# **Selecting Camping Gear**

# How to Choose a Family/Base Camping Tent - http://www.rei.com/learn/Camping/rei/learn/camp/familytentf

Car camping with family or friends is a regular summer pastime for many of us. Whether the campground itself is the main attraction or it's simply your base camp for nearby activities, here's how to find the right home-away-from-home.

# **Types of Family Tents**

At REI, tents that can sleep four or more campers comprise the "family" or "base camp" category. ( <u>Backpacking tents</u> are discussed separately.) Here are the basic design options:

- Cabin-style tents: These upright styles offer the easiest in/out access. Their near-vertical walls create much livable space, which is a nice advantage. Some models come with family-pleasing features such as room dividers and an awning (or a vestibule door that can be staked out as such).
- **Dome-style tents:** The larger cousin of the classic backpacking domes, these offer superior strength and wind-shedding abilities, both of which you'll appreciate on a stormy night. They stand tall, but their walls have more of a slope which slightly reduces livable space.
- Screen rooms and sun shelters: They usually cover the camp picnic table or are pitched for a day at the beach, though they can double as sleeping shelters if needed. With all-mesh walls, screen houses excel in warm conditions and keep occupants shielded from bugs, but not rain.

Weight is far less of a concern for a family camping tent than it is for a backpacking tent, as most family tents are carried only from car to campsite.

### **Shopping by Price**

Family tents are sold at discount stores across the land, sometimes at amazingly low prices. Outdoor specialty stores, meanwhile, can carry models that can cost upwards of \$500. They look about the same, so what's the big difference?

As is often the case, you get what you pay for. In calm weather, a bargain tent may serve you just fine—for a while. The real difference is the quality of materials, which tends to become apparent in bad weather or after your first few outings. Here are some tips to compare a tent's quality:

- · Poles: Aluminum is stronger and more durable than fiberglass
- Zippers: YKK zippers resist snagging and breaking better than others
- Materials: Higher-denier fabric canopies and rainflies are more rugged than lower-denier ones.
- Rainfly: A full-coverage fly offers better weather protection than roof-only styles.
- Detailing: Guyout loops let you batten down the hatches in bad weather.
- Floor design: Seam taping and higher-denier fabrics reduce the chance to leakage from below and from corners.

Bottom line: If camping is an annual activity for your group, consider the long-term advantages of having a quality tent. Similarly, if you camp in areas where wind and storms are a threat, the same advice holds.

### **Tent Setup and Livability**

### Headroom

This is listed as "peak height" on spec charts. If you like being able to stand up when changing clothes or just enjoy the airiness of a high ceiling, then look for a tall peak height.

# Ease of Access

Does the tent have one door or two? What shape is the door, and how easy is it to zip open and shut? Cabin-style tents tend to shine in this area.

### **Ease of Setup**

A tent's pole structure usually determines how easy or hard it is to pitch. Fewer poles allow faster setups. It's also easier to attach poles to clips than it is to thread them through "continuous" pole sleeves. Many tents offer a combination of both clips and short pole sleeves in an effort to balance strength, ventilation and setup ease.

### **Rainfly Coverage**

A rainfly is a separate waterproof cover designed to fit over the roof of your tent. Two types are common. **Roof-only rainflies** are designed to cover mesh roofs, while relying on the tent's waterproof walls to block rain. **Full-coverage rainflies** offer far more dependable rain protection, but slightly reduce ventilation. In nice weather, you can always opt to skip the rainfly for stargazing and waking up with the sun.

### **Packed Size**

How big is the tent when packed? Small-car and motorcycle campers find this spec especially important.

#### Ventilation

Mesh panels are often used in the ceiling, doors and windows. This allows views and enhances cross-ventilation to help manage condensation.

### Freestanding

Virtually all family tents these days are freestanding. This means they do not require stakes to set up. The big advantage of this is that you can pick up a freestanding tent (like a huge beach ball) and move it to a different location prior to staking. You can also easily shake it out before you take it down.

#### Vestibule

This shelter attaches to a tent for the purpose of storing your dusty boots or a keeping your daypack out of the rain. It can be either an integral part of the rainfly or an add-on item that's sold separately.

### **Interior Loops and Pockets**

A **lantern loop** is often located at the top-center of the ceiling to allow you a handy place to hang your lantern. **Gear loft loops** on tent walls can be used to attach a mesh shelf (sold separately) in order to keep small items such as keys or a headlamp off of the tent floor, or to a attach a clothesline to air out wet items. Similarly, interior pockets can help keep your tent organized.

# **Guyout Loops**

Higher-quality tents will include loops on the outside of the tent body for attaching guy lines. Guy lines allow you to batten down the hatches during high winds.

### **Key Accessories**

### **Footprint**

A footprint is a custom-fitted groundcloth (sold separately) that goes under your tent floor. Tent floors can be tough, but rocks, twigs, grit and dirt eventually exact a toll. A footprint costs less to replace or repair than your tent itself. For a family tent that gets a lot of in/out foot traffic, this is especially useful.

Also, because footprints are sized to fit your tent shape exactly, they won't catch water like a generic groundcloth that sticks out beyond the floor edges. Water caught that way flows underneath your tent and can seep through even tiny holes in the floor fabric.

### **Gear Loft**

Most tents come with a few attached pockets to let you keep small items off of the tent floor. A gear loft is an optional interior mesh shelf that can tuck a much greater volume of gear out of the way.

### Other Optional Nice-to-Haves

- · Stakes for sandy-soil campsites
- Broom and dustpan
- Inside/outside floor mat
- Battery-powered ventilation fan

### **Summary**

Once you know what size tent you want, your biggest decision is really quality. For occasional outings in placid weather, an inexpensive tent might suffice. But if camping is a frequent summer activity for your crew, you'd be wise to invest in a quality tent to better ride out storms and provide years of dependable use.

# How to Choose a Sleeping Bag - http://www.rei.com/learn/Camping/rei/learn/camp/hows/bagsf

On a cool evening in an unfamiliar place, a good sleeping bag seems to work like magic. Slip inside one after a few post-sundown shivers have rattled your body and, within minutes, the chill in your bones is replaced by a warm glow. It's a sweet sensation that assures you of a comfortable night's sleep.

Here are some tips to help you make a smart choice when selecting your own sleeping bag.

- 1. Match your bag's comfort rating with the coldest nighttime temperatures you expect to encounter—and maybe even exceed that number for a little security.
- 2. Bags using down insulation are lighter (providing a higher "warmth-to-weight" ratio) than bags using synthetic fill. They also compress into smaller shapes and last longer.
- 3. Synthetic-fill bags can provide some insulation even when wet, and they dry out fairly quickly. Plus, for the same temperature rating, they cost less than down bags.
- 4. A bag's shape matters. Mummy-style bags insulate most effectively and are your best choice for colder, high-elevation conditions; rectangular bags give you more room to change sleeping positions but offer more space that your body must heat up.
- 5. A good sleeping pad is essential. Your body weight compresses a bag's insulation when you lie on it, so you need a reliable buffer between your bag and the cold ground.

# How Do Sleeping Bags Work?

A sleeping bag's temperature or "comfort" rating identifies the most extreme temperature the bag is designed to accommodate. When you hear a bag described as a "+20 bag," it suggests most users should remain comfortable if the air temperature drops no lower than 20 degrees Fahrenheit.

Are such ratings infallible? No. Humans all have different metabolic rates, and no industry standards exist that uniformly determine sleeping bag comfort ratings. Instead, each manufacturer assigns a rating to its bags based on its own research. Therefore, use these numbers as a guide, not a guarantee. If you have trouble deciding between two bags, it's not a bad idea to select one that offers a little more warmth than you think you might need.

Many factors affect your ability to keep warm inside a sleeping bag:

- The insulating **pad**beneath your bag (when sleeping on frosty ground at high elevation, you need a full-length pad to keep you separated from the cold; when sleeping on snow or frozen ground, two pads are recommended)
- The presence/absence of a **tent**(a tent or bivy shelter traps an extra layer of dead air, warming it by up to 10 degrees)
- Your metabolism; you might be a "cold sleeper" (and thus one who prefers extra insulation when sleeping) or a "warm sleeper" (someone who kicks the covers off at home)
- Your **gender**(women frequently prefer bags with lower temperature ratings since they tend to "sleep colder" than men)
- Clothingworn while inside the bag (dry long underwear and clean socks are good choices on cold nights, plus they help keep body oils off your bag; a cap and neck gaiter keeps body heat from radiating away; fleece pants and jackets help on colder-than-expected evenings)
- **Adjustments**you make while in the bag (keep the bag zipped up and the hood cinched on cold nights; be careful to not breathe into the bag, since moisture has a negative effect on the insulation)
- **Food**in your stomach (the process of digestion helps produce warmth)
- **Hydration**(if you're not well hydrated the food won't help much)

Even experienced campers and backpackers can be surprised by unexpectedly cold overnight conditions, particularly during trips in the spring and fall. It's smart to be prepared.

**Tip**—To be ready for those extra chilly nights, select a bag with a temperature rating that slightly exceeds the low end of the temperature range you expect to experience. If a  $+20^{\circ}$  F bag sounds right for you, a  $+10^{\circ}$  bag would probably work well, too. On warm nights, you can always vent a bag (by using the double zipper to open the area near your legs) or simply drape it over you, unzipped. It never hurts to be a little overprepared.

Recognizing that comfort ratings are merely general guides, REI organizes sleeping bags in the following categories:

Bag Type	Comfort Rating (F)
Summer Season	+35° and higher
3-Season Bag	+10°to +35°
Cold Weather	-10°to +10°
Winter/Extreme	-10° and lower

Please note: Even in summer, a +35° bag may leave you feeling chilly when sleeping in the high country. If you think of yourself exclusively as a warm-weather camper, yet plan to routinely camp at higher elevations (3,000 feet and up), choose a bag with a comfort rating at least in the 20s.

### Down or Synthetic Insulation?

The insulation or "fill" inside a sleeping bag largely determines a sleeping bag's:

- Weight (and thus its "warmth-for-weight" ratio)
- Compressibility
- Durability

#### Down

Down is the wispy, fluffy undercoating found just beneath the outer feathers of geese and ducks. This natural fiber is an extraordinary insulator. Goose down is preferred to down from ducks, prized because it is believed its plumes offer a higher "fillpower" (explained below).

Down's positives include:

- It offers tremendous warmth for surprisingly little weight (thus offering a superior "warmth-to-weight" ratio).
- It can be compacted into very small sizes.
- Its effectiveness outperforms synthetic insulation by years—even decades.

Down, though, does have a downside:

- If it gets wet, it is of no value until it dries—and in the field, that can take a long time.
- It is more expensive (keep in mind, though, that its resistance to deterioration makes it an outstanding long-term value).

Down is graded according to fill power—meaning the number of cubic inches one ounce of down will displace. The higher the number, the better the insulation.

#### **Synthetic Materials**

Synthetic materials are basically plastic threads (extruded polymers, to be technical). The threads are most commonly a continuous filament (a long, single strand). They can also be arranged in short "staples" up to four inches long. Usually the threads are hollow, reducing their weight and enabling them to trap more air.

The advantages of synthetic fill include:

- It still provides some insulation when wet; plus it dries fairly quickly.
- It's less expensive than down.
- It's non-allergenic.

The shortcomings of synthetic fill are:

- It's bulkier than down (so it takes up more space when you're carrying it).
- It's heavier (it takes more weight to get the same warmth down provides).
- The filaments gradually degrade over time.
- The insulating "batts" of filaments are stiffer than down and do not drape over the contours of your body as effectively.

# Which is Right for You?

Down works well for just about everyone except people who frequently find themselves in rainy conditions.

Synthetic insulation is a good choice for kids and newcomers to camping and backpacking. It costs less than down and dries out relatively quickly if it gets wet.

Many women's bags are cut to accommodate a woman's body shape and preference for extra insulation.

Down always wins in terms of weight, compressibility, warmth and durability. Yet the value and performance of synthetic bags makes them very popular. Synthetic bags are improving each new model year, and they're champs when rain is a threat or cost is a factor.

What about length? Do you need a "regular" or "long" model? The general rule is as follows: If you are no taller than 6 feet, choose a "regular" length bag. If you are up to 6-feet-6, you want a "long" bag.

# How to Choose the Right Sleeping Pad - http://www.rei.com/learn/Camping/rei/learn/camp/slpadf

Sleeping pads perform 2 important functions -- first, they keep you comfortable when you're sleeping on hard, uneven ground. Second, they provide an important layer of insulation between you and the ground (to cut down on conductive heat loss).

### How do they work?

Sleeping pads insulate the same way that sleeping bags and clothing layers do. They trap and hold a layer of dead (non-circulating) air between your body and the cold (in this case, the cold ground). Your body gradually warms this layer of dead air and it becomes an insulating barrier.

The insulative performance of a pad depends upon how much air it holds inside and how free that air is to circulate.

### Step #1: Consider Your Plans

The primary variables to consider when choosing a pad are:

Insulation

- Comfort
- Weight/Bulkiness
- Durability

To decide which of these variables are most important to you, consider your outdoor plans. Think about:

- The kinds of weather you expect- if you're a fair-weather camper/backpacker, comfort will probably be more important than insulation. But if you hit the trail year-round or enjoy early spring or late fall trips, make sure you get a pad that provides protection from cold and wet conditions. It is recommended that you use two pads in snow or frozen conditions.
- The level of comfort you want while sleeping- some people prefer to save money, space and weight by sticking with very basic pads. Other prefer to spend (and carry) a little more to stay as comfortable as possible in the wilderness.
- How much extra weight you want to carry with you- Thicker, more comfortable pads can be heavy, which can cause problems on long backpacking trips. But if your trips are short or you're a car camper, weight will be less of an issue.
- **How much space you have for storage** If you're backpacking with a full gear load, a light, compact sleeping pad will be far easier to pack. Space will be less of a problem if you're carrying all of your gear in your car, or boat.

# **Step #3: Consider Your Options**

• Air mattresses- basic, inflatable air bladders

Positives- They're comfortable, adjustable and inexpensive.

*Negatives*- They tend to be heavy, bulky and they can be punctured/ripped easily. Air inside is free to circulate, so they tend to be poor insulators.

• Open-cell foam pads- sponge-like foam pads made up of tiny, open air cells

*Positives*- They're comfortable, lightweight and inexpensive. The tiny foam cells restrict air circulation, so they are also more effective insulators than air mattresses.

*Negatives*- Open-cell foam is absorbent, which can cause problems in wet conditions. It's also less insulating than closed-cell foam (it must be cut about four times as thick to get the same insulation). Open-cell foam tends to be bulky, difficult to compress (for packing) and not very durable.

• Closed-cell foam pads- pads made out of dense foam filled with tiny closed air cells

*Positives*- They're cheap, durable (won't pop when tromped on) and extremely insulative (almost no circulation of air in pad, so they can be cut thin yet still provide good insulation). Closed-cell foam is also non-absorbent.

Negatives- They're relatively stiff and firm, with far less cushioning than open-cell foam (so you'll need a thicker, heavier piece to be as comfortable).

Self-inflating pads- open-cell foam pads wrapped in air-tight, waterproof nylon shells.

*Positives*- They're as comfortable as open-cell foam, but much more insulating (the nylon shell limits air circulation, while also protecting against water absorption). They're adjustable (built-in air valves let you control the amount of air inside and thus the firmness of the pad) and they're extremely compact when rolled up.

*Negatives*- They're more expensive than the options listed above. Can be punctured or ripped (though field repairs are not difficult). Heavier than open- or closed-cell pads.

## Step #4: Try Before You Buy

Sleeping pads come in a variety of styles, shapes and lengths. If possible, try out a number of different pads before deciding on a single model. This will help you get a feel for:

- · How much cushioning you need to be comfortable
- How long and/or wide you want your pad to be (many models are cut short to save weight and packing space)
- How easy the pad is to inflate, deflate, and/or pack away

### **Step #5: Consider the Extras**

Finally, consider any extra pad features that might affect your decision -- like multiple air chambers (for a more custom adjustment), built-in pillows (for comfort), textured pad surfaces (for better insulation, less slip and more comfort) and tapered pad shapes that cut down on weight and bulk.

If you'll be traveling with a close friend, consider pads that can be attached together to form a larger sleeping area for two. Also, chair kits that work with inflatable pads offer a great deal of comfort without a lot of weight and bulk. See our selection of <u>pad accessories</u> for more great ideas.

# How to Choose a Daypack - http://www.rei.com/learn/Snowsports/rei/learn/camp/howdayf

For any activity that involves more gear than you can carry in your pockets — hiking, climbing, a full day at school — you can find a daypack that will make the experience more efficient and better organized.



**Panel-loading daypacks** offer a main storage compartment that is accessed via a U-shaped zipper. Fully opened, one sidewall (or panel) of the compartment falls away like a flap.

Such a wide opening makes panel loaders easier to load and rummage through when you're searching for something. This makes them particularly appealing for students, parents or trip leaders. If organization is important to you, consider a panel loader.

**Top-loading daypacks** generally are simpler in design and a little lighter than panel loaders of a comparable size. (Zippers and extra compartments add ounces.) Top loaders, which usually close with a drawstring, are also easier to overstuff when needed.

Some top-loaders offer a "floating" (extendable) top lid that creates space for extra gear so you can exceed the pack's stated capacity. This is valuable to climbers who may need to carry a lot of gear during the approach but don't want to climb with a larger volume pack once most of the contents (rope, rack, shoes, helmet) are in use.

Top loaders with side compression straps also do a nice job of stabilizing a load, making them appealing to climbers, scramblers and skiers.

The downside? Organizing and locating gear in a top loader can be a challenge. Something important, it seems, always migrates to the bottom of the pack.

A few daypacks offer dual access points—top and panel. That's a handy option.

### What's the Best Size?

The sweet spot for most hiking and multisport daypacks is 30 liters (roughly 1,800 cubic inches). That's enough capacity to hold the 10 Essentials plus some extras.

Some specialized packs lie at the far ends of the daypack-capacity continuum. A trail-running pack may be designed to hold as little as 10 liters (600 cu. in.). A climbing pack may hold 40 to 50 liters (around 2,400 to 3,000 cu. in.).

Are you often a trip leader? Someone who carries extra gear for other members of your family such as small children? Look for a pack in the 40-liter range—perhaps even larger.

In most cases, though, packs with capacities at or near 30 liters are a popular choice for a typical day hike.



If you day hike in the summer and ski tour in the winter, you may want more than one daypack to accommodate both activities. If, however, you'd prefer a single, do-it-all pack, evaluate your ambitions and expectations.

For example, will your pack get as much use (or more?) at school as it will on the trail? Then steer yourself toward a larger-capacity book bag. Plan to do some scrambling during some of your hikes? Consider packs with narrower profiles so your arms have room to swing freely.

**Day hiking:** The following attributes or features are often preferred by day hikers:

- an adequate capacity, typically 30 liters
- side pockets (usually elasticized mesh slots that lie flat against the pack until you wedge an item into place)
- compartments (slots or pockets) for organizing small items and loose gear
- · hydration-system compatibility

**Scrambling/climbing:** Choose a narrow-profile pack, perhaps one that includes a padded back or a framesheet. Often you'll be climbing to higher elevations where the air is cooler, so you'll need a capacity of 40 liters (about 2,400 cubic inches) or so to hold extra clothing.

Your ambitions will determine whether you need a lower-capacity multiday backpack or a large technical daypack. Compare your standard equipment load (ropes, carabiners, etc.) with the list of specialized features a pack may provide (ice axe loop, crampon patches, daisy chain).

A variety of load-stabilizing compression straps and a sternum strap are also valuable. Ask your climbing companions what features work best for them.

**Ski touring:** A smooth, narrow profile is a plus. Your range of travel (and the extra clothing you usually carry) will determine your capacity requirements. Look for a means to attach your skis to the pack and a secure place to keep your shovel and probe handy. A sternum strap and hipbelt are essential. Climbing packs often work very well for backcountry touring.

**Trail running/adventure racing:** A lumbar pack, water-bottle pack or small technical daypack (at 25 liters or less) are all good choices. Lumbar packs (also called waist packs) are less inclined to shift while you run, and it's nice to keep your back clear so perspiration can escape.

**Overnighters:** If you have a minimalist's mentality and the gear to match it (a teeny sleeping bag; a bivy sack or similar next-to-nothing shelter; and so on), a technical daypack can handle an ultralight overnight load. Typically, packing with such efficiency is a talent of an elite few. Newcomers to the ultralight scene are probably better advised to go with an ultralight multiday pack.

You may want to look for a pack that offers a padded back (or some type of framesheet) to help support a load, a modest lumbar pad and a padded (though not necessarily beefy) hipbelt. Some models offer one or two aluminum stays to accommodate a heavier load. The more amenities you crave, of course -- even during an overnight trip -- may push you into a larger multiday pack.

School/Commuting/Traveling: Look for packs that offer at least one divider, 2 or more compartments, a slot for stashing magazines or notebooks, space for your electronics and an organizer panel (to hold your pens and other small, loose items). A padded back panel will prevent corners of books from gouging your back.

### **Specialized Packs**

**Women-specific:** The chief advantage here is improved fit, accomplished through contoured shoulder straps and, on some packs, a narrower design.

**Hydration:** Most daypacks sold at REI are compatible with common hydration reservoir systems ranging from 1 to 3 liters. (Often the reservoir with sip tube are sold separately.) Packs labeled "hydration packs" come equipped with reservoirs and hose systems and thus likely cost more than "hydration-compatible" packs.

**Lumbar:** These are waist packs that ride on the small of your back as well as your waist. Their snug, stable design is very popular with trail runners.

Sling bags/courier-style bags: Designed to be worn over one shoulder, these are popular among cyclists. People like their distinctive looks.

Day bags: A smaller, more fashion-conscious variation of the traditional daypack. Fashionable yes, and functional, too.

### **Ventilated Back Panels**

This relatively recent design feature uses lightweight framing (or other engineering techniques) to suspend the load away from your back. The result: A steady flow of air can reach your back. This delivers a big bonus in comfort when carrying a pack on warm days. Packs from Gregory, Osprey and Deuter are among the first packs to offer this innovation.

Note: If you routinely carry bulky or heavy loads, these packs may not be your best choice—a heavy load suspended away from your body could affect your balance. If you are shopping for such a pack at an REI store, try loading it with some weight and take a test-stroll around the store to gauge how it carries.

#### **Fabrics and Coatings**

**Nylon** does an excellent job of withstanding abrasion and tearing and is the fabric most frequently used in pack construction. Nylon twill, which features a sturdy diagonal weave, is commonly found in packs.

**Ripstop** fabrics (nylon, polyester and nylon/polyester blends) are woven in a manner that creates box- or diamond-shaped patterns, creating a reinforced grid. Such "ripstop" fabric inhibits a tear from expanding beyond its point of origin.

**Kodra** fabrics (usually nylon) use high-tenacity fibers to enhance resistance to abrasion and tears. Their downside: The burly fibers tend to be heavy. Kodra is a generic name for such fabrics. The brand-name variation is Cordura®.

Nylon oxford is a light, smooth fabric (characterized by a plain weave) that has been used in pack construction for decades.

Nylon/polyester blends are principally used to provide different colors within one fabric. It's a fashion thing.

**Hypalon**® is flexible synthetic rubber used to reinforce areas of high abrasion, often the edges or key touch points of packs. It is sometimes used to create patches. It is used sparingly on packs due to its weight.

The **denier** (a unit of fineness for yarn) of a fabric used in packs influences its abrasion resistance and, subsequently, its weight. Packs made for the minimalist or ultralight explorer may use fabrics as light as 70 denier. Rough, tough ballistic nylon, meanwhile, is often rated 1,680 denier. Higher abrasion resistance comes with a higher denier fabric, which includes a corresponding higher weight.

**Polyurethane** (PU) is the standard coating applied to the interior walls of packs. It provides significant water resistance (though not waterproofness — so if you dunk your pack in a lake, its contents will eventually get wet).

A **silicone** coating (or impregnation) is used on lightweight, low-denier fabrics to minimize weight. It provides very high tear strength, though silicone can break down faster than a PU coating. PU coatings may also provide better water resistance. Some manufacturers boast that holes in silicone-treated nylon can be "healed" by rubbing the hole with your fingers. This is possible if the tear-resistant fibers have been pushed apart, not torn.

### What Makes a Quality Daypack?

Many stores sell backpacks. So which is a better value: A bargain pack from a department store or a well-engineered technical pack? You may wonder: "A daypack is a daypack, right? It's a sack attached to a couple of shoulder straps. How different can they be?"

You'll initially save money with a bargain pack, but you'll likely miss out on design refinements found in top-brand packs that deliver better performance, convenience and comfort. Such as? Well, to name a few:

- Padding, support and shaping: Shoulder straps and, on some models, scapula pads, offer plusher padding and great longevity in comfort; some packs include shaped bottoms or structured back panels to prevent loads from sagging, keeping items closer to your back.
- Women-specific designs: Shoulder straps are contoured to comfortably conform to the female form; some offer narrower profiles.
- Tougher fabrics at lighter weights: Discount packs commonly use weightier fabrics purchased in bulk to cut costs; more sophisticated packs may use a rugged 630-denier nylon that offers superb durability at a noticeable weight savings.
- Ventilated back panels: Mentioned previously.
- Sustainable fabrics and materials: An emerging trend already seen in packs such as the Osprey React.
- Water-resistant zippers: Eliminates storm flaps, saving weight and creating a cleaner look. Many times these zippers are welded, or glued, in place. This eliminates stitching, increases watertightness, boosts strength and further reduces weight.
- Waistbelt pockets: Handy for keeping small items (gel packs, for instance) within easy but unobtrusive reach.
- Hydration system compatibility: Some packs include sleeves for a hydration reservoir; most offer a port for a hydration hose.
- Tool loops and daisy chains: External attachment points for an ice axe, crampons, climbing gear, trekking poles.
- Small but useful nuances, including:
  - Padded back panels
  - Media pockets, even earbud holders
  - · Laptop slots or sleeves in school, commuter or travel packs
  - Organizers and keyholders