

# AVALANCHE TERRAIN EXPOSURE SCALE

## Technical Model (v.1-04)

	1 - Simple	2 - Challenging	3 - Complex
<b>Slope angle</b>	Angles generally < 30°	<i>Mostly low angle, isolated slopes &gt;35°</i>	<i>Variable with large % &gt;35°</i>
<b>Slope shape</b>	Uniform	Some convexities	Convoluted
<b>Forest density</b>	Primarily treed with some forest openings	Mixed trees and open terrain	Large expanses of open terrain. Isolated tree bands
<b>Terrain traps</b>	Minimal, some creek slopes or cutbanks	Some depressions, gullies and/or overhead avalanche terrain	<i>Many depressions, gullies, cliffs, hidden slopes above gullies, cornices</i>
<b>Avalanche frequency</b> (events:years)	1:30 ≥ size 2	1:1 for < size 2 <i>1:3 for ≥ size 2</i>	1:1 < size 3 <i>1:1 ≥ size 3</i>
<b>Start zone density</b>	Limited open terrain	Some open terrain. Isolated avalanche paths leading to valley bottom	Large expanses of open terrain. Multiple avalanche paths leading to valley bottom
<b>Runout zone characteristics</b>	Solitary, well defined areas, smooth transitions, spread deposits	Abrupt transitions or depressions with deep deposits	Multiple converging runout zones, confined deposition area, steep tracks overhead
<b>Interaction with avalanche paths</b>	Runout zones only	Single path or paths with separation	<i>Numerous and overlapping paths</i>
<b>Route options</b>	Numerous, terrain allows multiple choices	A selection of choices of varying exposure, options to avoid avalanche paths	<i>Limited chances to reduce exposure, avoidance not possible</i>
<b>Exposure time</b>	None, or limited exposure crossing runouts only	<i>Isolated exposure to start zones and tracks</i>	<i>Frequent exposure to start zones and tracks</i>
<b>Glaciation</b>	None	<i>Generally smooth with isolated bands of crevasses</i>	<i>Broken or steep sections of crevasses, icefalls or serac exposure</i>

### Using this scale:

Any given piece of mountain terrain may have elements that will fit into multiple classes. Applying a terrain exposure rating involves considering all of the variables described above, with some default priorities.

Terrain that qualifies under an *italicized* descriptor automatically defaults into that or a higher terrain class. Non-italicized descriptors carry less weight and will not trigger a default, but must be considered in combination with the other factors.

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## Public Communication Model (v.1-04)

Description	Class	Terrain Criteria
<b>Simple</b>	<b>1</b>	Exposure to low angle or primarily forested terrain. Some forest openings may involve the runout zones of infrequent avalanches. Many options to reduce or eliminate exposure. No glacier travel.
<b>Challenging</b>	<b>2</b>	Exposure to well defined avalanche paths, starting zones or terrain traps; options exist to reduce or eliminate exposure with careful routefinding. Glacier travel is straightforward but crevasse hazards may exist.
<b>Complex</b>	<b>3</b>	Exposure to multiple overlapping avalanche paths or large expanses of steep, open terrain; multiple avalanche starting zones and terrain traps below; minimal options to reduce exposure. Complicated glacier travel with extensive crevasse bands or icefalls.

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