

SUPERIOR
BREATHABILITY
AND THERMAL
PROTECTION
- EVEN IN WET
CONDITIONS



Thermal barriers provide less protection when they are wet. GORE-TEX CROSSTECH® PARALLON® System keeps the thermal barrier dry thus maintains the highest thermal protection, even in wet conditions and without compromising breathability. This system provides the most advanced protection for firefighters today.

Today's PPE provides excellent thermal protection from heat and flame. However, firefighters are still at risk from steam burns that can occur in sub flashover conditions, wearing wet gear, which transmits heat 23 times faster than dry gear. Steam burns, which occur with a buildup of thermal energy and moisture, are exacerbated by compression, such as from crouching, kneeling or a breathing apparatus harness or other belts and straps.

The GORE-TEX CROSSTECH® PARALLON® System combats these risks associated with moisture and heat stress by incorporating two highly breathable, liquidproof membranes on either side of the thermal barrier. This layered system encapsulates the thermal barrier to protect it against moisture from the inside and the outside. Sweat is wicked away from the skin to reduce heat stress and the risk of steam burns, as well as keeping the wearer cooler. The thermal protective fabric also remains dry from the inside. The outwards facing membrane prevents water and other chemicals from penetrating, so the thermal protection is drier and better able to shield against heat and flame and minimise the risk of burn injuries. The GORE-TEX CROSSTECH® PARALLON® System delivers extremely high protection from radiant and convective heat, with significantly increased breathability.

The GORE-TEX CROSSTECH® PARALLON® System is lighter in weight and less bulky, since less insulation is needed, thus more comfortable with better freedom of movement – without any compromise in thermal protection. There is also less water pickup so the weight of garment does not increase significantly in wet conditions. Available in two EN 469 compliant versions, GORE-TEX CROSSTECH® PARALLON® System offers the flexibility of choice to meet the needs of varying operational profiles.



SUMMARY:

GORE-TEX CROSSTECH® PARALLON® System offers superior thermal protection, even in wet conditions, with:

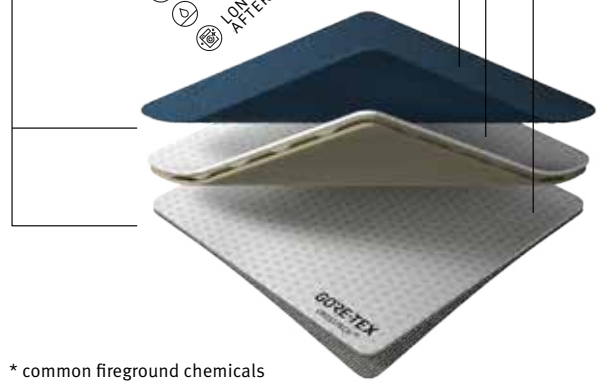
- ▶ Moisture Management – inside and out
- ▶ High breathability facilitating cooling off quicker
- ▶ Reducing heat stress while optimizing thermal protection in hazardous heat exposure conditions

Thus creating new benchmark for structural fire fighting garments.

GORE-TEX CROSSTECH®
PARALLON® SYSTEM

- ⊕ MOST BREATHABLE
- ⊕ BLOOD BORNE AND VIRAL PATHOGEN PROTECTION*
- ⊕ CHEMICAL RESISTANT*
- ⊕ LIGHTWEIGHT
- ⊕ QUICK REDRY
- ⊕ FLAME RESISTANT
- ⊕ DURABLY WATERPROOF
- ⊕ LONG LASTING PERFORMANCE AFTER FREQUENT WASHING

OUTERSHELL
THERMAL BARRIER
GORE MEMBRANE +
TEXTILE INSULATION
MOISTURE BARRIER
GORE-TEX CROSSTECH®
MEMBRANE +
PROTECTIVE WOVEN



* common fireground chemicals

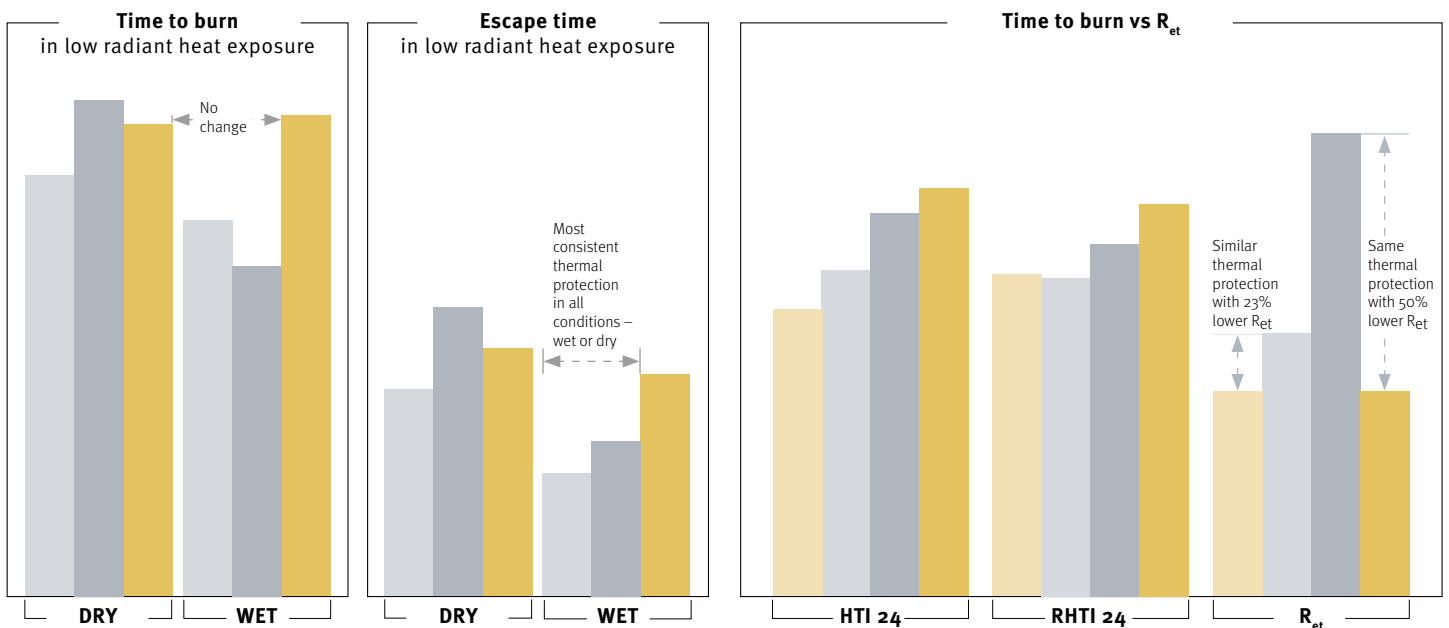
GORE-TEX CROSSTECH® PARALLON® System 600 is designed to deliver to the highest thermal protection combined with the highest breathability. This results in consistently high levels of thermal protection in wet and dry conditions that exceed the EN 469 standard.

GORE-TEX CROSSTECH® PARALLON® System 500 is lighter and improves wearer comfort but does not compromise protection. It is designed for structural firefighting in warmer, humid climates and for firefighters who undertake technical rescue work wearing structural garments.

Fire fighters wearing the PARALLON® system can focus on the task at hand instead of their gear, with:

- ▶ Consistently high protection in all conditions – dry or wet
- ▶ Highest breathability reducing the risk of heat stress
- ▶ High levels of comfort and freedom of movement
- ▶ Low water pick up as weight of garment does not increase significantly in wet conditions

Tests show GORE-TEX CROSSTECH® PARALLON® System consistently maintains thermal protection in wet conditions, allowing more time to escape and reducing the risk of burns. And that it delivers extremely high levels of protection from radiant heat with significantly increased breathability compared to other solutions.



Typical assembly performances using Gore products

Source: Gore Lab – unwashed samples



The GORE-TEX CROSSTECH® PARALLON® System has been extensively tested in wearer trials with impressive results.

Michael Wittmeier Professional Trainer at FEUREX, Fireman at the Fire Brigade Neuburg a. d. Donau said:

“The first thing I noticed was the comfort. It was comfortable to wear and easy to move in. Even when it got really hot you only felt the heat very gradually.

As soon as you got away from the heat it felt cooler. The cooling effect was immediate. That’s a great feature.”

The GORE-TEX CROSSTECH® PARALLON® System revolutionises firefighter protection, with higher levels of protection, even when wet, and is the most breathable solution to reduce the risk of heat stress.

For more information about the GORE-TEX CROSSTECH® PARALLON® System contact W. L. Gore & Associates goretexprofessional.com

