



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**

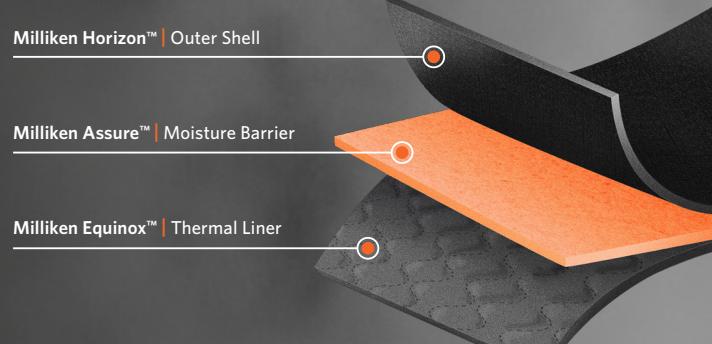
UL® certified to NFPA 1971-2018  
(Proximity and Structural Fire Fighting component)

ASSURE PERFORMANCE		SPEC	TEST METHOD	WHY IT MATTERS
<b>Protection</b>				
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.
<b>Durability</b>				
Strength (lbs.)	16 x 23	≥5 x ≥5	Trap Tear (as received) ASTM M5587	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.
<b>Comfort</b>				
Light Weight	5.7 oz/yd <sup>2</sup>	-	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.



## Contact the Milliken Fire Service team today to learn more.

[TEXTILES.MILLIKEN.COM](http://TEXTILES.MILLIKEN.COM)

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