



TECHNICAL SPECIFICATION: RUCKSACKS

RUCKSACKS

Your rucksack is one of the most important bits of kit to get right (along with footwear), to ensure it provides you with a comfortable and stable carry; a badly-fitting or unsuitable rucksack can, at best, be very uncomfortable and, at worst, do your back some serious harm.

The following sections are designed to help you choose the right rucksack for your chosen activities and to provide advice to help make sure it fits you properly.

HOW BIG SHOULD YOUR RUCKSACK BE?

Rucksack size tends to be measured in litres and can range from the smallest at around maybe 5 litres, all the way up to 100+ litre expedition packs. This section is intended to provide a few pointers, to help you choose the right volume of pack for your intended use.

A note on variable volumes: Not all packs are of fixed volume; some will have their volumes quoted as a range e.g. 50-75 litres, 45+10 litres etc. This is a reflection of a number of features that the rucksack may have that allows it to carry loads of varying size; these features may include expansion gussets, compression straps, expandable lids etc. When a quoted volume is a range, the first number will be the capacity of the pack with none of the expansion capability in use, whilst the second number indicates the capacity of the pack expanded out to its fullest, or the extra capacity of the expansion.

Variable volume packs tend to be amongst the more flexible designs, especially when travelling, given most people's tendency to pick all sorts of junk (sorry, souvenirs!) en route!

Up to 25 litres: This volume bracket includes smaller daysacks for general use, school/college bags and smaller active packs.

25-35 litres: Larger daysacks (such as for winter day walks) fall into this bracket, as do cragging sacks and the larger active packs (especially those used for adventure races).

35-55 litres: Packs for serious winter walking; this is a popular volume bracket for weekend packs too. The majority of climbing and alpine packs tend to be about this size. Carry-on travel luggage is usually around this size as well.

55-75 litres: Most backpacking, trekking and travel rucksacks fall into this category; the most popular tend to be around the 65 litre mark.

75+ litres: Rucksacks of this size tend to be for serious expedition or military use.

DIFFERENT TYPES OF RUCKSACK:

Rucksacks tend to be categorised according to their primary

intended end use; this section covers some of the different types of rucksack that are available.

Daysacks: The term tends to encompass any small rucksack that would be used for a day's activities; they can either be classic top-loader type things or of a zip-entry type. Generally speaking, the top-loaders are more popular for outdoors activities and the zip-entry ones are usually chosen for urban/travel applications.

Active packs: Active pursuits (e.g. running, biking, adventure racing etc) tend to require small packs that are far more stable and lighter than an average daysack. Active packs usually of similar volume to daysacks, but are often shaped and equipped to make them a far more stable carry, even when doing activities which involve moving fast. They also tend to work extremely well in the daysack role, because of this stability.

Climbing/Alpine packs: These packs tend to be clean, straight-sided (no side-pockets) designs, made from robust materials; they usually include compression straps, to stabilise the load when the pack is only partly full. Very lightweight designs are available, but these tend to be less durable than the more traditional designs made from tougher (but heavier) fabrics. A lot of smaller climbing packs get used for walking (usually, a comfortable carry) and also travelling (good hand-luggage size and uncluttered design).

Big Packs: This category incorporates both big trekking/backpacking packs and specialised travel packs. These packs are your big load carriers and will often include an adjustable back system. Trekking/backpacking packs tend to be top-loader packs; they often have side pockets, which on newer designs may be collapsible (in conjunction with the ever useful compression straps). Travel packs are usually zip entry (although you can get a few top-loader designs) and all have zip-away back systems, to protect the most vulnerable bit of the pack from the privations of baggage handlers etc. The zip-entry designs usually include lockable 'kissing zips' which make them easier to secure (with a judicious padlock or two) against the casual thief/having stuff planted on you.

FEATURES OF A RUCKSACK:

Some of the more useful features to look for in a rucksack; the example featured is a big trekking/backpacking pack, as it illustrates the majority of features found on rucksacks.

Lid pocket which may include a key clip inside.

Large side pockets which may be collapsible for maximum versatility.

Compression straps to keep the load stable, even if the pack is part full. Can be used to stow gear underneath.

Back system which includes a contoured, padded harness and comfortable hip belt; may be adjustable. Some modern chest straps include a safety whistle, which is a nice touch.

Wand pockets are useful if tent poles etc are being carried under the compression straps.

Trekking pole/ice axe attachment points.

Extendible lid gives extra capacity. Accessory attachment points on the outside of the lid can be useful too.

Bungee cord: allows light objects to be stowed on the outside of the pack.

Separate base compartment which may have a removable divider between it and the main body of the pack, to increase flexibility.

HOW TO FIT A RUCKSACK:

1) Get the hipbelt in the right place. The majority of the weight from a rucksack should be transmitted via the hipbelt, straight onto your hips – one way to view modern rucksacks is as humungous bumbags, with shoulder straps to stop them falling over. The hipbelt should be fastened firmly (not crushingly tightly) onto your hip-bone; it should not be around your waist.

2) Adjust the shoulder straps. Once the hipbelt is comfortably sat on your hips, the next step is to tighten the shoulder straps (having first ensured that any load adjusters are fully loosened); don't over-tighten them though, or you may lift the hipbelt off your hips.

3) Tweak the back length. Many rucksacks (especially larger ones) have adjustable back systems on them; you may need to alter the back length to achieve a precise fit. A couple of things to look for: As a rough guide, when the back is set to the correct length, the angle described between the pack and the shoulder straps should be about 30 degrees. Some packs also include a coloured tab on the shoulder straps, which should be roughly on the mid-line of your shoulders when the straps are done up.

4) Tension the load-adjusters. These should be taught (to stabilise the top of the pack), but not tight; too tight and they tend to lift the shoulder straps off your shoulders.

5) Tension any other load-stabilising straps. Many modern rucksacks include other straps to stabilise the load; the commonest run between the base of the rucksack and the hipbelt. These should be tensioned, to stabilise the load.

6) Adjust and do up the chest strap. This avoids the shoulder straps creeping outwards whilst you are walking and makes for an easier and more comfortable carry.

RUCKSACK BACK SYSTEMS:

There are a number of general types of back systems available on rucksacks today, with almost infinite variations at manufacturer/model level. This section is a general over-view of the main types.

Fixed: This type of back system has virtually no scope for length adjustment and is usually found on small packs. There will usually be padding for comfort.

Size-tolerant: The addition of load-adjusters and a low attachment point for the shoulder straps makes some packs fit a moderate range of back lengths. These backs will usually be padded and may include some sort of internal frame or stiffener, to make for a more comfortable carry.

Adjustable (limited): Increasingly, smaller packs are being produced with a limited amount of length adjustment in their back systems; essentially, these are an extension of the size-tolerant idea which allow a more precise fit.

Fully Adjustable: Most big packs have fully adjustable back systems, to allow a fully-tailored fit to be achieved, to make for as comfortable a carry as possible. All fully adjustable back systems include an 'internal frame' i.e. metal (usually aluminium alloy) spars to maximise load transfer onto the hips. These backs systems are the easiest to fit.

Males and female specific back systems: A large number of rucksacks now come in male and female specific versions, to further increase the comfort of the carry. Shoulder straps are shaped differently, as are hipbelts, to account for differences in anatomy; back lengths are different (women tend to have shorter backs than men) and the widths of the back system vary too.

Generally speaking, men will fit a male specific rucksack more comfortably, whilst women will fit a female specific rucksack more comfortably. Having said that, don't automatically rule out the 'wrong' sex of rucksack e.g. narrow-shouldered men often fit a 'female' rucksack better, whilst very tall women can often be better off with a 'male' rucksack.

Smaller packs usually have a unisex design of back system, although it is now possible to get smaller packs in female specific versions.

COMFORT GUARANTEED:

We want you to be happy with your rucksack.

Any rucksack (almost!) can feel comfortable with nothing in it! It is absolutely crucial for your rucksack to fit you properly. We recommend that when you get your rucksack home (before you cut the tickets off), you fill it up with the sort of gear you're really going to be carrying and try the pack out around the house (adjusting the back system as necessary). Going up and down stairs is a useful indicator of comfort.

If, after you've done this, you feel your rucksack isn't comfortable, bring it back to us in the same condition it was sold in (with the receipt) and we'll organise an exchange or refund.