

WATERPROOF TECHNOLOGIES

HYDROSHELL®



Advanced waterproof technology from Berghaus, designed to keep you drier for longer, whatever your adventure. Guaranteed.

HYDROSHELL® ELITE PRO



Advanced waterproof technology from Berghaus, with storm level protection, keeping you dry and protected when performance matters most. This durable, lightweight fabric is ideal for mountaineering and close to the rock activities.

HYDROSHELL® ELITE



Lightweight waterproof technology from Berghaus, with storm level protection to keep you dry even in the worst conditions. Our comfort touch technology provides enhanced next to skin comfort. Ideal for hiking, trekking and multisport activities.

HYDROSHELL® HYPER



Advanced waterproof technology from Berghaus in an ultra-light weight package. Incredibly light and packable while still offering exceptional levels of waterproof protection. Ideal for running, biking and other high intensity activities.

HYDROSHELL® AIR



Advanced waterproof technology from Berghaus, in an ultra-breathable package, keeping you dry and comfortable. Hydroshell® Air is exceptionally breathable, for optimum comfort during high intensity activities. The membrane allows air to pass through the fabric in both directions, regulating your body temperature and allowing you to perform to your peak.

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

Gore-Tex® Active laminates provide extreme breathability and durably waterproof and windproof protection for comfort, guaranteed. They use fine denier performance textiles, a thinner Gore-Tex® membrane and a proprietary lamination technology integrating the backer textile directly into membrane to achieve maximised breathability. Gore-Tex® Active garments are ideal for all-weather fast forward athletes seeking protection and comfort during highly aerobic, done in a day activities such as trail running, mountain biking, and fast Alpine ascents.

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.



GORE-TEX® CKNIT

Gore-Tex® CKNit utilises a brand new circular-knitted backer to create the most comfortable to wear 3L Gore-Tex® product for enthusiastic outdoor end use. Compared to previous 3L Gore-Tex® it is softer, lighter and more breathable while still providing the same high levels of durable waterproof performance.

AQ2™



AQ2™ 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/m²/24hrs, 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 H₂O column, ensuring the fabrics remain waterproof and the end-user protected from all but the harshest weather conditions.

WEATHERPROOF TECHNOLOGIES

WINDSTOPPER® SOFT SHELL



Gore-Tex® 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. Gore-Tex® 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



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

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.

AF SOFT SHELL

AF | SOFTSHELL

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 and moisture management. The AF™ Soft Shell fabrics offer good stretch and recovery properties to ensure excellent comfort and mobility.

AF SOFT SHELL BONDED-FLEECE THERMAL BACKER



Windstopper® 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®



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

EXTREM TECHNOLOGIES

ALPINE BALACLAVA

An adaptable solution for face protection in changeable weather. The adaptable Alpine Balaclava is ideal for covering the head and face during hostile mountain weather providing the protection you need. The system can be worn in multiple ways providing either neck, chin and head protection whenever needed. Cleverly tailored, constructed and styled the balaclava can be comfortably hidden away when not needed or pulled out as desired. The Alpine Balaclava is a versatile and functional addition to your technical hooded fleece.

OFFSET BAFFLES

A unique and exclusive baffle construction from Berghaus eliminates cold spots to provide a super lightweight insulation structure proven in the harshest conditions in the world. Down baffle construction is an extremely considered element of technical garment design at Berghaus. In 2012 Our MtnHaus™ Research and Development team created a unique baffle construction to provide vital protection in the world's harshest environments. Berghaus Offset Baffles provide a super lightweight insulation structure that avoids cold spots and wind penetration from occurring.

The Offset Baffles are constructed by the inner and outer face fabrics being stitched to a central scrim layer with offset stitch lines creating multiple down chambers. These chambers overlap on either side of the central lining providing insulation and cold weather protection at all times. For 2016 MtnHaus have introduced our new Reflect Mesh Technology to the central layer of our offset baffles, providing up to 10% increased warmth whilst further reducing weight to create the ultimate baffle solution.

REFLECT MESH

Reflect Mesh technology is an aluminium coated matrix that is added to the core of the Ramche 2.0 and Nunat Reflect Extrem Down Jackets. This mesh acts as a reflector preventing radiative heat loss, bouncing heat that you generate back into the jacket considerably boosting warmth. The MtnHaus™ research and development team have done extensive testing both in a controlled lab with Mick Fowler and on expedition with Leo Houlding on Mirror Wall in the high Arctic of Greenland. The testing showed that the Reflect Mesh delivers up to 10% greater thermal efficiency which can be vital when you're playing in the worlds coldest environments.

KEY BENEFITS

- Every individual fibre is coated with aluminium creating a matrix that reflects heat meaning that you retain the warmth that you create.
- Invisible Reflect Mesh technology around the centre of your body – warmth to the core.
- Provides up to 10% greater thermal efficiency compared to a down jacket without.

7 DENIER FACE FABRIC

AN EXCLUSIVE SUPER LIGHTWEIGHT YET STRONG FACE FABRIC.

We are using an exclusive 7 denier super lightweight face fabric on the Ramche 2.0 Jacket which is lighter than and twice as strong as other 7 denier fabrics in the market.

Advanced fabric engineering has been used to produce a super lightweight textile with an incredible strength to weight ratio. At only 22 grams per meter² this fabric combines some of the finest 7 denier yarns with high strength 30 denier polyamide ripstop, to create a fabric with truly exceptional performance. It is 10% lighter and up to twice as strong as previous fabrics in this class making it the perfect fabric to encapsulate our warm Hydrodown®; lightweight and durably tough keeping you protected, warm and focused.

KEY BENEFITS

- 7 denier face fabric offering a supremely feather light weight.
- 100% improved tear strength providing a tough face fabric.
- Completely windproof and breathable.

XPANSE™ BACK

AN INNOVATIVE AND UNIQUE DESIGN OFFERING UNRIVALLED FREEDOM OF MOVEMENT ACROSS THE BACK AND SHOULDERS.

Designed by the Berghaus MtnHaus™ team and tested by Leo Houlding on Mirror Wall in Arctic Greenland, the Xpanse™ Back is a technical, highly tailored design feature, offering a unique approach to stretch. Simple in design but highly challenging in waterproof construction, the Xpanse™ Back uses a storm proof box pleat, adapted from high end tailoring to provide extra stretch across the shoulders and back. The Incredible freedom of movement our Xpanse™ pleat provides is perfect for when you're reaching for those hard moves or awkward gear placements.

KEY BENEFITS

- Extra stretch across the back and shoulders.
- Fully waterproof, technically tailored design solution to allow dynamic body movement.
- Extensively tested by our athlete team including Leo Houlding's first ascent on Mirror Wall in Arctic of Greenland.

XPANSE™ FACE GUARD

ADAPTABLE FACE PROTECTION FOR THE HARSHTEST WEATHER CONDITIONS.

The Xpanse™ Face Guard is an exclusive design feature on the Extrem 8000 Pro Jacket. Constructed to provide face protection against spindrift and harsh punishing weather whilst still allowing you to breathe freely and remain focused on the ascent. The design is simple and so clean that you won't know it's there until you really need it. Pull down the zip to expand the guard and carry on with your climb. Berghaus athletes Leo Houlding and Mick Fowler worked closely with the MtnHaus™ Research and Development team testing this feature.

XPANSE™ HOOD

THE NEW XPANSE™ HOOD WILL REVOLUTIONISE HOOD MANAGEMENT, A SELF-CLOSING EXPANSION PLEAT CONTRACTS WHEN NOT NEEDED – MINIMIZING EXCESS HOOD MATERIAL WHEN WORN WITHOUT A HELMET.

The Berghaus MtnHaus™ team developed the innovative Xpanse™ Hood system to provide exceptional fit and weather protection when worn with or without a helmet. By using small magnets placed along the circumference of the hood you can adjust the fit easily with no nonsense. Simply pull up the hood to expand, then release to allow the hood to close – less excess fabric more comfort.

KEY BENEFITS

- Provides exceptional fit with or without a helmet.
- Solves the issue of excess material when wearing without a helmet.
- Quick, simple and easy to use.
- Highly advanced magnets with minimal field of attraction provide a positive and precise closure without navigational interference.

INSULATION TECHNOLOGIES

HYDRODOWN® POWERED BY NIKWAX

HYDRODOWN® NIKWAX HYDROPHOBIC DOWN



When you're experiencing wet and wild weather conditions in the mountains this technology from Berghaus helps keep you dry, warm and comfortable. This fully RDS (Responsible Down Standard) certified down is from European sources and is processed in the USA using a PFC-free water repellent treatment to ensure it continues to perform even in wet conditions. From AW16 Berghaus partnered with Nikwax to bring a revolutionary, first to market new technology, setting a new benchmark for fluorocarbon free performance. We have combined the market leading water repellent performance of Berghaus Hydrodown® with the environmentally friendly credentials of Nikwax to create Hydrodown®, the first fluorocarbon free, water resistant down that remains dry for 16 hours of hydrophobic shake testing. Hydrodown® is super compressible for easy packing, and has an amazing warmth-to-weight ratio that no synthetic alternative comes close to matching. It boasts some amazing attributes that you won't find in natural goose down:

Hydrodown® is available in four different fill levels – 850, 800, 700 and 600. The number refers to the quality of the down utilised, the higher the number the better the quality. Quality determines how much down is needed to fill the baffle to achieve the same level of warmth. The higher the down number the more effective the down becomes, therefore providing a lighter solution with a greater warmth to weight ratio. All of our hydrodown is bluesign approved.

HYDRODOWN® 850

HYDRODOWN® 850

Our premium down insulation technology, utilising top quality goose down providing the highest levels of warmth to weight.

HYDRODOWN® 700

HYDRODOWN® 700

Our superior down insulation technology, utilising excellent quality goose down providing great levels of warmth to weight.

HYDROLOFT®

HYDROLOFT®

Hydroloft® Ois designed to keep you warmer for longer during outdoor activities. Hydroloft® is available in two different structures: a sheet construction providing a standard insulation appearance and a spherical shape that fuses the original Hydroloft® fibres together mimicking down clusters for a baffle construction. It keeps you warm and comfortable and performs in the wet providing enhanced comfort, whatever your adventure.

HYDROLOFT® ELITE PRO

HYDROLOFT® ELITE PRO

Our premium synthetic insulation technology utilising innovative insulation to provide the highest levels of warmth to weight with exceptional breathability.

HYDROLOFT® ELITE

HYDROLOFT® ELITE

Our superior synthetic insulation technology utilising innovative insulation to provide the great levels of warmth to weight with exceptional breathability.

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.

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.

PERTEX QUANTUM



Pertex® Quantum uses a tightly woven structure to provide a light and soft fabric that allows insulation to fully loft.

PERTEX QUANTUM AIR



Pertex® Quantum Air is engineered with increased air permeability to provide a balance between wind resistance and breathability.

DIAMOND FUSE



Pertex® fabrics with Diamond Fuse technology use yarns with diamond shaped filaments that lock together to create a strong, durable and snag resistant fabric with greater water beading properties.

POLARTEC® POWER STRETCH® 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

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 it retains much of their warmth when wet, dry quickly and are easy to care for.

AT MICRO

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

AT-Optic fleece fabrics take on all the great characteristics of our AT-Classic fleece and more with great thermal insulation levels and pill resistance finishes accompanied by great new visuals provided by high loft constructions, structured knits, and two-tone colour effects.

AT STRETCH

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.

INSULATION TECHNOLOGIES

AT WIND RESIST

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|WINDPROOF

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.

AT FIBREFILL

AT|FIBRE FILL

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.

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.

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.

NEXT-TO-SKIN FABRIC TECH

ARGENTIUM®

ARGENTIUM

Argentium® is a Berghaus exclusive Baselayer technology that offers odour-resistance properties through the use of silver ion technology. It also provides UV blocking properties achieved through the use of UV absorbers and optimised knit structure. Another key benefit is its moisture management and wicking properties, delivered 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 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'.

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 and UV blocking properties achieved through the use of UV absorbers. These 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.

STRETCH NYLON

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.

Key advantages

- Certified permanent odour control
- Guaranteed to last for the life of the garment
- Safer next to the skin
- Eco friendly
- Registered under the EU Biocidal Product Directive and US EPA

COLOURKIND ECO FABRIC

COLOURKIND

Unlike regular textiles our Colourkind Eco yarn goes through fewer stages of the dyeing process, stages which consume large quantities of water and generate the most pollutants. By adding the colour to the very beginning of the yarn production process we are able to produce a better performing product that is great for the environment.

Superior colourfast fabric that will not fade or be washed out
89% water and 63% chemical savings
62% reduced CO2 emissions
67% reduction in the Chemical Oxygen Demand (COD) of the waste water