

WE HAVE OUR ORDERS. SHATTER CONVENTION.

POLARTEC® ALPHA®

Polartec® Alpha® is the latest evolution of synthetic insulation offering a rare combination of lightweight warmth and true breathability in a “puffy” style garment. Because Polartec® Alpha® insulation is highly durable and more stable than other synthetic insulation products, more open-construction woven face and back fabrics can be selected to create an air permeable package. This small amount of airflow rapidly draws moisture away from the body and allows Polartec® Alpha® to be worn in a wider range of activities compared to classic “vapor barrier” style insulation.

POLARTEC® ALPHA® DIRECT

Alpha® and Alpha® Direct are engineered as an active insulation that regulates core body temperatures during stop/start conditions. Therefore the latest evolution of synthetic insulation offering a combination of true breathability and lightweight warmth. Alpha and Alpha Direct insulation are highly durable and stable knit fabrics and more open-construction woven fabrics can be selected to create an air permeable package. The adaptive breathability helps eliminate the need for dropping or adding layers while on the move, making it versatile for endless activities.

HOW DOES IT WORK?

Alpha® and Alpha® Direct starts with a highly efficient insulation fabric. The patented technology is uniquely suited to create warmth without weight, and exceptional breathability, compressibility and dry times via high-loft fibers in a low density knit. They offer a combination of unique performance attributes that are highly valued in all activities where versatility is a benefit.

A NEW GARMENT DESIGN CONCEPT IN SYNTHETIC INSULATION.

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The beauty of Alpha® and Alpha® Direct concept is the freedom they offer apparel designers to construct a garment that can be worn over as wide a range of activities as possible. **

Polartec® Alpha® insulation is designed to be sandwiched between two outer fabrics. The insulation is highly durable; the fibers are not prone to “migration” or poking through the outer fabrics. As a result, more open construction fabrics that allow some air permeability can be selected. Polartec® can offer air permeable testing for customers who would like to test breathability and CFM rating of outer fabrics.

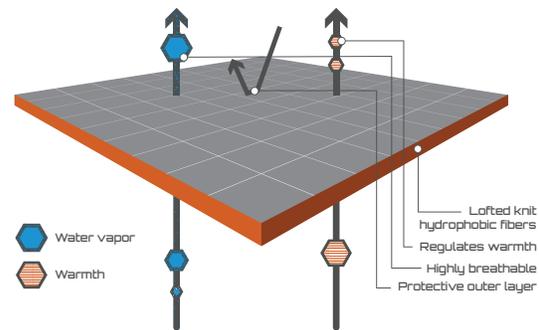
Polartec® Alpha® Direct insulation is designed for use with one outer fabric only. The unique shape and size of fibers enhance the resiliency and durability of Alpha® Direct. This visible technology offers direct warmth, increased breathability and compressibility and faster dry time while reducing garment weight due to eliminating the need for a lining fabric.

Apparel companies can differentiate based on the outer fabric choice, precisely dialing in the amount of breathability and stretch desired for the final package. The durability of Polartec® Alpha® and Polartec® Alpha® Direct create more flexibility in product design.

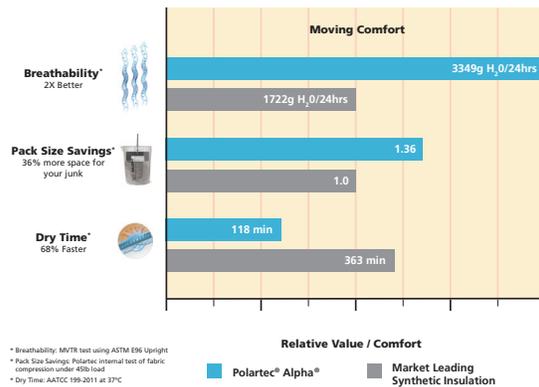
** Polartec® can offer air permeable testing for customers who would like to test breathability and CFM rating of outer layer and lining fabrics along with finished garment air permeable testing.

ACTIVE WARMTH

- Superior breathability
- Warmth without weight
- Packable
- Fast drying
- Easy care



Polartec® Alpha® Insulation
For People On the Move

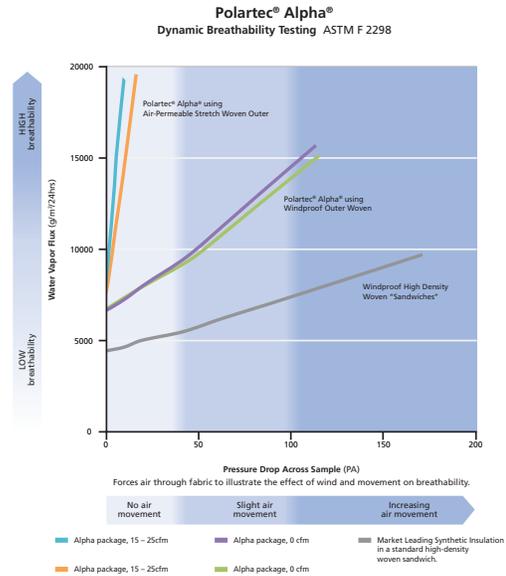


POLARTEC® ALPHA®

AIR MOVEMENT AND BREATHABILITY

Polartec® has tested some potential garment/fabric combinations to show the possible comfort ranges achieved by different pairings. We have looked at results both in the lab and on our own Athlete Advisory Board. Breathability can be increased by air movement through a garment, that process is called convection. The best way to measure breathability in the lab is using a DMPC (Dynamic Moisture Permeation Cell) because it allows us to measure both diffusion and convection of moisture vapor. We have found a high level of correlation between the breathability predicted by this lab tool and the breathability experienced by our athletes in the field.

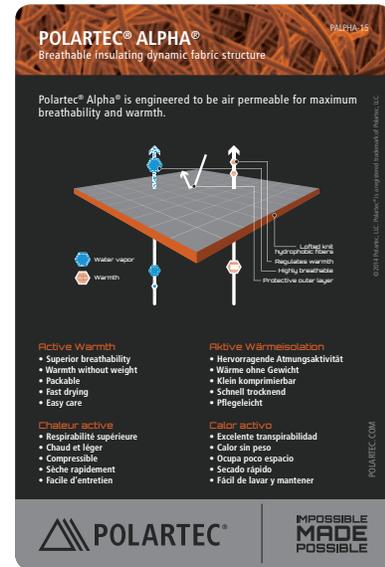
As you can see from the chart (right), choosing a highly air permeable woven for the outer fabric will produce a garment with very high breathability. Our athletes agree that this combination provides comfort for both skinning up and skiing down the mountain. Choosing a low or non airpermeable woven will give the user a high level of weather protection, while the Polartec® Alpha® components maintain a noticeably breathable, comfortable inner climate. The use of standard "downproof" windproof wovens as package fabrics severely limit the breathability of synthetic insulation.



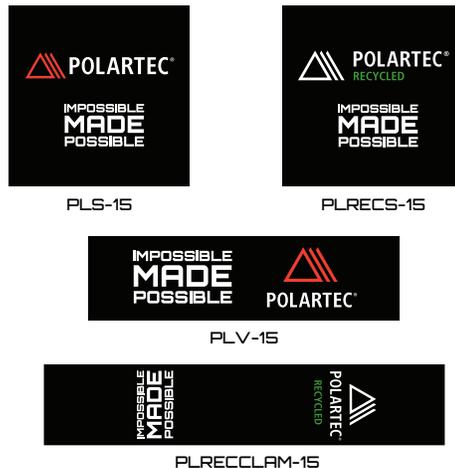
TECHNICAL HIGHLIGHTS

- Superior breathability to provide comfort in all activities: does not restrict the movement of moisture vapor
- Provides warmth without weight and bulk
- Dries quickly to minimize heat loss
- Packable
- Easy Care
- Versatile; appropriate for a broad range of activities a mid- or outer-layer depending on product design

HANG TAGS



LABELS



PALPHA-15

ACCESSORY TAGS



PALPHARACC-15

HEAT TRANSFERS

