

NOMEX[®]
only by DuPont



INTRODUCING NOMEX[®] LIMITEDWEAR

PERFORM WHEN THE HEAT'S ON

The safety and security
of NOMEX® in low-cost,
limited-use FR garments

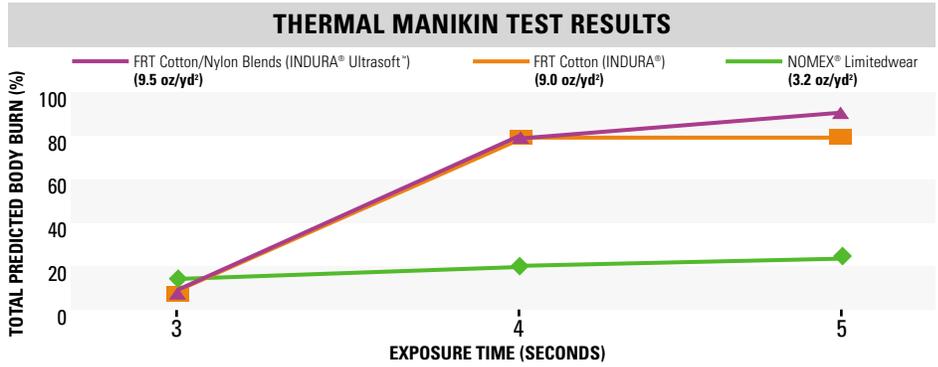


The work – even though it lasts for only short periods of time – is hot, dirty and dangerous. Flame-resistant (FR) protection for your employees is critical, but can be expensive. How can you protect your workers and your budget at the same time? By specifying NOMEX® Limitedwear – a new apparel offering from DuPont that offers the primary flash fire protection of NOMEX® in a low-cost, limited-use garment.

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Product safety information is available upon request.

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Conditions: Coveralls tested as intended to be worn; NOMEX® Limitedwear worn over cotton underwear, shirt and pants; others worn over cotton underwear. Heat flux of 2 cal/cm²-sec; average of three measurements; laundered and dried 1X.

Certified, Exceptional FR Protection

- NOMEX® Limitedwear has been certified as compliant with NFPA 2112 guidelines by Underwriters Laboratories.
- NOMEX® Limitedwear is inherently flame-resistant, launderable, and won't melt and drip or support combustion in the air.
- As primary flash fire protective apparel, NOMEX® Limitedwear is designed to be worn directly over regular cotton street clothes; most FR disposable garments need to be worn over other FR apparel.

Comfortable and Convenient

- At about 3oz/yd², NOMEX® Limitedwear is half the weight of traditional FR apparel and 1/3 the weight of most FR cotton.
- It is lighter, more breathable and more flexible than other FR garments, which helps keep workers cool and comfortable in hot environments.
- Engineered to last about 10 wash-wear cycles, depending on task.

Cost Effective

- NOMEX® Limitedwear is approximately half the cost of FR cotton garments, and less than one-third the cost of more durable FR garments. This significantly reduces the initial investment required to protect workers.

- Because it is so cost-effective, NOMEX® Limitedwear greatly simplifies the administrative issues and hassles of tracking and laundering more durable FR garments used by temporary workers.
- Since NOMEX® Limitedwear is less than half the price of traditional FR apparel, clothing allowances go further – especially if workers inadvertently take garments with them when they leave the job site.

Protection for the Short-Term, Value in the Long Run

NOMEX® Limitedwear was developed by DuPont™ NOMEX® at the request of employers looking to complement the traditional, durable protective apparel of NOMEX® worn by their permanent employees. Now, NOMEX® Limitedwear easily and cost-effectively provides the same exceptional flash fire protection to their temporary or contracted employees and visitors. NOMEX® Limitedwear is an outstanding choice for the primary flash fire protection it offers workers in short-term assignments and the value it offers safety managers in the long run. Properly worn, NOMEX® Limitedwear is excellent protection at a great price.

NOMEX® LIMITEDWEAR FREQUENTLY ASKED QUESTIONS (FAQ)

1. What is NOMEX® Limitedwear?

NOMEX® Limitedwear is a limited use flame-resistant (FR) coverall designed to provide primary flash fire protection for industrial workers and others requiring short-term FR protection.

2. Is NOMEX® Limitedwear compliant with NFPA 2112?

Yes, NOMEX® Limitedwear is certified by Underwriters Laboratories to be compliant with NFPA 2112, the new standard on flash fire protective apparel for industrial workers.

3. How comfortable is NOMEX® Limitedwear?

NOMEX® Limitedwear is one-third the fabric weight of FR cotton and three times as breathable. Since you wear it over cotton work clothes, you get the comfort of everyday cotton clothing against your skin.

4. Can NOMEX® Limitedwear be laundered?

Yes. It is made from NOMEX® brand fiber and can be laundered. Repeat laundering does not reduce the FR protection, because the inherent flame-resistance of NOMEX® cannot be washed out.

Laundering instructions: machine wash hot (140°F), tumble dry low heat (160°F), do not use bleach or line-dry in sunlight.

5. How long will NOMEX® Limitedwear last?

Experience in wear tests and field trials with construction and maintenance workers suggests typical durability will be 7-10 wearings. In these trials, most garments were discarded due to contamination or damage. In less rigorous applications durability could be longer.

6. Does NOMEX® Limitedwear have to be worn over other FR apparel?

No. NOMEX® Limitedwear is primary flash fire protection and does not need to be worn over other FR apparel. It is recommended that NOMEX® Limitedwear be worn over regular 100% cotton work clothes. However if worn over cotton underwear, it will still meet the performance requirements set by NFPA 2112.

Note: Clothing made from flammable thermoplastic materials such as nylon or polyester should never be worn under or over any FR apparel.

7. What size should I wear?

NOMEX® Limitedwear is generously cut and designed to be worn over normal cotton work clothes. The sleeves and legs can be cut or rolled to proper length, which should fully cover wrists and ankles. See the sizing chart for details. Available sizes are Small, Medium, Large, XL and XXL.

8. How do garments of NOMEX® Limitedwear compare with traditional NOMEX® IIIA?

When worn over cotton work clothes, NOMEX® Limitedwear is a lightweight coverall that provides comparable flash fire protection to NOMEX® IIIA, but with less durability. It is intended for short-term use, and because of its low cost can be affordably discarded after limited use.

9. Does NOMEX® Limitedwear provide chemical protection?

No. NOMEX® Limitedwear is a flash fire protection coverall.

10. How is NOMEX® Limitedwear packaged?

The basic unit of sale is a case, not individual garments. Each case contains 10 garments of the same size. The case size is 15 inches by 15 inches by 12 inches.

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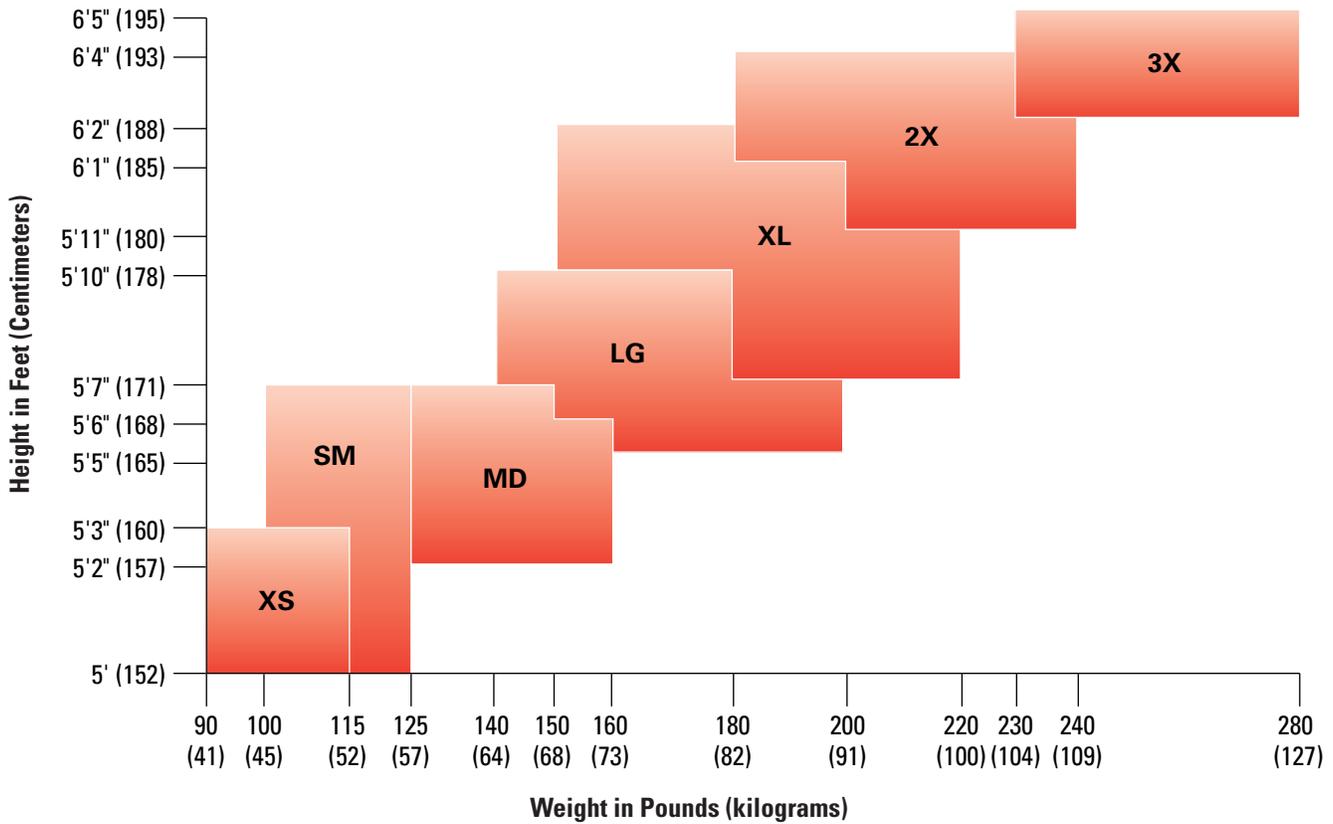
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RECOMMENDED SIZING CHART FOR LIMITED-USE AND DISPOSABLE COVERALLS



Reprinted as part of ANSI/ISEA 101-1996 American National Standard for Limited-Use and Disposable Coveralls-Size and Labeling Requirements.

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NOMEX® LIMITEDWEAR

TECHNICAL INFORMATION

Flame-resistant, launderable, short-term-use garments

NOMEX® Limitedwear is a limited use garment that provides the excellent flash fire protection of NOMEX® for temporary employees and visitors to flash fire hazard areas. NOMEX® Limitedwear is oversized and cut into a simple coverall pattern, so it can be comfortably worn over regular cotton work clothes and underwear. These garments, as well as the sewing thread and zipper tape used in their manufacture, are made from inherently flame-resistant DuPont™ NOMEX® brand fiber. Because NOMEX® Limitedwear is launderable, it is machine-washable and can be conveniently cleaned. And, due to its low cost, NOMEX® Limitedwear can be affordably discarded after only limited use.

Outstanding thermal performance

NOMEX® Limitedwear has been certified as compliant with NFPA 2112 guidelines by Underwriters Laboratories. When worn properly over cotton work clothes, a 3-second exposure (6 cal/cm²) in thermal manikin testing (ASTM F1930-99) produces only a 16% predicted body burn. Even at a 5-second exposure, the predicted body burn is only 24%. NOMEX® Limitedwear, a primary protection garment, does not need to be worn over other flame-resistant (FR) clothing as must be done with most disposable FR apparel. And, because NOMEX® Limitedwear is made from DuPont™ NOMEX® brand fiber, its flame resistance is an inherent and permanent property that cannot be washed out.

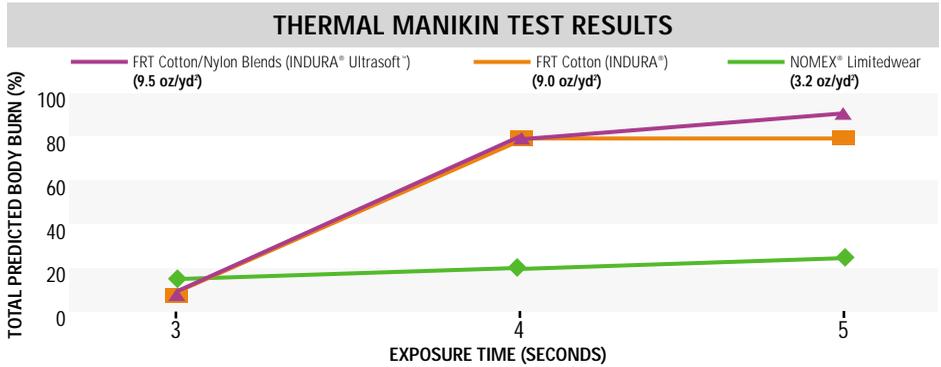
NOMEX® LIMITEDWEAR PERFORMANCE DATA	
TPP, Spaced	11 cal/cm ² (NFPA 2112)
TPP, Contact	7 cal/cm ² (NFPA 2112)
Vertical Flammability, Char Length	2.7 inches (ASTM F-6413)
Vertical Flammability, Afterflame	0.0 sec. (ASTM F-6413)
Thermal Shrinkage, MD/XD	<1% (NFPA 2112)
Breaking Strength, MD/XD	100 lb _f / 90 lb _f
Elmendorf Tear Strength, MD/XD	12 lb _f / 13 lb _f
Launderability	Machine wash in hot water, tumble dry low heat



Tested on THERMO-MAN®

Thermal testing of NOMEX® Limitedwear is done on THERMO-MAN®, an instrumented, six-foot, one-inch tall, high-temperature manikin system with 122 heat sensors. THERMO-MAN® is used to test and measure the protective performance of a variety of garments and clothing systems under simulated flash fire conditions.

THERMO-MAN® is dressed in protective apparel and engulfed in flames so that factors like garment construction, fabric weight, material type, style, fit, and the impact of outerwear and undergarments can be taken into account. Results of these tests are then analyzed to determine the extent of thermal protection provided by the clothing system. THERMO-MAN® is the most advanced life-size thermal burn injury evaluation system in the world today.



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Limited wear, lasting comfort

NOMEX® Limitedwear garments are specifically designed for short-term, limited use. While 7–10 day garment durability was common in field trials among construction workers, this could vary depending on task. And, since many of these tasks are performed in hot environments, keeping workers cool and comfortable is critical. Because NOMEX® Limitedwear is made from a lightweight (3.2 ounces per square yard) fabric, it provides outstanding comfort, excellent breathability and more flexibility than other, more durable FR apparel, which typically weighs 2 to 4 times as much as NOMEX® Limitedwear.

NOMEX® LIMITEDWEAR VS. FRT COTTON		
	NOMEX® LIMITEDWEAR	FRT COTTON (INDURA®)
Fabric Weight	3.2 oz/yd²	9.0 oz/yd²
Air Permeability	>150 cfm/ft²	<50 cfm/ft²

Excellent, affordable protection

NOMEX® Limitedwear delivers excellent flash fire protection at a great value. It complements the durable NOMEX® Workwear and NOMEX® Comfortwear product lines by offering workers low-cost, easy-to-use FR protection for short-term assignments. Comfortable, launderable and flame-resistant, NOMEX® Limitedwear also provides exceptional FR protection for visitors and temporary workers at an affordable price.

When you need outstanding thermal protection for your short-term contract workers and on-site visitors, but also need to keep an eye on the budgetary bottom line, the superior choice is NOMEX® Limitedwear.

For more information on NOMEX® Limitedwear, please visit the NOMEX® web site at www.dupont.com/nomex, contact your local DuPont Protective Apparel representative or call 1-800-453-8527.

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