

Nomex® On Demand™ Q&As

Q: How is Nomex® On Demand™ different than other commercially available thermal liner technologies?

A: Nomex® On Demand™ is a smart technology that is designed to expand when exposed to temperatures of 250° and higher. The expansion of the thermal liner traps additional air helping to increase the thermal insulation of the garment. Other thermal liner technologies are static and do not provide increased thermal insulation when exposed to high temperatures.

Q: When will the material expand?

A: The material will begin to activate and expand when the inside temperature of the coat reaches 250° Fahrenheit and higher. The level and rate of expansion will depend on the exposure temperature.

Q: Will the material go back to its original state after exposure?

A: No, the material stays expanded after exposure to provide that increased level of thermal protection. Typically the areas that undergo expansion are those regions of the garment that are not reinforced by other materials (pocketing, flaps, trim, overlap, or reinforcements). Nomex® On Demand™ is engineered to perform when you need it most, where the material has been exposed to temperatures of 250° Fahrenheit.

Q: If my coat is exposed and the Nomex® On Demand™ thermal liner activates, will I need to replace my coat?

A: No, the expansion of the thermal liner does not require replacement of the garment. Users should follow the guidelines outlined in NFPA 1851 for inspection and repair of their gear to determine if any or all of it needs to be replaced. Contact your preferred garment manufacturer for more information.

Q: Does the entire thermal liner expand if my coat is exposed in just one particular area?

A: No. Nomex® On Demand™ only expands when and where it is exposed to heat, so it is highly probable you may only see expansion in localized areas that have been specifically exposed to 250° Fahrenheit or higher.

Q: Does Nomex® On Demand™ lose any durability properties after it expands and is laundered?

A: No. Our data shows continued durability and increased thermal performance after expansion and laundering.

Q: Has DuPont conducted tests to verify the performance of this new product?

A: DuPont has done extensive testing of materials, composites, and complete garments to verify the thermal performance of Nomex® On Demand™. Testing of the garment systems containing Nomex® On Demand™ On DuPont™ THERMO-MAN® shows outstanding thermal protection under prolonged emergency conditions of 250° or higher.

Q: Will DuPont charge more for Nomex® On Demand™?

A: Nomex® On Demand™ is a premium offering that provides high level of thermal performance and will be priced accordingly.

Q: When can I specify Nomex® On Demand™ for my gear

A: We are working with most of the North American mills and major garment manufactures to incorporate this unique technology into there product offerings.

Q: Is DuPont now selling complete thermal liners?

A: No. Contact your preferred garment manufacturer to specify Nomex® On Demand™.

Q: Is Nomex® On Demand™ NFPA certified?

A: Yes, Nomex® On Demand™ has been incorporated into a component certified thermal liner that meets the performance requirements of NFPA 1971, 2007 edition. Mills and garment manufacturers are working with DuPont to have their garments and other liners certified.

Q: Can I find Nomex® On Demand™ technology in any other Fire Service industry products?

A: At this point, no. We are, however, currently evaluating Nomex® On Demand™ use in other specific applications.

Q: What is the price of a thermal liner with Nomex® On Demand™ technology compared to average industry prices?

A: Contact your preferred garment manufacturer for pricing.

Q: How is Nomex® On Demand™ different than Nomex® Omega™?

A: Nomex® Omega™ was a system of components - outershell, moisture barrier and thermal liner - that took advantage of a unique outer shell to provide lightweight

protection. The Nomex® On Demand™ thermal liner is available with any outer shell and moisture barrier and will provide improved thermal insulation in high temperature environments.