

Topic 10 ROOFING

Part 5: Roof slope

The slope of the roofs is determined by the angle between the slope and the horizontal plane or the value of the tangent in percent.

The roof slope is calculated with the help of the following formula:

Calculating the slope: $\frac{\text{Height (A)}}{\text{Base (B)}} \times 100$

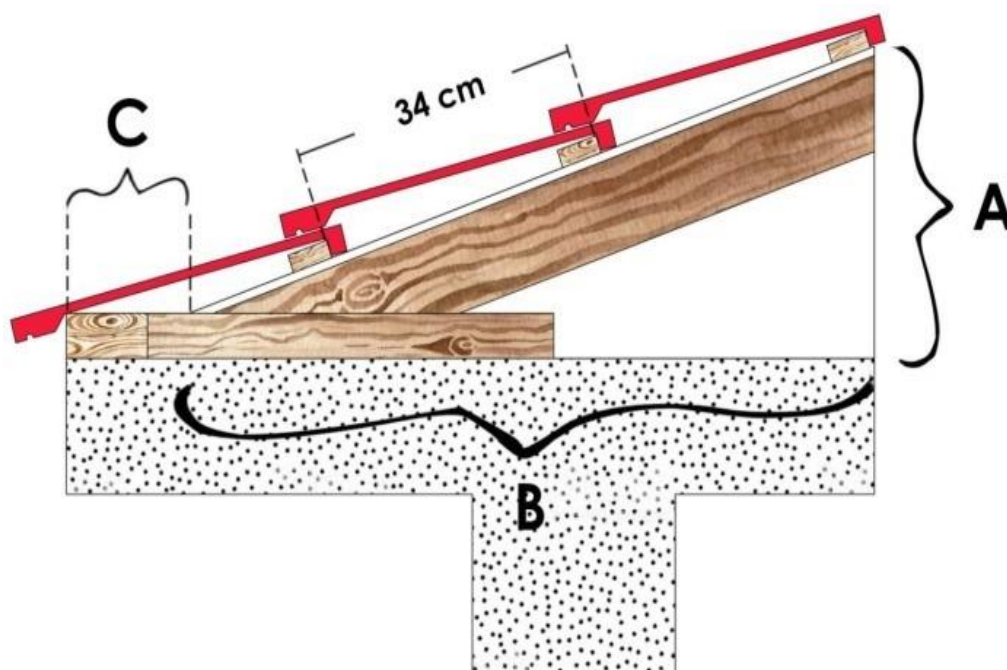


Figure 1. Calculating the slope of the roof

Once the slope is calculated, the angle can be found in the following table (see the next page).

Table: Calculating the slope of the roof

SLOPE (%)	ANGLE (°)	A	B	C
15	9°	15	100	33,54
20	11°	20	100	25,37
25	14°	25	100	20,51
30	17°	30	100	17,36
35	19°	35	100	15,10
40	22°	40	100	13,43
45	24°	45	100	12,16
50	27°	50	100	11,16
55	29°	55	100	10,35
60	31°	60	100	9,70
65	33°	65	100	9,15
70	35°	70	100	8,70
75	37°	75	100	8,32
80	39°	80	100	7,99
85	40°	85	100	7,70
90	42°	90	100	7,46
95	44°	95	100	7,24
100	45°	100	100	7,06

Example:

Let's find the slope of a roof 2 m high (A) and 5 m wide (B) in degrees.

Roof slope: $(A / B) * 100 = (2/5) * 100 = 40$

Therefore, we note in the table that the slope of 40% corresponds to 22°.