

4 / 12 - 18 °

Run Feet	Common Rafter Length	Rise	H / V Rafter Length
1	12 5/8	4	17 3/8
2	25 1/4	8	34 7/8
3	37 7/8	12	52 1/4
4	50 5/8	16	69 3/4
5	63 1/4	20	87 1/8
6	75 7/8	24	104 5/8
7	88 1/2	28	122
8	101 1/4	32	139 1/2
9	113 7/8	36	156 7/8
10	126 1/2	40	174 3/8
11	139 1/8	44	191 3/4
12	151 3/4	48	209 1/4
13	164 1/2	52	226 5/8
14	177 1/8	56	244 1/8
15	189 3/4	60	261 1/2
16	202 3/8	64	278 7/8
17	215	68	296 3/8
18	227 5/8	72	313 7/8
19	240 3/8	76	331 1/4
20	252 7/8	80	348 3/4
21	265 5/8	84	366 1/8
22	278 1/4	88	383 5/8
23	290 7/8	92	401
24	303 5/8	96	418 1/2
25	316 1/4	100	435 7/8

Factor Chart

Common Rafter Run	X	1.054	=	Common Rafter Length
Common Rafter Run	X	0.333	=	Rise
Common Rafter Run	X	1.453	=	H/V Rafter Length

First Jack Deduction - 16" O.C. (LP) 16 3/8 "
 Jack Difference - 16" O.C. 16.87 " or 16 7/8 "

First Jack Deduction - 24" O.C. (LP) 24 7/8 "
 Jack Difference - 24" O.C. 25.30 " or 25 1/4 "

Jack Rafter Length per inch of layout 1.05 "

Pitch of the Hip Rafter 4 / 17

Hip Drop (for 2x rafter) 1/8 "

Hip Backing Bevel 14 °

Saw cuts used with square cut common rafters

	Framing square - Degrees	Miter
Fascia Cut	(3 3/4 - 12) or 18 °	43 °
Hip / Valley Tail Cut	(2 1/2 - 12) or 12 °	43 °

Roof Sheathing Cut (11 3/8 - 12) 45 1/2 "

Run Inches	Common Rafter Length	Rise	H / V Rafter Length
1/4	0 1/4	0 1/8	0 3/8
1/2	0 1/2	0 1/8	0 3/4
3/4	0 3/4	0 1/4	1 1/8
1	1	0 3/8	1 1/2
1 1/4	1 3/8	0 3/8	1 7/8
1 1/2	1 5/8	0 1/2	2 1/8
1 3/4	1 7/8	0 5/8	2 1/2
2	2 1/8	0 5/8	2 7/8
2 1/4	2 3/8	0 3/4	3 1/4
2 1/2	2 5/8	0 7/8	3 5/8
2 3/4	2 7/8	0 7/8	3 7/8
3	3 1/8	1	4 3/8
3 1/4	3 3/8	1 1/8	4 3/4
3 1/2	3 3/4	1 1/8	5 1/8
3 3/4	3 7/8	1 1/4	5 1/2
4	4 1/4	1 3/8	5 3/4
4 1/4	4 1/2	1 3/8	6 1/8
4 1/2	4 3/4	1 1/2	6 1/2
4 3/4	5	1 5/8	6 7/8
5	5 1/4	1 5/8	7 1/4
5 1/4	5 1/2	1 3/4	7 5/8
5 1/2	5 3/4	1 7/8	7 7/8
5 3/4	6	1 7/8	8 3/8
6	6 3/8	2	8 3/4
6 1/4	6 5/8	2 1/8	9 1/8
6 1/2	6 7/8	2 1/8	9 1/2
6 3/4	7 1/8	2 1/4	9 3/4
7	7 3/8	2 3/8	10 1/8
7 1/4	7 5/8	2 3/8	10 1/2
7 1/2	7 7/8	2 1/2	10 7/8
7 3/4	8 1/8	2 5/8	11 1/4
8	8 3/8	2 5/8	11 5/8
8 1/4	8 3/4	2 3/4	11 7/8
8 1/2	8 7/8	2 7/8	12 3/8
8 3/4	9 1/4	2 7/8	12 3/4
9	9 1/2	3	13 1/8
9 1/4	9 3/4	3 1/8	13 1/2
9 1/2	10	3 1/8	13 3/4
9 3/4	10 1/4	3 1/4	14 1/8
10	10 1/2	3 3/8	14 1/2
10 1/4	10 3/4	3 3/8	14 7/8
10 1/2	11 1/8	3 1/2	15 1/4
10 3/4	11 3/8	3 5/8	15 5/8
11	11 5/8	3 5/8	15 7/8
11 1/4	11 7/8	3 3/4	16 3/8
11 1/2	12 1/8	3 7/8	16 3/4
11 3/4	12 3/8	3 7/8	17 1/8
12	12 5/8	4	17 3/8