



**MOISTURE
BARRIER**

MILLIKEN ASSURE™

RAISING THE STANDARD FOR MOISTURE BARRIERS.

Milliken Assure™ redefines firefighter protection as the industry's first non-PFAS, non-halogenated FR moisture barrier. Surpassing NFPA 1971-2018 requirements, this innovative middle layer offers the same exceptional protection and comfort as PFAS-based gear, without sacrificing performance, durability, or firefighter safety. Future-proof your department's bunker gear by specifying Assure—the only non-PFAS moisture barrier on the market that exceeds industry safety standards.

- + Breathable, lightweight design
- + 3x stronger than NFPA requirement
- + 2x more durable than competitive products in abrasion testing
- + Unique 3-layer design for increased durability and thermal protection
- + Non-PFAS, non-halogenated FR

Milliken™



Milliken Assure™ Moisture Barrier Performance Data				UL® certified to NFPA 1971-2018 (Proximity and Structural Fire Fighting component)
ASSURE PERFORMANCE		SPEC	TEST METHOD	WHY IT MATTERS
Protection				
Liquid and Viral Penetration	Non-PFAS barrier protects against hazardous liquids	No Penetration	ASTM F903 (Procedure C)	"No Penetration" result ensures the product is an effective liquid barrier against blood-born pathogens, hydraulic fluids, battery acids, firefighting foam, and other hazardous liquids.
Thermal Protection	3-layer construction provides extra protection	-	NFPA 1971	Unlike most moisture barriers that are only two layers, Assure is a 3-layer moisture barrier. This additional layer increases thermal protection. It also does not melt, drip or separate.
Durability				
Strength (lbs.)	16 x 23	≥5 x ≥5	Trap Tear (as received) ASTM5587	Assure is 3x stronger than the requirement, extending the life of the equipment.
Abrasion Resistance	> 10K cycles	-	Martindale Abrasion ASTM D4966-98	With a unique 3-layer design, Assure performs 2x better than competitive products in abrasion testing, extending the life of the moisture barrier.
Comfort				
Light Weight	5.7 oz/yd²	-	ASTM D3776	Similar weight to current commercial products, with the added protection and durability benefits that a 3-layer membrane offers.

Note: "Process Averages" are historical averages; actual results may vary by lot, but will meet the minimum "Specs."
Guaranteed flame resistance for the life of the garment when washed according to care instructions.

Answering the Call for a Non-PFAS System

With Assure, Milliken became the first and only U.S.-based manufacturer to offer a non-PFAS fabric for every layer of a firefighter's turnout gear. Fire departments and PPE committees can now specify fully non-PFAS turnout gear coats and pants that provide the same levels of comfort, durability and performance they depend on, without the chemicals they don't.

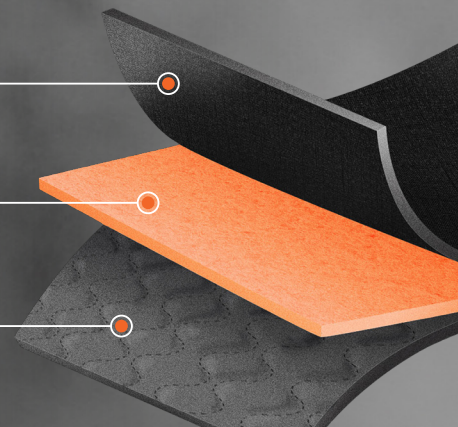
Horizon/Assure/Equinox 3-Layer	Horizon/Assure/Equinox 2-Layer
+ 275 THL	+ 293 THL
+ 40.9 TPP	+ 38.2 TPP

UL data - NFPA 1971-2018 certified November 2024

Milliken®
Horizon™
Outer Shell

Milliken®
Assure™
Moisture Barrier

Milliken®
Equinox™
Thermal Liner



Contact the Milliken Fire Service team today to learn more.

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