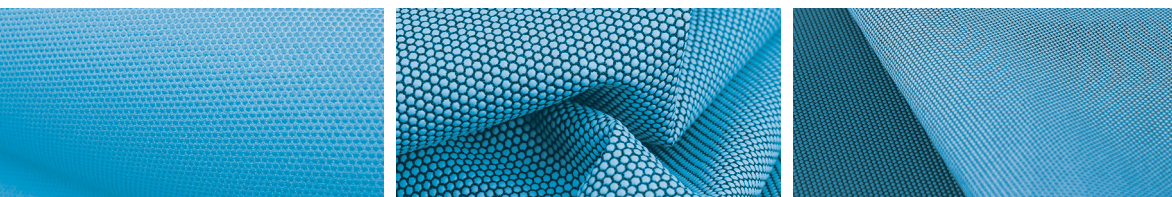




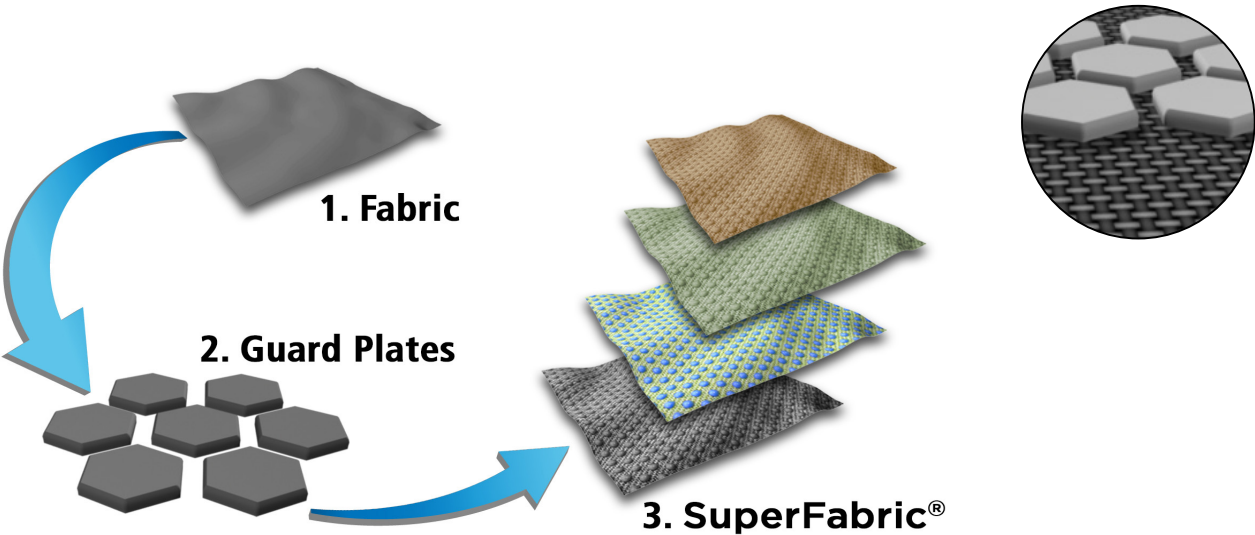
SuperFabric®-Am99™



UNRIVALED PERFORMANCE. UNMATCHED DURABILITY. UNLIMITED POSSIBILITIES.

INTRODUCTION to SuperFabric®

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, 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

WHAT IS SuperFabric® Am99™?

*Am99™ is a new line of SuperFabric® products that adds antimicrobial functionality while maintaining the other inherent features for which SuperFabric® materials are known.

Antimicrobial agents protect the surface of Am99™ from
damage or deterioration by microbes

Am99™ is:

Stain Resistant

Easy to Clean

Abrasion Resistant

Odor Resistant

Durable

SuperFabric®-Am99™ is formulated with antimicrobial agents to protect the SuperFabric® itself from stains, odors, damage, and deterioration from microbes. Antimicrobial protection is limited to the SuperFabric® material. Higher Dimension Materials, Inc. makes no claim whatsoever to protecting users or providing other health benefits.

This revolutionary product contains silver glass (EPA Registration Numbers 73148-1 through 73148-3 and 73148 through 73148-8) embedded into its guard plates resulting in a durable treatment that will not wash off under normal conditions, does not leach, and is highly resistant to being abraded off.

Am99™ TUV-SUD Tested

TUV-SUD is a world-renowned testing and product certification expert with over 1,000 locations. Its testing methods and certification process are well respected around the world.

In August of 2021, Am99™ materials passed the test as antimicrobial fabrics.

Features of Am99™

- **ANTIMICROBIAL:** Antimicrobial agents protect its surface from damage and deterioration by microbes.
- **REUSABLE / WASHABLE:** Can be washed and cleaned without diminishing its effectiveness.
- **STAIN RESISTANT:** Highly stain resistant to keep products made with this material performing and looking like new. It's easy to wash and clean.
- **ABRASION RESISTANT:** Am99™ materials are abrasion and scuff resistant.
- **SLASH RESISTANT:** Am99™ materials are slash resistant, which makes them great for use in seating and similar applications.
- **ENVIRONMENTALLY AND ECOLOGICALLY FRIENDLY:** Unlike conventional antimicrobial fabrics, Am99™ does not leach silver particles into the environment and ecosystem.
- **MANUFACTURED IN USA:** Am99™ is created and manufactured in the USA.
- **CUSTOMIZABLE:** Any SuperFabric® material can be made into an antimicrobial SuperFabric® (Am99™).

Conventional Antimicrobial Fabrics vs Am99™

CONVENTIONAL ANTIMICROBIAL FABRICS:

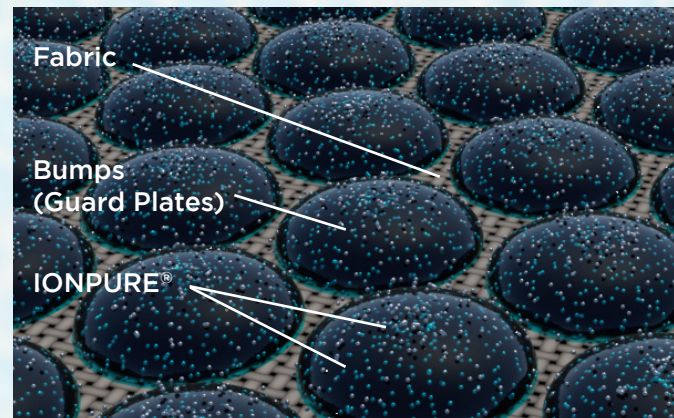
Other antimicrobial fabrics are loaded with silver nanoparticles that release silver ions as the effective antimicrobial agent. Unfortunately, around **98% or more of these silver particles are wasted** due to very low solubility of silver particles in water. Additionally, they are easily washed away from the fabric or rubbed off with slight contact. This can lead to environmental and ecological problems in addition to public health concerns.

Am99™ FABRICS:

Am99™ takes a new and advantageous approach. Am99™ embeds the antimicrobial agent (IONPURE®) into the material instead of coating the fabric like traditional, antimicrobial approaches. This creates a durable, long lasting solution.

It uses no silver nanoparticles, but rather small particles of IONPURE® agent which are very safe to humans and the environment.

The agent is completely controlled and contained within the guard plate.



Stain Resistance of Am99™

The ability of a fabric to protect against a variety of stains is key to long life, fabric aesthetics, and ultimately, customer satisfaction. SuperFabric® materials, including Am99™ offer outstanding stain resistance.



A SuperFabric® Am99™ sample with stains



After cleaning with soap, water and brush

Easy To Clean

Food, drinks and other substances are bound to spill on fabrics. They often dry especially in busy public areas such as buses, airports, and movie theaters, to name a few. Even when left to dry, SuperFabric® Am99™ fabrics, like other SuperFabric® materials, can usually be cleaned easily with just a scrub brush and water.

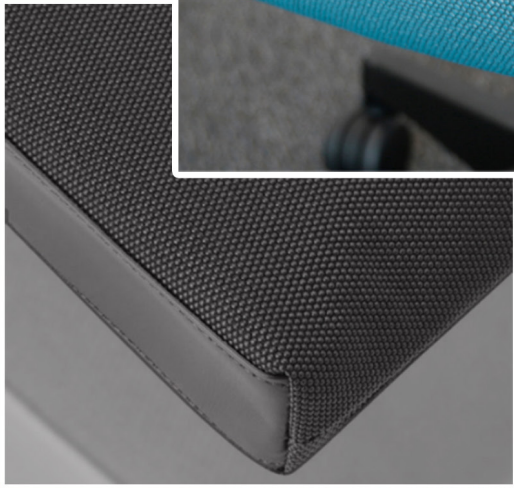


Ecologically And Environmentally Friendly

- Am99™ does not use silver nanoparticles, which are now becoming an environmental and ecological concern.
- The encapsulation nature of Am99™ means no harmful antimicrobial agent leaches out into the environment and waterways.
- Am99™ saves silver which is a precious resource that is being depleted rapidly.
- Re-usability means MUCH LESS disposal into our landfills and ecologically more friendly.

How Can Am99™ Be Used?

Public areas have many surfaces that can become contaminated by microbes such as viruses, fungi, and bacteria. This can cause surfaces to have an odor, and also damage the surface which results in increased maintenance and replacement cost. Am99™ prevents damage by retarding microbe growth.





SEATING: THEATER and AUDITORIUM

Places with high traffic, potential for spills and stains, and direct skin contact create a challenge for many fabrics. Am99™ fabrics are designed for commercial, high-use environments.

Potential application of Am99™



SEATING: PUBLIC TRANSPORTATION

Public transportation seating has lots of contact points including headrests, armrests, and seats that pick up germs. Am99™ fabrics reduce odors, helping keep them fresh and clean. Vehicles such as buses, taxis, trains, subways, and automobiles can all benefit from the antimicrobial properties of Am99™ for seating surfaces.

Potential applications of Am99™

EMT / GURNEYS

Emergency Medical Technicians respond to patients needing quick, immediate attention and transportation. Gurneys and other transports have lots of surfaces that make contact. Am99™ may assist in reducing damage to gurneys and transports caused by these contact encounters. Antimicrobial agents protect surfaces from damage or deterioration by microbes.

Potential application of Am99™

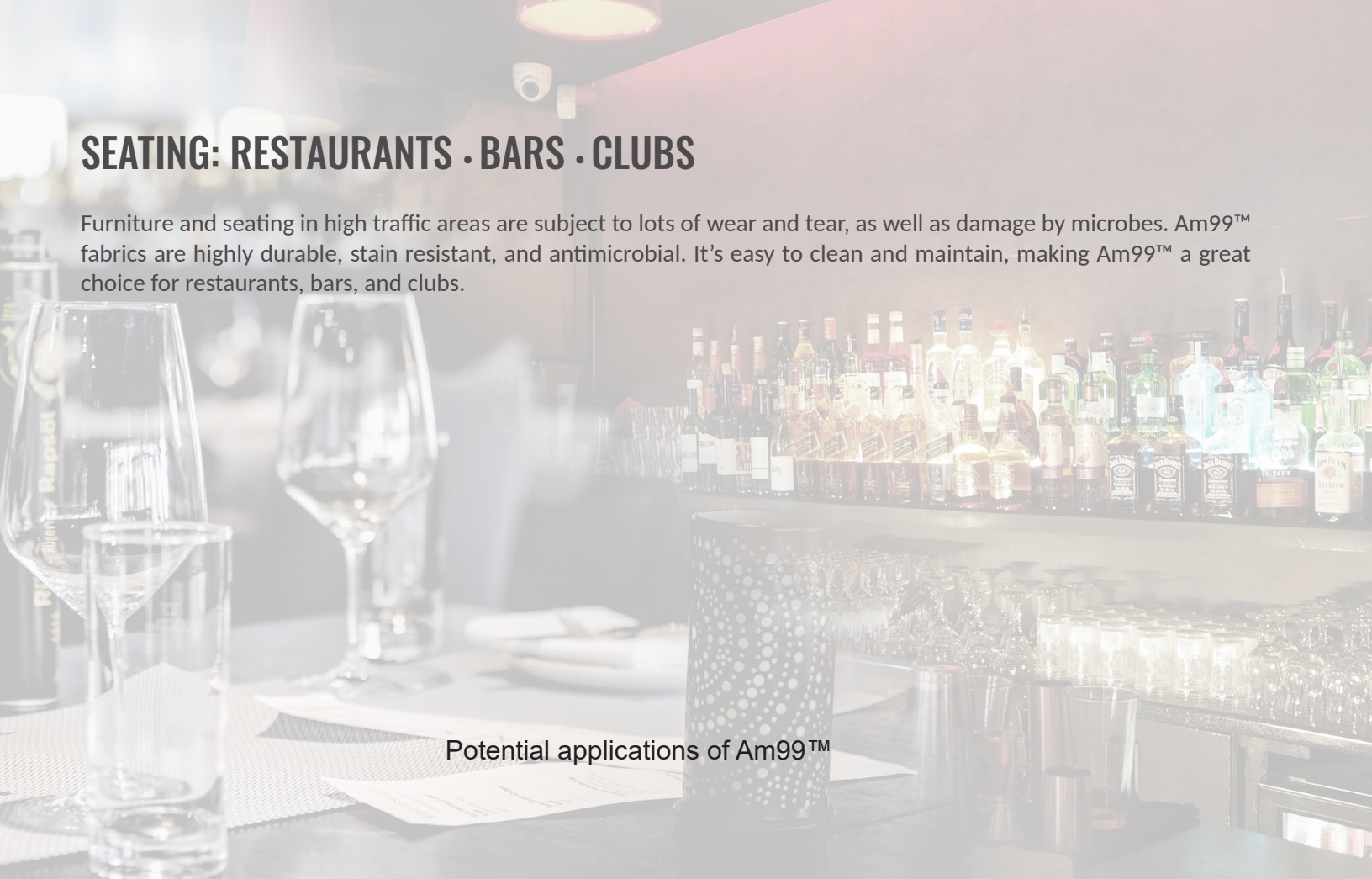
COVERS for HOSPITAL BEDS

Bed sheets on hospital beds must be changed frequently. However, fluids from patients often leak through to the underlying mattress cover. The mattress cover provides protection to the mattress itself. Am99™ can be made into a durable, long lasting cover that provides superior protection. This may reduce replacement and maintenance costs for mattress covers and mattresses.

Potential application of Am99™

SEATING: RESTAURANTS • BARS • CLUBS

Furniture and seating in high traffic areas are subject to lots of wear and tear, as well as damage by microbes. Am99™ fabrics are highly durable, stain resistant, and antimicrobial. It's easy to clean and maintain, making Am99™ a great choice for restaurants, bars, and clubs.



Potential applications of Am99™

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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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Pat. 5906873, other patents pending.



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