

# Pack Selection Guidelines

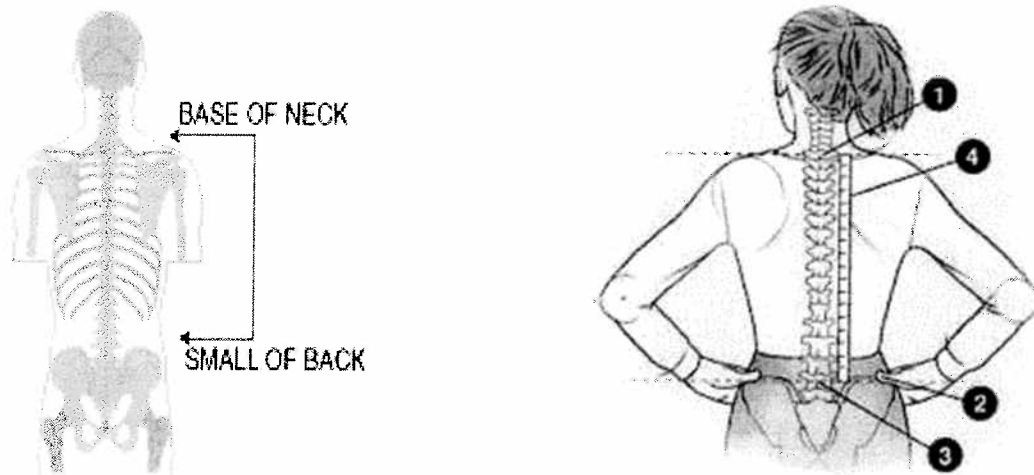
## Fitting tips

Your height has little bearing on what size pack you should wear; it's your torso length that matters.

- If the pack is too long, it will sag onto your rear end
- If it's too short, it won't support your lower back

Determining your proper pack size

- To determine your torso length, measure from the seventh vertebra (the bony protrusion at the base of your neck between your shoulders) to the small of your back (level with your hipbones)



- It is a good idea to have a friend help you take these measurements comfortably and accurately.
  - Write down the measurement in inches (in the United States) or centimeters.
1. Place a piece of masking tape on your 7th vertebra, the bony protrusion at the base of your neck between your shoulders.
  2. Now find the point at the small of your back that is exactly level with the top, or shelf, of your hipbones. Slide your hands (fingers forward, thumbs behind you) down your sides until they rest directly on top of your hips. Your thumbs will point toward your spine. Have a friend ensure that your thumbs are on the same horizontal plane across your spine.
  3. Place another piece of tape on the spine at the point where the imaginary horizontal plane would cross.
  4. Using a soft measuring tape, place one end on the 7th vertebra (1) and follow the contour of your spine to the tape mark on your lower back (3).
    - For torso length less than 18" (45 cm.), your suspension size will likely be Small
    - For torso length between 18" and 20" (45-50 cm.), your suspension size will likely be Medium
    - Torso length over 21" (52.5 cm.), your suspension size will likely be Large

## Determining your hip belt size & pack fit:

- The hip belt should cup your hips and when cinched tightly, the pads should not touch
- Hip belts: Women with straight or narrow hips will have little trouble with standard hip belts. Individuals (men or women) with more curve to their hips will need a woman's style waist belt. Women (and men) with more curve to their hips should choose a women's-specific model .
- Shoulder straps should anchor to the backpack just below the seventh vertebra and the crest of your shoulders. They should wrap comfortably, yet securely, around the shoulders and should be at least 5" below the armpit
- Sternum straps: These are meant to keep your shoulder straps from sliding off your shoulders under a load . They are not meant to support weight and should never be pulled so tightly that they restrict breathing.
- Load-Lifters: These should form a 45-degree angle from the frame or top of the pack to a point at or above your clavicle.

## Materials

- The most popular--and durable--technical pack materials are found in the nylon family: Cordura nylon, ballistics nylon, ripstop nylon, and nylon packcloth, which are all:
  - Very durable
  - Strong and abrasion resistant
  - Many feature water-repellent or waterproof coatings or treatments

### What to look for

- Backstitching and bar tacking in high-stress areas, such as around zippers, pockets, and external loops and webbing
- High-abrasion areas, such as pack bottoms, should be reinforced with a strong material such as Kevlar, Hypalon, or heavy-weight Cordura
- Back panels made of reticulated or compression-molded foam covered with a breathable, wicking fabric to disperse perspiration and enhance airflow

## Hydration packs

Hydration packs are designed to provide an ample supply of water while you're on the move.

- A bladder, or reservoir, usually made of food-grade plastic holds the water
- This is placed into a specially designed waist pack or low-profile day pack
- Users drink the water via a hose equipped with a non-leaking valve

### Styles and uses

- Hydration packs were originally used by long-distance bicyclists and runners who required lots of water, free hands, and who couldn't juggle lots of water bottles
- Now they are commonplace among skiers, snowboarders, hikers, inline skaters, climbers, triathletes and adventure racers
- Daypack styles offer the largest bladder capacity as well as varying degrees of storage space
- Waist pack styles generally have smaller bladder and storage capacities

### Features

- Reservoir capacity
  - Generally run from 1 to 3 liters
  - Your choice depends on intended use
- Insulation
  - Recommended to keep water cool in warm weather and to prevent freezing in cold weather
- Fill weight
  - Measure of what the bladder weighs when filled
  - Most indicated weights pertain to empty reservoirs
- Wide-mouth reservoirs
  - Accept ice cubes and make for easier cleaning
- Moisture-wicking fabric on shoulder straps and back panel for added comfort
- Sculpted shoulder harness for better fit
- Reflective trim

## Daypacks

Daypacks are ideal for carrying light loads over short distances.

### Sizes

- General purpose daypack capacity range is from 500 to 2,500 cubic inches
- In daypacks of 3,000 cubic inches or more - for ski touring or a long day of hiking--look for models with a framesheet and at least one internal stay
- A padded hip belt and padded, contoured shoulder straps are also nice to have

### Features

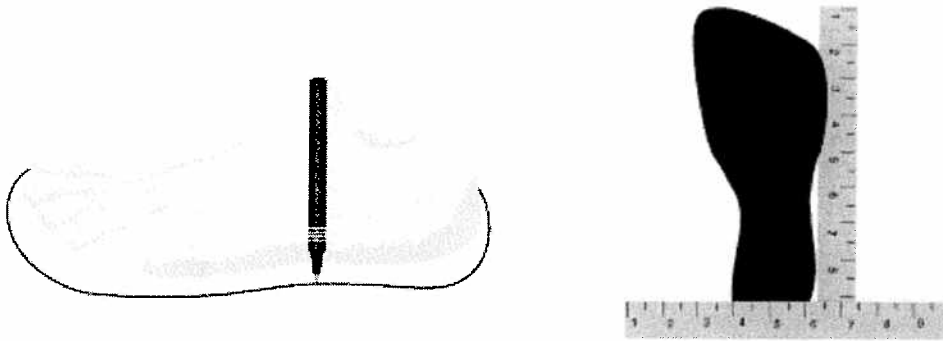
- The features you choose should be based on your intended activity
- Outside mesh pockets are handy for carrying water bottles, snacks, field guides, or wet shoes or clothing
- Easy-access pockets are good for storing cameras, GPS receivers, or other items you want to keep protected, yet accessible
- A daisy chain, nylon webbing that offers multiple lash points, is good for securing small items
- An external bungee cord is handy for securing a jacket or rain gear to the outside of the pack

# Fitting Boots

## Measurement tips

- Take your measurements at the end of the day, when your feet are the largest
- Wear the socks you'll wear with your new shoes when you measure
- Measure both feet and fit shoes to the larger foot
- If you are doing the measurement by yourself, you will get more accurate results if you sit in a chair when measuring. Don't stand.
- If you have someone to help you take your foot measurement, standing is the best choice
- You may take measurements in inches or centimeters. To convert inches to centimeters, multiply inches by 2.54.

## How to measure your foot



- While seated, place your foot on a piece of paper in front of you
- With a pencil, trace around your foot. Hold the pencil as straight up-and-down as possible while measuring and be sure that your pencil remains in constant contact with your foot during this process.
- With a ruler, measure your tracing to determine your foot length and width
  - **Foot length**
    - To find your foot length, measure the distance between the two longest points on your tracing. Reduce this number by 5 mm, or 1/5-inch. The result is your foot length and the number you will use to determine your shoe size.
  - **Foot width**
    - To find your foot width, measure the distance between the two widest points on your tracing. Reduce this number by 5 mm, or 1/5-inch. The result is the number you will use to determine your foot width. Use the chart below to determine your width.

**Find your shoe size & width**

Make sure you are looking in the proper column, either men's or women's, when determining your size. The standard width for women is B. The standard width for men is D.

**Women's Shoe Size Chart**

Shoe Size				Shoe Widths			
Inches	Centimeters	US size	Euro size	Shoe size	A	B (Standard)	C
8 1/2	21.6	5	36	5	2.6"	2.8"	3.0"
8 2/3	22.0	5 1/2	36 1/2	5 1/2	2.7"	2.9"	3.1"
8 5/6	22.4	6	37	6	2.8"	2.9"	3.1"
9	22.9	6 1/2	37 1/2	6 1/2	2.8"	3.0"	3.2"
9 1/16	23.3	7	38	7	2.9"	3.1"	3.3"
9 1/3	23.7	7 1/2	38 1/2	7 1/2	2.9"	3.1"	3.3"
9 1/2	24.1	8	39	8	3.0"	3.2"	3.4"
9 2/3	24.6	8 1/2	39 1/2	8 1/2	3.1"	3.3"	3.4"
9 5/16	25	9	40	9	3.1"	3.3"	3.5"
10	25.4	9 1/2	40 1/2	9 1/2	3.2"	3.4"	3.6"
10 1/6	25.8	10	41	10	3.3"	3.4"	3.6"
10 1/3	26.2	10 1/2	41 1/2	10 1/2	3.3"	3.5"	3.7"
10 1/2	26.7	11	42	11	3.4"	3.6"	3.8"
10 2/3	27.1	11 1/2	42 1/2	11 1/2	3.4"	3.6"	3.8"
10 5/6	27.5	12	43	12	3.5"	3.7"	3.9"

**Men's Shoe Size Chart**

Shoe Size				Shoe Widths			
Inches	Centimeters	US size	Euro size	Shoe size	C	D (Standard)	E
9 1/3	23.7	6	37 1/2	6	3.3"	3.5"	3.7"
9 1/2	24.1	6 1/2	38	6 1/2	3.3"	3.6"	3.8"
9 2/3	24.6	7	38 1/2	7	3.4"	3.6"	3.8"
9 5/16	25	7 1/2	39	7 1/2	3.4"	3.7"	3.9"
10	25.4	8	39 1/2	8	3.5"	3.8"	3.9"
10 1/6	25.8	8 1/2	40	8 1/2	3.6"	3.8"	4.0"
10 1/3	26.2	9	40 1/2	9	3.6"	3.9"	4.1"
10 1/2	26.7	9 1/2	41	9 1/2	3.7"	3.9"	4.1"
10 2/3	27.1	10	41 1/2	10	3.8"	4.0"	4.2"
10 5/6	27.5	10 1/2	42	10 1/2	3.8"	4.1"	4.3"
11	27.9	11	42 1/2	11	3.9"	4.1"	4.3"
11 1/6	28.4	11 1/2	43	11 1/2	3.9"	4.2"	4.4"
11 1/3	28.8	12	43 1/2	12	4.0"	4.3"	4.4"
11 1/2	29.2	12 1/2	44	12 1/2	4.1"	4.3"	4.5"
11 2/3	29.6	13	44 1/2	13	4.1"	4.4"	4.6"