SCOPE OF PRACTICE




ACMG
Association of Canadian Mountain Guides
Association canadienne des guides de montagne

Box 8341
Canmore, AB T1W 2V1
acmg@acmg.ca
acmg.ca

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1. Introduction

1.1. Association of Canadian Mountain Guides

The Association of Canadian Mountain Guides (ACMG) is the governing body that establishes certification standards and codes of conduct for professional guides and instructors who work in mountain-related activities, which include hiking, backcountry and mechanized-access skiing, via ferratas, indoor climbing, rock and ice climbing, and mountaineering. The ACMG provides nationally and internationally recognized certification for mountain professionals, and is the only association in Canada that is a member of the International Federation of Mountain Guides Associations (IFMGA).

The ACMG is comprised of seven disciplines:

1. Climbing Gym Instructor (Level 1 and 2)
2. Via Ferrata Guide
3. Top-Rope Climbing Instructor
4. Hiking Guide
5. Rock Guide
6. Alpine Guide
7. Ski Guide

Mountain guide designation results from successful completion of the alpine guide and ski guide certificate courses.

After initial training courses and successful assessment, candidates in any of the hiking, rock, alpine and/or ski guide programs are able to join the ACMG as an apprentice guide in their chosen stream. Membership enables apprentice guides the means to gain the experience, skills and mentorship required to complete the certificate program and obtain ACMG certification. The title of mountain guide is granted to candidates who have successfully completed the ski guide and alpine guide certificate programs. Mountain guide is the only ACMG certification officially recognized by other IFMGA countries.

1.2. Scope of Practice

The *ACMG Scope of Practice* provides structure and direction for the activities and terrain that are acceptable or not, within each ACMG discipline. In short, the *ACMG Scope of Practice* reflects activities and terrain addressed in ACMG training and certification courses. Organizations that offer employment to ACMG guides and instructors should ensure that work expectations, staff training, professional development, and workplace policies and support are congruent with the *ACMG Scope of Practice* framework. The main purpose of the *ACMG Scope of Practice* is to ensure that ACMG members work within their activity and terrain parameters, and provide an experience where risk is managed and safety is a key priority.

ACMG members and their employers are expected to fully comprehend the *ACMG Scope of Practice* relative to the discipline of mountain activity the member is employed in.

The implications of operating out of scope of practice (for members and/or employees) may include:

- Disciplinary action by the ACMG.
- Breach of contract for ACMG insurance and permits.
- Loss of trust and good faith on behalf of the public, land managers and colleagues.
- Reputational damage (and potential legal liability) to the individuals and organizations involved.
- Reputable damage to the mountain guiding industry (which could include loss of access to permits, insurance, etc.).

The main components this document addresses for each ACMG discipline are:

- Activity and terrain parameters
- Supervision requirements
- Cross-certification

1.2.1. Activity and Terrain Parameters

Activity and terrain parameters vary with each discipline. These parameters parallel the activities, terrain and situations presented in the ACMG training curriculum.

Within each discipline, activity and terrain parameters are the same for apprentice guides and certified guides. The difference is that apprentice guides must base their objectives on a required level of supervision.

In addition to ACMG training and certification, members must also consider their personal experience, skill level and physical abilities when determining the complexity and type of work they are competent to undertake.

In accordance with ACMG policies, members are expected to pursue recurrent training and continuing professional development to maintain their skill set. Lack of current training may render guides and instructors out of scope of practice for a particular activity (until sufficient re-training has occurred).

1.2.2. Supervision Requirements

Certain ACMG members are required to work under appropriate supervision, not only for safety reasons but to provide the necessary mentorship to become a successful certified ACMG member.

1.2.3. Cross-Certification

Cross-certification addresses potential issues with scope of practice that relate to members who are trained in multiple ACMG disciplines or have certification in other related fields of study.

1.2.4. Reference List of Acronyms

AAG	Apprentice Alpine Guide
ACMG	Association of Canadian Mountain Guides
AG	Alpine Guide
AHG	Apprentice Hiking Guide
ARG	Apprentice Rock Guide
ASG	Apprentice Ski Guide
AST	Avalanche Skills Training (Avalanche Canada curriculum)
ATES	Avalanche Terrain Exposure Scale
CAA	Canadian Avalanche Association
CANSI	Canadian Association of Nordic Ski Instructors
CGI	Climbing Gym Instructor
CSGA	Canadian Ski Guide Association
HG	Hiking Guide
IFMGA	International Federation of Mountain Guides Associations
ITP	Industry Training Program (Canadian Avalanche Association)
IRATA	Industrial Rope Access Trade Association
MG	Mountain Guide
RG	Rock Guide
SG	Ski Guide
SPRAT	Society of Professional Rope Access Technicians
TRCI	Top-Rope Climbing Instructor
UIAA	International Climbing and Mountaineering Federation
VFG	Via Ferrata Guide

2. Supervision

ACMG apprentice guides, via ferrata guides, climbing gym instructors and top-rope climbing instructors are required to work under appropriate supervision at all times.

2.1. Objectives of Supervision

- To ensure the application of appropriate risk-management measures.
- To provide operational oversight and accountability.
- To provide mentorship and training.

2.2. Types of Supervision

1. Direct
2. Local
3. Remote
4. Institutional

Forms of supervision vary based on the following:

- Type of activity.
- The supervising guide's familiarity with the apprentice guide.
- Experience level of the apprentice guide.
- Familiarity with area and activity.
- The complexity and commitment level of the terrain.
- Current and forecast conditions.
- Client skill level.
- Guide/instructor's familiarity with client.

2.2.1. Direct Supervision

The apprentice guide works directly alongside the supervising guide. Under direct supervision, in-person verbal communication is required for the majority of the working day. There is a determined number of days of direct supervision required for each discipline (see Table 1).

2.2.2. Local Supervision

The apprentice guide works in the same general area as the supervising guide. The two guides may be on different routes or mountains, but they can easily communicate via radio or cell phone throughout the day, and have in-person meetings prior to and after the day is complete.

An example of local supervision is an apprentice ski guide leading a group within the normal rotation of a mechanized ski operation while following a qualified lead guide. Local supervision is appropriate when the supervising guide is familiar with the apprentice's abilities, is confident that the apprentice is able to guide the planned objective without direct intervention and when the apprentice has met the requirements of direct supervision.

There is a determined number of days of local supervision required for each discipline (see Table 1).

2.2.3. Remote Supervision

The apprentice guide works on their own at a distant location from the supervising guide. Remote supervision is a significant step from direct and local supervision.

The following criteria are required for remote supervision:

1. Direct and local supervision benchmarks must be met first (Table 1).
2. Both the supervising guide and apprentice guide have personal familiarity with the area.
3. The apprentice guide has attended a related staff training or has worked directly in the field with the supervising guide.
4. Terrain has limited complexity, is low commitment and has limited exposure to objective hazards
5. Changeable conditions will not significantly increase the hazard or decision-making challenges, and/or low risk options exist nearby.
6. There is documented discussion (or standard institutional protocol) prior to the trip that addresses conditions, weather, emergency response plan, objective(s), and client needs, goals and concerns, coupled with post-trip review (report and/or discussion).
7. Records of the occurrence of twice-daily check-ins must be kept.
8. An apprentice ski guide or apprentice alpine guide with only a Canadian Avalanche Association (CAA) Level 1 certification must not be put in a position to make avalanche hazard forecast assessments without consultation with a supervising guide with CAA Level 2 (or equivalent) certification.

2.2.4. Institutional Supervision

Institutional supervision is provided by an organization that does not employ ACMG supervising guides. Successful institutional supervision is based on policies and procedures that meet industry best practices and are communicated to the staff in either a written document or at an organized staff-training event. Institutional supervision is used for climbing gym instructors, top-rope climbing instructors, apprentice hiking guides and via ferrata guides. In terms of employed apprentice hiking guides, the institution must follow the principals of direct local and remote supervision (see Section 2).

The institution provides permits and insurance, and therefore assumes all responsibility and risk. To qualify, an institution must:

- Obtain its own insurance and permits.
- Provide seasonal site-specific staff training.
- Have written protocols for daily operations, risk management, communication, first aid and emergency response.
- Recognize and adhere to the *ACMG Scope of Practice* for the discipline of a supervised member.

Small guiding companies may attain institutional status once the above criteria have been met. Institutions may be audited by the ACMG to ensure compliance.

Note: Under institutional supervision for hiking, direct supervision equates to two or more apprentice hiking guides working together under the institution's protocol and on specific hikes where in-house training provided by the institution has occurred.

2.2.5. Required Supervision

	Supervision*				
Discipline	*Direct ** *	*Local*	*Remote*	*Institutional*	*Supervisor*
AAG	First 5 days	Subsequent 5 days	>10 days	--	AG, MG
AHG	First 2 days	--	> 2 days	Yes	HG, AG, SG, MG, Institution
ARG	First 2 days	Subsequent 3 days	> 5 days	--	AG, MG, RG
ASG	First 5 days	Subsequent 5 days	> 10 days	--	SG, MG, CSGA 3
CGI	--	--	--	Yes	Institution
TRCI	--	--	--	Yes	Institution, or AG, RG, MG ***
VFG	--	--	--	Yes	Institution

Table 1: Required supervision timeline matrix (see 1.2.4 for acronym references).

* Direct and local supervision can be provided by different supervising guides.

** The required first number of days of direct supervision should be completed in terrain and situations typical of said discipline, which includes a mix of instructional and guiding contexts. Up to 50 per cent of the required direct supervision days may be completed in the context of field training with a supervising guide (without clients), where the apprentice fills the role of the guide.

*** A top-rope climbing instructor (TRCI) supervised by an alpine guide, rock guide or mountain guide must meet all requirements for institutional supervision including site-specific training.

Before supervised members progress to working under remote supervision in a discipline, they are required to document the amount of guiding work they have achieved under direct and local supervision. Documentation is necessary in the event of an audit. Ideally, the signature of the supervising guide or institution accompanies this documentation. See Table 1 for supervision requirements.

2.3. Supervisors

Any ACMG-certified guide may supervise apprentice guides who are working in the discipline in which they are qualified and in terrain familiar to the supervising guide. Mountain guides may supervise in all disciplines. For example, an ACMG rock guide may supervise an apprentice rock guide or top-rope climbing instructor, but not an apprentice ski guide. Foreign IFMGA-certified guides who work in Canada may supervise as ACMG mountain guides provided they are familiar with the terrain and possess comparable avalanche qualifications required of ACMG guides. Canadian Ski Guide Association (CSGA) Level 3 guides may supervise apprentice ski guides in the context of mechanized skiing.

Before taking responsibility for remote supervision, recently certified guides who act as managing guides are required to document a minimum of two seasons of experience in which they provided direct and local supervision in their discipline. Guides must gain experience in their discipline before accepting the role of mentor, coach and supervisor.

2.4. Responsibilities, Accountability and Expectations of the Supervising Guide

1. To ensure the application of appropriate risk management measures (the supervising guide may be held liable for the apprentice's actions).
2. Documentation of supervision (an important element of risk management from a legal perspective).
3. Use of an appropriate level of supervision.
4. Self-employed supervising guides must be named on the waiver to be signed by the client.

Supervising guides who work within an organization (versus self-employed guides) need to clarify the level of supervision required by an apprentice (see Table 1). Self-employed guides who act as supervisors must also meet the criteria in Table 1, and ensure that appropriate permits and insurance are in place.

While coaching and mentorship are considered desirable elements of supervision, the key responsibilities of the supervising guide is to ensure the application of appropriate risk management measures and that the supervised member is working within their scope of practice and personal abilities.

2.5. Responsibilities of the Supervised Member

1. To apply appropriate risk management measures.
2. To work within their scope of practice.
3. To properly communicate, document meetings and review performance feedback.
4. To work within the ACMG supervision guidelines regardless of a supervisor's intent. If in doubt, ask the ACMG technical director for clarification.

2.6. Mentorship Opportunities (Practicum Students, Observers, Helpers)

There is a long tradition of mentorship opportunities within Canadian guiding that involve non-ACMG-certified helpers within the mountain context. For the purpose of this section, the term "helpers" denotes mentorship opportunities. Supervisors who hire helpers for added trip support must clearly communicate the role and expectations of that individual.

Helpers are able to:

1. Observe a trip, with no assigned guiding duties and no influence on guide-to-client ratios.
2. Assist in hut or camp duties.
3. Add to a rope team to increase safety on glacier travel.
4. Carry loads.

Helpers are not:

1. Justification to increase guide-to-client ratios.
2. Able to provide a service for which they have no formal ACMG training.

Guides must fulfill their obligations to the hired helper and the ACMG in regard to waivers, insurance, park permits, labour laws and occupational health and safety regulations for the activities undertaken.

2.7. Tail Guides

The use of tail guides is common practice in the mechanized ski industry and is becoming more common in the context of ski touring and other ACMG disciplines. For example, in the ski guiding industry, the general role of the tail guide is to follow the certified guide at the back of the group to increase rescue capabilities, assist weaker clients in rejoining the group, enhance communication within the group, and gather weather and snowpack information. At present, there is not industry-wide consensus on the minimum training requirements for tail guides, and the ACMG does not provide tail-guide training or certification.

From the ACMG point of view, the role of an ACMG member as an uncertified tail guide is to enhance client safety and experience by applying the skills they have been trained and certified to perform. Supplemental training provided by the employer specific to rescue protocols and the role of the tail guide further builds on a member's skill set. In conjunction with direct supervision, an ACMG member who is not certified in the discipline may work as a tail guide while not conflicting with their current ACMG scope of practice.

For example, an ACMG member who is not yet an apprentice ski guide could work as a tail guide in the context of mechanized skiing or ski touring where supplemental training has been provided and the individual has direct supervision from a certified MG, SG or CSGA Level 3. Note, the tail guide's role is not to increase client-to-guide ratios, or make terrain choices or risk-management decisions.

2.8. Documentation

Supervisors and supervised members should always document their activities. Documentation is critical to demonstrate that requirements for supervision have been met in order to progress in certification. Recurrent staff training events are considered a part of supervision where standards, best practices and techniques are conveyed to the supervised member.

In the event of an accident or complaint, it may be necessary for supervising guides to demonstrate by way of documentation that adequate supervision was provided.

3. Mountain Guide

3.1. Overview

ACMG mountain guides have completed their alpine guide and ski guide certification. Mountain guides are qualified to instruct and guide unsupervised in all mountain terrain on skis and foot, within the level of their personal experience and skill set.

Currently, the IFMGA only recognizes candidates who have completed their ski guide course on skis as IFMGA-certified guides. That is, individuals who complete their ski guide course on snowboard are not recognized as IFMGA-certified guides. As a result, mountain guides should inform potential employers on which mode of travel (alpine or telemark skis, or snowboard) they completed their ski guide course.

The ACMG mountain guide designation is the only ACMG certification recognized by the IFMGA.

3.2. Activity and Terrain Parameters

- Backcountry skiing/snowboarding (all activities and terrain)
- Technical and non-technical climbing ascents and descents, which include:
  - Rock, ice, snow, mixed and alpine climbs
  - Bouldering
  - Short sections of aid climbing
- Indoor and outdoor rock or ice-climbing structures
- Hiking

3.3. Additional Specialized Activities

There are additional activities that are addressed in a limited manner in mountain-guide training. Supplementary knowledge, practice and continuing professional development is required before accepting work in these pursuits. Examples include:

- Guiding on equipment other than what the guide used to obtain their original certification (snowboard versus alpine or telemark skis).
- Steep skiing/snowboarding that involves high-consequence fall potential.
- High-altitude skiing and climbing that involves trips with overnight stays above 3,000 metres in elevation.
- Climbs that involve extensive aid climbing.
- Climbs that require client use of extensive mechanical rope-ascending techniques.
- Rando race skiing
- Trail running
- Via ferratas

3.4. Outside of Activity and Terrain Parameters

- Avalanche forecasting and hazard analysis for purposes other than alpine or ski guiding (unless the individual can demonstrate the required additional training, background, education and experience for these purposes).
- Rope access for industrial applications. This is the domain of an individual with SPRAT or IRATA credentials.

3.5. Supervision

3.5.1. Mountain Guide as Supervisor

Mountain guides may supervise:

- Top-rope climbing instructors and apprentice guides (see Section 2).

4. Alpine Guide Discipline

4.1. Overview

Alpine guides are qualified to instruct and guide climbing and other mountain-travel activities on rock, ice, snow and glaciers, and mixed and alpine routes, within their level of personal experience and skill set.

4.2. Activity and Terrain Parameters

- All hiking and mountain-travel activities on foot or snowshoes, which include:
  - On and off trail
  - Rock, snow, ice and glaciated terrain
- Technical and non-technical climbing ascents and descents, which include:
  - Rock, ice, snow, mixed and alpine climbs
  - Bouldering
  - Short sections of aid climbing
- Indoor and outdoor artificial rock and ice-climbing walls.
- Skis may be appropriate tools for alpine guides to use in limited circumstances. For example, on approaches to waterfall ice climbs on roads or relatively flat ground where downhill ski skills are not required to control speed and avoid hazards, or on Avalanche Skills Training (AST) courses in relatively flat terrain where downhill ski skills are not required to control speed and avoid hazards.

4.3. Additional Specialized Activities

There are additional activities that are addressed in a limited manner in the training for alpine guides and apprentice alpine guides. Supplementary knowledge and practice is required before accepting work in these pursuits. Examples include:

- Climbs that require extensive aid climbing.
- Climbs that require client use of mechanical rope-ascending techniques.
- High-altitude climbing that involves overnight stays above 3,000 metres in elevation.
- Trail running
- Via ferratas
- Mountain safety

4.4. Outside of of Activity and Terrain Parameters

- Interdisciplinary trips and activities. For example, a remote mountain ascent where significant portions of the trip require skiing and climbing skills. This terrain is usually considered the domain of a mountain guide.
- Avalanche forecasting and hazard analysis for purposes other than alpine climbing (unless the individual can demonstrate the required additional training, background, education and experience for these purposes).
- Rope access for industrial applications. This is the domain of an individual with SPRAT or IRATA credentials.

4.5. Supervision

4.5.1. Alpine Guide as Supervisor

Alpine guides may supervise:

- Apprentice alpine guides
- Apprentice rock guides
- Apprentice hiking guides
- Top-rope climbing instructors

4.5.2. Supervision of Apprentice Alpine Guide

Apprentice alpine guides are permitted to work under supervision within the same activity and terrain parameters as alpine guides. Considerations include:

- The timelines of five days each of direct and local supervision must be met prior to remote supervision being granted (see Section 2).
- Activities in alpine terrain or alpine conditions must be supervised by an alpine guide or mountain guide.
- Hiking guides may supervise apprentice alpine guides during hiking activities (see Section 2).
- Rock guides may supervise apprentice alpine guides during rock climbing activities (see Section 2).

5. Ski Guide Discipline

5.1. Overview

Ski guides are qualified to instruct and guide backcountry skiing and/or snowboarding in mountain terrain within their level of personal experience and skill set. This includes:

- Ski touring
- Mechanized skiing/snowboarding
- Ski/snowboard mountaineering ascents and descents that require simple technical systems.

Ski guides and apprentice ski guides should inform employers on which mode of travel (alpine or telemark skis, or snowboard) they completed their training.

Ski guides trained and certified on snowboards are not currently recognized by the IFMGA even though they have achieved ACMG mountain guide designation.

5.2. Activity and Terrain Parameters

- Ascents and descents on skis/snowboard.
- Travel on foot as part of ski/snowboard mountaineering activities, using simple technical systems:
    - 1st- and 2nd-class snow, rock and glaciers.
    - 3rd-class snow (good steps) that requires short-roping.
    - Short sections of 3rd-class hard snow or ice that requires boot crampons and short-rope techniques.
    - Very short sections of 3rd-class rock that requires short-roping.
- Hiking (as an alternative to skiing activities).

5.3. Additional Specialized Activities

There are additional activities that are addressed in a limited manner in ski guide and apprentice ski guide training. Supplementary knowledge and practice are required before accepting work in these pursuits. Examples include:

- Guiding on equipment other than what the guide used to obtain their original certification (snowboard versus alpine or telemark skis).
- Steep skiing/snowboarding that involves high-consequence fall potential.
- High-altitude skiing and climbing that involves trips with overnight stays above 3,000 metres in elevation.
- Rando race skiing.
- Interpretive glacier walks that may or may not require simple roped travel. There should be minimal slip/fall hazard. Ice cleats or instep crampons worn over hiking boots should be sufficient to mitigate slip hazards.
- Instructing crevasse rescue courses during spring, summer, and fall months
    - In non-glaciated areas readily accessible by road where high-integrity natural or fixed anchors are utilized.
    - On bare glaciers where there is minimal slip/fall hazard and site selection mitigates the need for extensive cramponing or climbing techniques.

- Under direct supervision and in the context of summer mountaineering, apprentice ski guides and ski guides may assist a mountain guide or alpine guide. Terrain and technique requirements must mirror those that ski guides are trained in, with the exception of season and amount of snow cover.

5.4. Outside of Activity and Terrain Parameters

- Interdisciplinary trips and activities. For example, a remote mountain ascent where significant portions of the trip require skiing and sustained technical climbing skills.
- Trips that include sustained steeps sections of ground that require either extensive climbing techniques or multiple consecutive rappels.
- Avalanche forecasting and hazard analysis for purposes other than ski guiding, unless the individual can demonstrate the additional training, background, education and experience for these purposes.

5.5. Supervision

5.5.1. Ski Guide as Supervisor

Ski guides may supervise:

- Apprentice ski guides
- Apprentice hiking guides who work in the winter

5.5.2. Supervision of Apprentice Ski Guide

Apprentice ski guides are permitted to work under supervision within the same activity and terrain parameters as ski guides. Considerations include:

- The timeline of five days each for direct and local supervision must be met prior to remote supervision being granted (see Section 2).
- A mountain guide or ski guide must supervise all activities.

6. Rock Guide Discipline

6.1. Overview

Rock guides and apprentice rock guides are qualified to guide and instruct climbing and technical descents on pure rock climbs and artificial climbing structures of any length, within their level of personal experience and skill set.

Approaches and non-technical descents should generally follow frequently used trails and routes. To a limited extent, off-trail travel that requires simple navigation techniques is acceptable.

Routes are predominantly 5th-class free climbing but may include short sections of aid climbing. Climbs may also include short sections of simple 3rd- and 4th-class short-roping, but, overall, any given climb should have very few, if any, transitions between pitched climbing and short-oping.

6.2. Activities and Terrain Parameters

- Single or multi-pitch rock climbs.
- Bouldering
- Limited short-roping as part of a rock climbing objective
- Approaches may involve hiking and straightforward navigation.

6.3. Additional Specialized Activities

There are additional activities that are addressed in a limited manner in rock guide and apprentice rock guide training. Supplementary knowledge and practice is required before accepting work in these pursuits. Examples include:

- Climbs that require extensive aid climbing.
- Climbs that require client use of extensive or complex mechanical rope-ascending techniques.
- Climbs that require bivouacs en route.
- Via ferratas
- Acting as an on-ground belayer on an artificial ice tower under direct supervision of an alpine guide or mountain guide.

6.4. Outside of Activities and Terrain Parameters

- Trips that involve any alpine terrain with glaciation, or permanent or seasonal snow or ice cover, or extensive short-roping.
- Terrain with overhead hazards of avalanches or cornices.
- Terrain or situations that requires extensive navigation techniques.
- Rope access for industrial applications. This is the domain of an individual with SPRAT or IRATA credentials.

6.5. Supervision

6.5.1. Rock Guide as Supervisor

Rock guides may supervise:

- Apprentice rock guides.
- Apprentice alpine guides within the rock guide scope of practice.
- Top-rope climbing instructors within the terrain and use of techniques described in the top-rope climbing instructor scope of practice.

6.5.2. Supervision of Apprentice Rock Guide

Apprentice rock guides are permitted to work under supervision within the same activity and terrain parameters as rock guides. Considerations include:

- The timeline of two and three days of direct and local supervision must be met prior to remote supervision being granted (see Section 2).
- All activities must be supervised by a rock guide, alpine guide or mountain guide.

7. Hiking Guide Discipline

7.1. Overview

Hiking guides are qualified to lead groups on mountain hikes and treks. The season for hiking guiding in Canada generally runs from late spring (after most of the snow has melted) to autumn (prior to significant accumulations of snow). Hiking guides are trained to lead clients through Class 1 and 2 terrain that is free of overhead alpine hazards, such as rockfall, cornices and avalanches. Hiking guide training enables guides to lead multi-day hikes in backcountry terrain without trails and with minimal fall or slip hazard.

With an upgrade course in winter travel, hiking guides are able to lead trips in winter conditions on foot or with snowshoes or ice cleats.

In 2012, the ACMG discontinued day-hiking guide training and certification. Members with previous day-hiking guide certification are still qualified to work within their previously established scope of practice.

7.2. Activity and Terrain Parameters – Day-Hiking Guide

- Travel on foot.
- Travel on and off trail.
- Travel in Class 1 and 2 terrain, including on rock and snow.
- Limited short sections that may have fall or slip hazards.
- Terrain with steeper sections, provided in-situ infrastructure exists (cables or ladders) to manage fall hazard; vertical fall distances are short and exposure to fall hazard is not sustained.

7.3. Activity and Terrain Parameters – Hiking Guide

- All of the above (Section 7.2) plus multi-day trips with backcountry camping.

7.4. Activity and Terrain Parameters – Hiking Guide with Winter Travel Accreditation

- All of the above (Section 7.3) plus:
  - No travel in avalanche terrain in winter-like conditions when public avalanche bulletins are not available.
  - Terrain is limited to ATES Class 1 rating when the regional public avalanche danger forecast is Low, Moderate or Considerable.
  - Terrain is limited to ATES Class 0 (non-avalanche terrain) when the public avalanche danger forecast is High or Extreme.
  - Travel on foot or with snowshoes or ice cleats.
  - Winter canyon walks on low-angle ice in terrain with limited slip/fall potential.

7.5. Additional Specialized Activities

There are additional activities that are addressed in a limited manner in hiking-guide training. Supplementary knowledge and practice is required before accepting work in these pursuits. Examples include:

- High-altitude hiking that involves trips with overnight stays above 3,000 metres in elevation.
- Hiking that involves environments not directly covered in the training and certification process (for example, deserts, tropical forests, intertidal zones).
- Trail running

For hiking guides who have completed the winter travel accreditation:

- Use of skis in relatively flat terrain where downhill ski skills are not required to control speed and avoid hazards (for example, cross country skiing).

7.6. Outside of Activity and Terrain Parameters

- Terrain with a difficulty rating greater than Class 2.
- Areas of alpine hazards, which include glaciers, overhead rockfall, cornice and avalanche hazard.
- Terrain with significant vertical fall or slip potential that could result in serious injuries.
- Terrain that requires active rope work to manage fall potential.
- Winter travel in avalanche terrain prior to the seasonal start of regional public avalanche danger forecasts.
- Routes with water crossings that require technical rope systems.

7.7. Supervision – Day-Hiking Guide

- Supervision not required.
- Unqualified to supervise other members.

7.8. Supervision – Hiking Guide

7.8.1. Hiking Guide as Supervisor

Hiking guides may supervise:

- Apprentice hiking guides.
- Apprentice alpine guides while working within the hiking guide activity and terrain parameters.

7.8.2. Supervision of Apprentice Hiking Guide

Apprentice hiking guides are permitted to work under supervision within the same activity and terrain parameters as hiking guides. Considerations include:

- The required timelines for direct supervision must be met prior to remote supervision being granted (see Section 2).
  Note: Under institutional supervision, direct supervision equates to two or more apprentice hiking guides working together under the institution's protocol and on specific hikes where in-house training provided by the institution has occurred.
- Must be supervised by a hiking guide, alpine guide, mountain guide or an institution, providing all criteria for institutional supervision is met (see Section 2).
- Apprentice hiking guides working in winter with the winter travel accreditation must be supervised by a hiking guide with winter travel accreditation, or a mountain guide or alpine guide.

8. Climbing Gym Instructor Discipline

8.1. Overview

Climbing gym instructors are qualified to instruct climbing and manage site safety on engineered climbing walls in single-pitch lead and top-rope scenarios.

8.2. Activity and Terrain Parameters for Climbing Gym Instructor Level 1 (CGI 1)

CGI 1s are certified to instruct the following rock climbing skills on engineered walls:

- Introductory rock-climbing movement skills.
- Instruction of top-rope climbing skills.

8.3. Activity and Terrain Parameters for Climbing Gym Instructor Level 2 (CGI 2)

CGI 2s are certified to instruct the following rock-climbing skills on engineered walls:

- Intermediate rock-climbing movement skills.
- Instruction of top-rope climbing skills.
- Instruction of bolt protected single-pitch lead-climbing skills.

8.4. Outside of Activity and Terrain Parameters

- Instruction on structures that have not been engineered.
- Instruction on natural rock climbs.

8.5. Supervision

- All climbing gym instructors must work under institutional supervision.

9. Top-Rope Climbing Instructor Discipline

9.1. Overview

Top-rope climbing instructors (TRCIs) conduct experiential rock-climbing programs in developed training areas. Training areas must be readily accessible to users and, if need be, emergency services. Typically, TRCIs work for institutions that offer multiple activities other than climbing. TRCIs are supervised under the guidelines of institutional supervision or by a rock guide, an alpine guide or a mountain guide while meeting all of the requirements listed under institutional supervision (see Section 2).

9.2. Activity and Terrain Parameters

TRCIs are qualified to instruct basic rock climbing skills and manage the following experiential rock-climbing activities:

Terrain:

- Established instructional, top-rope climbing venue.
- Approach via established trail on Class 1 or 2 terrain.
- Minimal external hazard, all of which can be easily managed or avoided.
- No fall hazard for participants as they wait their turn to climb.
- Reliable direct communication (phone, radio) with supervisor and emergency services.
- Easy and rapid access to venue by emergency services.

Top-rope climbing:

- Instruct basic climbing systems (use of helmet and harness use, tying in, belaying and rappelling).
- Roped movement lessons.
- Unroped movement lessons on terrain with a smooth landing, good spotting and very short fall distance.
- Top-rope climbing on cliffs less than half a rope length (generally less than 30 metres).
- Climbs must allow for visual and verbal communication at all times.

Rappelling:

- Rappels with a bottom belay on cliffs less than half a rope length (generally less than 30 metres).
- Rappels with a top belay on cliffs less than half a rope length (generally less than 30 metres).

9.2.1. Activity Rigging Parameters

- Anchors use in-place bolts or trees.
- Accessed by TRCI from below with lead belay and bolt protection.
- Accessed by TRCI from above via rappel, belay, fixed line or lower.
- Unroped access by TRCI from above or below via low-risk, established approaches on Class 1, 2 or 3 terrain.

9.3. Additional Specialized Activities

- Acting as an on-ground belayer on an artificial ice tower under direct supervision of an alpine guide or mountain guide.

9.4. Outside of Activity and Terrain Parameters

- Instructing at non-routine venues that lack established climbs and in-place anchors.
- Venues where communication with emergency services and the supervising institution are poor or nonexistent.
- Venues where access for users and emergency services is difficult.
- Any climbs that require placement of protection.
- Instruction of more advanced climbing skills, such as anchor construction, gear placements, un-belayed rappels and rescue systems.
- Bouldering in areas with high-risk landings or heights that the spotter cannot reach the climber to offer support.

9.5. Supervision

- TRCI activities must be supervised by an established institution (see Section 2).
- TRCIs may work under the direct, local or remote supervision of an ACMG certified rock guide, alpine guide or mountain guide (see Section 2).
- TRCIs working under local or remote supervision of a qualified ACMG member must meet the same institutional supervision requirements for site-specific training and emergency response.

10. Via Ferrata Guide Discipline

10.1. Overview

ACMG-certified via ferrata guides are qualified to lead trips on Class A via ferratas.

10.2. Activity and Terrain Parameters

Activities within the scope of practice for via ferrata guides include:

- Training clients in the operation of via ferrata equipment.
- Leading clients on Class A via ferratas.

10.3. Class A Via Ferrata Terrain Parameters

Class A via ferratas are an installation built to an engineered commercial standard. There is a high level of support and operational infrastructure provided by the institution.

Class A via ferrata must meet the following criteria:

- Built to UIAA (or equivalent) standard (operator's responsibility to determine).
- No 5th-class rock climbing required.
- Limited vertical fall potential.
- Rescue is straight forward.
- Within close proximity to a trained rescue team.
- Direct VHF radio and cell phone communications available.
- Access and descent on Class 2 (or easier) terrain.
- No travel on permanent snow or glaciers.
- Via ferrata must be operated and maintained by the institution.

10.4. Additional Specialized Activities

Via ferrata guides are unqualified to perform any additional activities without further training and certification.

10.5. Outside of Activity and Terrain Parameters

1. All via ferratas that are not designated Class A.
2. Trips that are primarily considered hiking or scrambling, or rock climbing or mountaineering.

10.6. Supervision

Via ferrata guides must work under institutional supervision (see Section 2).

11. Cross-Certification

11.1. Overview

Cross-certification is defined as a situation where an ACMG member has certification in:

- More than one ACMG discipline.
- One ACMG discipline and an apprenticeship in a second ACMG discipline.
- Related fields of study from organizations outside of the ACMG (CAA, SPRAT, IRATA, CSGA, CANSI).

ACMG members may be subject to multiple scopes of practice due to cross-certification. Members may also be subject to multiple codes of conduct and ethics due to their membership in multiple organizations. ACMG members have an obligation to protect the public interest by working within the ACMG's scope of practice at all times.

The overriding principle of the ACMG's scope of practice is that designations in more than one discipline do not combine to expand the scope of practice of an ACMG member, unless that individual holds the designation of certified ACMG mountain guide. That is, if a person is an apprentice in one discipline, they continue to work under the same supervision requirements and terrain limitations as other apprentices in that field despite the fact that they may have completed their certification in another discipline.

11.2. Cross-Certification within the ACMG

The following examples illustrate several possible cross-certification combinations, while illustrating the limitations in scope of practice for an ACMG member:

- A ski guide who is also an apprentice alpine guide may not combine their disciplines to act within the scope of practice of a mountain guide.
- A rock guide who is also a ski guide may not use their combined disciplines to include travel across a glacier in summer conditions in order to access a rock climb. This activity would be considered that of an alpine guide.
- A hiking guide who also has TRCI certification may not use their combined certifications to access a remote climbing site. TRCIs are trained to work in highly structured situations (institutional supervision) within a very strict scope of practice. Hiking guides are restricted to Class 2 terrain.

11.3. Cross-Certification with Other Organizations in Related Fields

ACMG members are responsible for client safety in a variety of outdoor environments and indoor climbing venues. Other organizations also provide training and certificates in the same or similar fields. Some examples of organizations where an ACMG member may hold cross-certification of this type include:

1. Canadian Ski Guide Association (CSGA)
2. Canadian Avalanche Association (CAA)
3. Society of Professional Rope Access Technicians (SPRAT)
4. Industrial Rope Access Trade Association (IRATA)

11.4. General Policy

Cross-certification between the ACMG and organizations with mandates in similar fields pose no conflicts as long as ACMG members work within the scope of practice of each organization. It is important that ACMG members not misrepresent themselves in these situations. For example, if an ACMG alpine guide is also a CSGA ski guide, the clearest way to represent oneself is to state they have earned both the ACMG alpine guide certificate and the CSGA ski guide certificate. To describe oneself generically as a ski guide without further explanation could lack context and be misleading.

Misrepresentation of one's qualifications may lead to issues with waiver validity, insurance and permits.

11.4.1. CSGA Certifications

The CSGA trains and examines their guides to lead clients in uncontrolled winter terrain in a supported and structured mechanized ski guiding environment. The ACMG recognizes CSGA certificates and endorses ACMG members who also hold a CSGA certificate to work within their CSGA scope of practice. The ACMG endorses CSGA Level 3 guides as supervisors of ACMG apprentice ski guides in a mechanized ski context.

11.4.2. CAA Certificates

The CAA Industry Training Program (ITP) provides avalanche-hazard observation and analysis skills and leadership for work within an avalanche-control team. CAA training does not prepare individuals to manage clients in uncontrolled backcountry environments. ACMG training expands on CAA training, and builds towards hazard analysis and avalanche forecasting specific to managing clients in the alpine climbing and skiing context. It is inappropriate for ACMG members to justify their CAA certificate as a means to manage people in uncontrolled avalanche-prone terrain unless the activity is also within their ACMG scope of practice. Certification as a ski guide or mountain guide does not qualify a member to undertake a broader capacity of avalanche forecasting (for example, mining or transportation) than that covered in their scope of practice. Avalanche forecasting is a context-specific skill developed through long periods of apprenticeship and additional training.

11.4.3. Avalanche Safety Training (AST) Course Providers

CAA Level 1 and Level 2 graduates are able to offer Avalanche Skills Training 1, Avalanche Skills Training 2, Companion Rescue Skills and Managing Avalanche Terrain courses through Avalanche Canada. ACMG members teaching AST courses must work within their ACMG scope of practice unless the course takes place in controlled terrain, such as within the boundary of a ski area and there is consent from the lease or tenure holder to conduct such activities.

11.4.4 Rope Access Certifications

The two rope-access certifying bodies are:

1. Society of Professional Rope Access Technicians (SPRAT)
2. Industrial Rope Access Trade Association (IRATA)

The relevant work for people with a certificate in rope access includes outdoor, high-angle activities and rope-access work on buildings and other structures. Although these certificates may include some client-safety training, it is of a different standard and context compared to ACMG climbing certifications. It is inappropriate for ACMG members to use a SPRAT certificate as a justification to manage clients in outdoor activities unless it is also within their ACMG scope of practice.

12. Variations to the *ACMG Scope of Practice*

Mountain industries and activities will continue to evolve. As a result, gaps will develop within the *ACMG Scope of Practice*. Identified gaps should be presented to the ACMG's technical committee in order for rulings to be made on where these activities fit within the existing training and disciplines of the ACMG. Any adjustments made to the *ACMG Scope of Practice* will be henceforth applicable to all members and will be published on the ACMG website (www.acmg.ca) and included in subsequent versions of this document.

13. Terrain Classification Definitions

Class 1: Easy hiking, usually on a well-worn or dedicated trail.

Class 2: More difficult hiking that may be off trail. Use of hands may be required for balance. May include easy snow climbs or hiking on talus or scree. Includes a wide range of hiking that may have exposure, loose rock, steepness, etc.

Class 3: Scrambling or un-roped climbing. Frequent use hands for balance or to hold the terrain (hand holds). Route finding can be difficult as a result of a combination of steepness and extreme terrain.

Class 4: Climbing where handholds and footholds are required for upward or downward progress. Ropes are sometimes used on Class 4 terrain as falls can be fatal. The terrain is often considered steep and dangerous.

Class 5: Technical rock climbing that involves the use of ropes and belaying. In the 1950's Class 5 was expanded to include a decimal at the end of the ranking to define the difficulties of rock climbing. This is called the Yosemite Decimal System. The decimal notations range from 5.1 (easiest) to 5.15 (most difficult). Recently, the rankings of 5.10 through 5.15 were expanded to include the letter a, b, c or d after the decimal (for example, 5.12a) to further denote the difficulty of the climbing route.

14. Avalanche Terrain Exposure Scale (ATES) Definitions

Avalanche Terrain Exposure Scale (ATES) v.2

October 11/22 draft

This is a draft product that is almost finalized and will be published soon (I've said that before ☺). This version is close, but unpublished, so be aware that some minor changes are likely in publication. Grant Statham.

ATES Communication Model

Terrain Rating	Class	Description
Non-avalanche	**0**	No known exposure to avalanches. Very low-angle or densely forested slopes located well away from avalanche paths, or designated trails/routes with no exposure to avalanches.
Simple	**1**	Exposure to low-angle or primarily forested terrain. Some forest openings may involve the runout zones of infrequent avalanches and terrain traps may exist. Many options to reduce or eliminate exposure.
Challenging	**2**	Exposure to well-defined avalanche paths, starting zones, terrain traps or overhead hazard. With careful route finding, some options will exist to reduce or eliminate exposure.
Complex	**3**	Exposure to multiple overlapping avalanche paths or large expanses of steep, open terrain. Sustained exposure to overhead hazard. Many avalanche starting zones and terrain traps with minimal options to reduce exposure.
Extreme	**4**	Exposure to very steep faces with cliffs, spines, couloirs, crevasses or sustained overhead hazard. No options to reduce exposure; even small avalanches can be fatal.

ATES Descriptive Model

	0 – Non-Avalanche (usage is optional)	1 – Simple	2 – Challenging	3 – Complex	4 – Extreme
Slope angle *and* Forest density	Very low-angle (< 10°) open terrain, or steeper areas of dense forest	Low-angle (< 20°) terrain, or steeper slopes of dense forest with openings for runout zones or short slopes	Moderate-angle (< 30°) open or gladed terrain, *with some open slopes or glades > 35°*	Moderate- to high-angle (< 35°) terrain *with large proportions of open slopes > 35°* and some isolated glades or tree bands	High-angle, open terrain averaging > 35° *with a large proportion of > 45° slopes and few or no trees*
Slope shape	Straightforward, flat or undulating terrain	Straightforward undulating terrain	Mostly planar with isolated convex or unsupported slopes	Convoluted open slopes with intricate and varied terrain shapes	Intricate, often cliffy terrain with couloirs, spines and/or overhung by cornices
Terrain traps	No avalanche-related terrain traps	Occasional creek beds, tree wells or drop-offs	Single slopes above gullies or risk of impact into trees or rocks	*Multiple slopes above and/or risk of impact into trees, rocks or crevasses*	*Steep faces with cliffs, cornices, crevasses and/or risk of impact into trees or rocks*
Frequency-magnitude (events: years)	Never	*1:100 - 1:30 for ≥ size 2*	1:1 for < size 2 *1:30 to 1:3 for ≥ size 2*	1:1 for < size 3 *1:1 for ≥ size 3*	~10:1 for < size 3 ~2:1 for ≥ size 3
Starting zone size and density	No known starting zones	Runout zones only except for isolated, small starting zones with < size 2 potential	Isolated starting zones with ≤ size 3 potential or several start zones with ≤ Size 2 potential	Multiple starting zones capable of producing avalanches of all sizes	Many very large starting zones capable of producing avalanches of all sizes
Runout zone characteristics	No known runout zones	Well-defined path boundaries with smooth terrain where deposits fan out	Channelled terrain where deposits concentrate	Multiple runout zones converge into deep, confined gullies and/or steep tracks overhead	Fans, snow cones, deep gullies, cliffs and/or bergschrunds
Interaction with avalanche paths	No known exposure to avalanche paths	*Minimal exposure crossing low-frequency runout zones or short slopes only*	Intermittent exposure managing a single path or paths with separation	*Frequent exposure inside or under starting zones or to multiple overlapping paths*	Sustained, continuous exposure inside or under starting zones
Route options	Designated trails or low-angle areas with many options	Numerous, terrain allows multiple choices; route often obvious	A selection of choices of varying exposure; options to avoid avalanche paths	*Limited options to reduce exposure; avoidance not possible*	No options to reduce exposure

Default parameters: Any given piece of mountain terrain or backcountry trip may have elements that will fit into multiple classes. Applying an ATES rating involves considering all of the variables described above, with some default priorities. Terrain that qualifies under a ***bold, italicized*** descriptor automatically defaults into that category or a higher terrain class. Non-italicized descriptors carry less weight and do not trigger a default, but must be considered in combination with the other factors.

Mapping thresholds (Campbell et al. 2013)

Slope Angle[1]					
Forest Density	**0—Non-Avalanche**	**1—Simple**	**2—Challenging**	**3—Complex**	**4—Extreme**
Open	99% ≤ 20°	90% ≤ 20° 99% ≤ 25°	90% ≤ 30° 99% ≤ 40°	< 20% ≤ 25° 45% > 35°	< 20% ≤ 35° 45% > 45°
Gladed	99% ≤ 25°	90% ≤ 25° 99% ≤ 35°	90% ≤ 35° 99% ≤ 45°		
Dense	99% ≤ 30°	99% ≤ 35°	99% ≤ 45°		

[1]Slope angles are averaged over a fall-line distance of 20-30 metres.

Forest Density		
Open	< 100 stems/ha	> 10 m average tree spacing
Gladed	100–1000 stems/ha	3.2–10.0 m average tree spacing
Dense	> 1000 stems/ha	< 3.2 m average tree spacing

ATES Waterfall Ice Climbing

Terrain Rating	Class	Description for waterfall ice climbs
Non-avalanche	**0**	Routes with no exposure to avalanches except small sluffs and spindrift.
Simple	**1**	Routes with brief exposure to very low frequency avalanches starting from above or crossing occasional short slopes.
Challenging	**2**	Routes with extended exposure to low frequency avalanches starting from above or a few steep slopes to cross en route. Options to reduce exposure.
Complex	**3**	Routes with extended exposure to high frequency avalanches starting from above or crossing multiple steep slopes en route with terrain traps below. Minimal options to reduce exposure.
Extreme	**4**	Routes with sustained exposure to high frequency avalanches starting from above and crossing steep snow slopes en route with exposure to cliffs and terrain traps below. No options to reduce exposure.

Focus for climbers is on the concepts of exposure time, avalanche frequency and human-triggering considering exposure to terrain traps below and options to reduce risk (belay locations, etc.).