

# Avalanche Terrain Classification

20081212 Draft, Adapted by Alaska Avalanche Specialists from Parks Canada Model

Terrain Complexity Factors	Class 1 +	Class 2 0	Class 3 -
Route Options or Alternatives	Numerous, terrain allows multiple choices.	A selection of choices of varying exposure, options to avoid avalanche paths.	<b>Limited chances to reduce exposure, avoidance not possible.</b>
Slope Angle	Angles generally < 30°.	<b>Mostly low angle, isolated slopes &gt; 35°.</b>	<b>Variable, with many &gt; 35°.</b>
Terrain Traps & Consequences	Minimal, some creek slopes or cutbanks.	<b>Some depressions, gullies or hollows, and/or avalanche terrain above, trees, brush, cliffs, rocks, narrows creeks, or water with some good escape routes or “islands of safety”.</b>	<b>Many depressions, gullies or hollows, cliffs, hidden slopes above gullies, cornices, trees, brush, cliffs, rocks, narrows, creeks, or water with few escape routes or “islands of safety”.</b>
Avalanche Frequency	30 year return, ≥ D2 size.	Yearly for < D2 size. <b>3 year return for ≥ D2 size.</b>	Yearly for < D3 size. <b>Yearly for ≥ D3 size.</b>
Interaction with Paths	Runout zones only.	Single path or paths with separation.	<b>Numerous and overlapping paths.</b>
Exposure Time	None, or limited exposure crossing runouts only.	<b>Isolated exposure to start zones and tracks.</b>	<b>Frequent exposure to start zones and tracks.</b>
Glaciation	None or smooth.	<b>Generally smooth with isolated bands of crevasses.</b>	<b>Broken or steep sections of crevasses, icefalls or serac exposure.</b>
Start Zone Density	Limited starting zone terrain.	Some start zones; isolated avalanche paths leading to valley bottom.	Large expanses of start zones; multiple paths leading to valley bottom.
Runout Zone Characteristics	Solitary, well-defined areas, smooth transitions, spread deposits.	Abrupt transitions or depressions with deep deposits.	Multiple converging runout zones, confined depositions area, steep tracks overhead.
Slope Shape	Uniform.	Some convexities.	Convolutated.

## Notes:

Terrain may fit into multiple classes. Consider all variables; note default properties indicated by **bold italics**. Those properties automatically default into that or higher class. Non-italicized descriptors carry less weight.