

# How to Choose a Backpack

---

## QUICK READ

1. Start by knowing your intended trip length and gear-carrying preferences.
2. What's your style of backpacking? We categorize our gear as minimalist, ultralight, lightweight or deluxe. Think in systems to optimize weight and function.
3. Good fit is a must. To achieve this, you need to know your torso length.

## Pack Basics

These days, almost all backpacks feature an internal-frame design. The body-hugging nature of an internal frame enhances your balance and freedom of movement. This is ideal for many activities, such as mountaineering, skiing, scrambling and hiking in rough terrain.



Whatever your pack model, you should put about 80% of the load where it can be most efficiently carried: on your hips. To do so, most packs offer suspension systems with padded, contoured shoulder straps, load-lifter straps, a sternum strap and a padded hipbelt.

Note: Packs not covered in this article include [travel packs](#), urban/school packs and dog packs.

## What's Your Hiking Style?

To answer this, first decide on a category of pack based on the kinds of outings you want to take.

- **Extended trips (five days and longer).** These packs hold more than 70 liters (4,200 cubic inches) of gear. They feature substantial load support and ample suspensions. Though designed for long trips, they are

also well suited for shorter spring and fall trips when you need to carry additional clothing.

- **Multiday (two to four days).** This popular category includes packs ranging from 40 to 70 liters (2,400 to 4,200 cubic inches) of gear capacity.
- **Technical daypacks.** Designed for trail use, these packs tote the Ten Essentials and more. Some are set up to haul climbing tools or snowsports gear. Many offer water bottle pockets and/or a sleeve for a hydration reservoir (usually sold separately) and an exit port for its sip tube.
- **Hydration packs.** These provide hands-free drinking while hiking or biking. Such packs include the reservoir, usually two or three liters in size, and some room for gear. A 2L (70 fl. oz.) reservoir is a popular, all-purpose choice. If you're often active in warm or dry conditions, consider a 3L (100 fl. oz.) reservoir.

Next, think about comfort and weight. REI divides core gear (pack, bag and tent) into four usage categories.

- **Minimalist:** Low weight overrides all other concerns (such as comfort, durability and convenience).
- **Ultralight:** Gear for those willing to forego some conveniences to reduce pack weight.
- **Lightweight:** Most packs fall in this category. These packs offer a nice balance of features and low-weight materials.
- **Deluxe:** For "maximalist" explorers who put a higher priority on comfort and convenience than they do on weight.

Obviously, individual views on comfort and weight vary greatly. Just keep in mind that you want to keep your pack's weight low, but without jeopardizing comfort or safety.

## Fit: The Most Important Feature

The key to comfort is a good-fitting pack. To get started, have a friend help you [measure your torso length](#). Torso length is measured from your shoulders (at the C7 vertebra, the one that protrudes farthest out from the spine) to the top of your hip bones. Once you have this measurement, look at the torso spec provided with each pack to make sure you're within the range.

Your waist size also matters, though most hipbelts can be

adjusted to fit a wide range of waist sizes. Just make sure the hipbelt is comfortable when you try it on; on some packs, hipbelts are replaceable.

**Fine tuning:** Many packs allow you to fine-tune their torso fit via easily adjustable suspension systems. The alternative is a fixed-suspension pack. This type is non-adjustable, but offers the advantages of being less complex and thus lighter than a comparable adjustable model.

**Women-specific packs:** These packs have narrower shoulder yokes, conically shaped hipbelts and shorter torso lengths specifically designed to fit women. Men with narrow frames sometimes find these packs are also a good fit for them.

To ensure your pack is adjusted properly, check out our [Backpack Fit](#) video and article.

## Other Key Features

**Loading (top or panel):** Virtually all packs let you access the main compartment at the top of the pack or via a front panel. The top-loading design minimizes weight, while the panel-loading design offers easier access to your gear. Some models combine top- and panel-loading features for maximum access to pack contents.

**Support (stays or framesheet):** Typically, one or two aluminum stays are used to transfer the weight of the load to your hipbelt. Stays are typically a rod or bar, though some now feature a tubular design to reduce weight. Other packs use a stiff plastic HDPE (high-density polyethylene) framesheet for load support. This thin sheet helps prevent objects in your pack from poking you in the back. A number of packs now offer a stay/framesheet combo.

**Suspension system:** This broadly refers to the load-supporting system of shoulder straps, load-lifting straps, a sternum strap and belt-stabilizer straps. These items, and tips for adjusting them, are discussed in our [Backpack Fit](#) video and article.

More specifically, packs offer one of two types of suspension.

- **Adjustable suspension:** This type allows you to fine-

tune the fit of your pack to match your torso size. Many feature a ladder-type system of rip-and-stick closure that let you move the shoulder harness up or down in small increments.

- **Fixed suspension:** This style allows no fit adjustment, but offers the advantages of less complexity and weight than comparable adjustable models.

**Ventilation:** Some frame designs are now using tensioned mesh to create a cooling air space between your back and the pack. Other packs feature a channel design to provide a similar cooling effect.

**Packbag:** The materials used in packbags seek to find a balance between durability and weight. Nylon packcloth and Cordura®, a burly nylon fabric with a brushed finish, both emphasize abrasion- and water-resistance. Cordura is tougher and a bit heavier. For minimalist and ultralight travelers, newer fabrics such as silicone-coated nylon are used to trim precious ounces at the cost of some durability.

**Top lid:** This top pocket offers extended capacity, as do expansion collars. Some lids detach to double as waistpacks for day trips from base camp.

**Hydration compatibility:** Most packs have a compartment designed to hold a hydration reservoir, plus a port (opening) on each side to route the sip tube. Reservoirs are typically sold separately, except on hydration-specific packs. Other packs have elasticized mesh "holsters" on their sides to hold water bottles.

**Hipbelt:** The hipbelt should straddle your "iliac crest" — the two prominent bones on the front of your hips. This is the area where your pelvic girdle begins to flare out. When evaluating hipbelts, consider their comfort and adjustability. Some packs offer interchangeable belts, permitting a more customized fit, and even belts where the angle of the fit can be adjusted. An increasing number of hipbelts have pockets for easy access to your energy food, digital camera, GPS or similar items.

**Other load-bearing straps:** Most packs help keep the load close to your body by using **load-lifter straps**. These are located just below the tops of your shoulders (near your collarbone) and should angle back toward the pack body at about a 45 degree angle. Also common is a **sternum strap** which secures across your chest to help support the load and allow your arms to swing freely.

**Attachment points:** These allow you to attach gear to the outside of your pack if you have the need. Climbers and early-season hikers should look for **ice-axe loops**, **daisy chains** (a series of small loops where you can dangle gear, such as carabiners) and **crampon patches**. A **shovel pocketholds** a snow shovel or other items tight against the back of your pack; it's a good place to stash wet things. All of these extras, of course, add some weight to a pack.

## Optional Add-Ons

**Rain covers:** These shelter your pack from bad weather and help prevent lashed-on gear from snagging on brush.

**Accessory pockets:** These are an easy way to expand capacity. Some accessory pockets are sized and padded to hold a GPS unit or digital camera.

**Stuff sacks:** Stuff sacks and mesh bags help organize your items inside cavernous pack compartments.

**Trekking poles:** These are especially helpful when hauling a good-sized pack. Trekking poles help you maintain balance, add a little thrust to your step when hiking uphill and ease jolts to your joints when descending.

[Close](#)