

How to select a backpack

Quick Tips

1. Internal-frame packs' narrow, body-hugging profiles are well suited to off-trail travel as they allow you to keep your balance.
2. Buy only as much volume as you'll need on your longest trip; packs get heavier as they get bigger!
2. Fit is crucial.

Internals are popular packs with many advantages:

Flexibility. Stays make internals stiff, but not rigid. This allows the pack to move in harmony with body movements, a big plus for climbers and skiers.

Balance. Internals hug your body. This holds your equipment closer to your natural center of gravity and helps you keep your balance when it counts — for example, while you're scooting across a log above a stream.

Stability. Compression straps are everywhere on an internal. You use them to cinch down your load and keep individual items bunched together. This keeps them from shifting and throwing you off balance if you make any abrupt moves.

Maneuverability. Because internals feature a slimmer shape, it's easier to swing your arms freely — another reason why these packs are popular with climbers and Nordic skiers. This narrow profile also helps hikers whenever they have to squeeze through tight spots or when they're bushwhacking through thick brush.

Adjustability. Internals use suspension systems (involving the shoulder harness and hipbelt) that can be adjusted more precisely than external-frame systems

Hipbelt:

Weight transfer is for naught unless the hipbelt, the receiver of this load, is up to the task. That means one that fits and has just enough stiffness to support a load without sagging. A soft-foam hipbelt may feel great, but after a few miles down the trail it will begin to bottom out and your hips will feel the pressure of the load. One that is too firm can bruise your hips.

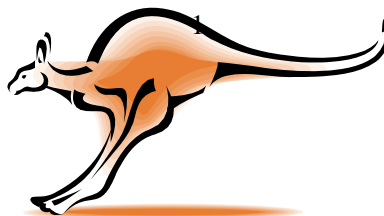
Padded hipbelts represent a major advancement in pack design and greatly enhance your ability to carry tonnage into the backcountry. A good hipbelt will compress progressively, like the shocks on a mountain bike. Look for one that cups over your hipbones "iliac crest", which maximizes the amount of weight-bearing surface area and providing the hipbelt with a stable, fortified foundation. The hipbelt's padded ends should not touch; you need some space to be able to cinch the belt securely.

Framesheet:

Many internal packs place a thin but stiff sheet of plastic between you and the packbag. Often this is a material known as HDPE, or high-density polyethylene. This adds stiffness to the frame without adding much weight. Plus, it prevents objects in your pack from poking you in the back. A sweaty back is an unavoidable consequence of carrying a load, but a good back panel can mitigate the soggy-back syndrome. This is an attempt to separate the pack from your back and encourage some air flow between the two.

Suspension system:

This involves the shoulder straps (padded and contoured), load-lifting straps, a sternum strap and belt-stabilizer straps.





Shoulder Straps

Here too you want to avoid too-soft foam. Another bad sign: puckers in the foam or in the sheath that covers it. These puckers will turn into hot spots against your skin out on the trail. The best pack makers have mastered the art of bending, curving, and covering foam without these dreaded creases— but, of course, you have to pay for such craftsmanship.

Packbag:

Every major maker of packs uses good quality materials and stitches them together with all the requisite back-stitching and bar-tacks so that a pack is very unlikely to fall apart during years of normal use.

Internals usually offer an extendable collar — additional nylon with a drawstring closure that allows the main compartment to stretch higher and hold extra gear.

Top lid: Many internals allow you to detach the "floating lid" pocket from the pack and convert it into a fanny pack or daypack. That's a handy feature when you choose to make day hikes from a backcountry basecamp.

Water-bottle holders/hydration pockets: Most packs include elasticized mesh "holsters" on their sides where you can keep small bottles handy. Hydration systems (water reservoirs, or bladders, connected to a long sipping hose) have boomed in popularity. Many packs now offer such systems.

Most packs designed for more than a weekend on the trail are top-loaders. The advantage: You can overstuff a pack up top by using a built-in extender, which gets capped off with a floating top pocket.

And most packs offer a bottom sleeping bag compartment, so you can access your snooze sack without hauling everything else out in the process. But if you really want convenient access to your belongings, get a pack with a zipper on the main panel— either a side zipper, or for the best access, a full horseshoe. Up top, it's handy if the aforementioned floating top pocket removes and converts to a fanny pack for day hiking or a summit push. Most packs have this feature. Fine touches to look for if you think you might need them: Ice ax loops, crampon patches, and lash points so you can strap on weird bulky things like snowshoes.

As for capacity, the 3,700 in³ (60 liters) neighborhood should suffice for most of us— that's generally enough for a long weekend to a week-long excursion— and you can typically pile on another thousand cubes by way of the top extender. Remember the bigger the pack the more you are likely to stuff into it. Most people should not carry more than 1/3 their weight.

Stays:

Curved to fit the bend of the spine. The stays extend from the top of the pack down to the hipbelt, typically two stays in a V-shape that meets near the center, i.e., the small of the back. The stays transfer weight effectively, yet the pack remains flexible. These are generally made of aluminum.

Fit:

Of utmost importance here is torso length, so the pack rests just right on your hips without doing a potato-sack number on your shoulders. It shouldn't sag, nor rest so high it squeezes your kidneys. Look for a pack that comes in two or three sizes, AND offers fine-tuning adjustability. Walk around the shop carrying each pack, loaded with the full amount of weight you intend to carry on the trail. You'll feel the best pack grab onto your back with no discernible hot spots, and the load will feel perfectly distributed.

