

Packs

Pack Capacities

With pack size one person's weekend pack may be another week long pack. You should look at all the items for your trip and buy a pack according to the space required. Hikers tend to fill extra space with extra items; many of these items are just extra weight.

- Under 2,500 cubic inches: Daypacks, great for day hikes or warm weather overnights.
- 2,500 to 3,999 cubic inches: Weekend trips, good for three season weekend trips.
- 4,000 to 5,999 cubic inches: Weeklong trips, if you have one pack this is it. This size is recommended for all Philmont treks.
- Over 6,000 cubic inches: Expedition packs, for long trips into remote areas.

Pack Frame Types

- Internal Frame: Have a "internal" frame made from ridged metal or molded plastic. The frame is concealed inside of the packbag. They carry the load low and close to the back, which make the load more stable and better balanced. This helps activities that demand freedom of movement, like rugged hiking and climbing.
- External Frame: Have an "external" frame made from ridged metal or molded plastic. This frame attaches to the outside of the packbag. The pack allows air to circulate between the frame and your back, keeping you cooler. They typically have multiple pockets and compartments, which helps in origination. And allowing an upright stance and good stability on trails. They tend to cost less than internal frame packs.

Pack Sizing and Parts

Comfort is created by a pack's suspension system. This is made up of the hip belt, shoulder straps, and frame. Most packs come in two or three sizes. The size corresponds to your torso length. To measure your torso, stand at attention and have someone extend a tape measure from your seventh vertebra - the bony protrusion at the base of your neck between your shoulders - along your spine to

the top of your hip bones. This length is your torso length. Many outdoor shops have a pack fitter which measures your torso and hip belt length.

Torso Length	Pack Size
18" or smaller	Small
18 - 20"	Medium
21"	Large

- **Hipbelts:** Should cup your hips and be sized so when you cinch them tight, there is still a bit of webbing left and the pads do not touch.

- **Shoulder straps:** Should anchor to the backpack just below the seventh vertebrae. They should wrap comfortably, but securely around the shoulders.

- **Sternum straps:** Are meant to keep your shoulder straps from sliding off your shoulders under a load. They are not meant to support weight.

- **Load-Lifter straps:** On the shoulders should form a 45 degree angle from the frame or top of the pack to a point on the shoulder strap at or above your clavicle

Pack Features

Beyond capacity and fit, you'll choose a pack based on its features. Some packs have very few features, others have all the bells and whistles. These things make a pack more functional but also increase its weight and cost. Find a pack with features you want, without paying for extras you don't need. The following are some of the features available.

- **Horizontal compression:** Straps to prevent contents from shifting.

- **Daisy chains or nylon loops:** For lashing things to the pack.

- **Ice ax loops:** For attaching ice axes.

- **Adjustable torso lengths:** Great for youth packs, the pack can grow with them.

- **Daypack conversions:** A removable pocket or lid that converts into a daypack or hipbelt.

- **Hydration system:** A pocket or sleeve for a water reservoir and drinking tube.

- **Water-bottle holster:** Outside pockets for water bottles.

Pack Fitting

You may have to try on several models to get a good fit. Packs are like anything else, every brand a style fits a little different. Choose a pack because it fits well, not because it looks cool or it fits your friend.

- Know your torso size, to help choose the right size of pack.
- Put about 25 pounds in the pack, this helps the pack set right on you.
- Loosen all the straps.
- Put the pack on, using just the shoulder straps.
- Lean forward and buckle the hipbelt. With the hip belt resting atop your hip bones, standing upright pull the belt comfortably snug.
- The chest strap should sit about three inches below your collarbone.
- Tighten the stabilizer straps. The straps on the sides of the hipbelt.
- Next, tighten the load-lifters, which should lie at a 45-degree angle to your shoulders.
- Lastly, tighten the shoulder straps and chest strap.

The shoulder straps should wrap cleanly around your shoulders, without gaps or bunching, and extend about a hand's width beneath your armpits; if they don't, try adjusting the shoulder yoke. When properly adjusted, about two-thirds of the pack's weight should ride on your hips. Walk around the store wearing your loaded pack. If it doesn't feel comfortable in the store, find another one.