

Today, Sigma is worn by over 100,000 U.S. soldiers across the globe to protect against the same dangers experienced by wildland firefighting and USAR teams—flash fire and fatigue. Now, following a two-year wear trial involving Cal Fire, Natick, the National Forestry Service, and dozens of the top agencies along the west coast, Sigma has confirmed what the U.S. Military had already determined—the next generation of flame resistant fabric technologies has arrived.

In Service in:

VENTURA COUNTY SAN DIEGO HOUSTON CAL FIRE LA CITY TULSA



Producer Dyed Colors









Tan

Black Yellow (Other colors may be available)

Navy

"Sigma was the top rated shirting/overcoat fabric in one of the largest wildland wear trials ever conducted."



Blend: 45% meta-aramid 17% Polyamide

6% para-aramid

32% Lenzing® FR

Weight: 7 oz.

Tan, Black, Yellow and Navy Color:

Weave: Comfort twill

Certified: NFPA 1977, NFPA 1975, NFPA 1951

Innovation

Innovation is a word not typically associated with FR Fabrics worn by those in the wildland firefighting and tech rescue world. First responders have been limited to traditional fabrics made of basic aramid blends or FR cotton blends for the last 30 years. These traditional blends usually have one or two positive areas of performance but lack in other areas of performance. Sigma™, made up of 45% meta-aramid, 32% Lenzing® FR, 17% polyamide and 6% para-aramid offers first responders the best combination of flash/ thermal protection, durability, comfort, and appearance in a single layer garment.

Comfort

First responders have traditionally sacrificed comfort for better protection and durability, and vice versa. Sigma breaks the mold with exceptional performance in every area. Sigma is made with Lenzing FR that creates a soft hand (feel) similar to cotton. Lenzing FR also allows the fabric excellent whicking properties to whick moisture away and dry quickly. Sigma has been described by wearers as the most comfortable PPE available on the market.

Battle Tested

Sigma has been tested and specified as the fabric of choice for use as flash protection by the following agencies:

U.S. Army - FR BDU (Battle Dress Uniform)

U.S. Air Force - FR Flight Suits

U.S. Marines - Advanced Combat Shirt

Cal Fire - Wildland Over Coat Oklahoma City (Dual Certification Tech Rescue and Wildland Suit)

In fact, Sigma was also specified as the fabric of choice by DHS (Department of Homeland Security) in a trial that included over 1,000 wear trial participants and 60 FR fabrics. The DHS report results are outlined below and available online.

Advanced Personal Protection System Wildland Firefighter PPE Shirt Fabric Comparison and Reference

Companson and Reference			
Test Description	S/469	Sigma	M900
Response Shirt Preference	4.55	4.92	4.15
System Heat Dissipation	5.09	5.50	5.15
System Radiant Protection	4.76	4.79	4.71
Appearance	4.73	4.78	4.52
Durability	4.80	4.97	4.88
Comfort	4.66	5.09	4.27



"The higher preference ratings for Sigma are most likely due to the better heat transfer performance, as the Sigma fabric received the highest ratings in both **System Heat Dissipation** and Comfort by a noticeable margin."





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Safety Components maintains ISO 9001:2000, TS 16949 and ISO 14001 certifications. Our fabric testing laboratories are ISO 1725 approved, ASTM (North America), DIN (Europe), JIS (Asia), and NFPA certified. Throughout our 100 year history, Safety Components has developed a reputation for product quality, product innovation, product diversity and on-time delivery. Sigma is a trademark of Safety Components, Inc. Lenzing FR is a registered trademark of Lenzing AG or its affiliates.

