
Dry.Q™ Elite/

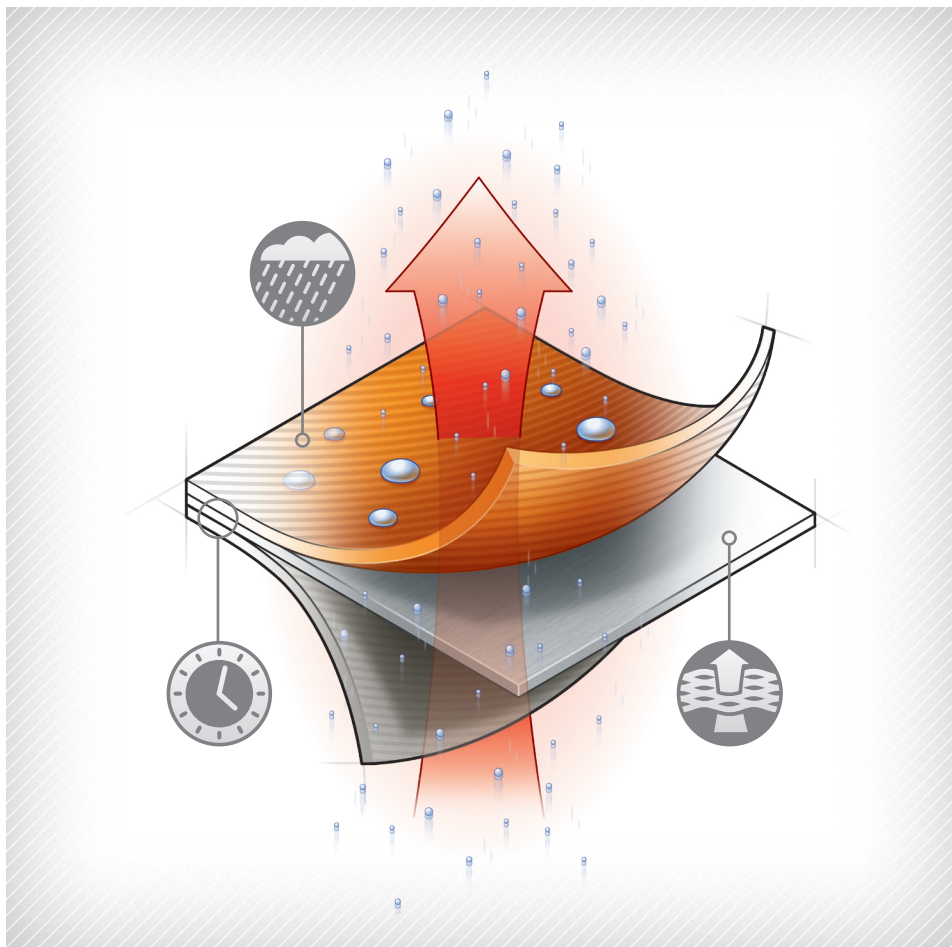
Air Permeability + Durability

Air-permeable membranes are the next generation of breathable fabrics

Immediate results—you can feel the difference the minute you put the jacket on




Extremely durable: outperforms leading brands in the 500-cycle wash test

“I used to avoid putting my shell on. Now it’s totally different. Dry.Q Elite has changed the way I think about shells.” — Janet Bergman, climber



Instant-on shell technology

Dry.Q Elite is the first waterproof-breathable fabric to start breathing the minute you start using it. Unlike traditional waterproof-breathable fabrics, Dry.Q Elite doesn't require humidity to trigger its breathability. No waiting. No clamminess. Just shell functionality like you've always wanted.

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-  Instant-on technology means breathing starts immediately
 -  Air-permeable membrane maximizes body vapor outflow
 -  Completely waterproof and windproof
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Dry.Q™ Elite by the Numbers/



Dry.Q Elite offers a number of advantages over competing waterproof/breathable technologies. Because it's air-permeable, it starts working the instant you put it on. But while it excels at air-permeable breathability, it also performs at the top of its class in the traditional moisture vapor transfer (MVTR) breathability. Working together, high MVTR rates and air permeability are the one-two punch that makes Dry.Q Elite a whole new kind of non-clammy waterproof/breathable experience.

What You Need to Know

First, the measurements. There are a few things about waterproof/breathable fabric testing to get straight.

1. The single most important variable is the weight of the face fabric. A jacket with 20-denier face fabric will always breathe much better than a 70-denier face fabric.
2. Two mechanical factors contribute to breathability: moisture vapor transfer (MVTR) and air permeability.
3. Different tests measure different things. These are the traditional breathability tests:

The Upright Cup Test

What: Fabric is stretched over a cup of water. Moisture transfer through the fabric is measured.

Problems: The air beneath the fabric is artificially humid.

The Inverted Cup Test

What: A cup is placed over fabric resting on a bed of water. Moisture transfer through the fabric is measured.

Problems: Measures what happens only when the inside of fabric is covered in water.

The Hot-Plate Test

What: Fabric is stretched over a water-laden, body-temperature hot plate. Moisture transfer through the fabric is measured.

Problems: Measures heat-generated evaporation rather than cross-temperature breathability.

4. In recent years, a new test has been developed. It is viewed as more accurate at simulating field conditions and is used by the U.S. Army labs, Polartec®, Mountain Hardwear and the PIT labs.

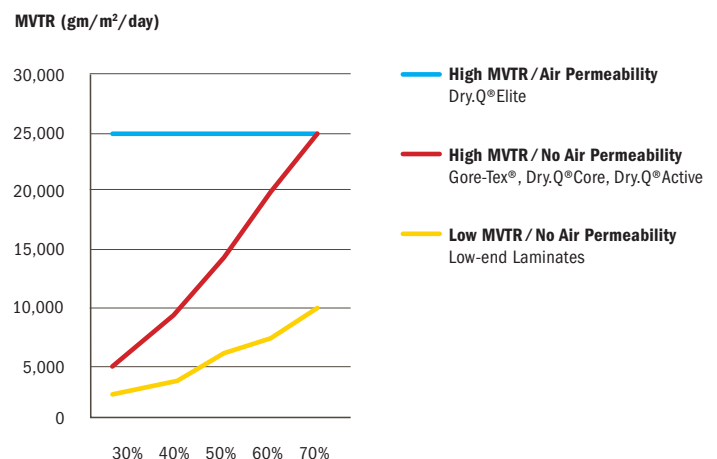
The DMPC Test

What: Fabric is tested in a chamber with variable humidity and temperature.

Benefit: Truer comparison to how a garment performs on the body.

5. The DMPC test measures moisture vapor transfer as humidity changes from 0% to 100%, simulating what happens inside a jacket as your body heats up and begins to sweat. Both MVTR and air permeability contribute to breathability. Only Dry.Q Elite excels at both.

Breathability Across Humidity



Source DMPC Test, Natick U.S. Army Soldier Research Center