Case Study

Performance textile innovation forging new ground in waterproofing

The North Face
Alameda, CA.
Executive summary

When a performance outdoor apparel company wanted to validate its claims about a revolutionary new material, it knew just where to turn.

About

For more than 50 years, The North Face has been on a mission to provide the best gear possible for outdoor athletes and everyday explorers pushing the boundaries of exploration and adventure. They undertake rigorous testing with every new product and take pride in their comprehensive testing facilities. Further, their team of extreme athletes wear the apparel in real world conditions—including summiting Mount Everest—to help evaluate and improve performance.

Challenge

The North Face developed a new breathable, waterproof material, FUTURELIGHT™, to deliver waterproof apparel that is both breathable and air permeable. In addition to athlete testing, The North Face’s laboratory team tests waterproof breathability in garments through hydrostatic testing (liquid testing under pressure to evaluate leaks) and moisture vapor transmission (the passage of water vapor through a substance). Once satisfied, The North Face goes a step further to assess air permeability which, in most cases for waterproof garments, is at or near zero.

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For FUTURELIGHT, a new, innovative fabric technology, The North Face realized they needed to go a step further to assess waterproofness and air permeability. To do so, they turned to UL for an unbiased, third-party confirmation to support their claim and help build trust in their innovation.

**How UL helped**

The North Face turned to UL, an independent third-party organization with extensive experience in textile performance testing. UL helped The North Face push the limits of how garments are evaluated. To verify that FUTURELIGHT™ is both waterproof and breathable, UL and The North Face went beyond normal apparel industry standards for waterproof and looked to the standards for safety and efficacy of first responder gear. FUTURELIGHT™ was tested under conditions for firefighter, emergency medical technicians (EMT), and hazardous materials (HazMat) gear.

To test The North Face FUTURELIGHT™ material, UL’s laboratory performed a liquid integrity test, during which a large quantity of water is sprayed on a garment from various directions to evaluate both the waterproofing abilities of the fabric and the garment construction. For The North Face, UL even extended its testing from 30 minutes to 60 minutes and at a rate of about 235 gallons of water per hour, exceeding the requirements set for first responder gear testing. FUTURELIGHT™ garments passed their test, and The North Face was authorized to put UL’s Marketing Claim Verification mark on current and new models of the tested FUTURELIGHT™ product.

**Results**

Third-party verification is a crucial step in putting rigorous and thorough testing at the center of a promise to customers. UL’s long history in science-based, independent testing is why The North Face trusted the company to help evaluate and validate its marketing claims. Using the UL Marketing Claim Verification helps demonstrate to customers that a company takes seriously its responsibility to tell the truth to its customers.

Verification programs are annual engagements with the option to renew. Re-testing is required if there are any changes to the manufacturing process, facilities producing the product, or materials used to produce the product. For UL and for The North Face, performance matters and the truth about performance matters even more.