

# CROSSTECH® Moisture Barriers

## About “Lightweight Systems”

Third-party certification of turnout ensembles is required in NFPA 1971. Underwriters Laboratories Inc. (UL) often performs this certification and component recognition of the materials, labels, etc, used in the manufacturing of the ensemble. You can find UL’s component recognition information here:

<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.html>

(UL Category code: QGVG2)

On weight of moisture barriers, the UL data is clear:

<b>Gore’s CROSSTECH® black moisture barrier:</b>	<b>4.7 oz/yd<sup>2</sup></b>
Non-Gore moisture barrier with PBI fibers:	5.2 oz/yd <sup>2</sup>

### CROSSTECH® black moisture barrier is the lightest weight woven substrate moisture barrier available.

There is no doubt that reduction of the weight of gear can help ease the burden on firefighters. But even though Gore offers the lightest weight moisture barriers, how much weight savings is important? What does this weight savings mean in a turnout ensemble? And how do these weight considerations compare to other decisions about turnout gear characteristics and performance?

As indicated, CROSSTECH® black moisture barrier is 0.5 ounces per square yard lighter. That difference in a typical turnout ensemble would be about 3 ounces total, or about the same weight as:

**A pair of trauma scissors**



**3.3 ounces**

**Seven feet of webbing**



**2.9 ounces**

**A plastic door chock**



**2.8 ounces**

Of course small weight savings can add up to larger weight savings. But until further research is conducted, you will have to decide for yourself if these kinds of weight differences are important to you and your department, and how they rank amongst the various performance tradeoffs that need to be made about your turnout gear selection.

Gore offers the lightest weight moisture barriers available, enabling the lightest weight turnout systems. But in the ongoing effort to minimize the burden on firefighters, weight is just one of the considerations.