



OUTERWEAR RATINGS DEMYSTIFIED

WATERPROOF RATING

Why is this important?

WATERPROOF RATING

Ability to withstand water under pressure

MORE RESISTANCE

TESTING OF WATERPROOF MATERIALS INVOLVES TWO CRITERIA



Rain-room and static-column testing - measures absolute water resistance. How? Take a measuring tube and stand it up vertically over a piece of waterproof fabric. Fill the tube with water. The measurement is the height of the water column in millimeters when leakage begins. The ratings appear as "5K mm" or "5000mm waterproof" and refers to the amount of rainfall a fabric can withstand in a single day. A 5000mm waterproof rating means the fabric can withstand 5000mm (approx. 195 inches) of rainfall in a single day without leakage.



REMEMBER: this is just the fabric, not the garment itself. A garment constructed from 5000mm-capable fabric is not necessarily a 5000mm waterproof jacket. Seam taping is the next factor, and a huge one.

Needle-stitched seams create thousands of small holes that allow water to sneak in. High-performance outerwear has sealed or taped seams to prevent leaks. There are two levels of seam-sealed construction: **CRITICAL SEAMS SEALED**: Only the upper body of a garment is sealed or taped, usually the shoulders, chest and sleeves for jackets. This protects the most vulnerable seams, but leaves other areas less protected.

FULLY SEAM-SEALED: All seams are sealed or taped for maximum protection in harsh weather. Only "fully" taped garments are fully "waterproof".

WHAT ABOUT BREATHABILITY?

A fabric's breathability rating is represented in units of g/24hrs/m². This indicates how many grams of water vapor pass through a square metre of fabric in a day of laboratory testing.

More is better for high-exertion activities versus low perspiration activities.

WARMTH RATINGS - IS IT A MYTH?

Warmth ratings for outerwear are very subjective. Not only is everybody different, conditions at any given temperature are different as well. Variables such as activity level, humidity, wind, sun, body type and what other clothing you are wearing all affect how cold a given temperature feels. Some people just don't handle cold as well as others so the first variable is whether you run cold or hot. One reason people expect to see temperature ratings on clothing is because they're used to seeing them on sleeping bags. The main reason sleeping bag companies can rate bags is that a sleeping person is inactive and (most often) in a sheltered environment, eliminating many of the variables which make ratings for clothing so difficult and inaccurate.

FABRIC

ONE BASIC RULE THICKNESS WARMTH Add layers for warmth and protection.



DRYFRAME WARMTH RATINGS