HYVENT™ TECHNOLOGIES

GORE-TEX® PRO SHELL

Gore-Tex® Pro Shell is engineered with the most rugged, highly breathable fabrics, making it ideal for extended exposure to extreme conditions. These fabrics are designed to perform at an elite level in numerous activities in order to meet the demands of outdoor professionals and serious enthusiasts alike. The advanced waterproof membrane used by Gore-Tex® Pro Shell fabric incorporates increased breathability characteristics allowing the user to enjoy longer exposure to harsh conditions without losing vital body heat.

GORE-TEX® PERFORMANCE SHELL

Gore-Tex® Performance Shells are designed to provide superior comfort and durable waterproof protection in a wide range of outdoor activities. The Gore-Tex® revolutionary patented membrane technology is specifically engineered to form an impenetrable barrier against wind and water while maintaining breathability. Gore-Tex® Performance Shell fabric is used in a two-layer construction for a lighter and softer feel, and in three-layer construction for a more heavy-duty alternative.

HYVENT™

HyVent™ is a superior waterproof, breathable technology utilizing a polyurethane (PU) coating that consists of a tri-component multilayer formula for waterproof protection, moisture permeability, and durability. This technology has been lab tested in The North Face® Quality Assurance lab to ensure the best possible durability and function while also maintaining a comfortable level of breathability. The minimum breathability achieved using HyVent™ is 600 g/m²/24 hours on the Moisture Vapor Transfer Rate (MVTR) scale. To test the level of waterproofness, The North Face® subject HyVent™ garments to 20 wash cycles; after which they retained an average of more than 60 PSI on the waterproofing Mullens Test.

In addition to quantitative lab science, qualitative feedback has been factored into HyVent™ development, and HyVent™ garments have been heavily field-tested for over three years with outstanding proof of long-term performance. Says skier and mountain guide Rick Armstrong, who has many first descents of famed peaks to his name: “This technology keeps me out in the storms, catching the best snow long after most people have gone inside. It’s just as good—if not better—than anything else on the market.”

HYVENT™ DT

BREATHABILITY: 750-800 g/m²/24 hrs
WATERPROOF RATING: 25 PSI
MINIMUM AFTER 20 LAUNDERINGS
USAGE: Flight Series™ and Exploration

HyVent™ DT uses the same principle as the original HyVent™ coating but reduces the thickness of the third layer. In HyVent™, the third layer is a high-performance, protective covering that ensures the long-term durability of the microporous elements within. HyVent™ DT uses a tactile, micro-grid print to boil this layer down to its barest, most vital function. This minimalistic micro-grid print provides a barrier between the garment and skin while channeling moisture away and allowing the underlying microporous layers to function more efficiently. HyVent™ DT is a lightweight, packable, and more breathable fabric than other lined treated fabrics. Technically advanced, it allows water vapor molecules to escape while preventing water from entering and lets the garment move easily over other layers. The minimum breathability achieved using HyVent™ DT is 700 g/m²/24 hours on the Moisture Vapor Transfer Rate scale.

THE NORTH FACE® TESTING METHODS

The North Face® tests breathability using the Upright Cup method, which measures the amount of water that passes through fabric in an evaporated form over a specific amount of time. Upright Cup more accurately simulates a true field experience because it retains a microclimate of air between the surface of the water and the fabric, as would be the case when an individual wears a garment, a layer of relative humidity separates the skin from the fabric.

Some companies use the Inverted Cup method of testing, which measures the amount of water that passes through fabric when water is applied directly to the fabric in an inverted fashion under pressure. This test assumes that there is liquid water pressure forcing water through the fabric when it’s in garment form, which is much less realistic than the North Face® method. For various reasons, the test results in grams will be much higher when using the Inverted Cup method; in other words, results from the two tests cannot be compared.

There are two additional reasons that The North Face® uses the Upright Cup method: 1) Upright is the original U.S. Military standard testing method and was therefore the logical choice when The North Face® first began testing, and 2) The North Face® has many years of historical data measuring Upright Cup results, which can be compared with field research. A change in test methods would invalidate this knowledge.

A third test method is RET, which Gore uses. The North Face® does not use RET because it is extremely expensive, difficult to control in the lab, and no data is provided by The North Face® mills.

REFERENCES

1. MVTR testing per ASTM E96B Upright Cup Water Method.
2. Black Circle: Machine wash warm (105°F) + dry 90 minutes.

These averages are based on the results of all Fall 2002 HyVent fabrics. Individual results will vary depending on the weight and construction of each fabric.

SOFT SHELL TECHNOLOGIES

GORE-TEX® SOFT SHELL

Constructed with soft and warm fabrics, the waterproof, windproof, and breathable Gore-Tex® Soft Shell is designed for reduced layering and improved freedom of movement in colder conditions. A specific Gore-Tex® membrane is bonded directly to the outer fabric and a fleecy liner on the inside. The result is a highly durable, versatile outerwear product that combines optimum weather protection with maximum comfort for the outdoor athlete.

TNF™ APEX SOFT SHELL

WIND RESISTANCE: 10+ CFM
WEIGHT RANGE: 113-198 g (4-7 oz)
USAGE: High levels of extended aerobic activity (running, biking, climbing) in mild winter and spring conditions

TNF™ Apex Aerobic fabric denotes the lightest and most breathable of TNF™ Apex garments. It offers the greatest stretch and mobility, with a CFM of 10+, making it ideal for running, cycling, and other highly mobile aerobic activities.
THE NORTH FACE / FALL 2010

THE NORTH FACE / FALL 2010

TNF™ APEX UNIVERSAL
WIND RESISTANCE: 5–15 CFM
WEIGHT RANGE: 227–312 g (8–11 oz)
USAGE: Medium levels of aerobic activity (hiking, biking, climbing, skiing, snowboarding) in moderate winter conditions

TNF™ Apex Universal is the most versatile of the TNF™ Apex fabrics. With enhanced stretch and a CFM between 5 and 15, it is both breathable and water resistant, making it ideal for a wide range of activities and weather conditions.

TNF™ APEX CLIMATEBLOCK
WIND RESISTANCE: 0 CFM
WEIGHT RANGE: 312–397 g (11–14 oz)
USAGE: Mild levels of aerobic activity (hiking, skiing, snowboarding) or for use in more severe winter conditions

TNF™ Apex ClimateBlock is the most protective TNF™ Apex fabric. Virtually waterproof and windproof, the fabric also maintains a comfortable level of breathability. TNF™ Apex ClimateBlock is ideal for trekking, skiing, and snowshoeing in challenging, inclement weather conditions.

FLEECE TECHNOLOGIES

POLARTEC® POWER STRETCH®

POLARTEC® Power Stretch® fabrics feature body-hugging, four-way stretch and are very breathable. They keep you dry when you sweat and provide warmth without weight. These are the most versatile outdoor and fitness apparel fabrics available today. Many of the fabrics feature a proprietary construction with two unique surfaces: The durable nylon outer layer is wind and abrasion resistant; the soft inner layer pulls moisture away from your skin, keeping you dry, warm, and comfortable.

INSULATION TECHNOLOGIES

GOOSE DOWN INSULATION

The North Face® uses only the highest quality goose down in all of its products. Each lot of down is thoroughly tested at three stages of production for loftiness, moisture resistance, and ability to regain loft after compression. The fill power of goose down is an indicator of two important features: the warmth-to-weight ratio and compressibility, both critical to the user’s warmth and comfort. True fill power is measured by placing one ounce of down in a graduated cylinder and measuring the volume the down occupies in cubic inches. The North Face® products are insulated with exclusive, high-fill-power down ranging from 550 fill to 900 fill, which represents the highest-quality down commercially available.

CLIMASHIELD® NEO

A revolutionary new synthetic utilized by The North Face®. Climashield® Neo is the first-ever commercially available, dual-density fill. That means it utilizes two deniers of fiber in one continuous filament. Larger fibers maintain loft and compaction resiliency, while the smaller fibers have a softer feel and the best heat-trapping characteristics.

Neo’s resiliency sets a new benchmark for the outdoor industry. One test consisted of completely compressing the Neo fill in a lab through 100,000 cycles. In the end, it regained 78 percent of original loft, substantially more than any previous synthetic fill used by The North Face®.

Tests show that Neo also outperforms other synthetic fills in moisture categories. Each fiber is coated with a heat-activated finish that is exceptionally water repellent. As indicated by a low evaporative resistance rating, Neo filament is less inclined to absorb water and actually facilitates vapor transportation away from the body and out through the shell fabric.

PRIMALOFT® ONE INSULATION

PrimaLoft® One is a patented, ultrafine microfiber blend that is incredibly soft, lightweight, and water repellent. PrimaLoft® One synthetic insulation absorbs three times less water, is 15 percent warmer when dry, and is 24 percent warmer when wet than the closest competitive insulation. In addition to these impressive thermal properties, PrimaLoft® One has a down-like softness that adds comfort and appeal.

TECHNICAL PRODUCT FEATURES

PIT-ZIPS

Pit-zips allow body heat to dissipate from your body’s core and arm pits, allowing increased ventilation that keeps you cooler and more comfortable. Our pit-zips have protective double flaps to keep out moisture.

DWR FINISH

Durable Water Resistant (DWR) finishes on fabrics and zippers give long life to waterproof technologies. The addition of an enhanced hydrophobic treatment enables DWR to adhere to materials for an extremely extended lifetime.

CRESCENT DROP SEAT CONSTRUCTION

The revolutionary new Crescent Drop Seat construction is a more efficient and user-friendly solution to the old drop seat problem. The nearly flat, horizontal zipper provides three unique benefits. First, it facilitates a single effortless pull, relieving stress on the zipper and replacing the up-and-down, struggling pulls of previous drop seats. Second, the flat zipper creates a wider and more user-friendly opening. Third, the Crescent Drop Seat construction produces a clean, flat, and appealing finish to the garment.

SUMMIT SERIES™

Developed with the world’s most serious outdoor endeavors in mind, Summit Series™ features athlete-tested and technically advanced apparel and equipment. This premier alpine-inspired collection is designed for expedition use from base camp to summit, where the extremes of weather, terrain, and temperature demand the highest level of performance.
The Performance team works hard to incorporate useful details and trims that will make our garments more durable, comfortable, versatile and safe. We do this to ensure our athletes can count on our products regardless of conditions or circumstances. Attention to detail is paramount. Listed below are a few of the keys to our success:

**Flat-Locked Seams**
The North Face® uses flat-locked stitching on strategic seams whenever possible to create a lower profile garment with less abrasion.

**Thumb Loops**
Thumb loops provide additional coverage and warmth at the wrist and hand area, and create an uninterrupted barrier to the elements when wearing gloves.

**Waistband Key Pocket**
Most Performance bottoms include a hide-away key pocket built into the waistband.

**Tagless**
The North Face® Performance garments utilize heat transfer logos to eliminate skin irritation caused by traditional sewn-in tags.

**Roll-n-Tie Stow System**
The Roll-n-Tie stow system is an innovative, minimal, lightweight and easy to use jacket storage feature. No stuff sacks or stowpockets: just a loop and a clip and you are on your way.

**Stash Pocket**
Many of our Performance tops have built-in stash pockets, perfect for cash, identification cards, credit cards or an MP3 player.

**Reflective Logos**
Most Performance styles incorporate reflective logos to increase visibility during evening or early morning exercise.

**Wrapped Seams**
In order to avoid abrasion and hot spots, The North Face® designed seams that angle across abrasion/pressure points or bypass them entirely to improve comfort and fit.

**Mesh Panels**
The North Face® often uses mesh panels in a body-mapping technique: Panels of highly breathable fabric are strategically sewn into garments to cover body areas that produce higher levels of perspiration. This helps manage moisture and regulate body temperature.
Minerale™ fabric uses Natural Technology,™ which is derived from crushed volcanic minerals that are embedded into the fiber. The naturally occurring minerals in Minerale™ yarns are commonly used to purify and soften water because of their ability to absorb impurities. Minerale™ fabric provides for exceptional evaporative cooling; it wicks and evaporates moisture quickly and is refreshed with normal washing and drying. Minerale™ fabric manages odor by trapping them in its pores, and then releases them during normal washing and drying. It also provides UV protection to keep you more comfortable in any environment. Minerale™ will not wash off or wear out: It is permanent and always working.

For Fall 2010, many Performance garments will be treated with Sanitized® Silver for odor control. This silver salt treatment is extremely durable. Sanitized® Silver defends against odor only on the garment, leaving the skin’s natural bacteria alone. Durable, effective and completely safe next to the skin and in the environment, Sanitized® Silver is a cutting edge solution to the problem of odor control.
HARD SHELL TECHNOLOGIES

HI/VENT® ALPHA

BREATHABILITY: 700-750 g/m²/24 hrs
WATERPROOF RATING: 75 PSI avg, 75 avg PSI after 20 launderings
USAGE: Summit Series

Hi/vent Alpha is a waterproof and highly breathable laminate that utilizes a microporous, hydrophobic laminating technology that retains its capabilities in even the most severe conditions. Its laminate membrane, consisting of nearly half a million holes per square inch, allows perspiration to pass through the jacket before it condenses to liquid, keeping the wearer dry, warm, and comfortable. The minimum breathability achieved using HiVent® Alpha is 700 g/²/²/24 hours on the Moisture Vapor Transfer Rate (MVTR) scale.

THE NORTH FACE® TESTING METHODS

The North Face® tests breathability using the Upright Cup method, which measures the amount of water that passes through fabric in an evaporated form over a specific amount of time. Upright Cup more accurately simulates a real field experience because it retains a microclimate of air between the surface of the water and the fabric—as would be the case when an individual wears a garment, a layer of relative humidity separates the skin from the fabric.

Some companies use the Inverted Cup method of testing, which measures the amount of water that passes through fabric when water is applied directly to the fabric in an inverted fashion under pressure. This test assumes that there is liquid water pressure forcing water through the fabric when it’s in garment form, which is much less realistic than the North Face® method. For various reasons, the test results in grams will be much higher when using the Inverted Cup method; in other words, results from the two tests cannot be compared.

There are two additional reasons that The North Face® uses the Upright Cup method: 1) Upright is the original U.S. Military standard testing method and was therefore the logical choice when The North Face® first began testing, and 2) The North Face® has many years of historical data measuring Upright Cup results, which can be compared with field research. A change in test methods would invalidate this knowledge.

A third test method is RET, which Gore uses. The North Face® does not use RET because it is extremely expensive, difficult to control in the lab and no data aid is provided by The North Face® mills.

1 MVTR testing per ASTM E96B Upright Cup Water Method.
2 Wash Cycle–Machine wash warm (105°F) + detergent. Tumble dry low (145°F) for 40 minutes.
3 Moistess testing per ASTM D751. U.S. Federal Standard 191A-95 requires a minimum of 25 PSI.

These averages are based on the results of all Fall 2002 HiVent® fabrics. Individual results will vary depending on the weight and construction of each face fabric.

SOFT SHELL TECHNOLOGIES

GORE WINDSTOPPER® SOFT SHELL FABRIC

Totally windproof, water resistant, and very breathable, Gore Windstopper® Soft Shell garments combine the reliable protection of a shell with the comfort of a mid-layer. These garments keep the enthusiast comfortable without the need for bulky, restricting layers, making them ideal for most active pursuits and weather conditions.

Gore Windstopper® Soft Shell garments are made with unique, soft, quiet, stretch fabrics that are highly abrasion resistant and allow for a wide range of motion. As these garments are very breathable, wearers can be incredibly active and remain comfortable.

TNF® APEX CLIMATEBLOCK

WIND RESISTANCE: 0 CFM
WEIGHT RANGE: 312-397 g (11-14 oz)
USAGE: Mild levels of aerobic activity (hiking, skiing, snowboarding) or for use in more severe winter conditions

TNF® Apex ClimateBlock is the most protective TNF® Apex fabric. Virtually waterproof and windproof, the fabric also maintains a comfortable level of breathability. TNF® Apex ClimateBlock is ideal for trekking, skiing, and snowshoeing in challenging, inclement weather conditions.

MINERALE™

Minerale fabric uses Natural Technology®, which is derived from crushed volcanic minerals that are embedded into the fiber. The naturally occurring minerals in Minerale® yarns are commonly used to purify and soften water because of their ability to absorb impurities. Minerale® fabric provides for exceptional evaporative cooling; it wicks and evaporates moisture quickly and is refreshed with normal washing and drying. Minerale® fabric manages odor by trapping them in its pores, and then releases them during normal washing and drying. It also provides UV protection to keep you more comfortable in any environment. Minerale® will not wash off or wear out; it is permanent and always working.

SANITIZED® SILVER TREATMENT

New for Spring 2010, many Performance garments will be treated with Sanitized® Silver for odor control. This silver salt treatment is an extremely durable antimicrobial. Sanitized® Silver defends against bacteria only on the garment leaving the skin’s natural bacteria alone. The silver ions used in this treatment are microscopic, however they are not nano particles which have raised concerns over comparative anti-odor treatments due to probable human health risks. Durable, effective and completely safe next to the skin and in the environment, Sanitized® Silver is a cutting edge solution to the problem of odor control.

WINDSTOPPER®

Windstopper® soft shells shield the outdoor enthusiast from brittle wind chills by offering total waterproofness with maximum breathability, all while combining the comfort of a soft mid-layer and the water resistance of a shell in one garment. Highly versatile Windstopper® soft shells excel in a broad range of activities and weather conditions, while simultaneously providing active freedom of movement and quick-drying protection that sheds rain and snow.

TECHNICAL PRODUCT FEATURES

DWR FINISH

Durable Water Resistant (DWR) finishes on fabrics and zippers give long life to waterproof technologies. The addition of an enhanced hydrophobic treatment enables DWR to adhere to materials for an extremely extended lifetime.

VAPORWICK®

VaporWick® is a proprietary fabric of The North Face® that moves moisture and sweat away from the skin to the outer surface of the fabric where it can readily evaporate. This process is accomplished by the capillary action of hydrophobic fibers. Capillary action moves moisture and sweat in all directions from where it is abundant (the user’s skin) and transports it to areas of lesser density (the fabric’s outer surface). The removal and evaporation of sweat and excess moisture helps to keep you dry and comfortable.

UPF PROTECTION

UV radiation is an invisible part of sunlight associated with sunburns, premature aging and skin cancer. The sun-protection properties of a woven or knit fabric are dependent upon the transmission, absorption and reflection of UV radiation. The fiber type, dye, construction and finishes determine these characteristics. Our UPF-rated garments offer very good UV protection from prolonged exposure to the sun.
C

a polyurethane (PU) coating

breathable technology utilizing

SHELL

heat.

conditions without losing vital body

characteristics allowing the user

incorporates increased breathability

HyVent® is a superior waterproof, 

USAGE:

minimum after 20 launderings

WATERPROOF RATING:

25 PSI

BREATHABILITY:

HYVENT® 3 LAYER FABRIC

HYVENT® DT FABRIC

HYVENT® 2-LAYER FABRIC

HYVENT® ALPHA

BREATHABILITY: 700-750 g/m²/24 hrs avg (MVTR) Upright Cup*

WATERPROOF RATING: 75 PSI avg. 75 PSI after 20 launderings

USAGE: Summit Series™

HyVent® Alpha is a waterproof and highly breathable laminate that utilizes a microporous, hydrophobic laminating technology that retains its capabilities in even the most severe conditions. Its laminate membrane, consisting of nearly half a million holes per square inch, allows perspiration to pass through the jacket before it condenses to liquid, keeping the wearer dry, warm, and comfortable. The minimum breathability achieved using HyVent® Alpha is 700 g/m²/24 hours on the Moisture Vapor Transfer Rate (MVTR) scale.

THE NORTH FACE® TESTING METHODS

The North Face® tests breathability using the Upright Cup method, which measures the amount of water that passes through fabric in an evaporated form over a specific amount of time. Upright Cup more accurately simulates a true field experience because it retains a microclimate of air between the surface of the water and the fabric, as would be the case when an individual wears a garment, a layer of relative humidity separates the skin from the fabric.

Some companies use the Inverted Cup method of testing, which measures the amount of water that passes through fabric when water is applied directly to the fabric in an inverted fashion under pressure. This test assumes that there is liquid water pressure forcing water through the fabric when it’s in garment form, which is much less realistic than The North Face® method. For various reasons, the test results in grams will be much higher when using the Inverted Cup method; in other words, results from the two tests cannot be compared.

There are two additional reasons that The North Face® uses the Upright Cup method: 1) Upright is the original U.S. Military standard testing method and was therefore the logical choice when The North Face® first began testing, and 2) The North Face® has many years of historical data measuring Upright Cup results, which can be compared with field research. A change in test methods would invalidate this knowledge.

A third test method is RET, which Gore uses. The North Face® does not use RET because it is extremely expensive, difficult to control in the lab, and no data aid is provided by The North Face® mills.

1 MVTR testing per ASTM E96B Upright Cup Water Method.
2 Wash Cycle- Machine wash warm (80°F) + Tumble Dry Low (145°F) for 40 minutes.
3 Marten testing per ASTM 5953. U.S. Federal Standard 191A-55 requires a minimum of 25 PSI. These averages are based on the results of all Fall 2002 HYVENT® fabrics. Individual results will vary depending on the weight and construction of each face fabric.

SOFT SHELL SOFT SHELL TECHNOLOGIES

POLARTEC® CLASSIC 100 MICROFLEECE

Polartec® Classic fabrics are the reference standard for lightweight warmth and breathability, offering unparalleled quality and durability. Polartec® Classic fabrics are the primary choice among experienced outdoors-people.

- Pill-resistant face and back.
- Unique microfibers provide unparalleled soft hand.
- Provides warmth without the weight and bulk of traditional insulating fabrics.
- Versatile; appropriate for a broad range of activities.
- Machine washable.
- Highly breathable to provide comfort in all activities; does not restrict the movement of moisture vapor.
- Dries quickly to minimize heat loss.
Durable; will outlast other fleece fabrics.

POLARTEC® POWER DRY®
Polartec® Power Dry® fabrics are designed to keep the skin dry as body perspiration increases. All fabrics in this series feature a patented, bi-component knit construction that uses different yarns on either side of the fabric. This creates two different surfaces: one that is optimized to move moisture away from the skin, the other to dry quickly. Polartec® Power Dry® fabrics move 30% more moisture away from the skin than single component fabrics.

TNF™ APEX SOFT SHELL FABRIC

TNF™ APEX AEROBIC

WIND RESISTANCE: 10+ CFM
WEIGHT RANGE: 113–198 g (4–7 oz)
USAGE: High levels of extended aerobic activity (running, biking, climbing) in mild winter and spring conditions

TNF™ Apex Aerobic fabric denotes the lightest and most breathable of TNF™ Apex garments. It offers the greatest stretch and mobility, with a CFM of 10+, making it ideal for running, cycling, and other highly mobile aerobic activities.

TNF™ APEX UNIVERSAL

WIND RESISTANCE: 5–15 CFM
WEIGHT RANGE: 227–312 g (8–11 oz)
USAGE: Medium levels of aerobic activity (hiking, biking, climbing, skiing, snowboarding) in moderate winter conditions

TNF™ Apex Universal is the most versatile of the TNF™ Apex fabrics. With enhanced stretch and a CFM between 5 and 15, it is both breathable and water resistant, making it ideal for a wide range of activities and weather conditions.

TNF™ APEX CLIMATEBLOCK

WIND RESISTANCE: 0 CFM
WEIGHT RANGE: 312–397 g
USAGE: Mild levels of aerobic activity (hiking, skiing, snowboarding) or for use in more severe winter conditions

TNF™ Apex ClimateBlock is the most protective TNF™ Apex fabric. Virtually waterproof and windproof, the fabric also maintains a comfortable level of breathability. TNF™ Apex ClimateBlock is ideal for trekking, skiing, and snowshoeing in challenging, inclement weather conditions.

FLEECE TECHNOLOGIES

GORE WINDSTOPPER®
The specially engineered Gore Windstopper® membrane provides wind protection and stabilizes the microclimate close to the skin by allowing excess moisture to escape while preventing unwanted moisture from coming back in. The North Face® offers Gore Windstopper® garments that combine comfort with the level of function you can expect from Gore-Tex®, making it one of the best layers available.

POLARTEC® CLASSIC 100, 200, AND 300 SERIES
Polartec® Classic 100, 200, and 300 Series fabrics are the reference standard for lightweight warmth and breathability. These fabrics have been the primary insulation layer of choice among experienced outdoor enthusiasts for nearly two decades.

POLARTEC® POWER STRETCH®
Polartec® Power Stretch® fabrics feature body-hugging, four-way stretch and are very breathable. They keep you dry when you sweat and provide warmth without weight. These are the most versatile outdoor and fitness apparel fabrics available today. Many of the fabrics feature a proprietary construction with two unique surfaces: The durable nylon outer layer is wind and abrasion resistant; the soft inner layer pulls moisture away from your skin, keeping you dry, warm, and comfortable.

POLARTEC® THERMAL PRO®
Polartec® Thermal Pro® fabrics are the most visually dynamic and technically advanced of the Polartec® insulation fabrics. Available in a variety of unique surface textures and patterns, many of which are designed to enhance performance, Polartec® Thermal Pro® fabrics are great styling options for virtually every end use. New high loft versions have achieved the highest warmth-to-weight ratios ever offered by a Polartec® fabric.

POLARTEC® WINDBLOC®
Polartec® Windbloc® fabrics block 100% of the wind and offer maximum protection from the cold and the elements. Windbloc® combines the warmth of Polartec® thermal fabrics with a polyurethane barrier membrane that allows moisture vapor transmission and is completely windproof and waterproof, eliminating the need for a windbreaker or additional shell. This reduces the weight and number of layers needed to protect and insulate. Windbloc® fabrics are very durable, quiet, and non-pilling, and they have enhanced stretch and recovery, making them appropriate for general outerwear and accessories where weather protection is desirable.

POLARTEC® WIND PRO®
Polartec® Wind Pro® fabrics are four times more wind resistant than traditional fleece while maintaining breathability that is so crucial for high performance across a variety of activities and a wide range of conditions. It performs exceptionally well at both outerwear and insulation and offers long-lasting durability. Proprietary yarns and a very tight construction reduce the effects of wind chill, and a durable, water repellent outer surface effectively sheds rain and snow. In addition to its weather-inhibiting qualities, Polartec® Wind Pro® maintains 85% of the breathability of traditional fleece to keep the outdoor athlete from overheating.

WINDWALL® FABRIC
WindWall® fabric is a proprietary wind-resistant fleece from The North Face®. WindWall® utilizes a unique fabric-bonding process that allows a limited degree of external air permeability (approximately 20 CFM), thereby drastically reducing the effects of windchill and enhancing the user’s warmth and comfort. WindWall® 1 fabric has a mesh liner, and WindWall® 2 fabric has a grid fleece liner for even greater insulation.
INSULATION TECHNOLOGIES

CLIMASHIELD™ NEO
A revolutionary new synthetic technology utilized by The North Face®, Climashield™ Neo is the first-ever commercially available, dual-density fill. That means it utilizes two deniers of fiber in one continuous filament. Larger fibers maintain loft and compaction resiliency, while the smaller fibers have a softer feel and the best heat-trapping characteristics.

Neo’s resiliency sets a new benchmark for the outdoor industry. One test consisted of completely compressing the Neo fill in a lab through 100,000 cycles. In the end, it regained 78 percent of original loft, substantially more than any previous synthetic fill used by The North Face®.

Tests show that Neo also outperforms other synthetic fills in moisture categories. Each fiber is coated with a heat-activated finish that is exceptionally water repellent. As indicated by a low evaporative resistance rating, Neo filament is less inclined to absorb water and actually facilitates vapor transportation away from the body and out through the shell fabric.

HEATSEEKER™ INSULATION
The North Face® proprietary synthetic insulation offers a great warmth-to-weight ratio, is highly compressible, and is extremely durable, making it ideal for cold-weather footwear and many other products that require warmth at minimal bulk.

PRIMALOFT® ECO
PrimaLoft® Eco uses fibers made from a minimum 50 percent recycled materials in combination with standard PrimaLoft® fibers to create a high loft, performance insulation. It is warm, lightweight, and water resistant, with superior softness. PrimaLoft® Eco fibers are produced from postconsumer products (e.g., plastic bottles) and postindustrial waste. At the same time, they are still subject to the rigorous test standards and specifications befitting the exceptional tradition of PrimaLoft®.

GOOSE DOWN INSULATION
The North Face® uses only the highest quality goose down in all of its products. Each lot of down is thoroughly tested at three stages of production for loftiness, moisture resistance, and ability to regain loft after compression. The fill power of goose down is an indicator of two important features: the warmth-to-weight ratio and compressibility, both critical to the user’s warmth and comfort. True fill power is measured by placing one ounce of down in a graduated cylinder and measuring the volume the down occupies in cubic inches. The North Face® products are insulated with exclusive, high-fill-power down ranging from 550 fill to 900 fill, which represents the highest-quality down commercially available.

PRIMALOFT® ONE INSULATION
PrimaLoft® One is a patented ultrafine microfiber blend that is incredibly soft, lightweight, and water repellent. PrimaLoft® One synthetic insulation absorbs three times less water, is 15 percent warmer when dry, and is 24 percent warmer when wet than the closest competitive insulation. In addition to these impressive thermal properties, PrimaLoft® One is lightweight with a down-like softness that adds comfort and appeal.

DWR FINISH
Durable Water Repellent (DWR) finishes on fabrics and zippers give long life to waterproof technologies. The addition of an enhanced hydrophobic treatment enables DWR to adhere to materials for an extremely extended lifetime.

M.C.S.® BLOCKER
Constructed with a molecular bonding process that surrounds each fiber in the fabric’s construction and actively moves moisture away from the body, M.C.S.® Blocker fabric is engineered to provide excellent UV protection while simultaneously keeping the wearer cool, dry, and comfortable.

COOLVISIONS® POLYPROPYLENE
Lightweight, warm, breathable, highly wicking, comfortable, durable, stain resistant and easy on the environment, CoolVisions® polypropylene is the complete package of synthetic performance fibers. Among the lightest of all commercial fibers, apparel constructed with CoolVisions® absorbs less moisture than competing fibers, making it extremely quick to dry. Additionally, CoolVisions® fabric is exceptionally tough and abrasion resistant, and it minimizes heat conduction, resulting in a more even, consistent body temperature.

CRESCENT DROP SEAT CONSTRUCTION
The revolutionary new Crescent Drop Seat construction is a more efficient and user-friendly solution to the old drop seat problem. The nearly flat, horizontal zipper provides three unique benefits. First, it facilitates a single effortless pull, relieving stress on the zipper and replacing the up-and-down, struggling pulls of previous drop seats. Second, the flat zipper creates a wider and more user-friendly opening. Third, the Crescent Drop Seat construction produces a clean, flat, and appealing finish to the garment.

MIRNO WOOL
Merino wool is super lightweight, stretchable, resilient, and exceptionally insulating. In day-to-day wear, it delivers an ideal balance of temperature regulation, supple comfort, and high durability. Merino wool is also naturally odor resistant and stays true to eco-friendly, sustainable production practices.

MIRNERALE-MERINO™
Minerale-merino™ fabrics combine warmth and softness with fast-drying performance. The combination of patented Minerale® and merino fibers creates a fabric that retains the favorable qualities of pure merino—while simultaneously eliminating its limitations—excess weight when wet, lack of wicking ability and ‘wool prickle’ discomfort. The large 3D surface area created by the activated particles in the Minerale® fiber is the catalyst for the accelerated wicking and drying performance. The resulting fabric, Minerale-merino™, is more comfortable in high output conditions, lighter when wet, highly wicking and dries up to five times faster than traditional merino wool.

REFERENCES // TECHNOLOGY
PIT-ZIPS
Pit-zips allow body heat to dissipate from your body’s core and armpits, allowing increased ventilation that keeps you cooler and more comfortable. Our pit-zips have protective double flaps to keep out moisture.

QUICKDRY
QuickDry is a vital feature for any product from The North Face® that is built for use in active endeavors. Fabrics that are designated QuickDry exhibit specific fabric constructions and blends that promote quicker evaporation times when wet, keeping you drier. QuickDry is especially vital to high performance in cooler conditions.

STRETCH ENHANCEMENT
The North Face® applied stretch enhancements to key body locations to increase freedom of movement where range of motion is critical. We studied the anatomy and physiology of a body in motion during various sport activities. In a hunched, arms-forward position, the radius created across the back from wrist to wrist can increase by as much as twelve inches. Under that kind of strain, the stretch enhancements allow the fabric to expand 25 percent over its relaxed state. Fabrics are constructed with mechanical stretch, creating an enhanced elasticity for specific form- and shape-shifting function. These fabrics can stretch up to 30 percent from their relaxed shape and still recover.

This revolutionary technology allows us to take outerwear innovation to another level by adding superior performance features to key aspects of our collection without compromising the waterproofness and breathability expected of The North Face® garments.

SUMMIT SERIES™
Developed with the world’s most serious outdoor endeavors in mind, Summit Series™ features athlete-tested and technically advanced apparel and equipment. This premier alpine-inspired collection is designed for expedition use from base camp to summit, where the extremes of weather, terrain, and temperature demand the highest level of performance.

VAPORWICK®
VaporWick® is a proprietary fabric of The North Face® that moves moisture and sweat away from the skin to the outer surface of the fabric where it can readily evaporate. This process is accomplished by the capillary action of hydrophobic fibers. Capillary action moves moisture and sweat in all directions from where it is abundant (the user’s skin) and transports it to areas of lesser density (the fabric’s outer surface). The removal and evaporation of sweat and excess moisture helps to keep you dry and comfortable.

ZIP-IN
The North Face® mid-layers can be zipped to the inner zipper of many shells to create a single, insulating, cold-weather jacket for challenging conditions.

UPF PROTECTION
UV radiation is an invisible part of sunlight associated with suntans, sunburns, premature aging, and skin cancer. The sun-protection properties of a woven or knit fabric are dependent upon the transmission, absorption, and reflection of UV radiation. The fiber type, dye, construction, and finishes determine these characteristics. Our UPF-rated garments offer very good UV protection from prolonged exposure to the sun.
Gore Windstopper® soft shells shield the outdoor enthusiast from brutal windchill by offering total windproofness with maximum breathability, all while combining the comfort of a soft mid-layer and the water resistance of a shell in one garment. Highly versatile Gore Windstopper® soft shells excel in a broad range of activities and weather conditions while simultaneously providing active freedom of movement and quick-drying protection that sheds rain and snow.

Totally windproof fabric protects your body’s warmth from the Chilling effects of wind and weather.

Maximum breathability prevents overheating and perspiration buildup by allowing moisture vapor to easily escape.

Polartec® Power Stretch® fabrics feature body-hugging four-way stretch properties, are remarkably breathable during exercise and provide warmth without weight. These are the most versatile outdoor and fitness apparel fabrics available today. Many of these fabrics feature proprietary construction with two unique surfaces: the durable outer layer is wind and abrasion resistant, and the soft inner layer pulls moisture away from your skin keeping you dry, warm and comfortable. All of Polartec® Power Stretch® fabrics excel at handling the demands of the next-to-skin environment.

Gore-Tex® Performance Shells are designed to provide superior comfort and durable waterproof protection in a wide range of outdoor activities. The Gore-Tex® revolutionary patented membrane technology is specifically engineered to form an impenetrable barrier against wind and water while maintaining breathability. Gore-Tex® Performance Shell fabric is used in a two-layer construction for a lighter and softer feel and in a three-layer construction for a more heavy-duty alternative.
GOOSE DOWN

The North Face® uses only the highest quality goose down in all of its products. Each lot of down is thoroughly tested at three stages of production for loftiness, moisture resistance, and ability to regain loft after compression. The fill power of goose down is an indicator of two important features: the warmth-to-weight ratio and compressibility, both critical to the user’s warmth and comfort. True fill power is measured by placing one ounce of down in a graduated cylinder and measuring the volume the down occupies in cubic inches. The North Face® products are insulated with exclusive, high-fill-power down ranging from 550 fill to 900 fill, which represents the highest-quality down commercially available.

GORE-TEX® PERFORMANCE

Gore-Tex Performance Shells are designed to provide superior comfort and durable waterproof protection in a wide range of outdoor activities. The Gore-Tex revolutionary patented membrane technology is specifically engineered to form an impenetrable barrier against wind and water while maintaining breathability. Gore-Tex Performance Shell fabric is used in a two-layer construction for a lighter and softer feel, and in three-layer construction for a more heavy-duty alternative.

GORE-TEX® PRO

Gore-Tex Pro Shell is engineered with the most rugged, highly breathable fabrics, making it ideal for extended exposure to extreme conditions. These fabrics are designed to perform at an elite level in numerous activities in order to meet the demands of outdoor professionals and serious enthusiasts alike. The advanced waterproof membrane used by Gore-Tex® Pro Shell fabric incorporates increased breathability characteristics allowing the user to enjoy longer exposure to harsh conditions without losing vital body heat.

MERINO WOOL

Today’s wool delivers high-performance features common to many synthetics. Silky and ultrafine merino wool fibers have inherent temperature-regulating qualities that insulate and breathe while also wicking moisture away from the skin even faster than other fabrics—a crucial feature when the mercury dips into cold conditions. Merino wool also has odor-resistant qualities which make it a wise choice for day-after-day use, backcountry expeditions, or simply transitioning from the rigorous mountain environment to social events on Main Street.
Polartec® Classic 100, 200, and 300 Series fabrics are the reference standard for lightweight warmth and breathability. These fabrics have been the primary insulation layer of choice among experienced outdoor enthusiasts for nearly two decades.

The Windstopper® High Point Hat, Flash Fleece Beanie & Scarf, Helmet Balaclava, and Neck Gaiter are constructed with recycled material as part of The North Face® commitment to sustainability. The materials used in these products are made from 90 percent post industrial waste and 10 percent post consumer waste, stopping the flow of materials to the landfill and creating valuable materials from waste.

Polartec® Power Stretch® fabrics feature body-hugging, four-way stretch and are very breathable. They keep you dry when you sweat and provide warmth without weight. These are the most versatile outdoor and fitness apparel fabrics available today. Many of the fabrics feature a proprietary construction with two unique surfaces: The durable nylon outer layer is wind and abrasion resistant; the soft inner layer pulls moisture away from your skin, keeping you dry, warm, and comfortable.

PrimaLoft® One is a patented, ultrafine microfiber blend that is incredibly soft, lightweight, and water repellent. PrimaLoft® One synthetic insulation absorbs three times less water, is 15 percent warmer when dry, and is 24 percent warmer when wet than the closest competitive insulation. In addition to these impressive thermal properties, PrimaLoft® One has a down-like softness that adds comfort and appeal.

WindWall™ fabric is a proprietary wind-resistant fleece from The North Face®. WindWall™ utilizes a unique fabric-bonding process that allows a limited degree of external air permeability (approximately 20 CFM), thereby drastically reducing the effects of windchill and enhancing the wearer’s warmth and comfort. WindWall™ 1 fabric has a mesh liner, and WindWall™ 2 fabric has a grid fleece liner for even greater insulation.

TNF™ APEX

WindWall™ fabric is a proprietary wind-resistant fleece from The North Face®. WindWall™ utilizes a unique fabric-bonding process that allows a limited degree of external air permeability (approximately 20 CFM), thereby drastically reducing the effects of windchill and enhancing the wearer’s warmth and comfort. WindWall™ 1 fabric has a mesh liner, and WindWall™ 2 fabric has a grid fleece liner for even greater insulation.

TNF™ APEX CLIMATEBLOCK

WindWall™ fabric is a proprietary wind-resistant fleece from The North Face®. WindWall™ utilizes a unique fabric-bonding process that allows a limited degree of external air permeability (approximately 20 CFM), thereby drastically reducing the effects of windchill and enhancing the wearer’s warmth and comfort. WindWall™ 1 fabric has a mesh liner, and WindWall™ 2 fabric has a grid fleece liner for even greater insulation.

TNF™ APEX AEROBIC

WindWall™ fabric is a proprietary wind-resistant fleece from The North Face®. WindWall™ utilizes a unique fabric-bonding process that allows a limited degree of external air permeability (approximately 20 CFM), thereby drastically reducing the effects of windchill and enhancing the wearer’s warmth and comfort. WindWall™ 1 fabric has a mesh liner, and WindWall™ 2 fabric has a grid fleece liner for even greater insulation.

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Athlete tested. Expedition proven. Best-in-class outdoor gear and apparel. Period. The North Face® Summit Series® represents the ultimate in achievement, in both product design and athletic accomplishment. Summit Series® products are built on a foundation of technical superiority, from research and design, to fabric and hardware selection, to integration and construction. The end result is gear and apparel designed to withstand the planet’s harshest environments and proven through use on myriad quests undertaken by The North Face® athletes.

MAXIMUM PROTECTION PLUS PERFORMANCE

The ultimate goal of The North Face® is to deliver unequaled, extreme performance. When elite adventurers crest a high-altitude ridge and race an approaching storm, they must have unconditional trust in their outerwear. For that very reason, The North Face® integrates top-tier fabrics and insulation combined with technical construction techniques to build outerwear designed for the most demanding conditions.

GORE-TEX® STRETCH PRO SHELL

Introducing a new cutting-edge fabric technology for Fall 2009, The North Face® is the first North American company to offer Gore-Tex® Pro Shell 3-Layer Stretch with Micro-Grid Backer Technology. For the very first time Gore has been able to manufacture their revolutionary lightweight and ultra-breathable Pro Shell with Micro-Grid Backer in a stretch fabric, taking hard shells to the next level. Engineered with the most rugged, most breathable, durably waterproof and windproof fabrics, Gore-Tex® Pro Shell 3-Layer Stretch meets the demands of outdoor professionals and serious enthusiasts. Gore Micro-Grid Backer Technology increases garment comfort and performance through an innovative woven lining. This lining technology improves internal abrasion and snag resistance, enhances garment breathability, and reduces overall garment weight.

GORE-TEX® PRO SHELL

ProShell is engineered for the most demanding outdoor athletes and serious enthusiasts tackling epic mountain expeditions. Built to exacting standards, Gore-Tex® Pro Shell will maintain water and windproofness while providing crucial breathability under the most extreme, demanding conditions. Pro Shell consists of a highly technical Gore-Tex® membrane that is firmly bonded to a durable outer layer and a rugged, yet comfortable breathable lining. The result epitomizes ironclad protection in harmony with ease of wear. For professionals whose livelihood depends on enduring the worst conditions, Pro Shell is the first choice.

GORE-TEX® PERFORMANCE SHELL

Gore-Tex® Performance Shells are designed to provide superior comfort and durable waterproof protection in a wide range of outdoor activities. The Gore-Tex® revolutionary patented membrane technology is specifically engineered to form an impenetrable barrier against wind and water while maintaining breathability. Gore-Tex® Performance Shell fabric is used in a two-layer construction for a lighter and softer feel and in a three-layer construction for a more heavy-duty alternative.

GORE-TEX® PACLITE®

Gore-Tex® Paclite® shells are ideal for trekking, hiking, cycling, and other sports in which weight and space are critical. Gore-Tex® Paclite® shells combine extreme breathability and durable wind and waterproofness with minimum weight and pack volume. Gore-Tex® Paclite® shells use a specific Gore-Tex® membrane with a protective layer on the inside made of an oil-repelling substance and carbon. Because of the protective layer, no separate lining is required. This makes Gore-Tex® Paclite® shells lighter and smaller to pack away.
DESIGNED FOR YOUTH

The North Face® Youth collection is expedition gear for adventurous kids. Designed for boys and girls ages 6–14, our Youth collection offers the same protection, performance, and durability you’ve come to expect from The North Face®. Emulating our most popular adult styles in their classic look and driven design, our Youth outerwear offers the same durability, versatility, and functionality as our adult counterpart, it has been fully adapted for kids in its fit, styling, and function.

A refreshed color palette for both boys and girls, combined with exciting new designs from fleece to outerwear to action sports, offers kids a collection of their own to take them through every season’s adventures.

In scaling down our adult designs for kids, we took into consideration the unique demands of smaller bodies with big outdoor aspirations. So while much of our Youth collection may look like its adult counterpart, it has been fully adapted for kids in its fit, styling, and function.

SAFETY FIRST

- Kid-specific hood design: a weather-tight elastic closure makes the hood snug around the face without cord locks
- Single-handed hem drawcords and cord locks cinch the waist and exit from both sides of the garment to eliminate excess cord snagging
- Kid’s ID label so clothes are easier to locate on the bus or in the lodge

DURABILITY & FUNCTIONALITY

- Unparalleled durability with constructions like bartacks, topstitching, and overlays
- Machine wash, tumble dry for hassle-free care and lasting performance
- Secure ski pass pockets on snowsport styles
- Multi-functional styles wick, insulate, and protect for all-day comfort and warmth on a hill or at home

FOR PARENTS TOO!

Parents appreciate functional features, durable materials, and kid-specific designs. In designing our Youth collection, we paid close attention to details such as safety, durability, and versatility.

YOUTH TECHNOLOGIES

DWR FINISH

Durable Water Resistant (DWR) finishes on fabrics and zippers give long life to waterproof technologies. The addition of an enhanced hydrophobic treatment enables DWR to adhere to materials for an extremely extended lifetime.

GOOSE DOWN

The North Face® uses only the highest quality goose down in all of its products. Each lot of down is thoroughly tested at three stages of production for loftiness, moisture resistance, and ability to regain loft after compression. The fill power of goose down is an indicator of two important features: the warmth-to-weight ratio and compressibility, both critical to the user’s warmth and comfort. True fill power is measured by placing one ounce of down in a graduated cylinder and measuring the volume the down occupies in cubic inches. The North Face® products are insulated with exclusive, high-fill-power down ranging from 550 fill to 900 fill, which represents the highest-quality down commercially available.

HEATSEEKER AERO

The North Face® proprietary synthetic insulation offers a great warmth-to-weight ratio, is highly compressible, and is extremely durable, making it ideal for cold-weather footwear and many other products that require warmth at minimal bulk.

HYVENT® 2-LAYER

BREATHABILITY: 625-675 g/m²/24 hrs avg (MVTR) Upright Cup¹
WATERPROOF RATING: 25 PSI minimum after 20 launderings
USAGE: Exploration

HyVent® is a superior waterproof, breathable technology utilizing a polyurethane (PU) coating that consists of a tri-component multilayer formula for waterproof protection, moisture permeability, and durability. This technology has been lab tested in The North Face® Quality Assurance lab to ensure the best possible durability and function while also maintaining a comfortable level of breathability. The minimum breathability achieved using HyVent® is 600 g/m²/24 hours on the Moisture Vapor Transfer Rate (MVTR) scale.¹ To test the level of waterproofness, The North Face® subjected HyVent® garments to 20 wash cycles², after which they retained an average of more than 60 PSI on the waterproofing Mullens Test3.

In addition to quantitative lab science, qualitative feedback has been factored into HyVent® development, and HyVent® garments have been heavily field-tested for over three years with outstanding proof of long-term performance. Says skier and mountaineer Rick Armstrong, who has many first descents of famed peaks to his name:

“This technology keeps me out in the storms, catching the best snow long after most people have gone inside. It’s just as good—if not better—than anything else on the market.”

POLARTECH® CLASSIC 100 MICROFLEECE

Polartec® Classic fabrics are the reference standard for lightweight warmth and breathability, offering unparalleled quality and durability. Polartec® Classic fabrics are the primary choice among experienced outdoorspeople.

- Pill-resistant face and back.
- Unique microfibers provide unparalleled soft hand.
- Provides warmth without the weight and bulk of traditional insulating fabrics.
- Versatile: appropriate for a broad range of activities.
- Machine washable.
- Highly breathable to provide comfort in all activities; does not restrict the movement of moisture vapor.
- Dries quickly to minimize heat loss.
- Durable: will outlast other fleece fabrics.

TKA 200 FLEECE

A mid-weight, high-performance fleece ideally suited to function as a mid-layer. This 100-percent polyester, pill-resistant fabric is warm and breathable, and has an excellent warmth-to-weight ratio. It can be worn as a layering piece or by itself as a warm, casual outer layer, making it a great alternative to a cotton sweatshirt.

ZIP-IN

The North Face® mid-layers can be zipped to the inner zipper of many shells to create a single, insulating, cold-weather jacket for challenging

REFERENCES // TECHNOLOGY

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MAXIMUM PROTECTION PLUS PERFORMANCE

**HYVENT® ALPHA**
HyVent® Alpha is a waterproof and highly breathable laminate that utilizes a microporous, hydrophobic lamination technology that retains its capabilities in even the most severe conditions. Its laminate membrane, consisting of nearly half a million holes per square inch, allows perspiration to pass through the jacket before it condenses to liquid, keeping the wearer dry, warm and comfortable.

**HYVENT® DT**
HyVent® DT is an applied polyurethane (PU) coating combined with a DT print matrix which acts as a dry-touch, half-layer coating. This DT half layer adds durability and comfort by physically separating the HyVent® PU coating from the skin. HyVent® DT eliminates the need for a liner and is commonly referred to as a 2.5-layer fabric. Instead of a true half layer, our competition typically uses simple prints, which have no function other than delivering aesthetic value.

**GORE WINDSTOPPER® SOFT SHELL**
Gore Windstopper® soft shells shield the outdoor enthusiast from brutal windchill by offering total windproofness with maximum breathability, all while combining the comfort of a soft mid-layer and the water resistance of a shell in one garment. Highly versatile Gore Windstopper® soft shells excel in a broad range of activities and weather conditions while simultaneously providing active freedom of movement and quick-drying protection that sheds rain and snow.

**POLARTEC® POWER SHIELD® PRO**
Virtually waterproof and yet still extremely breathable, Polartec® Power Shield® Pro is the holy grail of soft shells. Featuring an extremely abrasion-resistant face for long-lasting durability, a water-repellant surface that sheds both rain and snow, and a non-restrictive fit for a full range of motion, the fabric blocks both wind and weather while still allowing enough air circulation to prevent overheating during aerobic activities. Highly water resistant and exceptionally breathable, outerwear constructed using Polartec® Power Shield® Pro is ideal for high-energy outdoor pursuits in adverse weather conditions.

**POLARTEC® THERMAL PRO™ HIGH LOFT**
Polartec® Thermal Pro™ high loft fabrics take insulation to a new level by maximizing compressibility, breathability, and most important, warmth without weight. They are the most technically advanced of the Polartec® insulation fabrics, achieving the utmost versatility and performance under extreme conditions. This level of performance is critical when all you have is what you can carry. The key to this fabric’s performance is in its unique construction. An open-mesh stitch promotes compressibility, increases airflow, and minimizes weight. A low density, high loft pile face and back minimize weight but increase warmth and compressibility. The fabric maintains its loft wear after wear for enduring warmth. Fabrics are at least 20 percent warmer per weight than standard fleece.

**POLARTEC® POWER STRETCH®**
Polartec® Power Stretch® fabrics feature body-hugging four-way stretch properties, are remarkably breathable during exercise and provide warmth without weight. These are the most versatile outdoor and fitness apparel fabrics available today. Many of these fabrics feature proprietary construction with two unique surfaces: the durable outer layer is wind and abrasion resistant, and the soft inner layer pulls moisture away from your skin keeping you dry, warm and comfortable. All of Polartec® Power Stretch® fabrics excel at handling the demands of the next-to-skin environment.
**ALPINE**

The Alpine snowsports category consists of high-performance styles designed to deliver rugged versatility and protection during downhill action.

**SUMMIT™ SERIES**

The pinnacle of the Alpine snowsports category, Summit™ Series is built specifically for the ambitious, technical skier or rider. It offers cutting-edge fabrics and technical construction for rigorous, go-anywhere downhill style. Summit™ Series utilizes the most advanced waterproof, breathable products and is constructed for mountain athletes who depend on The North Face® for ultimate quality and ironclad dependability.

**HN24™ COLLECTION**

Influenced by the European alpine ski scene, HN24™ matches fashion with function to bring progressive styling to the mountain. Still focused on construction and performance, this collection branches out with another kind of statement, taking special care with tailored fits and stretch fabrics.

**FREERIDE**

The North Face® Freeride snowsports category provides today’s non-traditional winter athletes with a style all their own, and technical performance to match.
MAXIMUM PROTECTION PLUS PERFORMANCE

**TNF™ APEX AEROBIC**

Wind Resistance: 10 / CFM  
Weight Range: 113 g - 199 g  
Usage: High levels of extended aerobic activity (running, biking, climbing) in mild conditions.

TNF™ Apex Aerobic fabric is the lightest and most breathable of The North Face® soft shell fabrics. It is designed to accommodate high levels of activity in moderate weather conditions while offering the maximum amount of stretch, making it ideal for high-movement or vigorous endeavors.

**PERTEX® SYNCRO**

Pertex® Syncro is an ultra soft, super lightweight and eminently durable fiber-proof fabric woven using 10 denier yarns. When combined with insulation, the lightweight characteristics of Pertex® Syncro allow designers to create apparel with an optimum warmth to compressibility ratio. The most durable 10 denier fabric available in North America, Pertex® Syncro enables the creation of an insulated jacket that minimizes both weight and packed size without sacrificing warmth.

**800 FILL DOWN**

Leveraging its exceptional warmth-to-weight ratio, The North Face® utilizes 800 fill down in Summit Series® outerwear applications, for which minimal weight is paramount. The result is a highly compressible, ultralight garment with incredible thermal retention — the perfect piece for summit-hungry adventurers.

**PRIMALOFT ONE INSULATION**

PrimaLoft® One is a patented ultrafine microfiber blend that is incredibly soft, lightweight and water repellent. PrimaLoft® One synthetic insulation absorbs three times less water, is 15 percent warmer when dry and is 24 percent warmer when wet than the closest competitive insulation. In addition to these impressive thermal properties, PrimaLoft® One is lightweight with a down-like softness that adds comfort and appeal.
Polartec® Power Shield® Pro
The Epitome of Soft Shell Performance

In 1998 Polartec launched Polartec® Power Shield® and the soft shell revolution. It was developed in recognition of the fact that 90% of the time you are outside, the weather isn’t that bad. So there is great benefit in giving up a little weather protection, in order to get a lot more breathability.

In 2010, we are building on that product history by adding real water resistance to our soft shells with the launch of Polartec® Power Shield® Pro. Polartec® Power Shield® Pro combines never before seen levels of air permeability with durable hydrostatic resistance to keep you dry both from within and from out.

How does it work?
Polartec® Power Shield® Pro fabrics feature a smooth, tightly woven face for great abrasion resistance, and a polyester back for a high warmth-to-weight ratio. The membrane in the middle enables the fabric to block 99% of the wind. The remaining 1% circulates within the fabric which greatly enhances moisture vapor transmission, improving breathability and reducing the risk of heat stress buildup. The charts below show how the proprietary Power Shield® Pro membrane lets just 2cfm through the fabric, but significantly improves ‘real world’ or dynamic breathability. Resistance to water vapor diffusion is a similar measurement to RET = lower numbers mean a fabric is more breathable. Polartec® Power Shield® fabrics have better breathability than the best soft shells.

Ideal Uses: Polartec® Power Shield® fabrics are ideal for skiing, snowboarding, winter climbing, and back-country trekking. They are used in jackets, pants, bibs, hats, and gloves. It’s the outerwear that gets worn, not carried.

Highly breathable & waterproof
The biggest advance of the new Polartec® Power Shield® Pro membrane is the addition of a hydrostatic head, a.k.a. real water resistance. Polartec® Power Shield® Pro delivers an initial 5,000mm hydrostatic head, a.k.a. real water resistance. Polartec® Power Shield® Pro exceeds the requirement for seam sealing on a waterproof breathable shell (3psi or 2100mm) so you can be assured of its performance.

The combination of water resistance and breathability of Polartec® Power Shield® Pro offers a great advance in soft shell comfort.

Technical Highlights
• Blocks 99% of the wind to prevent wind chill, but allows enough air to circulate to keep you from overheating.
• Highly breathable; relieves heat stress buildup during action sports.
• Highly water resistant.
• Water repellent surface sheds rain and snow.
• Extremely abrasion resistant face for long lasting durability; fabric maintains its form and function regardless of abrasive contact.
• Stretch for active comfort.
• Provides less noise than a traditional shell.
• Provides warmth without the weight and bulk of traditional insulating fabrics.
• Machine washable.

Kishtwar Jacket
The North Face® has developed the HyActive™ Basalayer System to allow you to easily choose the correct baselayer for a range of activity levels and climates. HyActive™ provides you with the ultimate layering piece to keep you warm, dry, and comfortable no matter where you are or what you are doing.

**HyActive™ Benefits**

HyActive™ is made with super light hollow core yarns, providing excellent thermal protection without the added weight. Hollow core yarns simulate the efficiency of feathers – natural lightweight insulators. HyActive™’s inherent properties wick moisture to a second layer, keeping the skin dry and comfortable. It dries quickly, feels warm on the skin and is also highly odor resistant. Additionally, HyActive™ requires fewer resources for production than many other yarns, helping to protect the environment.

- Excellent thermal properties
- Lightweight
- Rapid moisture transport
- Quick-drying
- Easy care
- Stain resistant
- Hypoallergenic
- Odor resistant
- Requires fewer resources for production

**HyActive™ vs. Other Yarns**

HyActive™ is warmer, transports moisture better and is lighter than other yarns:

- HyActive™ is 7% warmer than wool.
- HyActive™ transports moisture 50% better than polyamide.
- HyActive™ is 20% lighter than polyamide.

Sources:
- Thermal Insulation: Alexander Dubcek Trenčín University, Faculty of Industrial Technologies, Slovak Republic, Alambeta device; Moisture Transport: Slovak University of Technology, Bratislava, Slovak Republic, CSN 80 0828 Fabrics. Determination of absorbency to water. Procedure by capillary action. Specific Weight: VÚCHV (Research Institute of Chemical Yarns), Svit, Slovak republic. PND 275-59-95