

SIERRA HIGH ROUTE EQUIPMENT LIST

ASI has pioneered an ultra-light, yet very comfortable method of ski travel. These systems were originally developed for the Sierra High Route and similar Sierra Tours. The following is *the* state-of-the-art combination of equipment and technique that has proven successful on over 40 group crossings of the Sierra High Route since 1981.

Going light with the correct application of techniques increases safety, reduces fatigue and adds to the overall enjoyment of this incredible tour, a true experience of a lifetime. Please consider adjusting and/or updating your gear to best match this style of travel.

Think lighter, smaller and less!

SKIING GEAR

Alpine Touring Skis - 80mm-90mm underfoot (waist) are guide's favorite
[K2 WayBack](#) or [Dynafit Manaslu](#).

Alpine Touring Bindings - [Dynafit Vertical ST](#) with brakes to fit waist of ski, Fritschi, Silveretta, or Marker are most popular.

- or -

Telemark Skis – 80mm-90mm underfoot (waist) are guide's favorite

Telemark Binding – preferably a telemark touring binding allowing resistance-free pivot for touring. [Voile Switchback](#), [7th Power Tour](#), Black Diamond 01 or G3 Targa Ascent.

In general, releasable bindings may increase your chances of surviving an avalanche.

Ski brakes recommended over safety straps

Alpine touring boots or heavy-duty telemark boots such as [Garmont Radium](#), [Helium](#), [Voodoo](#), [Kenai](#) or similar.

Ski poles – adjustable length (optional)

Climbing skins – maximum width to shape of ski recommended such as [Black Diamond Glidelite Mohair](#), mohair/nylon blend or nylon.

Ice axe - 50-60cm recommended, ultralight good (no longer than 70cm)
[Petzl SNOWRACER](#) or [CAMP Corsa](#) or [Corsa Nanotech](#).

Ski crampons – must fit ski width and be binding compatible.

Ski straps (2) to carry skis – [Voile Ski Straps](#) (15-18")

Ski Helmet (optional, not common on this tour) – CAMP makes a combination ski and climbing rated helmet such as the [Pulse](#) and [Speed](#).

SNOW SAFETY GEAR

Avalanche transceiver (457 kHz), digital option recommended such as [Ortovox D3](#) or [S1](#) with fresh batteries, probe and shovel if you own them

Otherwise, it will be provided by ASI (*Reservations required*)

SKI CAMPING GEAR

Ski Mountaineering/Ascent Pack (42-60 liter) with a strap system to carry skis
[Black Diamond Anarchist Avalung](#), [Quantum 55](#), [Predator 50](#) or similar.

Sleeping Bag - down or fiberfill, warm to 20° F, should weigh less than 2 1/2 lbs, use the smallest stuff sack possible (small sil-cloth compression stuff sacks are recommended).

An example of an ideal bag would be [Western Mountaineering UltraLite](#).

Sleeping Pad - 3/4 length light Thermarest® or closed cell foam. An ultra-light, comfortable and warm pad is the [Thermarest NeoAir](#). Bulky pads not recommended.

CLOTHING

Next to skin layers:

Short sleeve T-shirts (2) – light merino wool or capilene

Long sleeve light merino wool or capilene zip T-neck

Merino wool or capilene briefs (2 pr.)

Merino wool or capilene light long johns

Ski socks – wool/nylon blend or similar (2 pr.)

Note: Merino wool layers work very well in wet, cold and warm environments and retain the least amount of unpleasant odor.

Outer layers:

Soft-shell jacket (lightly insulated) or fleece pullover or full zip such as the [Patagonia Guide Jacket](#), [Simple Guide Jacket](#) or similar.

Light soft shell mountain pants (AKA “guide pants” - synthetic stretch woven fabric) such as [Patagonia Simple Guide Pants](#), [Mammut Glacier Pants](#) or similar.

Light puff jacket - nylon with synthetic or down insulation (useful at rests, in the tent and in the sleeping bag).

[Patagonia Down Sweater](#)

Rain layer – light waterproof/breathable jacket (and pants optional)

[Patagonia Rain Shadow Jacket](#)

Light wool or fleece hat

Thin Fleece neck gaiter for storm conditions

Sun hat – with visor. Large 360° brimmed hats are impractical at high elevations in the wind.

Gloves – medium weight ski gloves and light gloves for spring conditions

Light down or fiberfill booties (optional, many experts change socks and wear their inner boots in the tent and/or use their outer shells for quick bathroom trips)

This is a recommended optimum layering system. Certain items may be substituted but combination of layers should equal the recommended list for warmth, moisture wicking, wind and precipitation resistance, weight and packability.

MISCELLANEOUS

1-2 Liter water container (wide-mouth lexan, BPA-free recommended) or hydration system (with soft hydration bladder, an additional hard Lexan 1 Liter bottle is recommended for camp use). Bottle can be refilled during the day at open water and snow can be added for solar melting.

Cup (16 oz.) Lexan mug such as [GSI Infinity Insulated Mug](#) or Plastic Bowl and Cup such as [GSI Ultralight Nesting Bowl + Mug](#)

Lexan spoon

Water purification – [Katadyn Micropur](#) tablets or tincture of iodine in small plastic dropper bottle. Filtration pumps not recommended.

Sunglasses with retainer

Goggles with light lenses for storm conditions

Sunscreen - 50-70 SPF or greater recommended (dispensed into a small squeeze bottle) such as [Hawaiian Tropic Ozone Sport](#), [Neutrogena Ultimate Sport](#), or similar

Lip Balm – 30+ SPF recommended

Very Small personal first aid kit – band-aids, moleskin, tape, aspirin, antacid tablets

Toothbrush and toothpaste - small tube

6-8 moist toilets (anti-bacterial recommended or anti-bacterial gel in a tiny squeeze bottle)
Cotton Bandana
2-3 Organizational Stuff Sacks
Toilet paper in zip-lock bag with matches (or small butane lighter)
Light Headlamp with fresh batteries such as [Petzl TIKKA PLUS](#), [E+Lite](#), or similar.
Butane lighter
Small pocket knife
Small Digital Camera (optional)
Small 2-way FRS radio (optional, check with your guide)

ASI PROVIDES

All group guiding equipment, Ortovox avalanche transceivers, probes, shovels, group first-aid, emergency and repair kits, shelters, ground cloth, stoves, cook kits, and 5 dinners.

FOOD

Variations in tastes makes it most practical for each participant to pack his or her own breakfast and lunch food. These are easy but should be calculated carefully. You will need to pack 5 breakfasts and 6 lunches. Here is a suggested sample we would carry for one day:

- Breakfast-instant, non-cooking
- Hot beverage-tea, coffee or cocoa
- 2 packets instant oatmeal or cream of wheat or granola
- 4 tablespoons whole or low-fat milk powder (instant)
- 1 tablespoon margarine (optional)

Lunch-high energy, snackable type

- 3 oz. protein source (cheese, dried meat or other)
- 2-3 oz. crackers or light bread (bagels ok for the first days)
- 3 oz. nuts or dried fruit (gorp)
- 2 oz sweets (goo gels, chocolate, etc.)

Energy bars may take the place of gorp or candy

- 1 electrolyte replacement drink mix per day (optional, but recommended)

1 Small Stuff Sack for breakfast and dinner food

1 Small Stuff Sack for lunch food (different colors)

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