

GORE[®] RT7100

MOISTURE BARRIER

*Valuable
Performance
Advantages*



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W. L. Gore and Associates is committed to delivering the most innovative and functional moisture barriers for turnout gear on the market, providing firefighters with excellent protection against the hazards they face and effective heat stress management in the range of environments they encounter. In addition to exceeding the minimum requirements of the NFPA 1971 Standard, GORE® moisture barriers provide other valuable performance advantages, are field proven day after day, and are produced using proprietary technologies and processes unique to Gore.

Some of these additional advantages that the GORE® RT7100 moisture barrier brings to turnout gear include:

Moisture Barrier Feature	GORE® RT7100 Moisture Barrier	Non-Gore barrier with non-woven substrate	Further Explanation
Heat Stress Management: Resistance to Sweat Evaporation	Less Than 32 m ² Pa/W with commonly used shell and thermal liner	At least 50% greater resistance	Heat stress in warm conditions can be severe, and enabling sweat to evaporate through the turnout materials is critical to managing it. The European Standard for firefighting garments (EN469) requires testing the resistance to this evaporation – the lower the resistance, the better. Studies have indicated that this difference can be physiologically significant.
Breathability After Heat Exposure	Maintained initial breathability	Lost more than 20%	Repeated heat exposures, even short durations, can cumulatively degrade some materials. While THL, which is used in the NFPA 1971 Standard, is a measure of composite breathability, this test focuses on the performance of the moisture barrier only. Gore designed its moisture barriers to maintain their high levels of initial breathability.
Wet Flex Durability to Leakage	More than 200 hours	Less than 100 hours	Turnout gear gets wet, flexes, and abrades on the job. This test burdens a barrier with accelerated flexing and abrasion in a wet environment to help understand in-use durability. The US military, who uses a similar test, requires minimums of 216 hours and 168 hours in two active outerwear garment programs.
Free of Added Brominated Flame Retardants (BFRs) and Antimony	Yes	No	Gore developed this flame retardant laminate without the use of BFRs and the heavy metal Antimony. This helps enable Gore's moisture barriers to meet the product safety criteria of Oeko-Tex® Standard 100, Class II. This independent, internationally accepted standard ensures that textiles are sufficiently free of harmful substances, so they can safely be worn as intended.
Total Weight	4.6 osy	13% heavier	GORE® RT7100 moisture barrier is the lightest two-layer nonwoven moisture barrier available. The impact/benefit of this level of weight difference is currently debated among industry experts.
Technology from W. L. Gore & Associates, Inc.	Yes	No	The GORE® RT7100 moisture barrier uses proprietary technologies from W. L. Gore & Associates, the creators and manufacturers of GORE® CROSSTECH® moisture barrier. With almost 30 years of demonstrated success in protecting firefighters in the most demanding conditions, Gore's proven technologies are incorporated into the GORE® RT7100 moisture barrier, providing excellent performance and value from the industry leader.

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WARNING: No products, including garments, footwear, and gloves, protect completely, even when new; their protective performance will decline with wear, tear, abrasion, and other damage associated with use.

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