

CROSSTECH® Moisture Barriers

Better manage your heat stress across a
BROADER RANGE of environments.



You work in all kinds of conditions...so should your gear!



- Get hydrated
- Stay physically fit
- Wear CROSSTECH® moisture barriers for the range of environmental conditions you encounter



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crosstech.com

Firefighters face many environments that contribute to heat stress, particularly warmer conditions and conditions with radiant heat.

- When you work a *highway accident on hot asphalt* or vent a *rooftop in the heat of the sun*, these conditions can result in significant heat stress.
- Your body attempts to maintain a normal core temperature, but in conditions in which there is significant heat stress, body core temperature may rise.

The NFPA 1971 THL test requires only a minimal, relatively mild, condition when evaluating the ability of gear to manage heat stress.

- This test evaluates composites at 77°F, 65% RH, without sun or other radiant heat. Turnout gear, which performs similarly in these conditions, may perform differently elsewhere. As a result, THL is just one part of the heat stress story.

How does YOUR gear perform in conditions beyond those of the NFPA 1971 THL test?



Did you know... As little as a 0.3°F difference in body core temperature can impact how you feel*, and an increase of just a couple degrees above normal can raise the risk of heat exhaustion and impaired decision-making?

*Umbach, K.H. "A universal description of wear comfort in relation to clothing and textiles used in its construction." AIF 4827 Hohenstein Institute, Germany.

CROSSTECH® moisture barriers perform better than non-Gore barriers in conditions beyond those of the THL test.

**CROSSTECH®
black moisture
barrier:**

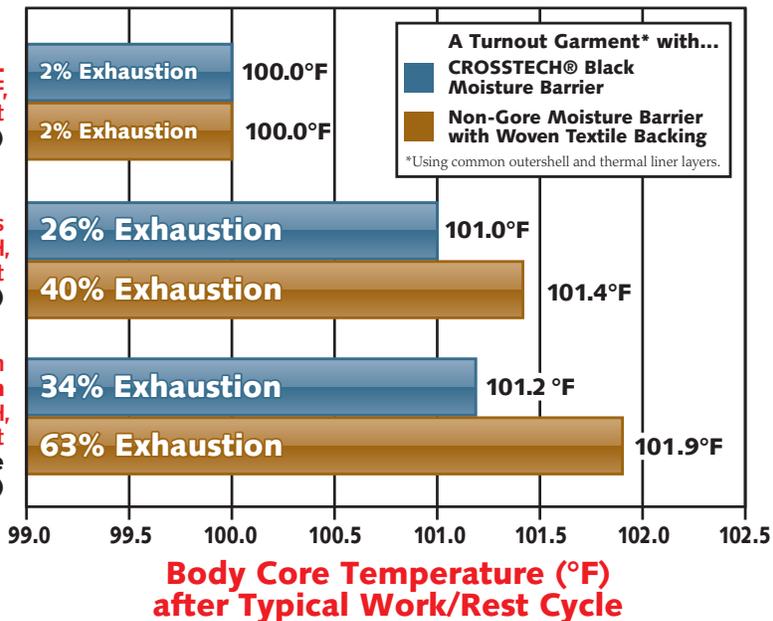
**Lower Core
Temperatures**

**Reduced Heat
Exhaustion**

**NFPA 1971 THL
Conditions 77°F,
65%RH, No Radiant
(dark office)**

**Hotter Conditions
95°F, 40%RH,
No Radiant
(hot night)**

**THL Condition
+ Medium Sun
77°F, 65%RH,
500W/m² Radiant
(moderate
sunny day)**



CROSSTECH® moisture barriers enabled lower core temperatures and reduced dropout rates from exhaustion. Even in cases where the THL values are similar, CROSSTECH® moisture barriers outperformed the non-Gore barrier alternative in other conditions.
Chart based on a combination of proprietary clothing models that incorporate industry-accepted physiological models, and US Military studies.
 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.

For more than 30 years, Gore, the manufacturer of CROSSTECH® moisture barriers, has built a globally recognized capability in human comfort science and expertise.

By utilizing industry-leading methods, proprietary technologies, and input from end users, Gore has created trusted products that go beyond industry standards to provide the performance firefighters deserve.



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