

### WATERPROOF, BREATHABLE FABRIC TECHNOLOGIES

#### GORE-TEX®

GORE-TEX® is designed to provide breathable comfort and durably waterproof and windproof protection. GORE-TEX® is ideal for a wide range of outdoor activities.

The secret of GORE-TEX® fabrics lies within its revolutionary membrane.

The expanded PTFE portion of the membrane contains over 9 billion microscopic pores per square inch. These pores are approximately 20,000 times smaller than a drop of water, but 700 times bigger than a molecule of moisture vapour. So whilst water droplets cannot penetrate the GORE-TEX® membrane, moisture vapour (a gas) can easily escape.

#### GORE-TEX® PRO WITH MICRO-GRID™ BACKER TECHNOLOGY

GORE-TEX® Pro laminates are engineered with the most rugged, most breathable, durably waterproof and windproof fabrics for extended and extreme conditions. GORE-TEX® Pro products meet the demands of outdoor professionals and serious enthusiasts.

The Micro-Grid™ Backer Technology improves garment comfort and performance using an innovative internal backer fabric. This fabric enhances garment breathability, decreases garment weight and improves internal abrasion and snag resistance. This fabric also slides more easily over mid layers.

All GORE-TEX® Pro laminates use nylon face fabrics for maximum durability.

#### GORE-TEX® WITH PACLITE TECHNOLOGY

GORE-TEX® with Paclite technology features the lightest, most packable fabric. GORE-TEX® with Paclite Technology is durably waterproof, windproof and extremely breathable and is ideal when weight and space are critical.

Berghaus garments constructed using GORE-TEX® Pro and GORE-TEX® with Paclite technology meet GORE® Extreme Wet Weather Construction requirements. Garments with this rating are engineered to pass GORE® most aggressive rain test, simulating extended vertical and horizontal wind-driven rain conditions. These garments deliver superior protection against extreme and extended wet weather conditions through the use of advanced design techniques.

#### GORE-TEX® ACTIVE

Garments engineered with GORE-TEX® Active laminates are ideal for highly aerobic, done-in-a-day activities and are built for extreme breathability to provide durably waterproof and windproof protection for guaranteed comfort. Featuring a lighter weight, streamlined 3-layer construction, this completely new class of waterproof garments delivers extreme breathability and excellent next-to-skin comfort.

Ideal for all-weather fast forward athletes seeking durable protection and comfort during highly aerobic, done-in-a-day activities such as trail running, mountain biking, and fast Alpine ascents.

GORE-TEX® Active laminates combine a lighter, thinner GORE-TEX® membrane with fine denier performance textiles to deliver the ultimate 3-layer solution for the Active consumer. On the liner side, a proprietary lamination technology integrates the backer textile directly into the GORE-TEX® membrane, allowing for extreme breathability and excellent next to skin comfort.

GORE-TEX® Active features in both our Extrem™ and Trail ranges, where both weight and performance are essential for successful light and fast projects and expeditions. Berghaus garments constructed using GORE-TEX® Active adhere to the strictest design constraints to ensure weight is minimised and breathability is maximised. Elite end-user comfort and protection are at the forefront of the latest innovation from GORE-TEX®.

#### GORE-TEX® ACTIVE REINFORCEMENT:

GORE-TEX® Active reinforcement laminates are composed of higher denier face textiles, a thicker membrane, and the same high performance backer technology, and are specifically designed for use in high wear areas of GORE-TEX® Active garments.

GORE-TEX® Active reinforcement fabrics are carefully selected to ensure optimum performance and durability.

#### AQ™2

AQ™2 is designed for use on the hill, tried and tested, it offers good waterproofing, breathability and is lightweight. AQ2 offers a moisture vapour transmission rate of 8,000g/m<sup>2</sup>/24hrs, meaning that moisture vapour can easily escape through the fabric enhancing overall enjoyment of the outdoors. AQ2 provides a hydrostatic head of 10,000 mm H<sub>2</sub>O column, ensuring the fabrics remain waterproof and the end-user protected from all but the harshest weather conditions.

#### AQ™2.5

AQ™2.5 fabrics allow for extremely lightweight and packable products. The highly advanced polyurethane coating is protected by a protective print that is exclusive to Berghaus. This ensures outstanding breathability and waterproofing, with the protective print eliminating the need for a lining fabric. AQ™2.5 offers a moisture vapour transmission rate of 8,000g/m<sup>2</sup>/24hrs and a hydrostatic head of 10,000 mm H<sub>2</sub>O column ensuring the fabrics remain waterproof and the end-user protected.

#### AQ™ 2.5 Stretch

AQ™2.5 Stretch fabrics combine the lightweight and packable features with stretch ensuring exception freedom of movement. AQ™2.5 Stretch fabrics are constructed using a highly advanced polyurethane membrane which is also protected by Berghaus' exclusive print which eliminates the need for a lining. AQ™2.5 Stretch offers a moisture vapour transmission rate of 10,000g/m<sup>2</sup>/24hrs and a hydrostatic head of 10,000 mm H<sub>2</sub>O column ensuring the fabrics remain waterproof and the end-user protected.

## WEATHER RESISTANT FABRIC TECHNOLOGIES

### WINDSTOPPER® SOFT SHELL

WINDSTOPPER® Soft Shell offers total windproofness and maximum breathability, combining the comfort of a soft mid layer and the water resistance of a shell in one garment. WINDSTOPPER® Soft Shell keeps you comfortable with the freedom of movement you need for enhanced performance in a wide range of activities and weather conditions.

### WINDSTOPPER® TECHNICAL FLEECE

WINDSTOPPER® Technical Fleece provides more warmth and comfort than non-windproof fleece with less bulk by combining total windproofness and maximum breathability. WINDSTOPPER® Technical Fleece is effective as a mid layer or outer layer, keeping you warm and comfortable in cool and windy conditions.

### WINDSTOPPER® ACTIVE SHELL

WINDSTOPPER® Active Shells are the lightest, most packable garments offering total windproofness, maximum breathability and water resistance. WINDSTOPPER® Active Shells keep you comfortable for enhanced performance during highly aerobic activities.

### AF™ SOFT SHELL

AF™ Soft Shell fabrics effectively combine the shell and mid layers to offer excellent all round performance for a wide range of activities. AF™ Soft Shell fabrics are engineered to offer wind and water resistance whilst maximising thermal comfort & moisture management.

The AF™ Soft Shell fabrics offer good stretch and recovery properties to ensure excellent comfort and mobility. AF™ Soft Shell fabrics are available in 3 forms:

#### AF™ Soft Shell - Bonded - Fleece Thermal Backer

High performance layers are carefully selected and brought together to maximise end user comfort. These fabrics are engineered to offer water and wind resistance (less than 25 cfm maximum) making them comfortable in a wider range of activities and weather conditions. The thermal backer maximises thermal comfort.

#### AF™ Soft Shell - Double Weave

These fabrics are developed using highly advanced weaving techniques which create double sided fabrics, offering very different functions on each face. The DWR treated outer layer offers durability, abrasion resistance along with water repellency and wind resistance (less than 25 cfm maximum). The inner layers are designed to offer next to skin comfort where the fabric structure maximises moisture management and allows micro air pockets to form to maintain an excellent next to skin microclimate.

### PERTEX® MICROLIGHT

Perfected through intensive research and development, PERTEX® Microlight has become the global standard for lightweight outdoor gear. Highly abrasion resistant, soft, downproof, windproof and having a durable water repellency, PERTEX® Microlight contains a well-balanced list of features, making it ideal for all your mountain adventures.

### AF™

A tightly woven, synthetic fabric that provides excellent insulation retention properties, good packability, a high level of wind resistance (less than 5 cfm) and superb breathability. AF™ is treated with a DWR finish that is durable to home laundering - the water just keeps on shedding off this fabric.

### INSULATION TECHNOLOGIES

#### PRIMALOFT® PL1 FILL

A unique Microfibre insulation which resembles the physical and thermal properties of down. PRIMALOFT® insulation is lightweight and compressible and is unsurpassed in its ability to keep you drier and warmer than down and other synthetics.

#### AT-Fibrefill

AT-Fibrefill insulation range offers thermal efficiency, a low water up take coupled with fast dry properties along with good compressibility and recovery. The weight of AT-Fibrefill is carefully selected within and across garments to offer a range of optimised thermal comfort levels.

### FLEECE FABRIC TECHNOLOGIES

#### POLARTEC® THERMAL PRO®

POLARTEC® Thermal Pro® is a visually dynamic and technically advanced fleece fabric. The 100% polyester velour structure creates air pockets that trap air and retain body heat, providing outstanding warmth without weight. POLARTEC® Thermal Pro® fabric dries quickly to minimise heat losses from the body.

#### POLARTEC® CLASSIC MICRO

POLARTEC® Classic Micro utilises a 100% polyester velour structure which creates air pockets that trap air and retain body heat, providing outstanding warmth without weight. POLARTEC® Classic Micro has excellent pill resistance and packability.

#### POLARTEC® POWERSTRETCH® PRO

POLARTEC® Powerstretch® Pro features body-hugging 4-way stretch. The smooth outer layer offers superior abrasion resistance and durability whilst the soft inner layers pulls moisture away from the skin ensuring that the microclimate next to the skin is warm, dry and comfortable.

#### ADVANCED THERMALS

The Advanced Thermals range is a collection of fleece fabrics developed specifically for Berghaus to meet our exacting standards of thermal insulation properties, pilling resistance, stretch and great visuals. The Advanced Thermals range is offered in the following categories designed to maximise end user requirements:

**AT™-Classic:** A 100% polyester classic mid-weight fleece fabric designed to offer a good level of thermal insulation and a durable double-sided pill resistant finish. Warm and very comfortable they retain much of their warmth when wet, dry quickly and are easy to care for.

**AT™-Micro:** A classic microfleece made from 100% polyester micro denier yarn, designed to offer a velour touch. The microfleece has a non-pilling face to ensure its performance and looks are retained after repeated launderings. AT-Micro is a lightweight and packable fleece.

**AT™-Optic:** AT-Optic fleece fabrics take on all the great characteristics of our AT-Classic fleece and more with great thermal insulation levels & pill resistance finishes accompanied

by great new visuals provided by high loft constructions, structured knits, and two-tone colour effects.

**AT™-Stretch:** AT-Stretch fabrics are designed to offer good durability, moisture management and great stretch. AT-Stretch fabrics have a smooth face for good durability and non-binding layering. The raised inner structures are designed to trap air to maximise thermal insulation, whilst ensuring that moisture is moved through the fabric. AT-Stretch fabrics have excellent stretch characteristics to ensure a long lasting, great fit.

**AT™-Wind Resist:** AT-Wind Resist fabrics combine a smooth and durable face structure that offers moderate wind resistance with a brushed, wicking inner layer to ensure moisture management and thermal comfort. This also offers the added benefits of ARGENTIUM technology to restrict any odour retention.

**AT™-Wind Proof:** AT-Wind Proof fleece fabrics combine the great characteristics of our Advance Thermals fleece range with a breathable, windproof membrane to produce a fleece fabric that will keep you warm on the windiest of winter days as well as offering durable pill-resistant finishes and great visuals.

## KNITTED NEXT TO SKIN FABRIC TECHNOLOGIES

### ARGENTIUM®

ARGENTIUM® is a Berghaus exclusive Baselayer technology offering the following features:

- Odour resistance properties through the use of silver ion technology
- UV blocking properties achieved through the use UV absorbers and optimised knit structure
- Moisture management and wicking properties through the use of a denier gradient knit structure and/or channelled yarns

ARGENTIUM® is available in a variety of weights and knit structures.

### ARGENTIUM® powered by POLYGIENE®

ARGENTIUM® fabrics which are powered by POLYGIENE® have all the benefits of ARGENTIUM® but with the odour resistance coming through POLYGIENE® 'permanent odour control technology'.

### POLYGIENE®

POLYGIENE® uses natural silver salt made from recycled silver to provide an effective and permanent odour-free effect by inhibiting the growth of odour-causing bacteria on fabrics. This means that your garments 'stay fresh' for longer.

### SHIRTING FABRICS

Selected shirting fabrics are now treated with ARGENTIUM® technology powered by POLYGIENE® providing:

- Odour resistance properties through the use of silver ion technology
- UV blocking properties achieved through the use UV absorbers

A variety of nylon/polyester check fabrics ensure the fastest possible dry times coupled with good protection from the sun's rays. Utilising POLYGIENE® technology to control unwanted odours, these fabrics are designed to be comfortable for travelling, trail and everyday use.

## LEGWEAR FABRIC TECHNOLOGIES

### CORDURA®

CORDURA® brand fabrics have over 30 years of trusted, rugged performance in clothing and equipment in some of the world's toughest environments. Offering exceptional abrasion resistance and long-lasting durable woven fabrics – CORDURA® brand fabric performs.

### STRETCH NYLON

Stretch nylon fabrics use nylon yarns to enable tough standards of strength, abrasion resistance and durability to be achieved while the stretch yarns ensure a great fit and freedom of movement. These fabrics are treated with DWR finishes for good water shedding and quick dry performance.

### NYLON

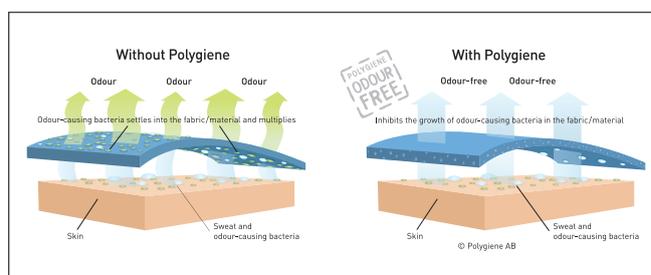
Nylon fabrics are made from nylon yarns and are designed to be hardwearing and abrasion resistant. When treated with a DWR finish, the fabrics also offer good water shedding. These fabrics offer excellent protection from the sun's rays with a UPF of 50+.

### STRETCH POLYESTER

Stretch polyester fabrics incorporate polyester yarns for great handle and drape along with elastane yarns to ensure a great fit and freedom of movement. These fabrics are treated with DWR finishes for good water shedding and quick dry performance.

### POLYCOTTON

Polycotton fabrics are made from 65/35 polyester cotton. The fabric is treated with a water repellent finish to promote water shedding and quick drying. These fabrics offer excellent protection from the sun's rays with a UPF of 50+. These fabrics are comfortable yet hard wearing, perfect for everyday outdoor use.



**What is Polygiene?** A permanent odour control technology for the treatment of high performance fabrics and other materials.

**Why use it?** Sweat is odourless but helps create an environment for odour-causing bacteria to multiply. When sweat mixes with odour-causing bacteria on fabrics, odour results.

**How does it work?** Uses low concentrations of natural silver salt, a highly effective antimicrobial, to inhibit growth of odour-causing bacteria.

**Who should use it?** Everyone, especially active people who demand natural, longlasting odour control.

### Key advantages

- Certified permanent odour control
- Guaranteed to last for the life of the garment
- Safer next to the skin
- Eco-friendly
  - bluesign® approved
  - On the Oeko-tex® list of approved products
  - Made of recycled silver
  - Less washing – wear longer before wash
- Registered under the EU Biocidal Product Directive and the US EPA

