

Roof Pitch to Degrees Conversion Chart

Free printable reference | JusTheTool.com/roof-pitch-guide.html

Pitch is expressed as inches of vertical rise per 12 inches of horizontal run (e.g. 6/12 = 6" rise per foot).
Rafter multiplier: multiply the horizontal run by this factor to get rafter length. Slope % = rise / run x 100.

Pitch	Angle	Slope %	Multiplier	Pitch	Angle	Slope %	Multiplier
1/12	4.8°	8.3%	1.0035	13/12	47.3°	108.3%	1.4743
2/12	9.5°	16.7%	1.0138	14/12	49.4°	116.7%	1.5366
3/12	14.0°	25.0%	1.0308	15/12	51.3°	125.0%	1.6008
4/12	18.4°	33.3%	1.0541	16/12	53.1°	133.3%	1.6667
5/12	22.6°	41.7%	1.0833	17/12	54.8°	141.7%	1.7341
6/12	26.6°	50.0%	1.1180	18/12	56.3°	150.0%	1.8028
7/12	30.3°	58.3%	1.1577	19/12	57.7°	158.3%	1.8727
8/12	33.7°	66.7%	1.2019	20/12	59.0°	166.7%	1.9437
9/12	36.9°	75.0%	1.2500	21/12	60.3°	175.0%	2.0156
10/12	39.8°	83.3%	1.3017	22/12	61.4°	183.3%	2.0883
11/12	42.5°	91.7%	1.3566	23/12	62.4°	191.7%	2.1619
12/12	45.0°	100.0%	1.4142	24/12	63.4°	200.0%	2.2361

Quick Facts

- Walkable pitches: 6/12 (26.6°) and below are generally safe to walk with care.
- Most common residential pitch in the US: 4/12 to 9/12.
- Minimum pitch for asphalt shingles: 2/12 (with special underlayment); 4/12+ standard.
- Flat roofs are typically 1/4:12 to 1/2:12 - use membrane roofing, not shingles.
- Rafter length = horizontal run x multiplier (add overhang separately).