COMPANY PROFILE

W.L. Gore

Moving the dial in rescue protection

For decades, technical rescue teams have operated under the uncomfortable assumption that effective protection means sacrificing mobility and comfort. But that trade-off became a thing of the past when Gore introduced GORE-TEX® CROSSTECH® PYRAD® stretch designed specifically for rescue operations.

The fabric brings together four of Gore's proven technologies in a single garment system. The result is a fabric that is simultaneously waterproof, windproof, breathable and inherently flame retardant, with the ability to stretch in four directions. It sets a new standard for comfort and protection without compromise.

Technical rescue exposes responders to a risk profile unlike many other operational scenarios. A firefighter responding to a road traffic accident may encounter blood and body fluids, petrol, battery acid and hydraulic fluid – add to that, the risk of flash fire. Most rescue suits are designed to protect from one end of that spectrum or the other. Many fire and rescue services also still respond in structural firefighting gear, which protects against all of those risks but is designed to protect in the most extremes of firefighting, such as flashovers. In rescue operations, its additional bulk and weight can induce heat stress and restricts movement in tight spaces. GORE-TEX® CROSSTECH® PYRAD® stretch is engineered for all the risks. The fabric meets ISO 16604 procedure C standard for blood-borne pathogens and viral protection, resists common industrial chemicals, and carries inherent flame retardancy that doesn't rely on chemical treatments that wash out after time. In independent ISO 13506 burn tests on a thermal manikin with a three-second engulfment at 83 kw, the fabric did not melt or drip and there was no burn prediction.

The stretch component of the fabric is unique in this application. Technical rescue frequently requires work in confined spaces, contorted positions and unusual angles. A garment that restricts movement is an operational hazard in itself. The four-way stretch of GORE-TEX® CROSSTECH® PYRAD® stretch fabric moves more like an athlete's performance garment. The elasticity also improves fit over base layers which enhances breathability, keeping the membrane closer to the body which allows sweat to evaporate more efficiently.

Where lifetime performance is critical for delivering best value in protective clothing procurement, rescue garments with GORE-TEX® CROSSTECH® PYRAD® stretch perform extremely well. The fabric has been tested to withstand more than 50 industrial wash cycles using the ISO 15797 Table 1 Method 2 washing garments at 60°C. Crucially, the flame and pathogen protection does not degrade with repeated laundering, and seams and fabric integrity are maintained across the operational lifetime of the garment.

The high levels of durability mean a reduced environmental footprint. Gore applies the ISO 14040-14044 Life Cycle Assessment framework to its products and a longer-lasting garment that maintains protection across its full lifespan is a demonstrably better outcome.

Firefighters often cite the importance of comfort in their garments. Whether that's keeping them dry and warm in wet and windy weather or keeping them cool in the hot sun at protracted incidents. They need a garment designed for purpose that will protect without compromise. A fatigued, overheated or restricted rescuer is a less effective and less safe rescuer. GORE-TEX® CROSSTECH® PYRAD® stretch has moved the dial in rescue protection, recognising the unique needs of this work.

For further information on GORE-TEX® products for fire and rescue, contact Melbourne-based Gore Associate, Gordon Burns gburns@wlgore.com ●

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For more information, go to www.goretexprofessional.com