



Unrivaled Performance. Unmatched Durability. Unlimited Possibilities.

## APPLICATIONS

OUTERWEAR  
SEATING  
FOOTWEAR  
MOTORCYCLE

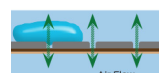
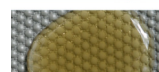
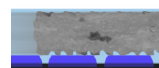
BAGS | PACKS  
MILITARY  
INDUSTRIAL  
SPECIALTY



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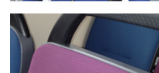
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## Applications

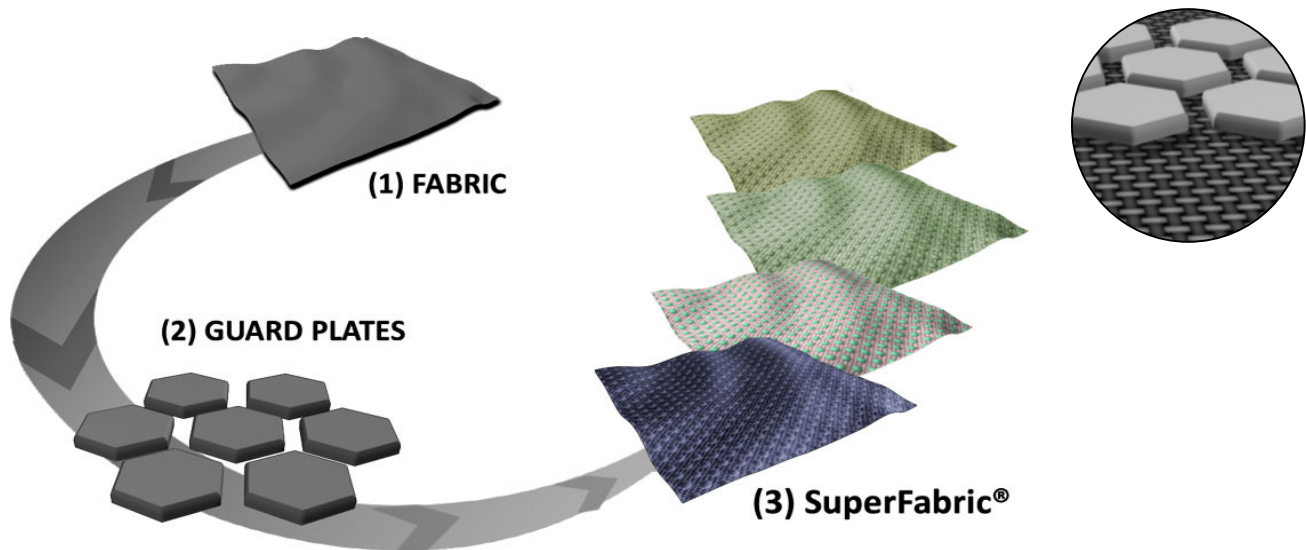
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## Introduction to SuperFabric® materials

SuperFabric® technology takes a fabric and overlays it with tiny plates (“guard plates”) in a specific arrangement. The gaps between guard plates allow complete flexibility. The geometry, thickness, and size of the guard plates, as well as the fabric, can be varied depending on the desired attributes. SuperFabric® materials are designed to deliver a range of performance features such as abrasion resistance, stain resistance, quick drying, weight reduction and more.



## Technology

The key to this remarkable material is the fact that locally, the plates are hard. Globally, the plates allow full motion which gives SuperFabric® a feel similar to traditional fabrics.



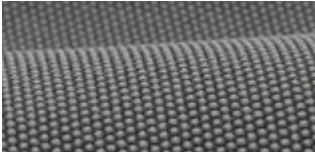
Side View: Small guard plates allow for a high degree of flexibility while providing tough protection



Side View: Showing integration of guard plates, spacing, and fabric

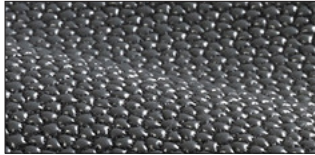
## Types of SuperFabric® materials

The many varieties of SuperFabric® materials are all built around the same core technology. Our materials address a range of performance and attribute needs that help showcase the versatility for which SuperFabric® is known.



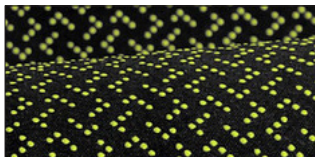
### **SUPERFABRIC®-Am99™**

The newest addition to the SuperFabric® family of products. SuperFabric®-Am99™ incorporates antimicrobial functionality...read more on Pg. 35.



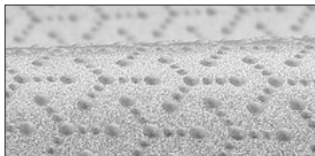
### **PERFORMANCE SUPERFABRIC®**

These SuperFabric® materials have a close array of plating integrated into strong fabric to provide the most performance such as abrasion resistance, slash resistance and more.



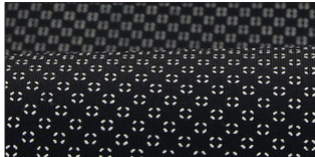
### **LIGHTWEIGHT SUPERFABRIC®**

These SuperFabric® materials are very lightweight while still bringing a level of performance that often surpasses other performance fabrics. These SuperFabric® materials offer soft hand feel and high levels of flexibility in addition to their lightweight properties.



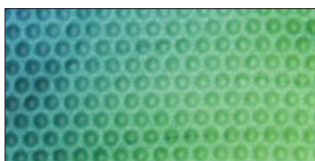
### **REFLECTIVE SUPERFABRIC®**

Reflective SuperFabric® materials not only look good, but they are well suited for safety applications such as apparel, jackets, and shoes.



### **STRETCH SUPERFABRIC®**

Many applications require fabric that has a bit of stretch, whether it be for apparel, bags, seating, or forming over hard objects such as cases. This new offering still provides nice performance in a highly flexible fabric.



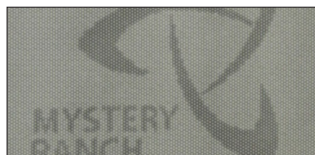
### **MULTI-COLORED SUPERFABRIC®**

Multi-colored SuperFabric® ushers in a new area of continuous color. The coloring is a result of a deep infusion (sublimation) of color to the plates which results in strong, lasting color suited for many applications.



### **EMBOSSED SUPERFABRIC®**

A new line of SuperFabric® brand materials with amazing design and performance. Can be used for many applications including seating, bags and apparel.



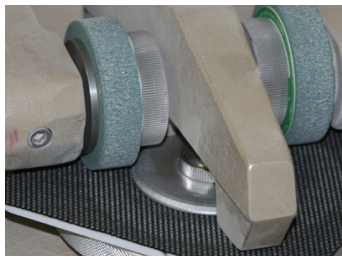
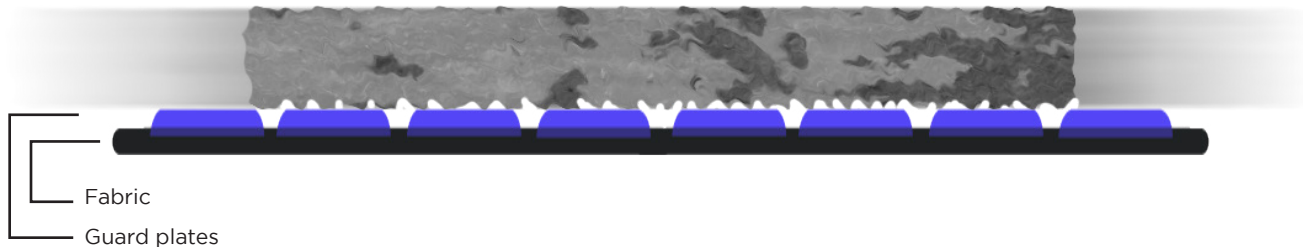
### **CUSTOM SUPERFABRIC®**

Applications often require unique color, patterns, or branding to be most effective. SuperFabric® can provide all that and more. Customers love the flexibility and creativity of SuperFabric® material.



## Performance: Abrasion Resistance

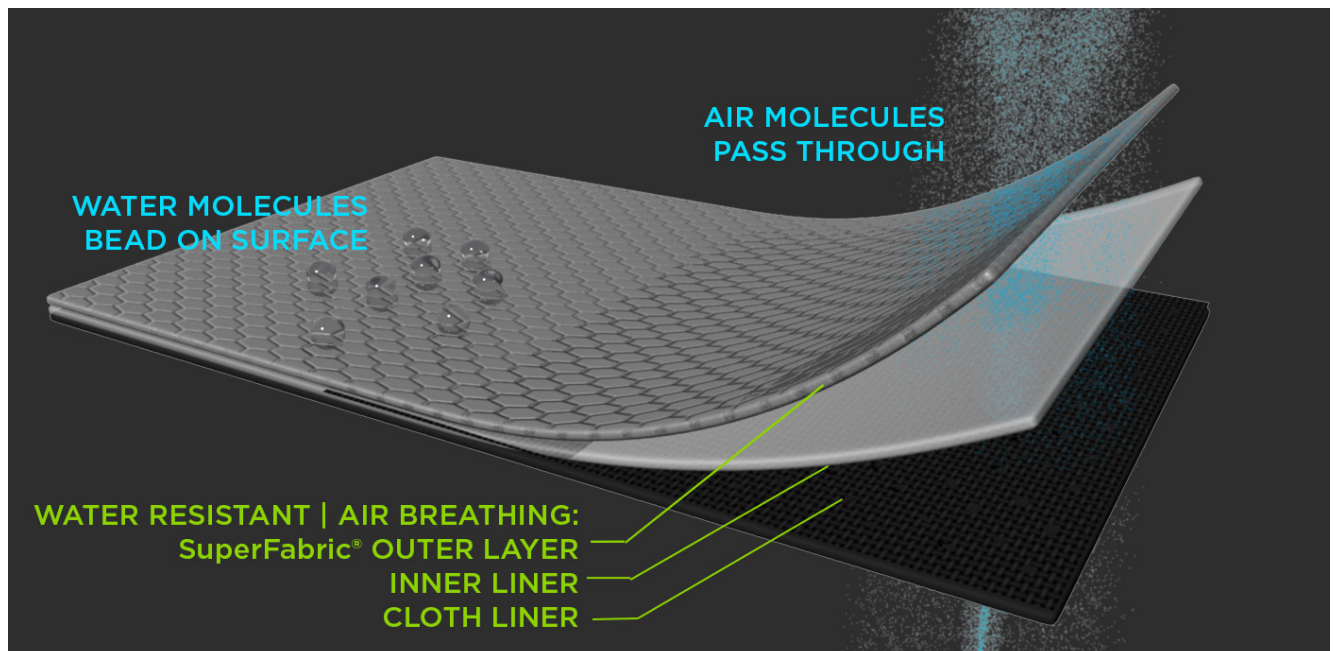
The guard plates are ready to fend off rock, ice, brush, debris, scuffs, and scrapes. SuperFabric® doesn't just look pretty, it performs day in and day out. SuperFabric® materials won't snag like knit fabrics. SuperFabric® is used in demanding abrasion resistant application such as motorcycle apparel, ski and snowboarding apparel, footwear and more.



SuperFabric® material is undergoing a Taber abrasion test using 1000g load and an H18 wheel. This is an aggressive test that demonstrates the ability of the guard plates to perform in abrasion applications.

## Performance: Breathability

It is the ability of a fabric or material to transmit air and moisture. Lots of materials are, of course, breathable. However, being breathable while still being water resistant is a much taller order. By their inherent construction, SuperFabric® materials are both air breathing and water repellent.



## Performance: Stain Resistance

SuperFabric® is highly resistant to stains from mud, dirt, grease, and liquids such as oil, sauces, and more. In the photos, you can see all of the mud washes right off of SuperFabric®. Nylon and conventional materials quickly pick up stains which can deteriorate the performance of the fabric as well as compromise the look of the material.



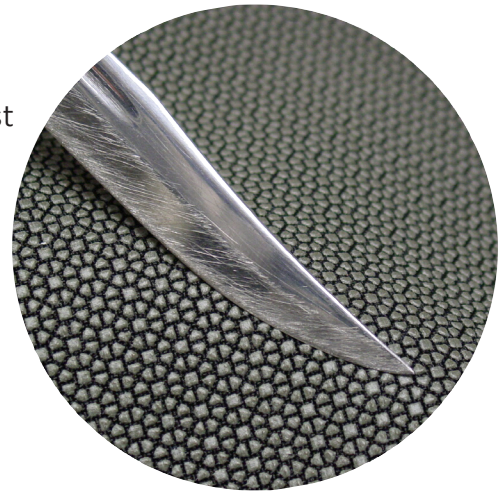
In photo on left, a combat boot gets 'in the mud'. After, it is rinsed off...not scrubbed...not pressure washed...just rinsed with water. The photo on the right shows that the mud is gone from the SuperFabric® area of the boot (toe area). The leather and nylon areas don't clean easily and they also don't dry as quickly.





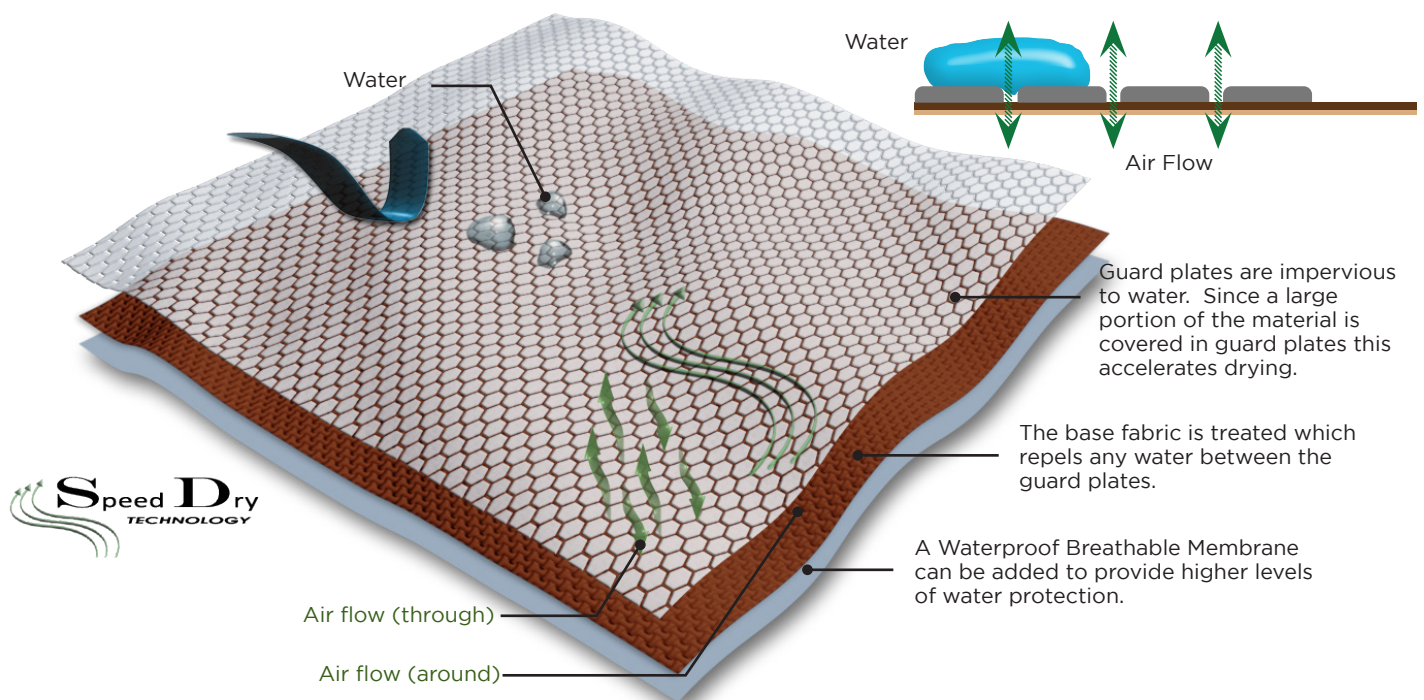
## Performance: Slash Resistance

The performance SuperFabric® materials offer the most slash protection with heavier coverage of guard plating. Many applications, such as motorcycle apparel, scuba apparel, ski and outdoor jackets and pants, all benefit from the slash resistance SuperFabric materials offer.



## Performance: Quick Drying

SuperFabric® drying is the result of a 3-pronged system that quickly dries, while keeping the elements on the outside and contents dry on the inside. Impervious guard plates, repellent fabric, and optional waterproof breathable membranes are part of the Speed Dry advantage.



Select SuperFabric® materials have other intrinsic properties such as rodent resistance (important for covers and other protective applications), flame resistance, and high UV resistance.



# FOOTWEAR



## **SuperFabric® ADVANTAGES**

- + Durable: Provides long life even in extreme conditions such as mountaineering
- + Unique: Like no other material in the world
- + Versatile: Can be used in the upper, toe, tongue, and heel
- + Performance: Breathable, water resistant, rot resistant, abrasion resistant, etc.
- + Design: Unlimited possibilities of colors and patterns



## EXAMPLE



DC SHOES  
Snowboarding Boots

WHERE: SuperFabric®  
over toe and side

WHY: SuperFabric®  
provides high levels  
of abrasion resistance  
against ice, compacted  
snow, and bindings. This  
boot is part of the Travis  
Rice Signature series.



■ SuperFabric®

## EXAMPLE



**BLACK YAK®**

BLACK YAK  
Hiking Shoes

WHERE: SuperFabric®  
used on upper

WHY: SuperFabric®  
provides abrasion  
resistance and weather  
resistance in critical area  
of shoe subjected to rocks,  
brush, water, and mud.





# FOOTWEAR

EXAMPLE



ALTAI™ Boots  
Footwear | Tactical

WHERE: SuperFabric® on uppers and toe

WHY: extreme abrasion protection in addition to breathability, comfort, and design.



■ SuperFabric®





■ SuperFabric®

ALTAI™ Footwear is used in law enforcement and SWAT, and has extended out to hiking and other areas. ALTAI™ Boots use SuperFabric® materials extensively throughout the upper and toe (on most models) for superior performance.





# FOOTWEAR

## EXAMPLE



HEAD  
Tennis Shoe

WHERE: SuperFabric®  
across toe area

WHY: Provides extreme  
abrasion resistance against  
asphalt, clay, and concrete  
surfaces.

■ SuperFabric®



■ SuperFabric®

## EXAMPLE

**VANS®**

VANS  
Skateboarding Shoes

WHERE: SuperFabric®  
used across entire shoe

WHY: Skateboarding is  
an extreme sport that  
works shoes hard on  
concrete and asphalt.  
SuperFabric® protects  
against scuffs, scraps,  
and abrasions. Who can  
argue that these shoes  
don't look awesome?

Comments about boots made with SuperFabric® materials.

“I have been wearing these boots for two months on patrol. I have been in buildings, on the street, and in the woods, and these boots are working great.”

Brady F.  
(Canine officer)

“I love the SuperFabric® upper. It is very durable and water resistant.”

Eric J.  
(Wildlife officer)

“Water resistant, my feet never got wet.”

Joseph C.  
(Correctional officer)

## EXAMPLE

### NOBULL Cross Trainers



■ SuperFabric®

WHERE: SuperFabric® used on entire outer surface

WHY: SuperFabric® provides abrasion resistance and durability, along with an amazing look and style, in this rugged cross-training shoe.



## SuperFabric® materials for FOOTWEAR

Footwear covers a wide range of needs, from lightweight running shoes, to industrial work boots, to hiking shoes. SuperFabric® provides materials perfectly tailored for the diversity and performance needed. SuperFabric® is available in *more than 50 varieties*, not to mention customization that is nearly limitless.

## A few examples of SuperFabric® materials



DURABLE  
STAIN RESISTANT  
ABRASION RESISTANT  
BREATHABLE



# OUTERWEAR



## SuperFabric® ADVANTAGES

- + Durable: Provides long life even in extreme conditions such as mountaineering
- + Unique: Like no other material in the world
- + Versatile: Can be used in the upper, toe, tongue, and heel
- + Performance: Breathable, water resistant, rot resistant, abrasion resistant, etc.
- + Design: Unlimited possibilities of colors and patterns

## EXAMPLE

# K2

K2  
Ski/Snowboard jacket

WHERE: SuperFabric® used  
on shoulders and elbows

WHY: High performance  
materials are the  
necessity when it comes  
to technical jackets such  
as this K2. SuperFabric®  
provides abrasion  
resistance, and scuff  
protection against the  
elements and gear.



SuperFabric®



SuperFabric®



## EXAMPLE

# SLYTECH

Slytech  
Ski Gloves

WHERE: SuperFabric®  
used across entire back

WHY: Provides extreme abrasion  
protection for downhill skiers.  
Ted Livity wore a pair of these  
on his way to winning the gold  
metal in Sochi 2014.



# OUTERWEAR

## EXAMPLE



Nepa  
Ski/Snowboard jacket

WHERE: SuperFabric® used  
in key abrasion areas

WHY: This is a high  
performance jacket  
designed for cold and windy  
environments. SuperFabric® is  
used in key abrasion and slash  
areas.



■ SuperFabric®

## EXAMPLE



Lindy Little Joe  
Fishing Gloves

WHERE: SuperFabric®  
across entire palm and  
back thumb

WHY: Regarded as the  
best fish handling glove  
on the market, this Lindy  
glove uses multiple layers  
of SuperFabric material  
to protect against razor  
sharp teeth, gill plates,  
hooks, and fillet knives.



■ SuperFabric®





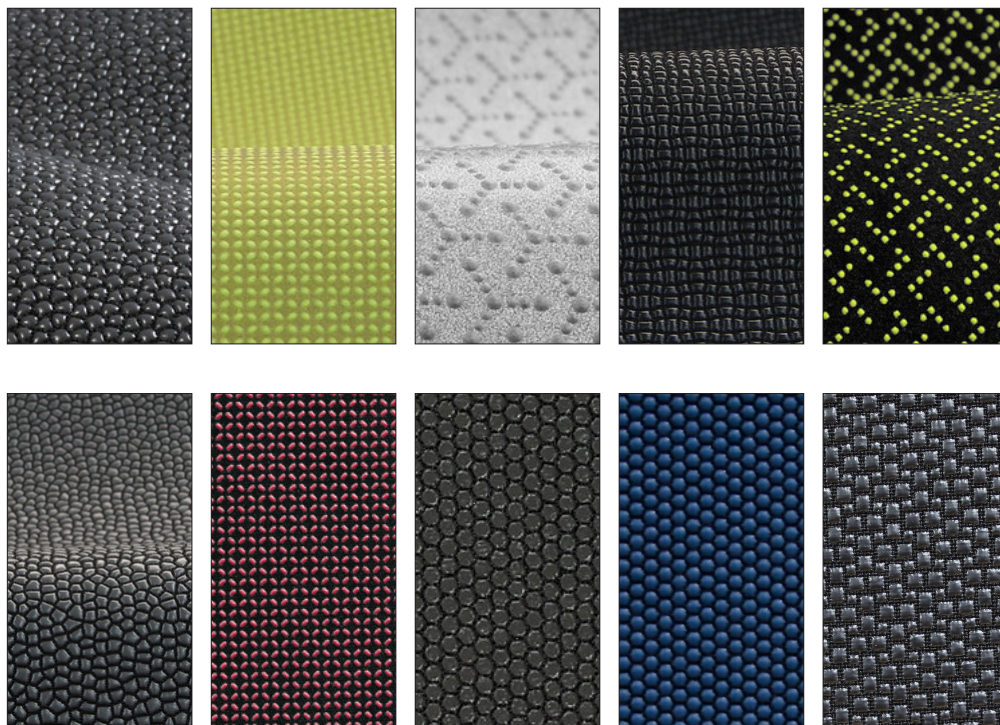
SuperFabric® is used in all kinds of harsh weather and environmental conditions. In the cold and ice of snowboarding, alpine mountaineering, and winter trekking, SuperFabric® has proven not to freeze like other materials. This is largely due to SuperFabric® not holding or trapping water like leather, nylons, etc.

On the other end of the spectrum, SuperFabric® can handle a scorching hot summer day, in running or hiking shoes or in gloves used for fishing.

Whether it's mud, dirt, ice, snow, gravel, rock, or rain, SuperFabric® materials are ready for what comes their way.

## SuperFabric® materials for OUTERWEAR

Apparel and gear continue to push the envelope of both performance and design. Lighter, stronger, and more technical fabrics combine with innovative patterns, colors, and style. SuperFabric® provides the ultimate balance that merges high-end performance with unmatched style. SuperFabric® is available in *more than 50 varieties*, not to mention customization that is nearly limitless.





# SEATING



## SuperFabric® ADVANTAGES

- + Durable: Provides long life even under continuous use such as in public transit
- + Unique: Like no other material in the world
- + Versatile: Can be used in seats, backs, headliner, cargo area, floor mats
- + Performance: Breathable, water resistant, abrasion resistant, stain resistant
- + Design: Unlimited possibilities of colors and patterns

EXAMPLE

# bimos

Bimos  
Industrial chair

WHERE: SuperFabric®  
over entire seat and back

WHY: SuperFabric® provides  
abrasion, slash, and stain resistance  
from heavy use in an industrial  
environment.



■ SuperFabric®

■ SuperFabric®



EXAMPLE



Zero1  
Office Chair

WHERE: SuperFabric®  
over entire seat and back

WHY: SuperFabric® provides  
abrasion, slash, and stain resistance  
from heavy use in an industrial  
environment.



# SEATING



Photo Credit: Ferarri

Ferrari Belinetta using SuperFabric® in the floor mats.

## EXAMPLE



### Hospital seating

WHERE: SuperFabric® over entire seat and backrest

WHY: SuperFabric® provides abrasion, cut, and stain resistance in seating applications.



Which chair would you rather sit in? The choice is obvious with SuperFabric®. Vinyl fades, hardens and cracks. Whether it's an office chair, bus seat, or seating at an airport, hospital or other public place, SuperFabric® material offers a durable and long-lasting solution for your upholstery applications.

VINYL



SuperFabric®



## SuperFabric® materials for SEATING

Seating materials take a lot of daily wear in addition to stains from spills. SuperFabric® has an array of options that are a great fit for seating needs for automotive, public transportation, chairs, and more. SuperFabric® is available in *more than 50 varieties*, not to mention customization that is nearly limitless.





# MOTORCYCLE



teiz motorsports

Teiz Motorsports makes a variety of motorcycle apparel with SuperFabric® materials.

## SuperFabric® ADVANTAGES

- + Durable: Provides long life even in extreme conditions
- + Unique: Like no other material in the world
- + Versatile: Can be used in the elbows, knees, and shoulders
- + Performance: Breathable, water resistant, rot resistant, abrasion resistant, etc.
- + Design: Unlimited possibilities of colors and patterns



# PROTECTION



- Zone 1: Highest risk
- Zone 2: High risk
- Zone 3: Moderate risk
- Zone 4: Lower risk

Motorcyclists are 28 times more likely than passenger car occupants to die in a crash per vehicle mile traveled and eight times more likely to be injured, according to NHTSA\*.

SuperFabric® provides some of the highest levels of abrasion resistance in the industry, which is why you will often see it used in the high risk zones (Zone 1).

## EXAMPLE



Klim USA  
Motorcycle Jacket  
and Pants

WHERE: SuperFabric® is used on elbows, shoulders, and knees

WHY: SuperFabric® used on key areas of abrasion helps protect riders from severe injury.



■ SuperFabric®



# MOTORCYCLE

## EXAMPLE

---



Held  
Motorcycle Gloves

WHERE: SuperFabric®  
fingers, palm, and other  
high wear areas

WHY: SuperFabric® is  
used on areas of high  
abrasion, helping to  
protect riders from  
severe injury.



## EXAMPLE

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REV'IT!  
Motorcycle Jackets and Gloves

WHERE: SuperFabric® on elbows,  
shoulders, and palms

WHY: SuperFabric® is used for  
high levels of abrasion  
resistance.



■ SuperFabric®





## EXAMPLE



**FEEL THE RIDE**

Hein Gericke  
Motorcycle Jacket and Gloves

WHERE: SuperFabric® on  
elbows and shoulder

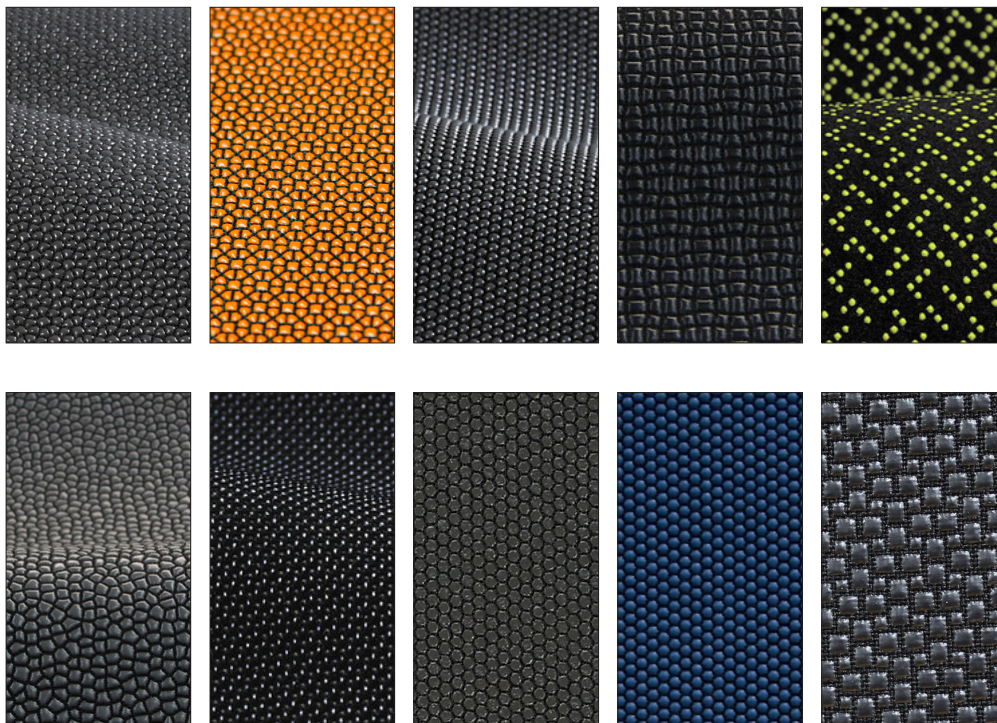
WHY: SuperFabric® is used  
for high levels of abrasion  
resistance.



 SuperFabric®

## SuperFabric® materials for MOTORCYCLE

Motorcycle riding is a dangerous activity that can put protective equipment and materials to the test. SuperFabric® provides a number of materials that are performance driven. SuperFabric® can be further customized without compromising high levels of abrasion resistance, slash resistance, or other performance features.





# BAGS AND PACKS

## EXAMPLE



Mystery Ranch  
Backpacks

WHERE: SuperFabric® on  
the front panel

WHY: A custom SuperFabric®  
was developed which  
incorporates the company's  
logo and provides abrasion  
resistance.



■ SuperFabric®

## EXAMPLE



Amabilis  
Stash capsule

WHERE: SuperFabric® on  
the entire bottom half

WHY: Used as a carrying  
pouch.



■ SuperFabric®



## EXAMPLE



The North Face  
Backpacks

WHERE: SuperFabric® in  
high wear area (tool)

WHY: SuperFabric® provides  
abrasion resistance from tools  
such as picks and axes.

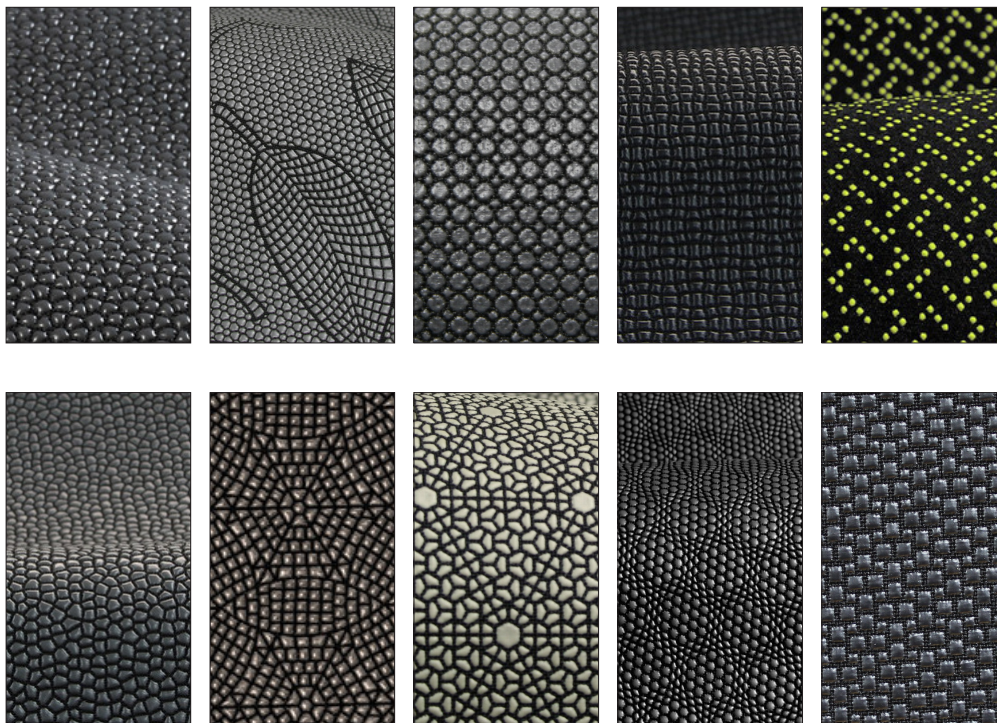
■ SuperFabric®



Photo credit: climbinggearreviews.com

## SuperFabric® materials for Bags and Packs

Let's face it, bags get tossed around, knocked over, scrunched, and in general...abused. SuperFabric® is a great material to keep bags and packs functional.







# MILITARY

## SuperFabric® ADVANTAGES

- + Durable: Provides long life even in extreme conditions such as fast rope rappelling
- + Unique: Like no other material in the world
- + Versatile: Can be used in footwear, jackets, pants, and vehicles.
- + Performance: Breathable, water resistant rot resistant, abrasion resistant, etc.
- + Easy to clean, highly breathable



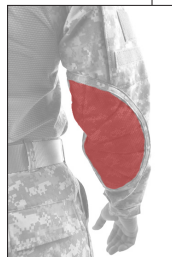
## EXAMPLE



Massif  
Army Combat Shirt

WHERE: SuperFabric® on  
the elbows

WHY: A flame retardant  
SuperFabric® is used on  
the elbows to provide  
abrasion and flame  
retardance.



■ SuperFabric®



■ SuperFabric®



## EXAMPLE



DriFire  
Combat shirt and pants

WHERE: used on the  
elbows and knees

WHY: A flame retardant  
SuperFabric® is used  
on elbows and knees  
to provide abrasion  
resistance and flame  
retardance.



# MILITARY

EXAMPLE



Military Uniforms

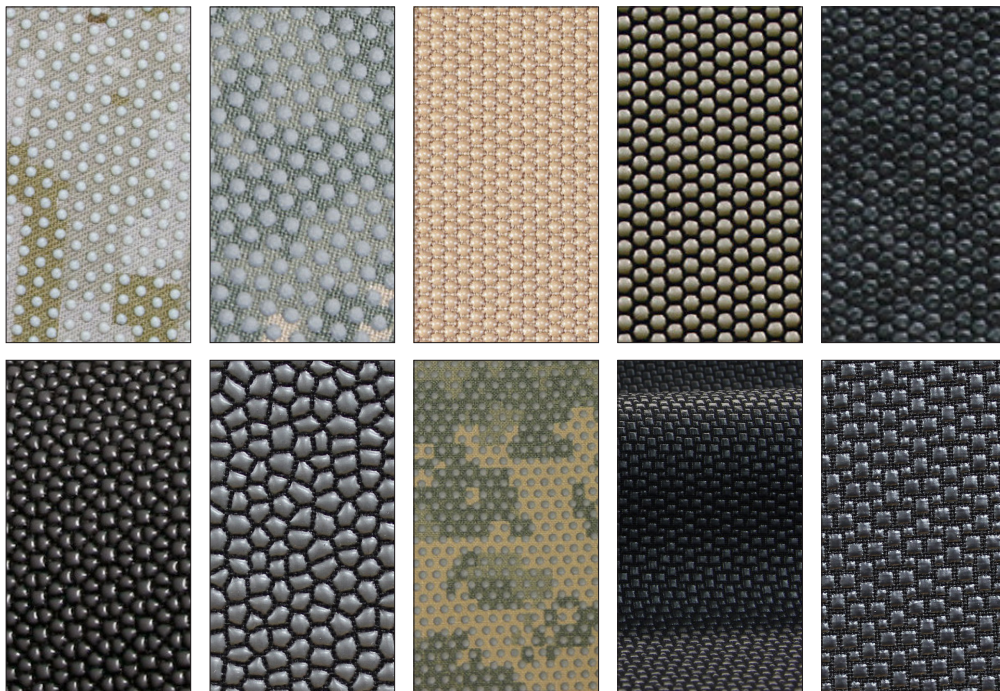
WHERE: SuperFabric® on knees and elbows

WHY: SuperFabric® provides abrasion resistance against rough terrain, sand, dirt, and rock.



## SuperFabric® materials for Military

SuperFabric® provides superior protection in key wear areas. In addition to apparel, SuperFabric® can be used in seats, covers, razor wire gloves, and more.





# INDUSTRIAL



## SuperFabric® ADVANTAGES

- + High levels of cut resistance
- + High levels of abrasion resistance
- + Use in gloves, aprons, arm guards, and covers
- + Often exceeds the highest levels of safety standards
- + Washable, breathable, stain resistant



# INDUSTRIAL

EXAMPLE

## HexArmor®

HexArmor  
Gloves, Aprons and Arm Guards

WHERE: SuperFabric® in  
high safety risk areas

WHY: SuperFabric® provides cut,  
abrasion, and puncture resistance  
in a variety of safety products such  
as gloves, arm guards, and aprons.

**A few examples of the many industrial  
safety products made by HexArmor**





## EXAMPLE

# HexArmor®

HexArmor®  
Mechanics Gloves

WHERE: SuperFabric® in high  
safety risk areas in palm and  
back of hand

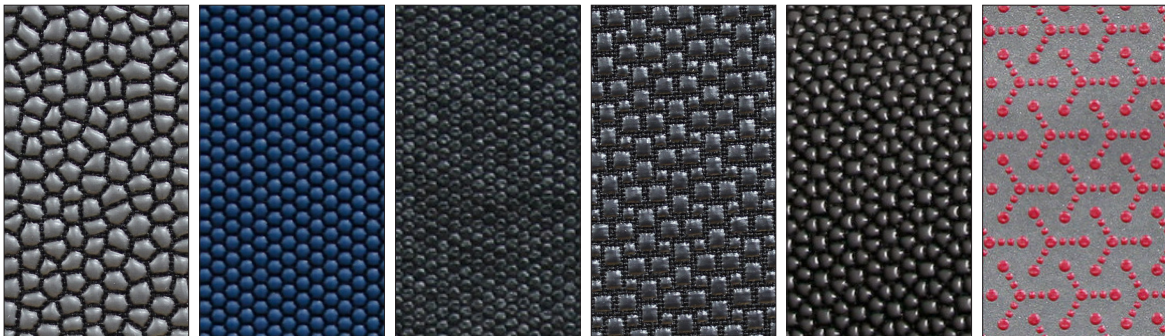
WHY: SuperFabric® provides cut  
and abrasion resistance.



■ SuperFabric®

## SuperFabric® materials for Industrial

SuperFabric® brings superior protection in the industrial safety market. From materials with high abrasion resistance, to multiple layers that provide puncture resistance, to reflective materials designed to provide high visibility, SuperFabric® offers performance solutions for industrial safety products.





# SPECIALIZED

EXAMPLE



## DIVE RITE®

Dive Rite  
Scuba/Diving equipment

WHERE: SuperFabric® on  
outer jacket of buoyancy  
compensator.

WHY: SuperFabric provides  
critical protection from life-  
threatening slashes caused by  
sharp rock and coral.

Photo credit: Jon-Layslider



SuperFabric®



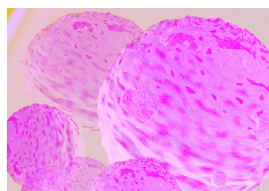


## SuperFabric® Am99™

SuperFabric® adds a **NEW** member to its portfolio of product offerings with the addition of its SuperFabric® Am99™ (**Am99™**).

SuperFabric® materials are already known world-wide for their performance properties such as durability, stain resistance, breathability, quick drying, and more. SuperFabric® attains this remarkable combination of properties by having an array of closely spaced, engineered guard plates that creates a **LOCALLY HARD, GLOBALLY FLEXIBLE** fabric.

**NOW**, \***Am99™**, pushes the boundaries by adding antimicrobial functionality while still maintaining the other inherent features.



**Microbe Resistant**  
**Odor-Resistant**  
**Mold & Mildew Resistant**



**Durable**  
**Stain Resistant**  
**Quick Drying**

**AND more!!!**

The antimicrobial agent used in **Am99™** kills and retards the growth of these types of microbes on SuperFabric®



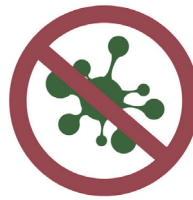
**bacteria**



**fungi**



**mold**



**mildew**



**algae**

Am99™ is formulated with antimicrobial properties to protect the SuperFabric® itself from stains, odors, and damage caused by bacteria and other microbes. Antimicrobial protection is limited to the SuperFabric® material. Higher Dimension Materials makes no direct or implied claims to protecting users or providing other health benefits.

This revolutionary textile uses IONPURE antimicrobial agent (EPA Registration Numbers 73148-1 through 73148-3 and 73148-5 through 73148-8) embedded into its guard plates, resulting in a durable treatment that does not wash off under normal laundering conditions, does not leach and is highly resistant to being abraded off.

SuperFabric is a registered trademark of HDM, Inc.

Am99 is a trademark of HDM, Inc.

IONPURE is a registered trademark of ISHIZUKA GLASS CO., LTD.





### SuperFabric® Environmentally Friendly

SuperFabric® offers a preventative solution, which represents the highest level of environmental protection. SuperFabric® durability extends finished goods' product life, thus preventing products from ending up in landfills. SuperFabric® brand material consists of plates printed onto a base fabric. The plates are inert, eco-friendly materials and SuperFabric® brand material can be printed onto many different base fabrics, including fabrics made from renewable, environmentally friendly materials such as cotton. Find out more at [SuperFabric.com](http://SuperFabric.com).



[Facebook.com/SuperFabric](https://Facebook.com/SuperFabric)



[Twitter.com/SuperFabric](https://Twitter.com/SuperFabric)



[LinkedIn.com/company/SuperFabric](https://LinkedIn.com/company/SuperFabric)



[Instagram.com/SuperFabric](https://Instagram.com/SuperFabric)



[YouTube.com/user/SuperFabric](https://YouTube.com/user/SuperFabric)

SuperFabric® materials are not puncture, abrasion, or cut proof, etc. SuperFabric® materials are available in a variety of configurations and intended to be matched with suitable applications. Branding agreement is needed for the use of SuperFabric® materials.

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