



Alpine Institute

Aid and Big Wall Equipment Checklist

This list is designed as a “worst case scenario”, a trip with significant inclement weather. However, if a program does not encounter significant weather, there may be items here that are not used. As you prepare for your trip, it is important to plan for the worst and hope for the best. That being said, an alpine climber should be able to carry as little as necessary.

On the first day of your program, an AAI Guide and Equipment Specialist will work with you to refine your mountain kit. They will ensure that you bring exactly what is needed. It is acceptable to bring too much clothing and equipment to your initial meeting. It is also fine to bring things that you may have questions about. Any extra equipment can be left behind at our Equipment Shop for safekeeping.

The Cascade climbing season is defined as May 1st through October 1st. This list will reference early, mid, and late-season conditions. They are defined as follows:

Early Season: May 1 - July 1

There is usually significant snow both on the ground as well as on the glaciers. You should expect to encounter deep, wet snow during the day and firm conditions at night. Overnight temps range from 15° to 40°F (-9° to 4°C). Daytime highs range from 35° to 70°F (1° to 21°C). Precipitation as snow or rain can be likely.

Mid Season: July 1 - September 1

Temps range from 40° to 50°F at night with occasional dips below freezing. Daytime temps often reach 70°F. You should expect the possibility of freezing temps above 9000ft on summit days throughout the summer. Though mid-season tends to be dryer, the possibility of rain is always there.

Late Season: September 1 - October 1

September is a varied month. Temps begin to drop both during the day and at night. Late in the month, you may encounter an increase in snow and rain.

Please be sure to check the forecast several days before your course to ensure that you are properly prepared.

PROVIDED EQUIPMENT: Climbing rope, anchors, solid waste bags.

RENTALS: Equipment that is available for rent through the AAI Equipment Shop is designated with a “Rent” check box. **These items must be rented and picked up before your course.**

You can call or email the Equipment Shop for advice on gear.

shop@alpineinstitute.com

360-671-1570

CLOTHING

Beanie/Toque (Optional)

Wool or synthetic. Must fit under a helmet. Easily replaced with hooded layers after the early season.

Buy
 Own

Sun Hat

Ideally fits under a helmet. Ball caps with a button on top are NOT recommended. Visors or athletic hats are more comfortable, vent better, and are easier to clean and dry out.

Buy
 Own

Buff/Neck Gaiter

Look for one that is UPF-rated. Lighter colors are better for warm conditions and darker for colder conditions.

Buy
 Own

Sun Glasses

Preferably with UVA/UVB protection.

Buy
 Own

Headlamp

Bring extra batteries or charger for rechargeable battery style. The ideal range is 200-350 lumens.

Examples: Petzl Swift RL, Petzl Actik

Buy
 Own

Sports Bra

Wool or synthetic. Comfort is key. Avoid bras with adjusters and clasps, as they could get compressed by your pack straps. Racerbacks are a popular option.

Buy
 Own

Sun Hoody

A lightweight, wool or synthetic sun hoody is ideal. Look for one with UPF 30+ sun protection. UPF Clothing protects better from the sun than sunscreen.

Examples: Patagonia Capilene Cool Daily Hoody, Outdoor Research Echo, Rab Pulse

Buy
 Own

Active Insulation Layer

Lightweight "gridded fleece" or lightweight synthetic insulated jacket. Hood preferred. Active insulation weight - 40g/m². Heavier insulation weight - 60-80g/m²

Examples: Patagonia R1, Patagonia Nano Air, Arc'Teryx Proton LT

Buy
 Own

Soft Shell Jacket or Windproof Jacket

A soft shell jacket is considered an "action layer." Its materials are designed to stretch and breathe while also maintaining wind and water resistance. This allows the user to leave this jacket on for a wide range of temps and conditions throughout the day without the hassle of constantly changing layers.

Windproof jackets are lightweight and packable, but lack the breathability and stretchy nature of the soft shell. Windproof jackets are ideal for blocking wind and light precipitation during low output activities.

Example Softshells: Black Diamond Alpine Start Hoody, Rab Borealis, Mountain Equipment Squall, Patagonia Houdini Air

Example Windproof: Patagonia Houdini, Arc'Teryx Squamish Hoody

Buy
 Own

Soft Shell Pants

Thin, weather-resistant, breathable, and stretchy. You will wear these a majority of the time.

Examples: Patagonia Altvia, Mountain Equipment Ibex, Arc'Teryx Gamma FL

Buy
 Own

CLOTHING CONTINUED

Sun Hoody

A lightweight, wool or synthetic sun hoody is ideal. Look for one with UPF 30+ sun protection. UPF Clothing protects better from the sun than sunscreen.

Examples: Patagonia Capilene Cool Daily Hoody, Outdoor Research Echo, Rab Pulse

Buy
 Own

Active Insulation Layer

Lightweight “gridded fleece” or lightweight synthetic insulated jacket. Hood preferred. Active insulation weight - 40g/m2. Heavier insulation weight - 60-80g/m2

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 Own

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Example Softshells: Black Diamond Alpine Start Hoody, Rab Borealis, Mountain Equipment Squall, Patagonia Houdini Air

Example Windproof: Patagonia Houdini, Arc’Teryx Squamish Hoody

Buy
 Own

Insulation Jacket

AKA the “puffy”. Down or synthetic. This piece is worn in cold conditions or when not moving. Hood preferred. If choosing down, water-resistant down treatment is preferred to help prevent matting and loss of insulating ability if the jacket gets wet.

Examples: Arc’Teryx Nuclei FL, Patagonia DAS Light, Patagonia Down Sweater, Arc’Teryx Cerium, Rab Alpine Series

Buy
 Own

Hardshell Jacket (Waterproof Rain Jacket)

Non-insulated jacket with a waterproof and breathable membrane. Three-layer construction is recommended. It must have a hood, ideally helmet-compatible. When sizing, make sure it can fit over other layers. Ski jackets are discouraged because they are usually not waterproof and have heavy insulation.

Look for Gore-Tex, eVent, Drilite, H2NO, Pertex Shield.

Examples: Patagonia Torrentshell, Arc’Teryx Alpha AR, Mountain Equipment Lhotse

Buy
 Own
 Rent

Undergarments

Wool or synthetic. Long, compression-style undergarments can help reduce inner thigh chafing.

Buy
 Own

Hard Shell Pants (Waterproof Rain Pants) (Optional)

Non-insulated, waterproof, and breathable membrane. Full side zips are recommended. Ideally, it has at least a 1/4 length zipper from the bottom of the pant cuff to get pants on and off while wearing mountain boots. When sizing make sure it can fit over a base layer and soft shell pants. Insulated ski pants are strongly discouraged due to lack of waterproofness and heavy insulation.

Materials: Gore-Tex, eVent, Drilite, H2NO, Pertex Shield

Examples: Patagonia Torrentshell, Arc’Teryx Beta Pant

Buy
 Own
 Rent

CLOTHING CONTINUED

Socks

Wool or synthetic socks that are at least mid calf height.

Example : Darn Tough Coolmax Lightweight

- Buy
 Own

Approach Shoes

Used for the Aid climbing portion of this course, ideally stiffer and burlier. Made with sticky climbing rubber, can also be used for approaches to and from the rock climbing areas as well as for climbing some of the easier routes.

Example Approach: La Sportiva TX4, Five Ten Guide Tennie

- Buy
 Own

Comfortable Shirts, Pants, and/or Shorts

Comfortable clothing that will be used in the front country and for car camping.

- Buy
 Own

CLIMBING

Helmet

Must be UIAA-rated for climbing. Be aware that foam, break-away style helmets like the ones listed below are susceptible to damage if being loaded in a checked bag.

Examples: Petzl Meteor, Black Diamond Vision

- Buy
 Own
 Rent

Harness

Make sure the harness has a belay loop and Equipment loops. When sizing, it should fit over your clothes when you have multiple layers on. A more robust, padded harness is ideal for this program.

Example Padded Harness: Petzl Adjama, Arc'Teryx AR-395a

- Buy
 Own
 Rent

Rock Shoes (Optional)

Focus on comfort so they can be worn all day. Avoid technical or aggressive rock shoes with a downturn. Avoid curled toes when sizing.

Examples: La Sportiva Tarantulace, La Sportiva TC Pro

- Buy
 Own
 Rent

Slings

Bring one 48in (120cm) and one 24in (60cm) pre-sewn sling. Slings must be UIAA-rated for climbing. Available for sale at our Equipment Shop.

Examples: Mammut Contact, Black Diamond Nylon Runner

- Buy
 Own

Cordelette

A 180cm-240cm length sling or 18-24 feet of 6mm accessory cord can be used as a cordelette.

Example : Mammut Contact, Bluewater Titan Cord

- Buy
 Own

Belay Device

Bring an auto-blocking device that accepts two ropes.

Examples: Black Diamond ATC Guide, Petzl Reverso

- Buy
 Own

Rappel Backup

The Sterling hollow Block or Beal Jammy are recommended for their heat resistant properties.

A 4ft length of 6mm nylon accessory cord will also suffice.

Example : Beal Jammy 35mm, Sterling Hollowblock 2 13.5

- Buy
 Own

CLIMBING CONTINUED

Carabiners

Must be UIAA-rated for climbing. Must have:

- 4 large pear-shaped munter-style locking carabiners
- 5 non-locking wire gate carabiners

Examples: Petzl Attache, Camp Photon Wire

- Buy
 Own

Assisted Braking Device

Used for everything from belaying, ascending, rigging portaedges, and hauling.

Example: Petzl GriGri, Edelrid Eddy

- Buy
 Own

Rappel Backup

The Sterling hollow Block or Beal Jammy are recommended for their heat resistant properties. A 4ft length of 6mm nylon accessory cord will also suffice.

- Buy
 Own

Trekking Poles (Optional)

Two are highly recommended. Poles help with balance while hiking with a heavy pack and increase security during stream crossings. They also decrease the pressure on your knees during steep descents. For early season, poles should have snow baskets.

Example: Black Diamond Expedition

- Buy
 Own
 Rent

Belay Gloves

Fingerless gloves are popular for protecting your hands from rope burn, pinching, and sharp elements while maintaining dexterity when handling aid gear. Lightweight and breathable gloves with a durable leather palm are ideal.

Example : Metolius 3/4 finger, Petzl Cordex

- Buy
 Own

Day Pack

A 25L to 35L is an ideal-sized pack. This will be used during rock climbing and can also be used as a summit pack. Ideally, this pack is frameless.

Examples: Black Diamond Blitz 28, Mountain Equipment Tupilak 37+

- Buy
 Own

Internal Frame Pack

A 65L to 75L pack is the recommended size range. Mountaineering specific packs, instead of backpacking packs, are a good way to shave weight. Should also have the ability to carry weight well.

Examples: Black Diamond Mission 75, Mountain Hardware AMG 75, Arc'Teryx Bora 75

- Buy
 Own
 Rent

AID EQUIPMENT

The more personal gear you have, the better. Please bring any and all aid climbing equipment that you own. If you do not have equipment, then we can provide it.

Ascenders

Mechanical ascenders with handles. Make sure to get a right and left hand.

Example: Petzl Ascension Right and Left (Gold and Black)

- Buy
 Own

Daisy Chains

Bring two. There are many different types and models and all have their pros and cons. Bring a pair of the same model in different colors. Preferably Nylon. Longer is better, around 140cm.

Example: Black Diamond Daisy chain

- Buy
 Own

AID EQUIPMENT CONTINUED

Aiders

Bring two. Again, a pair of the same but in different colors is better. Ladder-style with spreader bars are strongly recommended for sustained wall climbing, as are sewn ladders instead of adjustable ones.

Example: Metolius Ladder Aider

- Buy
 Own

Fifi Hooks

Bring One.

Example: Black Diamond Fifi Hook

- Buy
 Own

OPTIONAL CLIMBING EQUIPMENT

Rock Climbing Rack

Optional. If you have it then bring it. Make sure and mark your gear so it doesn't get mixed up. Nailpolish is the best way to permanently mark your gear, tape is strongly discouraged as it tends to fall off and become trash.

- Buy
 Own

Progress Capture

Optional. Modern progress captures are useful for hauling.

Example : Petzl Microtraxion, Edelrid Spoc

- Buy
 Own

Chalk Bag and Chalk

Optional.

- Buy
 Own

CAMPING

Tent

3 season tents are appropriate for this course's camp locations.

Example 3-Season : Big Agnes Copper Spur, REI Half Dome

- Buy
 Own
 Rent

Sleeping Bag

Synthetic or Down. 20°F to 30°F (-6°C to -1°C) is an appropriate temperature rating for this course's camp location.

Example: Mountain Equipment Fireflash (5), Western Mountaineering Alpinlite (20), Rab Mythic Ultra 180 (32)

- Buy
 Own
 Rent

Sleeping Pad

One inflatable or closed cell foam pad.

Example : ThermaRest XTherm

- Buy
 Own
 Rent

Stove and Fuel

Liquid fuel or canister stove. Fuel is available at AAI the morning of the course.

Example : Soto Windmaster, MSR Windburner

- Buy
 Own

CAMPING CONTINUED

Pots

Bring one 0.5L to 2L pot depending on what you are planning to cook.

NOTE: If you have a complete stove system like the Jetboil or MSR Reactor, and plan on eating out of your integrated pot, then you do not need to bring another pot.

- Buy
 Own

Utensils

Don't forget the official "most forgotten item ever;" the spoon, or spork. Long-handled spoons make stirring hot liquids safer, and metal ones tend to not break as easily in cold temperatures.

- Buy
 Own

Bowl

Bring 1.

NOTE: If you have a Jetboil or MSR Reactor type stove and plan on eating out of your integrated pot, then you don't need to bring a bowl. The same applies if you plan on only using commercially packaged dehydrated or freeze dried meals.

- Buy
 Own

Lighters

Bring 2. You will have the opportunity to buy them the morning of the course.

- Buy
 Own

Hydration

3L capacity is recommended, though some people need more.

A common approach is to bring a 2-3 liter bladder and a 1 liter hard sided bottle. The bottle is an important backup to the bladder if it gets punctured. A hard-sided bottle may also double as a mug for hot water, though not every bottle is designed to hold boiling water.

Example : Nalgene 32 oz bottle, Hydrapak Seeker 2-3L, MSR Dromedary 4-8L

- Buy
 Own

Food

You are responsible for your own food for the duration of the course. Please consult our meal planning page.

- Buy
 Own

OTHER ESSENTIALS

Passport

Some Aid and Big Wall courses are held in Canada.

- Own

Toothbrush and Toothpaste

Travel size recommended

- Buy
 Own

Hand Sanitizer and/or Wet Wipes

Required. Used after going to the bathroom and before eating. Wet wipes can be used for the "mountain shower."

- Buy
 Own

Alarm Clock

You will be responsible for waking up at certain times throughout the program. While your guide can sometimes be your alarm, there are often situations where tents are far apart. Be sure if you use your phone as an alarm that you have enough backup battery to accommodate for this. If you plan to use a watch, be sure your alarm is loud enough to work for you.

- Buy
 Own

ESSENTIALS CONTINUED

Toilet Paper

The provided solid waste bags have a small amount of toilet paper with them, but most people do not find this to be adequate. Estimate how much you'll need for a program of this length and place that in a plastic zip-lock bag. An extra zip lock bag can be helpful for pack-out of used paper. If you plan to use wet wipes, be wary of scented or exfoliating types as these can be an irritant for some people.

- Buy
 Own

Pee Cloth (Optional)

A reusable, antimicrobial pee cloth, used in the place of toilet paper or wet wipes.

Example: Kula Cloth

- Buy
 Own

Menstrual Cup (Optional)

There are many things to consider about backcountry menstruation, click on the [link](#) for more information.

Examples: Diva cup, Saalt, Lunette

- Buy
 Own

Urination Device (Optional)

Pee funnels such as the GoGirl or Freshette. Rigid pee funnels hold their shape better. Used in conjunction with a pee bottle or while on a rope team. These can help mitigate the need to squat.

Example: Freshette

- Buy
 Own

Sunscreen

At least an SPF of 30+. Zinc-based is preferred. Small travel-size tubes are recommended so you can put them in a close-by pocket for easy access.

Examples: ZBlok 45, 2oz containers are a nice size.

- Buy
 Own

Lip Balm

Make sure it is SPF Rated.

Example: Blistex Gold Five Star Protection SPF 30

- Buy
 Own

Personal First Aid Kit

- Band aids
- Blister Treatment
- Prescription Drugs
- Ibuprofen, etc
- If you wear contacts, make sure you have spares if you can't see without them

- Buy
 Own

Repair Kit

- Inflatable sleeping pad patch kit
- Duct tape (can be wrapped around trekking pole or water bottle. Gorilla Tape tends to be the best brand for the mountains).
- Zip ties
- 6-10ft of 3mm accessory cord
- 2 trash bags that are big enough to line the inside of your pack with

- Buy
 Own

OTHER OPTIONAL ITEMS

These items are not required, although many are nice "luxury" items that can make your expedition more enjoyable. Remember that a few ounces here and there add up to extra pounds on your back and knees during your expedition.

Belay Gloves

Lightweight and breathable glove with a durable leather palm. They protect your hands from rope burn, pinching, and sharp elements.

Example: Petzl Cordex

- Buy
 Own

Portable Charging Device

Phone charger, battery pack, or solar panel. You are responsible for your alarm clock each morning. If you are going to use your phone, be sure you have enough power to accommodate this.

NOTE: Solar panels should only be used to charge battery packs. Battery packs should be used to charge devices. Inappropriate use of a solar charger could lead to the depletion of a device's power.

- Buy
 Own

Pee Bottle

Used at night or when the weather is poor so you don't have to get out of your tent. A 32oz or larger capacity is strongly recommended. Many guides use a bladder instead of a bottle to increase capacity.

Example: Hydrapak Seeker 2L, Collapsible 48oz Nalgene

- Buy
 Own

Ear Plugs

For defense against snoring and high winds

- Buy
 Own

Entertainment

Books, games, cards, music player, kindle, etc. For evenings or down time in the tent.

- Buy
 Own

Insect Repellent

Biting insects such as mosquitoes and blackflies can be prevalent during different times of the season depending upon conditions and location. This is a nice item to have just in case. Sometimes even a headnet is a nice item to have.

- Buy
 Own

Camera

Phone cameras or small point-and-shoot cameras are preferred. SLR cameras are not recommended due to their size and bulk.

- Buy
 Own

Comfortable Clothing and Footwear

Breathable footwear - like flip flops - as well as some comfortable clothing can be nice to change into after you get back to the van.

- Buy
 Own

Car Charger

Consider bringing an extra battery pack as well, having a lot of people using car charger cables is difficult.

- Buy
 Own