

## HOW TO: Choose a Waterproof Breathable (WB) Jacket

Whether you are hiking, traveling, canoeing or cycling, a good waterproof breathable jacket is an essential part of your outdoor wardrobe.

### What is Waterproof?

Waterproof means **100%** waterproof! To determine whether a garment is truly waterproof check the seams. If the seams have been completely taped or "seam-sealed" then the jacket is waterproof. No manufacturer will go to the trouble of taping seams if the fabric itself is not waterproof.



### What is Breathable?

The most comfortable raingear is waterproof **and** breathable. A very crude test for breathability is to hold a portion of fabric up to your mouth and try to blow air through. If air passes through, then there is some degree of breathability. Please note that manufacturers certainly have more accurate methodologies for testing breathability!

Oh... and please don't think that a WB jacket is more breathable than a jacket that has no waterproofing. For highly aerobic activities such as cross-country skiing or running we do not recommend using a WB jacket as you will still produce moisture faster than your WB jacket can get rid of it. For highly aerobic activities, go for a simple wind jacket or a soft shell that has no WB layer.



### Gore-Tex vs. "alternative" WB's



Gore-Tex is the original WB product but now there are many alternatives at more affordable prices. The North Face offers Hyvent, Sierra Designs offers Torrent, Columbia has Omnitech..and so on. All WB's operate on the principle that they contain tiny pores that may be 20,000 times smaller than a water droplet but many times larger than a water vapour molecule. As a result the membrane will allow vapour to escape from the inside but it will not allow water in from the outside.

Gore-Tex is actually laminated to the inside of the shell fabric. The alternatives such as Hyvent are a polyurethane coating that is "painted" on to the inside of the outer shell. For the average user, all WB's are comparable in terms of being 100% waterproof. However, the laminate construction of Gore-Tex does make it more breathable and more durable. If you are looking for a jacket that will last 8 -10 years (or more as we have seen from some customers), then Gore-Tex is the way to go. If you don't want the price tag of Gore-Tex then go for an "alternative" because they do work well but expect to get 3-4 years out of the jacket.

The debate over Gore-Tex vs. alternatives can get confusing because Gore-Tex jackets sometimes appear heavier and more durable. Gore-Tex and alternative WB membranes can be applied to many different types of shell fabrics and it is this shell

fabric that actually determines the weight, feel and the durability of the garment itself. It stands to reason that Gore-Tex is often (but not always) applied to heavier, tougher fabrics as they are inherently more durable. On the other hand, many people who are 'packing light' want a very light weight, compact jacket and an alternative WB works well in this situation.

How can you tell if a jacket is Gore-Tex? Look for the Gore-Tex symbol, usually located on the inside just below the collar. If it is not there it is not Gore-Tex.

### **Why does my WB jacket 'wet out'?**

We sometimes have customers reporting that their WB jacket isn't waterproof anymore. While this may be the case if your jacket is just plain worn out, it may just be that it needs some treatment. All WB jackets come with a DW coating on the outside of the jacket. This coating is not the same as the Gore-Tex or alternative waterproofing mentioned earlier. This is a silicone-based, water-repellent coating that causes the water to roll up and bead off the outside of the jacket. Over time, this coating does wear off and the result is that water "soaks" in to the outer layer of fabric and it appears the jacket is leaking. In actual fact the jacket is probably not leaking but this 'wetting out' does affect the breathability of the garment and it begins to feel clammy and ineffective.

The solution? Firstly, wash your jacket using a Tech Wash (we recommend Nikwax) that does not leave harmful chemical residues in your jacket and then apply a treatment that will rejuvenate the DW coating. Tumblehome carries a full selection of specialty laundering cleaners for your WB jacket and many other technical garments.

### **Still not sure what to choose?**

Come in to Tumblehome and tell us what it is you want to do and our staff will help you sort it out. We carry several brands of WB jackets that come in a vast array of colours and styles. Because they all have different fits and different features there is no substitute for trying on a few jackets as it will certainly make your decision much easier.