

## Clothing and Equipment List

The following list contains a brief description of the equipment and clothing required to enjoy mountain climbing. It is an unsponsored list and reflects personal opinion. It should be taken as a guideline only. We thank Adventure Logistics Ltd for this description.

## CLOTHING

Clothing is a huge subject and there are a lot of different options for purchase. The majority of New Zealand's easier mountains can be climbed with good hiking gear with a few pieces of mountaineering equipment added.

Please remember when purchasing equipment for mountaineering in New Zealand that our climate is cold and damp compared with Northern Hemisphere's cold and dry climate. Your equipment should therefore be designed for wet weather and worn in layers that can handle moisture.

These layers are described below:

### First Layer:

The purpose of this lightweight layer is to wick moisture and hold heat near the body.

- **On the body** – Two piece thermal underwear. Try to avoid zips. Power Dry™, merino or polypropylene are two recommended materials.
- **On the hands** - Polypro or Silk-weight liner for gloves.
- **On the feet** - Wool is recommended to keep your feet dry and 'sweet smelling' for longer. To reduce rubbing, a thin inner sock is a good idea under a thick outer sock .

### Second Layer:

This general purpose layer will be worn at all times and provide protection from the elements.

- **On the head** - Legionnaires caps are great at deflecting the glare of the sun and the scarf helps to keep you cool. If selecting a beanie, it should be lightweight, windproof and fit under your helmet
- **On the torso** - Glacier Shirt, a lightweight, long sleeved shirt. Next is a warm top, 100 weight polarfleece or heavyweight merino with a half zip. Finally a top jacket to stop wind, a 'soft shell' is great.
- **On the legs** - Climbing pants. Lightweight, quick drying fabrics are best. Light colours reflect heat better than dark ones. Scholler™ fabric pants are great.

**Third Layer:**

This purpose of this outer layer is to protect you from the elements in all weather conditions. Breathable, waterproof fabrics such as Gore-Tex™, Event™, Reflex™, Pre-Cip™ are best.

- **On the torso** - Jacket: Fully waterproof with a hood that covers a climbing helmet and pockets that are accessible while wearing a climbing harness.
- **On the legs** - Over trousers: Fully waterproof with full length zips are recommended so they can be pulled on over boots and crampons. Braces are fashion statement as well.
- **On the hands** - Gloves: Water resistant shell gloves, allowing good dexterity with leather palms.

**Extra layer:**

This layer can be used when in camp or during cold climbing belays

- **On the torso** – Jacket. Lightweight, compact down or synthetic jacket for relaxing in or around the hut or camp. (You can add an extra 200 weight fleece if you do not have a down/synthetic jacket.)

## EQUIPMENT

There are many different styles, brands and colours of alpine equipment available for purchase, and each does a similar job. When looking for equipment, do your research - observe what others in the industry use and question them. Here are some guidelines for gear that is used for New Zealand alpine climbing and mountaineering.

- **Sleeping Bag:** A +3 Season (-5°to -10°C) bag is required, preferably filled with down greater than 650 loft as it is lighter and more compact than synthetic equivalents.
- **Bivouac Bag:** Waterproof and breathable fabrics are recommended. The bag should weigh less than 1kg.
- **Sleeping Mat:** Full length or ¾ length, self-inflating with a 40cm length of closed cell foam mat, or full length foam mats provide the best insulation on snow.
- **Backpack:** For multi day mountaineering trips, a 60-75 liter pack is recommended. Make sure that it is designed for alpine use, with external crampon, axe and hammer attachment points. You will not need a day pack. (Tramping packs are not suitable if they do not have attachment points for equipment).
- **Pack Liner:** A big plastic bag works fine.
- **Stuff Sacks:** Use stuff sacks to organize your gear. The waterproof ones are good for keeping your sleeping bag in.
- **Personal Toiletries:** Include sun-block (SPF30 or more), lip balm, toothbrush and paste, unscented baby wipes for personal cleaning, earplugs, small pack towel and small antibacterial gel. Package these together in a dry bag to prevent leaking into your backpack.
- **Boots:** Full shank leather mountain boots or plastic boots. Note: *When waxing leather boots it is recommended to use an aqueous wax that will be absorbed into the leather, not a bee's wax that sits on the surface and cracks off in the cold*
- **Gaiters:** Knee length with stirrups and laces hook. Made from Gore-Tex™, canvas or similar.
- **Compass:** With a Rotating bezel, 'Northing' lines and scale markings. Must be balanced for the southern hemisphere
- **Map:** A current map of the area and a route plan showing safe camping areas. Be able to adapt your plan if needed. (Use 1:50,000 scale maps)
- **Head torch:** Models with a high powered LED are recommended as they use a minimal amount of battery power (3xAAA). Try: Black Diamond™ or PETZL™ brands.

- **Helmet:** Climbing specific to deal with the specifics of climbing UIAA and CE rated only.
- **Ice Axe:** A general mountaineering axe with leash of around 65-75cm long is recommended. This will not be suitable for vertical ice however.
- **Crampons:** Semi articulated models for general mountaineering. Look for models with front straps and a rear heel bails. Use full strap models if you are not sure if your boots have heel welts. 'Anti balling' plates are a must.
- **Walking Poles:** 1 or 2 collapsible trekking poles are good for balance on long approaches with heavy overnight packs.
- **First-Aid Kit:** Blister/sports strapping tape, 'Band Aids', painkillers, personal medications, elastic bandage and single #14 wound dressings.
- **Repair Kit:** Spare screws and/or bar for crampons, Zip-Ties, small amount of gaff /cloth tape, repair kit for Therm 'A 'Rest, spare sunglasses or goggles, multi-tool, lighter, tea candle, accessory cord (3mmx4m), spare liner for gloves, beanie and spare batteries for head torch and transceiver.
- **Snow Shovel:** Collapsible type with metal blade.
- **Avalanche Transceiver:** Any transceiver that operates on 457 kHz is fine. Digital models have now replaced analogue models. Always carry spare batteries on trips over 4 days
- **Avalanche Probe:** 2.5-3m long, quick assembly and collapsible.
- **Water Bottle:** PET or 1 litre Nalgene bottles are great as they can handle boiling water for hot drinks
- **Ice screws:** Screw in, screw out design are best. 17 - 22cm long.
- **Harness:** Lightweight with adjustable leg and gear loops that will fit over your entire clothing system
- **Ice Hammer:** 50-55cm, with a reverse pick and leash. Straight or bent shaft is ok. Do not buy a vertical ice specific model as they are harder to plunge while walking or alpine climbing.
- **Prussic:** 6mm nylon climbing cord.  
Small: Length 'nose to navel' when tied off.  
Large: Length 'navel to ground' when tied off.
- **Climbing Protection:** Your instructors will provide this, but a collection of 2-3 wires and 2-3 small cams will be fine.
- **Slings:** 16-20mm width: 2 x 3m and 1 x 5m lengths before tying off.

- **Snow Stake:** 60cm long. T shape is recommended as they are lighter and easier to use.
- **Cordellette:** Length 6-8m X 7mm static cord.
- **Karabiners:** Locking, pear shaped with screw/twist lock gates.
- **Sun Glasses:** Wrap around style that is dark enough for mountain conditions, preferably with side shields and a strap. (100% UVA, B and C protecting)
- **Goggles:** Standard ski goggles are sufficient. Use an old PET bottle cut at the middle as a lightweight case for them.

# Recommended Clothing and Equipment Brands

## Boots

High Alpine Climbing Boots  
La Sportiva Nepal Evo  
Scarpa Cumbre  
All round Mountaineering Boots  
La Sportiva Karakorum Pro

## Crampons

Ice Climbing  
Grivel G14 Newmatic  
Alpine/Mountaineering  
Grivel Air Tec New Classic  
Grivel G12 New Classic

## Ice Axe

Grivel Air-Tec Evo

## Ice Hammer

Black Diamond Venom Hammer 50cm

## Ice Climbing Tools

Black Diamond Viper Axe & Hammer  
Black Diamond Cobra Axe & Hammer

## Helmet

BD Half Dome  
Petzl Elios

## Harness

All-round: Arcteryx 350a  
BD Momentum  
Metolius All-round  
Light/compact: BD Alpine Bod  
BD Couloir Harness

## Karabiners

### Snap Link

BD Hotwire  
Metolius

### Screw Gate

BD Rock lock  
Edelrid HMS

## Belay Device

Edelrid Kilo  
BD ATC Guide

## Ice Screws

BD Turbo Express 17-22cm  
Grivel 360° Ice screw

## Snow Stake

Aspiring 'Swaged' V Steak  
MSR Coyote 'T' Steak

## Walking Poles

Leki Makalu  
BD Expedition Pole

## Gloves

BD Patrol Work Glove  
BD Prodigy GTX Storm Glove  
Kinko Work Glove

## Gaiters

Sea to Summit Alpine Gaiter GTX  
BD Front point Gaiter

## Bivy Bag

BD Bibbler Hooded Bivy Bag

## Sleeping Mat

Therm'A'Rest Prolite 4 Small  
Nemo

## Avalanche Transceiver

Ortovox 3+  
Mammut Barryvox  
Pieps DSP

## Snow Shovel

Voile T6 'D' Handle

## Avalanche Probe

BD Guide Probe

## Multi Tool

Gerber Sport  
Gerber Crucial

## Head Torch

BD Icon  
BD Spot  
Petzl Myo XP