

# Honeywell Thermal Liner made with Nomex® Nano

## New Generation Thermal Liners for Increased Firefighter Protection and Mobility

The thermal liner within a set of turnout gear minimizes, to a safer level, the amount of heat transfer from a firefighting environment to the body of the wearer.

The exclusive Honeywell Thermal Liner made with Nomex® Nano incorporates DuPont™ Nomex® Nano technology that helps to mitigate heat stress – a growing problem firefighters may experience. Our liner with Nomex® Nano is up to 40% thinner than other liners and improves total heat loss (THL) while providing similar thermal protection performance (TPP). Thinner and lightweight, our new thermal liner directly correlates to a reduction of turnout gear bulk to give you increased mobility and larger range of motion.

The Nomex® Nano thermal liner is constructed from one layer of Nomex® Nano and one layer of E89 material which are together quilted to a fine face cloth made from Nomex® fibers.





## Features & Benefits

- Outstanding thermal insulation
- Thinner than other thermal liners
- Reduced weight and bulk as compared to other thermal liners
- Improved THL while maintaining similar TPP
- Superior moisture management performance

### **Available Composites**

Composite	TPP	THL	
4150	37.9	267.7	
4153	36.8	282.6	
415D	36.6	274.7	
6250	38.2	280.8	
625D	37	284.6	
625G	39	286.8	
6550	42	301.9	
6553	39.8	321.1	
655D	41.4	299.3	
655G	42.4	323.1	
7450	42	301.9	
7453	38.9	300.2	
745D	39	287.8	

DuPont™ and Nomex® are trademarks and registered trademarks of DuPont or its affiliates. Copyright © 2019 DuPont de Nemours Inc.

THERMAL LINER ATTRIBUTES TESTING	CRITERIA	RESULTS
TDD, NEDA 1071	GBX, Type 2F CROSSTECH® Black	39.8
TPP: NFPA 1971	GBX, STEDAIR® 4000	42.4
THL: NFPA 1971	GBX, Type 2F CROSSTECH® Black	321.1
Inc. NPPA 1971	GBX, STEDAIR® 4000	323.1
Breaking Strength: ASTM D5034	As Received (W x F)	170 x 120 lbf
Transpaid Tagy Desistance, ACTM DEFO7	As Received (W x F)	45 x 30 lbf
Trapezoid Tear Resistance: ASTM D5587	After 5X Launderings (W x F)	45 x 31 lbf
Cleaning Shrinkage: AATCC 135	After 5X Launderings (W x F)	3.9% x 1.8%
Heat and Thermal Shrinkage: NFPA 1971	As Received (W x F)	1.3% x 0.4%
	After 5X Launderings (W x F)	0.8% x 0.4%
	As Received	
	After Flame (W x F)	0.0 x 0.0 Seconds
Flores Desigtances ACTM DC (112	Char Length (W x F)	0.9 x 0.8 inches
Flame Resistance: ASTM D6413	After 5X Launderings	
	After Flame (W x F)	0.0 x 0.0 Seconds
	Char Length (W x F)	1.1 x 0.9 inches

THERMAL LINER ATTRIBUTES		
Quilt Style	6NF-NANO2-PB1	
Color	Blue	
Nominal Weight	6.6 oz/yd²	
Facecloth	Nomex®, 3.2 oz/yd²	
Datting	One layer of E89, 2.3 oz/yd²	
Batting	One layer of DuPont™ Nano, 0.6 oz/yd²	
Thickness	0.037 Mills	
USA Made	Yes	
Certification	NFPA 1971	

## **Honeywell First Responder Products**

#1 Innovation Court
Dayton, Ohio 45414
Tel: 800-688-6148
www.honeywellfirstresponder.com

