

# American Alpine Institute<sup>Ltd.</sup>

## Haute Route Equipment List

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Climbers in Europe have developed an extensive system of huts, which have enabled them to travel fast, light and unencumbered through the alpine wilderness. While some of these huts are very small bivouac shelters accommodating no more than 6 to 8 people, others are more like hotels with over a hundred beds and a well-stocked kitchen. This, in combination with easy access, has made the Alps into an alpine playground where short approaches, light packs, and big routes are generally the norm.

Even though the mountains and huts are usually close at hand, the climber cannot forget that the storms, wind, and cold of an early dawn are every bit as serious here as in other comparable ranges. The Alps are high with many peaks rising over 13,000 feet; Mont Blanc itself rises to over 15,700 feet. The moist maritime climate and the northerly latitude - about the same as Portland, Oregon, or northern Maine - can combine to produce severe storms. Climbers must not underestimate the seriousness of the weather in the Alps.

Typically, temperatures on the Haute Route drop well below freezing at night but warm up in the bright sunshine of the day. Spring can have excellent weather, but storms also frequent at that time as well. When the weather is unstable you can expect snow or rain and a very cold wind.

The equipment you bring must function well in a wide variety of conditions. Your clothing should be warm, lightweight, dry quickly, and allow you good freedom of movement. The layering principle, which uses several layers of insulation (rather than one thick one), covered with an outer weatherproof shell, meets these needs well. Typically, alpinists will wear a layer of long underwear made from polypropylene or similar synthetic, a layer of fleece or other insulating material, and a Gore-Tex shell, in addition to gloves/mittens and a hat.

Please take the time to prepare your equipment carefully, and to the extent possible, become familiar with it by using it in the field. If you have any questions don't hesitate to call the Institute office.\

### CLOTHING

**Ski Boots** - You can either bring telemark gear or randonee (alpine touring) equipment.

- Telemark boots should be heavy-duty single or double boots. They should have relatively stiff soles for better downhill control, be warm, and be well waterproofed. It is important that you are sure they're warm enough.

- Randonee ski boots must be designed for alpine touring. The hinge should be flexible enough to allow for comfortable walking, even for long distances. The use of plastic mountaineering boots with randonee bindings is not acceptable for two reasons; first, downhill performance is greatly reduced when using mountaineering boots, and second, the increased flexibility of climbing boots significantly reduces the effectiveness of binding release mechanisms, increasing the risk of injury.

**Socks** - Wool or synthetic, (no cotton). Skiers frequently wear a thin liner sock, and one pair of thick socks depending on boot fit.

**Long Underwear Bottoms and Tops** – This will be your base layer and should be lightweight polyester, polypropylene, or similar synthetic.

**Synthetic Climbing Pants** - These should be made of a durable, hard finish fabric such as Schoeller. Lighter weight stretch fleece will work, however this material is not as durable, breathable, or wind resistant. You will wear these pants most of the time as your skiing or "action" pants, wearing your shell pants (below) only when it is storming. Examples are the Patagonia Guide, Super Guide, and Simple Guide Pants.

**Shell Pants or Bibs** – Lightweight Gore-Tex or other waterproof breathable material recommended. Full side zips highly recommended for easy on and off over boots and crampons. This is your storm layer. An example is the ArcTeryx Alpha SL Pant.

**Second Layer (Top)** – Expedition weight long underwear top, 100 weight powerstretch (check out Wild Things Powerstretch Hoody), very lightweight fleece, or a lightweight wind shirt (like the Marmot DriClima) are good examples of this multi-use layer.

**Third Layer (Top)** – Schoeller or similar material. This is your action jacket and should be very breathable. It will be worn as your outermost layer unless it's precipitating heavily, in which case you will wear your rain jacket, below. Examples are the Patagonia Ready Mix Jacket or the Patagonia Core Skin Jacket.

**Shell Jacket with Hood** – Lightweight Gore-Tex or other waterproof breathable material recommended. This is your storm layer. Examples are the Patagonia Jetstream Jacket, the Patagonia Stretch Latitude Jacket, and the ArcTeryx Alpha SL Jacket.

**Insulated Jacket** – Lightweight Down or synthetic, with an insulated hood. Should be able to fit over your schoeller jacket. Examples are the Patagonia Micropuff Jacket and the MontBell Ultralight Thermawrap Parka.

**Liner Gloves** – Polypropylene, lightweight.

**Medium Weight Gloves** - Fleece or Windstopper.

**Modular gloves** - These include a matched pair of insulating gloves and a pair of waterproof shells offer excellent protection. Good models are made by Outdoor Research, Wild Country, and others.

**Warm Hat** - Synthetic is less itchy than wool.

**Balaclava** - Thin. For a windy days and sun protection.

## **SKIING GEAR, CLIMBING GEAR & MISCELLANEOUS**

### **Skis and Skins**

**Ice Axe** – 55cm to 60 cm max, with standard pick and wrist loop.

**Crampons** - Semi-rigid or flexible. Aluminum crampons highly recommended because they are much lighter to carry. Be sure your crampons fit your boots. Crampons with step-in bindings are usually the easiest to put and off. Please seek advice when purchasing crampons and make sure they can be put on your ski boots. (Many types of crampons can be purchased or rented in Chamonix.)

**Climbing Harness** - Should fit over bulky clothing. Adjustable leg loops help in this regard.

**Carabiners** - Bring two locking, Munter (pear-shaped) carabiners.

**Prusik Cord** - Three lengths of 6 mm cord: 12 feet, 6 feet, and 5 feet.

**Ski Poles** - Adjustable poles are highly recommended

### **Ski Crampons**

**Ski Safety Straps** - Necessary for glacier skiing so this doesn't turn into a walking trip instead of a ski trip.

**Internal Frame Backpack** - 40-45 liters max. Should be equipped with ice axe loops and should easily be able to carry your skis strapped to the sides.

**Simple Ski strap** - to help carry skis on lifts and buses and to lash tips together when they are on your pack.

**Headlamp** - Bring an extra bulb and batteries.

**Personal Medical Kit** - For blisters, cuts, scrapes, etc.

**Glacier Glasses** - With side shields.

**Ski Goggles** - Good venting is essential.

**Sunscreen** - With a protection factor of at least 16, though 30 SPF is best.

**Lip Protection** - With a protection factor of at least 16.

**Water Bottles** - Bring two 1 liter bottles or one bottle and a hydration bladder like a Camel Back. Consider bringing a small thermos.

### **Personal Toiletries**

**Ear Plugs** - Nice to have in noisy huts.

**Camera** - With lots of film and an extra battery.

### **Lighter**

**Repair Kit** – Including:

- Glop Stopper (for skins)
- Pocket Knife (or multitool)
- Duct Tape (small amount)
- Spare parts for your bindings.