

TTL Eclipse™

Countless hours of on-going tests painstakingly performed in various types of waterproof/breathables in the lab and on the water, enable Stohlquist to offer remarkably fine developments we put in our products. Several steps beyond, only the best is achieved by insistence on performance to take discovery to the next level. Stohlquist proprietary "Total Eclipse™" fabric measures 20,000-25,000 mm² of water resistance, meaning there is no chance water will penetrate the fabric. There are two methods we use to measure a fabric's ability to transport moisture or moisture vapor: the Upright Cup Test (UCT) and the Inverted Cup Method (ICM). UCT measures how much moisture vapor can penetrate a micro-porous laminate or coating, while the ICM is a test of the hydrophilic laminate and measures how much moisture is wicked from the inside of the laminate to the outside of the laminate. Just about every other so-called breathable fabric available performs only one of these tasks, not both at the same time. With a UCT rating of 6,000-7,000 grams/mm², and an ICM rating of 7,000-8,000 grams/mm², proprietary "Total Eclipse™" incorporates both ratings for maximum breathability, the best of both worlds.

"Total Eclipse™" has an oleophobic layer (outermost layer), a micro-porous membrane, and an inner scrim layer, all sandwiched together to create the optimum mix of durability and breathability. The oleophobic layer prevents membrane contamination from the outside elements, and protects the micro-porous membrane, the layer that allows the fabric to breathe. The breathable membrane has billions of pores per square inch, with each pore many times smaller than a water droplet. These tiny holes are too small for water and wind to pass through from the outside, but large enough for moisture vapor to pass, so your body's perspiration is able to escape and you don't get clammy and uncomfortable. The inner scrim layer helps in transferring or pulling moisture away from your body. Combine this exceptional fabric to our proven construction methods of assembly along with final product pressure-testing for leaks; we guarantee you will not find a finished product anywhere that will outlast or exceed the performance a Stohlquist. No liquid from the outside or the inside will get you wet, only keep you dry.