



Avalanche Safety Reduction Method Calculation Tables

Note that the Reduction Method is most reliable on snow packs in the Northern Hemisphere between 40° and 50° degrees latitude. All of the 2nd class reduction factors are invalid with wet snow conditions. The safe distance between members of a group should be increased when descending to well over 10 metres.

When using the reduction method formula, you should remember that to proceed the risk factor should be less than 1, and in the mountains the risk factor can never be reduced to zero. There is always some avalanche risk at all times.

If you require avalanche training in this field, contact us for guiding on 01539 44 22 17 / info@icicle.co.uk

DP = Danger Potential

Avalanche Risk	=	Danger Potential
1	=	2
2	=	4
3	=	8
4	=	16
5	=	32

<1 = OK
1 = maybe
>1 = NO

$$DP = \frac{RF1 \times RF2 \times RF3}{1}$$

RF1 = Risk Factor 1st Class

<u>Steepest slope angle</u>	<u>RF1</u>
Steepest slope 35° - 39°	2
Steepest slope around 35°	3
Steepest slope 30° - 34°	4

RF2 = Risk Factor 2nd Class

<u>Slope aspects</u>	<u>RF2</u>
Avoid north sector (NW-NNE)	2
No N half aspects (WNW-ESE)	3
Avoid critical aspects / elevation	4
Use highly frequented slopes	2

RF3 = Risk Factor 3rd Class

<u>Group size</u>	<u>RF3</u>
Large group (over 4)	2
Small group (2 – 4 per)	2
Small group (10m+ between)	3