



# NEW ZEALAND BACKCOUNTRY SKI & SNOWBOARD EQUIPMENT NOTES

Due to the nature of the mountain environment, equipment and clothing must be suitable for its intended purpose. It must be light, remain effective when wet or iced, and dry easily. These notes will help you make informed choices.

Bring along the mandatory clothing, wet weather gear and any equipment that you already own which is on the equipment checklist. This gives you an opportunity to practice with your gear and equipment so that you become efficient at using it out in the field.

**These equipment notes are a comprehensive guide which covers all our backcountry skiing and avalanche courses from single day trips to multi-day high alpine trips and courses. Please look over your equipment checklist to see what is required and refer only to the sections that are pertinent to your trip or course.**

Adventure Consultants can offer clients good pricing on a range of clothing and equipment. Please feel free to contact us if you would like any advice on specific products, or if you would like to special order any clothing, gear or equipment for your trip.

## SKI TOURING OPTIONS

### OPTION 1: Alpine Touring Skis/Boots/Bindings/Climbing Skins/Ski Crampons

#### Touring Skis

The best touring ski is one that is lightweight, wide and short to allow for good manoeuvrability and performance in the difficult conditions that are found off-piste. Some general-purpose skis such as the Volkl Mantra, Rossignol Sky 7 or Black Crows Camox are suitable, or specific touring skis are also available including the Dynafit Tour and Beast or Black Diamond Helio Recon. We recommend that you visit a reputable ski shop to assist you in purchasing the right ski for you.

#### Touring Bindings

Touring bindings are much lighter than the 'standard' ski binding and feature free heel mode for uphill touring and lock down mode for downhill skiing. The new ultra-light tech bindings utilise a pin system, which will require compatible touring boots with pin notches in the toe piece. Top of the range tech bindings includes Salomon S/Lab Shift, G3 Zed and Ion, Marker Kingpins, Fritschi Vipec EVO and Dynafit ST and TLT models suitable for those who will be mostly touring. Touring step-in bindings are an excellent choice for those needing a hardwearing binding for on piste and touring. Top of the range step-in bindings includes the Salomon Guardian MNC 16 and Marker Tour. Bindings must be fitted with brakes.

#### Touring Boots

When selecting a touring boot, please ensure that the hinge is flexible enough to allow for comfortable walking. We recommend La Sportiva, Scarpa, Scott, Atomic and Dynafit ski touring boots. It is important to have your boot fitted by a qualified technician and if you have problems with your feet, consider purchasing footbeds.



Dynafit ST Rotation 12 Binding



Dynafit TLT8 Expedition CL Touring Boots



Marker F10/12 Step-in Bindings

## Climbing Skins

Climbing skins are available in different widths and should be wide enough to cover the entire ski base, leaving the metal edges exposed. This maximises climbing ability, especially when traversing hard snow. Keep self-adhesive skins out of the dirt and grass, and assure they are dry before storing them in a sturdy plastic bag which prevents the glue from drying. Fold the ends of each skin to its centre, sticky sides together. We find that nylon skins are the most durable for our NZ conditions, so we recommend these over alternatives such as mohair.

## Ski Crampons

We highly recommend this addition to your touring setup. Ensure that they are compatible with your binding system and are an appropriate width for your ski.

## SNOWBOARD TOURING OPTIONS

### OPTION 1: Split Board/Climbing Skins/Splitboard Crampons—Recommended Option

These are specifically designed with backcountry touring in mind allowing the board to split in half lengthways to allow for climbing skins to be attached when in travel and touring mode. This eliminates the need for snowshoes, which means much faster travel and more runs! Regular snowboard boots are suitable for use with a split board, but make sure that your mountaineering crampons are compatible with your snowboard boots. We have had good luck with the Grivel G-10 Wide Crampons with snowboard boots.

Climbing Skins: these are specific to split boards and should be cut to fit each half of the board.

Split board Crampons: We highly recommend this addition to your touring setup. Ensure that these are compatible with your binding system.

Collapsible ski poles or walking poles with snow baskets are essential if using this option.

*We recommend Voile Backcountry Split Boards and Climbing Skins with Black Diamond Collapsible Ski Poles.*

### OPTION 2: Standard Snowboard/Snowshoes

Bringing your own board is usually the most economical option for snowboarders, although you will find travel much slower with snowshoes compared to those with skis and/or a split board. We highly recommend the split board option as it allows both skiers and snowboarders to travel at the same speed, making it more enjoyable for everyone.

## Snowshoes

The latest snowshoe models are lightweight with ice-claws for firm snow conditions. Make sure that the snowboard binding fits your snowboard boots. Snowshoes can be hired or purchased from Adventure Consultants.

*We recommend the MSR Lighting Ascent and Revo Snowshoes.*

## Ski Poles

Collapsible ski poles or walking poles with snow baskets for use with your snowshoes.

*We recommend the Black Diamond Expedition 3-piece Poles.*

## Ski & Snowboard Touring Equipment Rental

The AC Office has a handful of Ski Touring setups of skis, skins and ski crampons for hire, which works especially well if you're bringing your own ski touring or side country boots with you. If we are booked out or are unable to provide a ski touring setup for you, we may request that you contact one of our local ski shops to book a full touring setup with them.

You will need to book your rental equipment early to ensure that you secure the best and most appropriate equipment available. Ski touring is becoming more popular and equipment gets booked up well in advance.

The following ski shops have a great selection of high-quality touring setups for hire. Please be in contact with them as soon as you book your trip!

**WANAKA:** **MT Outdoors**, 17 Dunmore Street, Wanaka +64 3 443 2888, [www.mtoutdoors.co.nz](http://www.mtoutdoors.co.nz)

**QUEENSTOWN:** **Small Planet Sports**, 15-17 Shotover Street, Queenstown, Phone: +64 3 442 5397, Website: [www.smallplanetsports.com](http://www.smallplanetsports.com)

If you are looking for a split board setup, we highly recommend the split boarding specialists in Christchurch SplitN2. They have a wide range of equipment and they are happy to courier setups to Wanaka for trips and courses.

**CHRISTCHURCH:** **SplitN2**, Phone: +64 3 326 6585, Website: [www.SPLITN2.com](http://www.SPLITN2.com), E-mail: [sales@splitn2.com](mailto:sales@splitn2.com)

## AVALANCHE RESCUE EQUIPMENT

Winter conditions require the following avalanche safety items. If you own avalanche safety equipment, please bring it along so you can practice and become efficient with your particular models.

If you would like to purchase avalanche equipment prior to your trip or course, please get in touch. We have avalanche safety kits for sale in our office retail store, and we can also order in individual items of transceiver, shovel or probe.

### Avalanche Transceiver

Transceivers are used to locate a buried victim in the least amount of time possible. If purchasing a transceiver, look for a digital 3 antenna model that is easy to use. All avalanche transceivers transmit on the same 457kHz frequency and are compatible with all other analogue or digital models.

*We recommend the Pieps DSP Sport, BCA Tracker Series, Ortovox Zoom or 3+ Transceivers.*

### Avalanche Probe

Avalanche probes are made up of multiple aluminium or carbon sections, tensioned by a cable. These sections extend to form a 2-3 metre pole for probing avalanche debris deep into the snow.

*We recommend Black Diamond Quick Draw Tour 240, Backcountry Access Stealth or the Ortovox 240 Light PFA Probes.*

### Snow Shovel

Shovels should be a lightweight avalanche, specific model. A telescopic handle and a large metal blade will allow you to move more snow at a faster rate.

*We recommend Voile, Black Diamond Deploy 7, Backcountry Access B-2 EXT and RS EXT or the Ortovox Range of Shovels.*



Black Diamond Quick Draw Tour Probe 240



Pieps DSP Sport Transceiver



Black Diamond Deploy 7 Snow Shovel

## BODY WEAR

### Waterproof Shell Jacket

Bring a non-insulated, fully waterproof shell jacket with a good hood and water-resistant zip closures. The jacket should be easy to move in with your base and mid layers on underneath, and provide a good overlap with your pants, but should not be so long that it restricts access to your harness. Chest pockets are useful for things like snacks and sunscreen, and pit zips allow for increased ventilation and cooling.

There are numerous fabrics which are both water-resistant and breathable such as Gore-Tex, eVent, MemBrain, PreCip and Entrant, etc. Shell clothing should be seam sealed during the manufacturing process or the garment will leak through the stitching. Shell clothing made of PVC or similar is totally waterproof but does not breath, which means you become damp from the inside out as moisture cannot escape while you are moving. This style of waterproof shell is not suitable for ski touring or ski mountaineering. Fabric breathability is very important when you are active in the mountains.

A technical mountaineering jacket is ideal, but many general-purpose jackets are sufficient as well.

*We recommend The North Face Summit L5 LT Futurelight Jacket, Arc'teryx Alpha AR Jacket, Macpac Lightweight Prophet Jacket, Montane Alpine Pro Jacket or the Rab Muztag GTX Jacket.*

### Down Jacket

A hooded, midweight and high loft (e.g. 700 to 800 fill) down jacket is essential in the high alpine environment, especially for cold days out in the field plus nights in the alpine huts.

*We recommend the Rab Neutrino Pro Jacket, The North Face Summit L3 Hoodie and the Montane Anti-Freeze Jacket.*



The North Face Summit L5  
LT Futurelight Jacket



Rab Mustang GTX Pants



Rab Neutrino Pro Down Jacket

## Midweight Insulated Jacket

This can be a synthetic insulated jacket (Primaloft, etc.), insulated softshell or thick fleece with a full front zip for ventilation. Zip pockets help avoid losing items stored inside and a hood is also a bonus.

*We recommend include The North Face Thermoball Hoody, Arc'teryx Nuclei FL Jacket, Macpac Pulsar Jacket, Montane Prism Jacket and the Rab Xenon Jacket.*

## Softshell Jacket

Softshell fabric is incredibly versatile in the high alpine environment. It has wind and water-resistant qualities while also being highly breathable and comes in a variety of fabric weights. For the NZ winter ski season, light to midweight insulated softshell jackets with a full front zip for ventilation are the most functional. Zip pockets help prevent losing items stored inside and a hood is useful. Make sure you can fit a base layer underneath, and your waterproof shell jacket over the top.

*We recommend the Arc'teryx Gamma LT or Gamma MX Hoodys, Rab Vapour Rise Alpine Jacket or Torque Jacket.*

## Lightweight Fleece Top

A lightweight fleece made from Polartec Power Stretch, Polartec Power Grid, Polartec Alpha, Pontetorto Tecnopile micro fleece or an expedition weight base layer is a good additional layer to keep your thermoregulation perfect.

Wear it as your top layer when warmer out or put your insulated softshell jacket over it, when it gets colder. It can be a light fleece pullover or have a short or full zip. A zip chest pocket is useful for sunscreen and snacks.

*We recommend The North Face Summit L2 Power Grid Hoodie, Arc'teryx Delta MX Hoody, Macpac Ion Polartec Fleece Hooded Jacket, Rab Power Stretch Pro Jacket and the Montane Power Up Hoodies.*

## Waterproof Shell Pants

Your waterproof shell pants should have good freedom of movement to enable you to lift your legs easily when worn over your softshell pants during inclement weather. They should also have three quarter to full length zips down each leg to enable you to put them on and take them off, while wearing your ski boots and/or crampons.

A salopette style can be warmer as it has a greater overlap with your jacket, however, you will need to choose a model which allows you to tend to toileting easily and that the zip system is compatible with your underlying pants and base layers.

*We recommend The North Face Summit Dryzzle Futurelight Pants, Arc'teryx Beta AR Pants, Montane Alpine Pro Pants or the Rab Muztag GTX Pants.*

## Softshell Climbing Pants

Stretchy, comfortable and lightly insulated softshell pants are recommended, although non-insulated softshell pants which fit comfortably with your base layer bottoms are suitable as well.

*We recommend The North Face Summit L4 Softshell Pants, Arc'teryx Sigma FL Pants, Macpac Fitzroy Alpine Series Softshell Pants, Marmot Scree Pants, Rab Ascendor Pants or the Montane Skyline Pants.*

## Base Layer Tops & Leggings

Base layers must be made from materials such as merino wool or polyester. No cotton, please! We recommend that you bring at least two tops (one for skiing in and one for wearing in the evenings, or to double up if you are really cold).

Tops should have long sleeves and a high neck with a zip to allow some ventilation. Base layer leggings should fit snugly without constriction.

*We recommend The North Face Warm, Macpac Prothermal, Rab Forge and Pulse, Earth Sea Sky and Smartwool Base Layers*

## Underwear

We recommend treated polyester or merino underwear instead of cotton as they dry quickly and wick away sweat from your skin, working with your other layers to keep you dry. Merino has the added advantage of not smelling when worn for long periods of time.

Bring enough changes of underwear for the trip. It is generally possible to wash small items even when in the mountains.

*We recommend Smartwool, Earth Sea Sky Merino, Montane Primino and Rab Merino Blend Underwear Ranges.*

## Socks

Bring light to midweight wool or mixed fibre over the calf socks. Ski-specific socks will have extra padding in the shin area for greater comfort over a long day in your ski boots. You need at least 2 complete sets of your personal preference. Please assure that your ski socks fit well within your ski boots so that you still have room to wiggle your toes, this will help to maintain good circulation which will keep your feet warmer.

*We recommend Smartwool Ski and Snowboard Specific Socks.*



Rab Xenon Jacket



The North Face Summit L4 Softshell Pant



Smartwool 150 Long Underwear

## HEADWEAR

### Sun Hat

A wide-brimmed soft hat or baseball cap in conjunction with bandana or buff to protect you from the sun.

*We recommend The North Face Horizon Breeze Brimmer Sun Hat or AC Cap, available from our office.*

### Sunglasses

Preferably a "glacier" style with side protection, although some wraparound glasses rated with a category 3 or 4 lens will provide enough protection from reflected light.

The lens should be dark enough to withstand the intense reflection from the snow and MUST filter 100% of UVA, B and C radiation. Snow reflects up to 85% of solar radiation and the UV index increases 10% with every 1,000m gain in altitude, so it is of utmost importance you protect your eyes. A Category 3 or 4 polarised lens with an anti-fog coating is ideal.

If you wear prescription glasses, we recommend you get grey or amber prescription lenses. If you wear contact lenses, it is advisable to bring a pair of prescription glacier glasses as a back-up. Eyewear retainers are essential.

*We recommend Oakley, Smith, Julbo, Bollé and Adidas Sunglasses.*

### Ski Goggles

Bring good-quality goggles for protection from high winds and heavy snow. The lens should offer visible light transmission (VLT) of no more than 30%. Those with light-sensitive eyes may wish to use a darker lens and photochromatic models are ideal for use in changing conditions.

If you wear prescription glasses, please ensure they fit under your goggles.

*We recommend Oakley, Smith, Julbo, Bollé and Adidas Goggles.*

### Warm Hat

Your hat can be wool, merino, Windstopper or fleece. It should extend over the ears and be snug enough not to fly off in a strong wind.

*We recommend The North Face Bones Beanie, the Rab Logo Beanie and Smartwool Beanie.*

## Neck Warmer, Bandana or Buff

A lightweight Buff, bandana or neck warmer is a good idea for added warmth and sun protection.

*We recommend the Adventure Consultants Buff, available from our office.*

## HAND WEAR

### Liner Gloves x 2 Pairs

These thin, lightweight finger gloves should fit snugly to allow for handling ropes and carabiners easily. These should fit inside your ski/mountaineering gloves and we recommend bringing at least two pairs so that you always have warm and dry hands.

*We recommend the Basic Polypropylene Gloves, Macpac Polypro Gloves, Montane Primino Gloves, Outdoor Research Vigor Lightweight Sensor Gloves, and the Rab Stretch Knit Liner Gloves.*

### Fleece Gloves

Fleece midweight finger gloves can be used as an additional layer to protect against the cold.

*We recommend The North Face Etip Gloves, Macpac Stretch Gloves, Marmot Power Stretch Connect Gloves, Montane Powerstretch Pro Grippy Gloves, and the Rab Power Stretch Pro Gloves.*

### Mountaineering/Ski Touring Gloves

Mountaineering/Ski Touring gloves should be warm and provide dexterity for working with ski equipment plus ropes and technical tools. A good model will have abrasion-resistant palms, shaped fingers, a waterproof outer and an insulating removable liner. A removable liner allows for faster drying and provides greater versatility as you can use different weights of liners inside for better temperature regulation. Please ensure that you can fit your various liner gloves inside your mountaineering/ski touring gloves.

*We recommend the Black Diamond Guide Gloves, Rab Guide and Pivot Gloves and the Outdoor Research Alti Gloves.*



Adventure Consultants Branded Buff



Julbo Explorer Sunglasses



Black Diamond Guide Gloves

## CAMPING GEAR & ACCESSORIES

### Alpine Climbing/Ski Touring Pack

First Tracks Geo Dome trips plus single day ski touring and day avalanche training courses will require a small 30 to 40L ski touring pack. The pack will need to have enough space for some extra clothing layers, a bit of food and hydration, climbing skins, ski crampons, avalanche safety equipment and accessories such as a pair of goggles or sunglasses and sunscreen. There should be attachment points for skis or snowboard/split board on the outside, along with attachment points for ski poles. Avalanche equipment should be easily accessible.

For First Tracks Geo Dome trips, single day ski touring and day avalanche training courses we recommend The Blue Ice White Tiger 35L, Deuter Freerider Pro 30, Osprey Kamber or Women's Kresta, and Black Diamond Cirque Ski Touring Packs.

Glacier ski touring trips and courses working out of MT Cook National Park or West Coast venues require a larger 50–65 litres mountaineering or ski touring pack, which will accommodate all your day and overnight clothing and gear, plus avalanche safety equipment and additional technical equipment, plus hydration and a share of the food. Features include a good expansion/compression system, a top pocket, attachment points for skis or split board as well as attachment points for ice tools and crampons.

*We recommend The North Face Phantom 50, Cobra 60, Osprey Mutant 52, Macpac Sentinel 50L, Arc'teryx Alpha AR 55 or Black Diamond Speed 50 Backpacks for Multi-Day High Alpine Trips and Courses.*



Black Diamond Speed 50 Backpack



Rab Neutrino 600 Sleeping Bag



Black Diamond Storm 375 Headlamp

## Headlamp

We recommend a headlamp with at least 300 lumens which features a long-range ultra-bright beam plus smaller LED lights with short range lighting for around camp. A long-range beam with a dimming function for around camp is also suitable. Rechargeable models are fine if standard batteries can also be used. Please bring a set of spare batteries.

*We recommend the Petzl Actik or Actik Core, LED Lenser MH5 or SEO 7R and the Black Diamond Storm or Spot Headlamps.*

## Sleeping Bag

Glacier ski touring trips and courses staying in Aoraki/Mount Cook National Park or West Coast high alpine huts will need to bring a four season down sleeping bag that is rated to around -10C/14F. Synthetic bags of this warmth rating are too heavy and bulky. A down bag with 700g or more of down fill is preferred as this provides greater warmth for weight, while also keeping the sleeping bags volume to a minimum.

It is a good idea to pack your sleeping bag in a plastic bag or dry compression sack. This is to avoid it getting wet, as down loses its insulating qualities when wet.

For First Tracks Geo Domes trips and courses we will provide a three-season sleeping bag and fleece liner. If you sleep cold, then we recommend bringing an additional down sleeping bag with you which you can double up with the bags already in the domes. We do have some down bags for hire at the office if you would like to rent an additional bag for your trip.

Please note that the ratings quoted above are the sleeping bags Limit or comfort temperature. If you are a cold sleeper, consider a warmer bag. If you are using the EN temperature ratings when choosing a sleeping bag, a general rule is most women or cold sleepers should tend towards the Extreme rating and most men should tend towards the Comfort Limit rating. Sleeping bags that do not have the EN rating tend to be rated at their Comfort Limit temperature.

*We recommend The North Face Blue Kazoo, Macpac Epic HyperDRY Down 600, Marmot Helium, and the Rab Ascent 700 and Neutrino 600 Sleeping Bags.*

## Sleeping Bag Liner

A sleeping bag liner must be used if you are hiring a sleeping bag. Although we highly recommend sleeping bag liners in general as they prolong the life of your bag by keeping it clean and dry. Liners can be made from silk, cotton or wool, and thermal liners are also available which can increase the warmth of your bag.

*We recommend Sea to Summit Silk and Thermal Sleeping Bag Liners.*

## Water Bottle

Two plastic bottles with heat-resistant qualities and a wide top of at least 1-litre capacity are recommended.

A bladder hydration system is useful in theory but will freeze on cold mornings, even with an insulation sleeve on the tube. These are also prone to punctures from sharps such as crampon spikes when stored together in your pack.

*We recommend the Adventure Consultants Branded Nalgene 1 Litre and 500ml Wide Mouth Bottles, available from our office.*

## Personal Toiletries

A small toiletries kit which can include a toothbrush, tiny tube of toothpaste and soap plus a small flannel. Make sure everything liquid is in containers that don't leak or break.

## Sunscreen

A small tube of max protection sun block, plus sunscreen lip balm (with SPF 30+) for day application.

## First Aid Kit

You should always carry a basic first aid kit including blister tape, second skin, gauze pads, crepe bandage and painkillers.

Include any personal medication required plus extras and please remember to inform the office and your guide if you are taking any prescription medicine. Store your first aid kit in a waterproof container.

## Stuff Sacks & Plastic Bags

Lightweight nylon stuff, compression and dry sacks are perfect for keeping your clothing and gear organized and dry.

*We recommend Sea to Summit Pack Liners, Ultrasil Stuff Sacks, Dry Sacks and Compression Sacks.*

## OPTIONAL EXTRAS

### Ski Helmet—Recommended

A ski helmet can be brought for additional safety. If you normally wear a ski helmet, please bring it with you.

### Small Thermos Flask

A small Thermos flask for hot drinks, made from stainless steel with a capacity of 300ml to 500ml.

*We recommend Primus and Lifeventure Vacuum Flasks.*

### Down Booties

Down booties or other warm and comfortable footwear for wearing around in the hut or Geo-Dome Heli-Camp.

*We recommend Rab Hot Socks and Expedition Slippers or Montane Fireball Footies and Prism Booties. For the Geo-Domes we recommend Sorel Style Boots for around camp and Rab Hot Socks for sleeping.*

### Earplugs

A handy way to get a good night's sleep when sharing a room with a snorer!

### Notebook & Pencil

Preferably waterproof paper notebook or wrapped in plastic bags.

### Compass & Map

Any compass which is suitable for orienteering will do. The magnetic declination is different in the Southern Hemisphere, so compasses designed for the Northern Hemisphere will stick if you use them here.

The relevant map can be purchased from our office.

*We recommend the Silva and Suunto Compasses.*

### Pocket Knife/Leatherman/Tool Kit

Swiss Army Knife, Leatherman tool or equivalent. A personal repair kit for your own equipment is useful as is a lighter.

*We recommend the Victorinox Knives and Leatherman Multi-Tools.*

### Chemical Hand & Toe Warmers

You can bring 2–3 sets of lightweight disposable chemical hand and toe warmers.

### Personal Entertainment

Consider taking an iPod/E-reader or a good small book. We recommend *A Climbers Guide* by Adventure Consultants.

### Camera/Smartphone

Camera and spare batteries or Phone with power bank/portable charger.

## TECHNICAL EQUIPMENT—APPLIES TO GLACIER SKI TOURING TRIPS AND SOME WINTER COURSES\*

*\*Please refer to your equipment checklist to see if technical equipment is required.*

### Ice Axe

You will be carrying your ice axe on your pack most of the time while ski touring, so a lightweight model axe between 50–60cm long is ideal. Make sure the axe has a good, sharp adze for chopping steps and a classic curve pick to facilitate self-arrest. Ice climbing tools are not necessary. If you only have a longer general-purpose axe, bring that along.

*We recommend the Black Diamond Raven Pro, Blue Ice Hummingbird, Petzl Litteride and Petzl Summit Ice Axes.*



## Crampons

We recommend a pair of 12-point steel crampons with a toe harness and heel bail, as they are the quickest to put on and take off. The front points of your crampons should stick out from the front of the boot about 2.5cm. Be sure to check the heel piece of the clip-on crampon is compatible with your ski boot and stays in place when in the up position. Practice putting on your crampons before you head into the mountains.

**Crampons for Snowboarding**—We have found the Grivel G-10 Wide Crampons work with most snowboard boots.

*We recommend the Grivel G12 New-Matic, Black Diamond Sabretooth Clip and Petzl Vasak Leverlock Universel Crampons.*

## Ski Mountaineering Harness

Bring a lightweight alpine climbing or ski mountaineering harness. Heavy, padded harnesses are not necessary. Your harness must have gear loops, adjustable leg loops and waistband large enough to fit over all your clothing layers. The waist band and leg loops should be able to completely separate.

We strongly recommend newer models with a belay loop and buckles that do not require you to "doubling back" your waist belt.

*We recommend the Petzl Tour, Mammut Zephir Altitude or the Black Diamond Couloir Harnesses.*



Black Diamond Couloir Harness



Petzl Literide Ice Axe



Grivel G12 Mountaineering Crampon

## Locking and Non-Locking Carabiners

Bring the specified number of lightweight locking carabiners which have either a 'screw gate' or 'twist lock' gate. Do not get the ball lock type! One large locking carabiner for belaying is advantageous, such as the Black Diamond RockLock Carabiner. All additional carabiners can be smaller in size to fit more compactly on your harness.

Bring the specified number of lightweight non-locking or snap link carabiners.

*We recommend Petzl and Black Diamond Carabiners.*

## Belay Device

Bring an ATC style device for belaying and rappelling. We use the tubular style devices which have two holes for the rope to pass through. They are lightweight, easy to use and are compatible with single or double ropes.

*We recommend the Black Diamond ATC-XP or Guide, and the Petzl Verso or Reverso Belay Devices.*

## Personal Anchor System

This device is attached to the belay loop on your harness and with the use of a small carabiner, the excess chain links are tucked away on one of your front gear loops. This device is used as your safety when reaching an anchor point on a rock, snow or ice climb. We use a chain link style system because it's safer, more convenient and more adjustable than other methods, plus can be used to equalise anchors.

*We recommend the Metolius PAS 22 Device.*

## 1 x Long and 2 x Short Prusiks

You should bring one long (3.2m untied length) and two short prusik loops (1.6m untied length). Prusiks should be made from 6mm cord and are used for glacier travel, crevasse rescue and abseiled safety backup. A double fisherman's knot is generally used to create the loop. Your guide can help tie these during the course.

*Adventure Consultants has prusik cord available for purchase.*



Beal 120cm Sewn Sling



Black Diamond RockLock Screwgate Carabiner



Petzl Reverso 4 Belay Device

## 1 x Sling

One 3 metre untied sling or 120cm sew sling is required. Slings are either made from tubular webbing or Dyneema/Spectra. The former is more economical, whereas Dyneema slings are much thinner and lighter, but also more expensive and need to be replaced more frequently.

*Adventure Consultants has unsewn tubular sling available for purchase.*

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**Please check your equipment checklist as there may be other requirements not listed here.  
Give us a call or send us an e-mail if you have any questions as we are always happy to help.  
Adventure Consultants provide a retail order service should you wish to purchase equipment.  
Please contact us if you would like to know more about this service.**

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