ ] **56** Get Board V: 5/4×6 PT Pine, 16'.
- [ ] **57** From Board V, crosscut a piece 132-3/4" long for Decking.
- [ ] **58** From Offcut V1, crosscut a piece 48" long for Tread.
- [ ] **59** Get Board W: 5/4×6 PT Pine, 16'.

- [ ] **60** From Board W, crosscut a piece 132-3/4" long for Decking.
- [ ] **61** From Offcut W1, crosscut a piece 48" long for Tread.
- [ ] **62** Get Board X: 5/4×6 PT Pine, 16'.
- [ ] **63** From Board X, crosscut a piece 132-3/4" long for Decking.
- [ ] **64** From Offcut X1, crosscut a piece 48" long for Tread.
- [ ] **65** Get Board Y: 5/4×6 PT Pine, 16'.
- [ ] **66** From Board Y, crosscut a piece 132-3/4" long for Decking.
- [ ] **67** From Offcut Y1, crosscut a piece 48" long for Tread.
- [ ] **68** Get Board Z: 5/4×6 PT Pine, 12'.
- [ ] **69** From Board Z, crosscut a piece 132-3/4" long for Decking.
- [ ] **70** Get Board AA: 5/4×6 PT Pine, 12'.
- [ ] **71** From Board AA, crosscut a piece 132-3/4" long for Decking.
- [ ] **72** Get Board AB: 5/4×6 PT Pine, 12'.
- [ ] **73** From Board AB, crosscut a piece 132-3/4" long for Decking.
- [ ] **74** Get Board AC: 5/4×6 PT Pine, 12'.
- [ ] **75** From Board AC, crosscut a piece 132-3/4" long for Decking.
- [ ] **76** Get Board AD: 5/4×6 PT Pine, 12'.
- [ ] **77** From Board AD, crosscut a piece 132-3/4" long for Decking.
- [ ] **78** Get Board AE: 5/4×6 PT Pine, 12'.
- [ ] **79** From Board AE, crosscut a piece 132-3/4" long for Decking.
- [ ] **80** Get Board AF: 5/4×6 PT Pine, 12'.
- [ ] **81** From Board AF, crosscut a piece 132-3/4" long for Decking.
- [ ] **82** Get Board AG: 5/4×6 PT Pine, 12'.
- [ ] **83** From Board AG, crosscut a piece 132-3/4" long for Decking.
- [ ] **84** Get Board AH: 5/4×6 PT Pine, 12'.
- [ ] **85** From Board AH, crosscut a piece 132-3/4" long for Decking.
- [ ] **86** Get Board AI: 5/4×6 PT Pine, 12'.
- [ ] **87** From Board AI, crosscut a piece 132-3/4" long for Decking.
- [ ] **88** Get Board AJ: 5/4×6 PT Pine, 12'.
- [ ] **89** From Board AJ, crosscut a piece 132-3/4" long for Decking.

- [ ] **90** Get Board AK: 5/4×6 PT Pine, 12'.
- [ ] **91** From Board AK, crosscut a piece 132-3/4" long for Decking.
- [ ] **92** Get Board AL: 5/4×6 PT Pine, 12'.
- [ ] **93** From Board AL, crosscut a piece 132-3/4" long for Decking.
- [ ] **94** Get Board AM: 5/4×6 PT Pine, 12'.
- [ ] **95** From Board AM, crosscut a piece 132-3/4" long for Decking.
- [ ] **96** Get Board AN: 5/4×6 PT Pine, 12'.
- [ ] **97** From Board AN, crosscut a piece 132-3/4" long for Decking.
- [ ] **98** From Decking (Board AN), rip a strip 1-7/8" wide for Decking.
- [ ] **99** Get Board AO: 5/4×6 PT Pine, 10'.
- [ ] **100** From Board AO, crosscut a piece 120" long for Border.
- [ ] **101** Get Board AP: 5/4×6 PT Pine, 10'.
- [ ] **102** From Board AP, crosscut a piece 120" long for Border.
- [ ] **103** Get Board AQ: 2×12 PT Pine, 16'.
- [ ] **104** From Board AQ, crosscut a piece 46-3/4" long for Stringer.
- [ ] **105** From Offcut AQ1, crosscut a piece 46-3/4" long for Stringer.
- [ ] **106** From Offcut AQ1, crosscut a piece 46-3/4" long for Stringer.
- [ ] **107** From Offcut AQ1, crosscut a piece 46-3/4" long for Stringer.
- [ ] **108** Get Board AR: 4×4 PT Pine, 12'.
- [ ] **109** From Board AR, crosscut a piece 44-1/4" long for Rail post.
- [ ] **110** From Offcut AR1, crosscut a piece 44-1/4" long for Rail post.
- [ ] **111** From Offcut AR1, crosscut a piece 44-1/4" long for Rail post.
- [ ] **112** Get Board AS: 4×4 PT Pine, 12'.
- [ ] **113** From Board AS, crosscut a piece 44-1/4" long for Rail post.
- [ ] **114** From Offcut AS1, crosscut a piece 44-1/4" long for Rail post.
- [ ] **115** From Offcut AS1, crosscut a piece 44-1/4" long for Rail post.
- [ ] **116** Get Board AT: 4×4 PT Pine, 12'.
- [ ] **117** From Board AT, crosscut a piece 44-1/4" long for Rail post.
- [ ] **118** From Offcut AT1, crosscut a piece 44-1/4" long for Rail post.
- [ ] **119** From Offcut AT1, crosscut a piece 44-1/4" long for Rail post.

- [ ] **120** Get Board AU: 2×4 PT Pine, 14'.
- [ ] **121** From Board AU, crosscut a piece 56-1/2" long for Top rail.
- [ ] **122** From Offcut AU1, crosscut a piece 56-1/2" long for Bottom rail.
- [ ] **123** From Offcut AU1, crosscut a piece 45-11/16" long for Top rail.
- [ ] **124** Get Board AV: 2×4 PT Pine, 14'.
- [ ] **125** From Board AV, crosscut a piece 56-1/2" long for Top rail.
- [ ] **126** From Offcut AV1, crosscut a piece 56-1/2" long for Bottom rail.
- [ ] **127** From Offcut AV1, crosscut a piece 45-11/16" long for Bottom rail.
- [ ] **128** Get Board AW: 2×4 PT Pine, 14'.
- [ ] **129** From Board AW, crosscut a piece 45-11/16" long for Top rail.
- [ ] **130** From Offcut AW1, crosscut a piece 45-11/16" long for Bottom rail.
- [ ] **131** From Offcut AW1, crosscut a piece 45-11/16" long for Top rail.
- [ ] **132** From Offcut AW1, crosscut a piece 29" long for Top rail.
- [ ] **133** Get Board AX: 2×4 PT Pine, 12'.
- [ ] **134** From Board AX, crosscut a piece 45-11/16" long for Bottom rail.
- [ ] **135** From Offcut AX1, crosscut a piece 32-1/2" long for Top rail.
- [ ] **136** From Offcut AX1, crosscut a piece 32-1/2" long for Bottom rail.
- [ ] **137** From Offcut AX1, crosscut a piece 29" long for Bottom rail.
- [ ] **138** Get Board AY: 2×2 PT Pine, 16'.
- [ ] **139** From Board AY, crosscut a piece 25-1/2" long for Baluster.
- [ ] **140** From Offcut AY1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **141** From Offcut AY1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **142** From Offcut AY1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **143** From Offcut AY1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **144** From Offcut AY1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **145** From Offcut AY1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **146** Get Board AZ: 2×2 PT Pine, 16'.
- [ ] **147** From Board AZ, crosscut a piece 25-1/2" long for Baluster.
- [ ] **148** From Offcut AZ1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **149** From Offcut AZ1, crosscut a piece 25-1/2" long for Baluster.

- [ ] **150** From Offcut AZ1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **151** From Offcut AZ1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **152** From Offcut AZ1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **153** From Offcut AZ1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **154** Get Board BA: 2×2 PT Pine, 16'.
- [ ] **155** From Board BA, crosscut a piece 25-1/2" long for Baluster.
- [ ] **156** From Offcut BA1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **157** From Offcut BA1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **158** From Offcut BA1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **159** From Offcut BA1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **160** From Offcut BA1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **161** From Offcut BA1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **162** Get Board BB: 2×2 PT Pine, 16'.
- [ ] **163** From Board BB, crosscut a piece 25-1/2" long for Baluster.
- [ ] **164** From Offcut BB1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **165** From Offcut BB1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **166** From Offcut BB1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **167** From Offcut BB1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **168** From Offcut BB1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **169** From Offcut BB1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **170** Get Board BC: 2×2 PT Pine, 16'.
- [ ] **171** From Board BC, crosscut a piece 25-1/2" long for Baluster.
- [ ] **172** From Offcut BC1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **173** From Offcut BC1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **174** From Offcut BC1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **175** From Offcut BC1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **176** From Offcut BC1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **177** From Offcut BC1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **178** Get Board BD: 2×2 PT Pine, 16'.
- [ ] **179** From Board BD, crosscut a piece 25-1/2" long for Baluster.

- [ ] **180** From Offcut BD1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **181** From Offcut BD1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **182** From Offcut BD1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **183** From Offcut BD1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **184** From Offcut BD1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **185** From Offcut BD1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **186** Get Board BE: 2×2 PT Pine, 16'.
- [ ] **187** From Board BE, crosscut a piece 25-1/2" long for Baluster.
- [ ] **188** From Offcut BE1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **189** From Offcut BE1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **190** From Offcut BE1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **191** From Offcut BE1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **192** From Offcut BE1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **193** From Offcut BE1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **194** Get Board BF: 2×2 PT Pine, 14'.
- [ ] **195** From Board BF, crosscut a piece 25-1/2" long for Baluster.
- [ ] **196** From Offcut BF1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **197** From Offcut BF1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **198** From Offcut BF1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **199** From Offcut BF1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **200** From Offcut BF1, crosscut a piece 25-1/2" long for Baluster.
- [ ] **201** Miter both ends of Stringer ×4 at 35.5°
- [ ] **202** Miter both ends of Border at 45°
- [ ] **203** Miter the front end of Border ×2 at 45°
- [ ] **204** Taper the bottom face of Stringer ×4 from 11-1/4" to 2-1/4", starting 34-1/8" from the right end
- [ ] **205** In Stringer (Board AQ), cut 3 stringer notches, each 1-1/2" wide × 6-1/8" deep.
- [ ] **206** In Stringer (Board AQ), cut 3 stringer notches, each 1-1/2" wide × 6-1/8" deep.
- [ ] **207** In Stringer (Board AQ), cut 3 stringer notches, each 1-1/2" wide × 6-1/8" deep.
- [ ] **208** In Stringer (Board AQ), cut 3 stringer notches, each 1-1/2" wide × 6-1/8" deep.

Setup sheets

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

Setup 1 Get the stock

- [ ] Board A: 2×8 PT Pine, 16' — step 1
- [ ] Board B: 2×8 PT Pine, 16' — step 6
- [ ] Board C: 2×8 PT Pine, 16' — step 11
- [ ] Board D: 2×8 PT Pine, 12' — step 16
- [ ] Board E: 2×8 PT Pine, 12' — step 18
- [ ] Board F: 2×8 PT Pine, 10' — step 20
- [ ] Board G: 2×8 PT Pine, 10' — step 22
- [ ] Board H: 2×8 PT Pine, 10' — step 24
- [ ] Board I: 2×8 PT Pine, 10' — step 26
- [ ] Board J: 2×8 PT Pine, 10' — step 28
- [ ] Board K: 2×8 PT Pine, 10' — step 30
- [ ] Board L: 2×8 PT Pine, 10' — step 32
- [ ] Board M: 2×8 PT Pine, 10' — step 34
- [ ] Board N: 2×8 PT Pine, 10' — step 36
- [ ] Board O: 2×8 PT Pine, 10' — step 38
- [ ] Board P: 2×8 PT Pine, 10' — step 40
- [ ] Board Q: 2×8 PT Pine, 10' — step 42
- [ ] Board R: 6×6 PT Pine, 8' — step 44
- [ ] Board S: 5/4×6 PT Pine, 12' — step 48
- [ ] Board T: 5/4×6 PT Pine, 16' — step 50
- [ ] Board U: 5/4×6 PT Pine, 16' — step 53
- [ ] Board V: 5/4×6 PT Pine, 16' — step 56
- [ ] Board W: 5/4×6 PT Pine, 16' — step 59
- [ ] Board X: 5/4×6 PT Pine, 16' — step 62
- [ ] Board Y: 5/4×6 PT Pine, 16' — step 65
- [ ] Board Z: 5/4×6 PT Pine, 12' — step 68
- [ ] Board AA: 5/4×6 PT Pine, 12' — step 70
- [ ] Board AB: 5/4×6 PT Pine, 12' — step 72
- [ ] Board AC: 5/4×6 PT Pine, 12' — step 74
- [ ] Board AD: 5/4×6 PT Pine, 12' — step 76
- [ ] Board AE: 5/4×6 PT Pine, 12' — step 78
- [ ] Board AF: 5/4×6 PT Pine, 12' — step 80

- [ ] Board AG: 5/4×6 PT Pine, 12' — step 82
- [ ] Board AH: 5/4×6 PT Pine, 12' — step 84
- [ ] Board AI: 5/4×6 PT Pine, 12' — step 86
- [ ] Board AJ: 5/4×6 PT Pine, 12' — step 88
- [ ] Board AK: 5/4×6 PT Pine, 12' — step 90
- [ ] Board AL: 5/4×6 PT Pine, 12' — step 92
- [ ] Board AM: 5/4×6 PT Pine, 12' — step 94
- [ ] Board AN: 5/4×6 PT Pine, 12' — step 96
- [ ] Board AO: 5/4×6 PT Pine, 10' — step 99
- [ ] Board AP: 5/4×6 PT Pine, 10' — step 101
- [ ] Board AQ: 2×12 PT Pine, 16' — step 103
- [ ] Board AR: 4×4 PT Pine, 12' — step 108
- [ ] Board AS: 4×4 PT Pine, 12' — step 112
- [ ] Board AT: 4×4 PT Pine, 12' — step 116
- [ ] Board AU: 2×4 PT Pine, 14' — step 120
- [ ] Board AV: 2×4 PT Pine, 14' — step 124
- [ ] Board AW: 2×4 PT Pine, 14' — step 128
- [ ] Board AX: 2×4 PT Pine, 12' — step 133
- [ ] Board AY: 2×2 PT Pine, 16' — step 138
- [ ] Board AZ: 2×2 PT Pine, 16' — step 146
- [ ] Board BA: 2×2 PT Pine, 16' — step 154
- [ ] Board BB: 2×2 PT Pine, 16' — step 162
- [ ] Board BC: 2×2 PT Pine, 16' — step 170
- [ ] Board BD: 2×2 PT Pine, 16' — step 178
- [ ] Board BE: 2×2 PT Pine, 16' — step 186
- [ ] Board BF: 2×2 PT Pine, 14' — step 194

Setup 2 Miter saw: stop block at 144"

Clamp a stop block on the fence 144" from the blade, and square one end of each piece before it goes to the stop.

- [ ] Board A: a piece for Ledger — #4 step 2
- [ ] Board B: a piece for Rim joist — #5 step 7
- [ ] Board C: a piece for Beam — #3 step 12
- [ ] Board D: a piece for Beam — #3 step 17
- [ ] Board E: a piece for Beam — #3 step 19
- [ ] Board S: a piece for Border — #19 step 49

Setup 3 Miter saw: stop block at 132-3/4"

Clamp a stop block on the fence 132-3/4" from the blade, and square one end of each piece before it goes to the stop.

- [ ] Board T: a piece for Decking — #20 step 51
- [ ] Board U: a piece for Decking — #20 step 54
- [ ] Board V: a piece for Decking — #20 step 57
- [ ] Board W: a piece for Decking — #20 step 60
- [ ] Board X: a piece for Decking — #20 step 63
- [ ] Board Y: a piece for Decking — #20 step 66
- [ ] Board Z: a piece for Decking — #20 step 69
- [ ] Board AA: a piece for Decking — #20 step 71
- [ ] Board AB: a piece for Decking — #20 step 73
- [ ] Board AC: a piece for Decking — #20 step 75
- [ ] Board AD: a piece for Decking — #20 step 77
- [ ] Board AE: a piece for Decking — #20 step 79
- [ ] Board AF: a piece for Decking — #20 step 81
- [ ] Board AG: a piece for Decking — #20 step 83
- [ ] Board AH: a piece for Decking — #20 step 85
- [ ] Board AI: a piece for Decking — #20 step 87
- [ ] Board AJ: a piece for Decking — #20 step 89
- [ ] Board AK: a piece for Decking — #20 step 91
- [ ] Board AL: a piece for Decking — #20 step 93
- [ ] Board AM: a piece for Decking — #20 step 95
- [ ] Board AN: a piece for Decking — #23 step 97

Setup 4 Table saw: rip fence at 1-7/8"

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

- [ ] Decking (Board AN): a strip for Decking — #23 step 98

Setup 5 Miter saw: stop block at 120"

Clamp a stop block on the fence 120" from the blade, and square one end of each piece before it goes to the stop.

- [ ] Board AO: a piece for Border — #21 step 100
- [ ] Board AP: a piece for Border — #21 step 102

Setup 6 Miter saw: stop block at 117"

Clamp a stop block on the fence 117" from the blade, and square one end of each piece before it goes to the stop.

- [ ] Board F: a piece for Joist — #6 step 21

- [ ] Board G: a piece for Joist — #6 step 23
- [ ] Board H: a piece for Joist — #6 step 25
- [ ] Board I: a piece for Joist — #6 step 27
- [ ] Board J: a piece for Joist — #6 step 29
- [ ] Board K: a piece for Joist — #6 step 31
- [ ] Board L: a piece for Joist — #6 step 33
- [ ] Board M: a piece for Joist — #6 step 35
- [ ] Board N: a piece for Joist — #6 step 37
- [ ] Board O: a piece for Joist — #6 step 39
- [ ] Board P: a piece for Joist — #6 step 41
- [ ] Board Q: a piece for Joist — #6 step 43

Setup 7 Miter saw: stop block at 48"

Clamp a stop block on the fence 48" from the blade, and square one end of each piece before it goes to the stop.

- [ ] Offcut T1: a piece for Tread — #22 step 52
- [ ] Offcut U1: a piece for Tread — #22 step 55
- [ ] Offcut V1: a piece for Tread — #22 step 58
- [ ] Offcut W1: a piece for Tread — #22 step 61
- [ ] Offcut X1: a piece for Tread — #22 step 64
- [ ] Offcut Y1: a piece for Tread — #22 step 67

Setup 8 Miter saw: stop block at 56-1/2"

Clamp a stop block on the fence 56-1/2" from the blade, and square one end of each piece before it goes to the stop.

- [ ] Board AU: a piece for Top rail — #9 step 121
- [ ] Offcut AU1: a piece for Bottom rail — #8 step 122
- [ ] Board AV: a piece for Top rail — #9 step 125
- [ ] Offcut AV1: a piece for Bottom rail — #8 step 126

Setup 9 Miter saw: stop block at 46-3/4"

Clamp a stop block on the fence 46-3/4" from the blade, and square one end of each piece before it goes to the stop.

- [ ] Board AQ: a piece for Stringer — #7 step 104
- [ ] Offcut AQ1: a piece for Stringer — #7 step 105
- [ ] Offcut AQ1: a piece for Stringer — #7 step 106
- [ ] Offcut AQ1: a piece for Stringer — #7 step 107

Setup 10 Miter saw: stop block at 45-21/32"

Clamp a stop block on the fence 45-21/32" from the blade, and square one end of each piece before it goes to the stop.

- [ ] Offcut AU1: a piece for Top rail — #11 step 123
- [ ] Offcut AV1: a piece for Bottom rail — #10 step 127
- [ ] Board AW: a piece for Top rail — #11 step 129
- [ ] Offcut AW1: a piece for Bottom rail — #10 step 130
- [ ] Offcut AW1: a piece for Top rail — #11 step 131
- [ ] Board AX: a piece for Bottom rail — #10 step 134

Setup 11 Miter saw: stop block at 44-1/4"

Clamp a stop block on the fence 44-1/4" from the blade, and square one end of each piece before it goes to the stop.

- [ ] Board AR: a piece for Rail post — #2 step 109
- [ ] Offcut AR1: a piece for Rail post — #2 step 110
- [ ] Offcut AR1: a piece for Rail post — #2 step 111
- [ ] Board AS: a piece for Rail post — #2 step 113
- [ ] Offcut AS1: a piece for Rail post — #2 step 114
- [ ] Offcut AS1: a piece for Rail post — #2 step 115
- [ ] Board AT: a piece for Rail post — #2 step 117
- [ ] Offcut AT1: a piece for Rail post — #2 step 118
- [ ] Offcut AT1: a piece for Rail post — #2 step 119

Setup 12 Miter saw: stop block at 32-1/2"

Clamp a stop block on the fence 32-1/2" from the blade, and square one end of each piece before it goes to the stop.

- [ ] Offcut AX1: a piece for Top rail — #13 step 135
- [ ] Offcut AX1: a piece for Bottom rail — #12 step 136

Setup 13 Miter saw: stop block at 29"

Clamp a stop block on the fence 29" from the blade, and square one end of each piece before it goes to the stop.

- [ ] Offcut AW1: a piece for Top rail — #16 step 132
- [ ] Offcut AX1: a piece for Bottom rail — #15 step 137

Setup 14 Miter saw: stop block at 25-1/2"

Clamp a stop block on the fence 25-1/2" from the blade, and square one end of each piece before it goes to the stop.

- [ ] Board AY: a piece for Baluster — #18 step 139
- [ ] Offcut AY1: a piece for Baluster — #18 step 140
- [ ] Offcut AY1: a piece for Baluster — #18 step 141

- [ ] Offcut AY1: a piece for Baluster #18 step 142
- [ ] Offcut AY1: a piece for Baluster #18 step 143
- [ ] Offcut AY1: a piece for Baluster #18 step 144
- [ ] Offcut AY1: a piece for Baluster #18 step 145
- [ ] Board AZ: a piece for Baluster #18 step 147
- [ ] Offcut AZ1: a piece for Baluster #18 step 148
- [ ] Offcut AZ1: a piece for Baluster #18 step 149
- [ ] Offcut AZ1: a piece for Baluster #18 step 150
- [ ] Offcut AZ1: a piece for Baluster #18 step 151
- [ ] Offcut AZ1: a piece for Baluster #18 step 152
- [ ] Offcut AZ1: a piece for Baluster #18 step 153
- [ ] Board BA: a piece for Baluster #18 step 155
- [ ] Offcut BA1: a piece for Baluster #18 step 156
- [ ] Offcut BA1: a piece for Baluster #18 step 157
- [ ] Offcut BA1: a piece for Baluster #18 step 158
- [ ] Offcut BA1: a piece for Baluster #18 step 159
- [ ] Offcut BA1: a piece for Baluster #18 step 160
- [ ] Offcut BA1: a piece for Baluster #18 step 161
- [ ] Board BB: a piece for Baluster #18 step 163
- [ ] Offcut BB1: a piece for Baluster #18 step 164
- [ ] Offcut BB1: a piece for Baluster #18 step 165
- [ ] Offcut BB1: a piece for Baluster #18 step 166
- [ ] Offcut BB1: a piece for Baluster #18 step 167
- [ ] Offcut BB1: a piece for Baluster #18 step 168
- [ ] Offcut BB1: a piece for Baluster #18 step 169
- [ ] Board BC: a piece for Baluster #18 step 171
- [ ] Offcut BC1: a piece for Baluster #18 step 172
- [ ] Offcut BC1: a piece for Baluster #18 step 173
- [ ] Offcut BC1: a piece for Baluster #18 step 174
- [ ] Offcut BC1: a piece for Baluster #18 step 175
- [ ] Offcut BC1: a piece for Baluster #18 step 176
- [ ] Offcut BC1: a piece for Baluster #18 step 177
- [ ] Board BD: a piece for Baluster #18 step 179
- [ ] Offcut BD1: a piece for Baluster #18 step 180

- [ ] Offcut BD1: a piece for Baluster #18 step 181
- [ ] Offcut BD1: a piece for Baluster #18 step 182
- [ ] Offcut BD1: a piece for Baluster #18 step 183
- [ ] Offcut BD1: a piece for Baluster #18 step 184
- [ ] Offcut BD1: a piece for Baluster #18 step 185
- [ ] Board BE: a piece for Baluster #18 step 187
- [ ] Offcut BE1: a piece for Baluster #18 step 188
- [ ] Offcut BE1: a piece for Baluster #18 step 189
- [ ] Offcut BE1: a piece for Baluster #18 step 190
- [ ] Offcut BE1: a piece for Baluster #18 step 191
- [ ] Offcut BE1: a piece for Baluster #18 step 192
- [ ] Offcut BE1: a piece for Baluster #18 step 193
- [ ] Board BF: a piece for Baluster #18 step 195
- [ ] Offcut BF1: a piece for Baluster #18 step 196
- [ ] Offcut BF1: a piece for Baluster #18 step 197
- [ ] Offcut BF1: a piece for Baluster #18 step 198
- [ ] Offcut BF1: a piece for Baluster #18 step 199
- [ ] Offcut BF1: a piece for Baluster #18 step 200

Setup 15 Miter saw: stop block at 14-1/2"

Clamp a stop block on the fence 14-1/2" from the blade, and square one end of each piece before it goes to the stop.

- [ ] Offcut A1: a piece for Blocking #14 step 3
- [ ] Offcut A1: a piece for Blocking #14 step 4
- [ ] Offcut A1: a piece for Blocking #14 step 5
- [ ] Offcut B1: a piece for Blocking #14 step 8
- [ ] Offcut B1: a piece for Blocking #14 step 9
- [ ] Offcut B1: a piece for Blocking #14 step 10
- [ ] Offcut C1: a piece for Blocking #14 step 13
- [ ] Board R: a piece for Post #1 step 45
- [ ] Offcut R1: a piece for Post #1 step 46
- [ ] Offcut R1: a piece for Post #1 step 47

Setup 16 Miter saw: stop block at 12-1/4"

Clamp a stop block on the fence 12-1/4" from the blade, and square one end of each piece before it goes to the stop.

- [ ] Offcut C1: a piece for Blocking #17 step 14

- [ ] Offcut C1: a piece for Blocking #17 step 15

Setup 17 Miter saw: miter at 35.5°

Swing the saw to 35.5°. Make a test cut on scrap first and check it.
A stop block for the second part, so pairs come out the same length.

- [ ] Stringer ×4: Miter both ends 35.5° #7 step 201

Setup 18 Miter saw: miter at 45°

Swing the saw to 45°. Make a test cut on scrap first and check it.
A stop block for the second part, so pairs come out the same length.

- [ ] Border: Miter both ends 45° #19 step 202
- [ ] Border ×2: Miter the front end 45° #21 step 203

Setup 19 Table saw: taper jig, 9" over 12-19/32"

Mark the taper: full size 34-5/32" from the right end, 2-1/4" at the narrow end.
Set the jig so the blade meets both marks: nothing off where the taper starts, 9" off at the narrow end.

- [ ] Stringer ×4: Taper one face from 11-1/4" to 2-1/4", starting 34-5/32" from the right end #7 step 204

Setup 20 Circular saw: stringer notches, rise 7-1/2", run 10-1/2"

A framing square with stair gauges at 7-1/2" and 10-1/2", stepped along the top edge.
Cut to the lines with a circular saw, stopping at the corner, and finish each corner with a handsaw.

- [ ] Stringer ×4: 3 stringer notches #7 steps 205, 206, 207, 208

Assembly steps

The order it goes together

No clamps: everything screws together or sits in place.



1 Set the posts in post bases

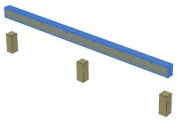
Parts Post ×3 (part 1)

Joints Post: 3 post bases, 6×6

Glue No glue.

Clamps No clamps.

Set each post in its base on its footing and brace it plumb both ways until the beam is on.



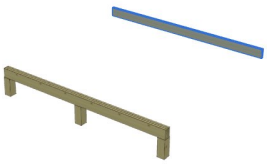
2 Build the beam on the posts

Parts Beam ×3 (part 3)

Joints Beam and Beam: 36 structural screws, 1/4" × 3-1/2"
Post and Beam: 3 beam brackets, 6×6

Glue No glue.

Clamps No clamps.



3 Fasten the ledger to the house

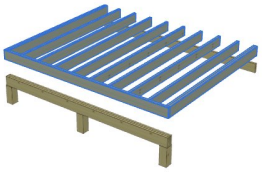
Parts Ledger (part 4)

Joints Ledger: 18 ledger lag screws, 1/2" × 4" (or through-bolts)

Glue No glue.

Clamps No clamps.

Flash the ledger before the joists go on.



4 Hang the joists in joist hangers

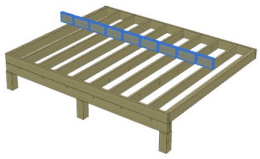
Parts Rim joist (part 5), Joist ×12 (part 6)

Joints Rim joist and Joist: 6 structural screws, 1/4" × 3-1/2"
Joist and Ledger: 4 joist hangers, double, 2×8
Joist and Beam: 12 hurricane ties
Joist and Joist: 32 structural screws, 1/4" × 3-1/2"
Joist and Ledger: 16 joist hangers, 2×8

Glue No glue.

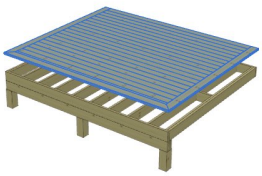
Clamps No clamps.

Set each joist crown up.



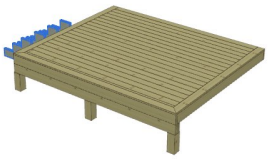
5 Nail in the blocking

Parts Blocking ×7 (part 14), Blocking ×2 (part 17)
Joints Blocking and Joist: 54 framing nails, 3-1/4"
Glue No glue.
Clamps No clamps.



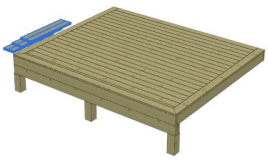
6 Screw down the decking

Parts Border (part 19), Decking ×20 (part 20), Border ×2 (part 21), Decking (part 23)
Joints Border and Joist: 56 deck screws, 2-1/2"
Decking and Joist: 336 deck screws, 2-1/2"
Glue No glue.
Clamps No clamps.



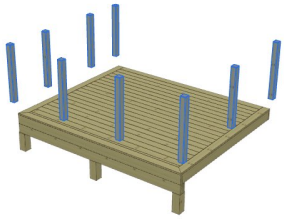
7 Hang the stringers on stair stringer brackets

Parts Stringer ×4 (part 7)
Joints Stringer and Joist: 4 stair stringer brackets
Glue No glue.
Clamps No clamps.



8 Screw the treads to the stringers

Parts Tread ×6 (part 22)
Joints Tread and Stringer: 48 deck screws, 2-1/2"
Glue No glue.
Clamps No clamps.



9 Bolt the rail posts to the frame

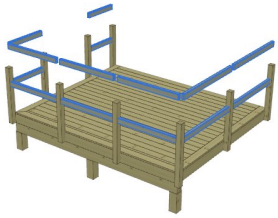
Parts Rail post ×9 (part 2)

Joints Rail post and Rim joist: 8 carriage bolts, 1/2" × 8"

Rail post and Joist: 10 carriage bolts, 1/2" × 8"

Glue No glue.

Clamps No clamps.



10 Screw the rails to the rail posts

Parts Bottom rail ×2 (part 8), Top rail ×2 (part 9), Bottom rail ×3 (part 10), Top rail ×3 (part 11), Bottom rail (part 12), Top rail (part 13), Bottom rail (part 15), Top rail (part 16)

Joints Top rail and Rail post: 28 deck screws, 2-1/2"

Bottom rail and Rail post: 28 deck screws, 2-1/2"

Glue No glue.

Clamps No clamps.



11 Screw on the balusters

Parts Baluster ×55 (part 18)

Joints Baluster and Top rail: 220 deck screws, 2-1/2"

Glue No glue.

Clamps No clamps.