

## Roof Pitch Length Ratios

Roof Pitch	Common Ratio	Hip Valley Ratio
1	1.0035	1.4167
2	1.0138	1.4240
3	1.0308	1.4386
4	1.0541	1.4554
5	1.0833	1.4767
6	1.1180	1.5023
7	1.1577	1.5321
8	1.2019	1.5657
9	1.25	1.6029
10	1.3017	1.6436
11	1.3566	1.6874
12	1.4142	1.7341
14	1.5366	1.8352
16	1.6667	1.9454
18	1.8028	2.0632

**Description:**

Use this chart to find the length of a rafter by multiplying the run by the pitch ratio. The average roof area of a given pitch can also be figured using the calculations below

Gables: Multiply the **SPAN X RIDGE LENGTH X RATIO**

Hip/Valley: Multiply the **SPAN X COMM RUN X H/V RATIO**

Note: The Hip/Valley calculation finds the area of roof measuring perpendicular from the ridge connection point out towards the exterior wall were the King Common rafter sits