



Flame Resistant Clothing



FLAME RESISTANT CLOTHING

Why to wear flame resistant garment?

It's necessary to wear flame resistant garment in flammable condition. The FR fabric of flame resistant garment can reduce the burning rate and stop burning once away from the fire. FR fabric will carbonize without melting drip when it's on fire, so it will give workers enough time to run away from fire or take off the burning garment to avoid or alleviate burn and scald.

Which professionals can flame resistant garment be used for?






Workers in the petroleum, petrochemical, fire service, and other professionals that may be exposed to flash fire.

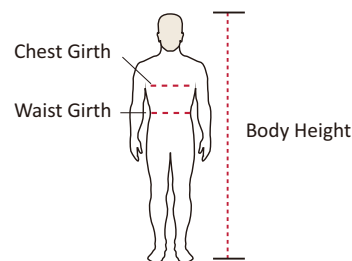
Standards of flame resistant garment

American Standards

- NFPA 2112: Standard on Flame-Resistant Garments for Protection of Industrial Personnel against Flash Fire
- ASTM F-1930: Standard Test Method for Evaluation of Flame Resistant Clothing for Protection Against Flash Fire Simulations Using an Instrumented Manikin

European Standards

 EN11612	EN11612: Protective clothing — Clothing to protect against heat and flame
 EN11611	EN11611: Protective clothing for use in welding and allied processes
 EN61482-1-2	EN61482-1-2: Protective clothing against the thermal hazards of an electric arc
 EN1149-5	EN1149-5: Protective clothing — Electrostatic properties
 Type 6	Type 6: Suits which offer limited protection against a light spray of liquid chemicals



Sizes: (cm)

	XS	S	M	L	XL	2XL	3XL
Body Height	153-158	158-163	163-168	168-173	173-178	178-183	183-188
Sleeve Length	56	57	58	59	60	61	62
Chest Girth	112	116	120	124	128	132	136
Shoulder Breadth	44	46	48	50	52	54	56
Outseam	98	100	102	104	106	108	110
Waist Girth	78	82	86	90	94	98	102



SELECTION GUIDE FOR FLAME RESISTANT GARMENT

Step 1 Fabric Selection

- Lakeland supplies multiple choices of fabrics with different features. Please refer to P47 for detailed information.
- Every fabric has different weight for your choice.
High weight: suitable for autumn and winter
Low weight: suitable for spring and summer



Step 2 Styles Selection

Lakeland supplies multiple choices of styles and we also can design according to customers' requirements.

Fabric	FRC		TSP	NMX		DH	TenCate Oasis
Fiber Blend	100% FR cotton		100%Tecasafe Plus (48%FR-modacrylic +37%lyocell+15% aramid)	100%NomexIIIA(93% NOMEX®+5%KEVLAR® +2%P140 antistatic fiber)		48%Tencel+ 40%modacrylic +12%aramid	50% Lenzing FR fiber+40%wool +10%nylon
Weight(+5%)							
grams(sq meters)	306g	260g	238g	153g	204g	220g	255g
oz(sq yd)	9.0oz	7.7oz	7.0oz	4.5oz	6.0oz	6.5oz	7.5oz
Flame Resistant Type	Treatment flame resistant		Inherently flame resistant	Inherently flame resistant	Inherently flame resistant	Inherently flame resistant	Inherently flame resistant
Price	Low		Medium	High	Medium		
Daily Cost	High		Low	Medium		Low	
Protection	Flash Fire Arc Flash Antistatic		Flash Fire Arc Flash	Flash Fire Arc Flash Antistatic		Flash Fire Arc Flash Antistatic	—
Comfort	★★★★		★★★★★	★★★★		★★★★★	
EN Standards	—	—	—	—		EN11612	EN11612 EN373
NFPA 2112	✓	✓	✓	✓		✓	—

Fabric Recommendation

DH Inherent FR Fabric

48%Tencel 40% modacrylic 12% aramid

- Lakeland DH FR Garment is designed to provide a solution that bridges a vast number of industries and adheres to the most important performance standards. FR regulations, such as NFPA 70E, and NFPA 2112.
- Lakeland DH FR Garment is designed with inherent FR properties; protection is built into the fiber. Normal laundry conditions will not adversely affect the performance of the garment.
- The fabric is designed to not melt, stick, or drip when exposed to extreme temperature or flame.
- Under normal wear condition, Lakeland DH FR Garment can provide years of dependable and reliable service.
- Lakeland DH FR Garment is designed to provide comfort with performance and a high level of aesthetics. Natural feel is a result of a high percentage in the blend of Tencel, a hydrophilic fiber that enhances comfort.
- Economic, cost-effective.

TenCate Oasis Premium Molten Metal Splash Protection

50% Lenzing FR fiber+40% wool+10% nylon

TenCate Oasis is an innovative protective fabric that offers incredible softness, has a lightweight feel and is flexible. It is designed to deliver premium protection against molten metal splash, radiant heat, flame and other smelting hazards. An outstanding value and the best choice among thermal resistant, metal-shedding fabrics, it has been chosen by leading aluminum manufacturers, worldwide, for its protection, comfort and durability.

- Inherently flame-resistant – Flame-resistant, metal shedding protection is built into the fabric, so it won't wash or wear out.
- Comfortable to wear – Engineered with an innovative fiber blend, this fabric is designed for excellent softness and flexibility.
- Outstanding value – Long-lasting protection withstands rugged use and repeated industrial launderings.

FRC 260/306 Economic and Comfortable Flame Resistant Fabric

100% FR cotton

- Comfortable and soft
- Antistatic
- Economic and Durable



FLAME RESISTANT CLOTHING STYLES

Omega Coverall

- 2 chest pockets
- Heavy duty, two-way quick release brass zipper
- 2 hip pockets
- Bi-swing back with elasticized waistband
- Adjustable sleeve cuffs
- NFPA certified style



Classic Style Jacket

- Brass zipper, front closure with a snap
- 2 chest pockets with flap closure
- Adjustable sleeve cuffs and jacket bottom



Classic Style Pants

- 2 front hip pockets
- 2 hip pockets
- 2 pockets for tolls can be added in legs' sides



FLAME RESISTANT CLOTHING STYLES

SigmaA Coverall



- Pop-stud front fastening
- Elasticized waist
- 2 chest pockets
- 2 side pockets
- 1 left hip pocket
- Contrast stitching (orange unless specified)

Package: 1 pcs/bag

Alpha Coverall



- Two-way collar-button up or wear down
- Certified FR reflective strip to arms and legs
- 2 chest pockets
- 2 pants pockets(with “pass throughs”)
- 2 hip pockets
- 1 tool pocket/hammer loop
- Contrast color pocket lining and detailed stitching (orange unless specified)
- EN standard certified style

Package: 1 pcs/bag

JT Jacket



- Jacket with collar
- Front enclosure with snap
- 2 chest pockets
- Adjustable sleeves cuffs
- Bi-swing back with elasticized waistband
- Contrast color pockets & collar lining (orange unless specified)
- EN standard certified style

Package: 1 pcs/bag

PT Pants



- Front enclosure with FR zipper and button
- Contrast color pockets & waist lining (orange unless specified)
- 2 side pockets
- 2 hip pockets
- Elasticized waist with belt loop
- Adjustable pants bottom
- EN standard certified style

Package: 1 pcs /bag

BJT Jacket



- Flap over collar
- Front enclosure with snap
- 1 chest pocket with snap
- 2 lateral insert hand warm pockets with Velcro closure
- Adjustable cuff by velcro
- Adjustable cuff by velcro
- Elasticized bottom
- EN standard certified style

Package: 1 pcs/bag

TS Bib Pants



- Bib and Brace Pants
- Two hang tapes with buckles
- 1 front pocket on front flap
- 2 lateral slit pockets
- 1 hip pocket
- 1 tool pocket
- 1 hang loop for tool
- Velcro on leg opening for adjustment;
- Elasticized waistband;
- Contrasted color fabric for pockets;
- FR aramid tape brass zipper for front closure
- EN standard certified style

Package: 1 pcs/bag

LSH Long Sleeves Shirt



- Flap over collar
- 2 chest pockets
- Front enclosure with snap
- Contrast color pockets & collar lining (orange unless specified)
- EN standard certified style

Vented-Back Shirt



- 2 chest pockets with Velcro® closures
- Extra-long shirt tail
- Sleeve straps
- Sleeve pocket
- Tapered aramid mesh vented back