

NFPA 70E Requirements

The National Fire Protection Association (NFPA) published the latest edition of the NFPA 70E Standard (Standard for Electrical Safety Requirements for Employee Workplaces) in 2009. The revised version requires employees to wear flame resistant (FR) protective clothing that meets the requirements of ASTM F1506 wherever there is possible exposure to an electric arc flash. It requires employers to perform a flash hazard analysis to determine the flash protection boundary distance. The standard is designed to protect employees working inside these flash protection boundaries by requiring protective clothing for corresponding Hazard/Risk Category that has an arc thermal performance value (ATPV) of at least the value listed in the "Protective Clothing Characteristics" section of the standard (see table above). The vast majority of major companies in the U.S. have some employees who work on or near energized electrical conductors or circuit parts. In addition, the Department of Energy has required that federal and contractor employees comply with NFPA 70E and the 2002 National Electric Code (NEC) references the NFPA 70E standard. Finally, OSHA considers the NFPA 70E standard a "recognized industry practice."

When incident energy exceeds 40 cal/cm² at the working distance, greater emphasis than normal should be placed on de-energizing before working on or near the exposed electrical conductors or circuit parts.



From Clothing to Insulated Tools to ARC Suppression Blankets we have everything you need to meet the NFPA 70E Standard and OSHA 29 1910.269 Regulations. The NFPA 70E Standard and OSHA Regulations have been established to protect workers from electrical shock and arc flash hazards. For example, the NFPA 70E Standard specifies areas in which arc flash protection is required for workers. All personnel within the defined boundaries must wear specified protective equipment, even on circuits as low as 50 volts. The NFPA 70E Standard and OSHA Regulations **MUST** be met, and OEL has made it easy and affordable for you to meet and exceed them.

OEL is Protecting the American Worker

OEL's ARC Flash Protection Jackets

8 cal/cm2 and 55 cal/cm2 ATPV ratings
 Made from arc flash resistant, Indura Ultra Soft®
 Sewn with Nomex® thread
 Jackets meet current ASTM F1506 and
 NFPA 70E standards.
 Sizes M, L, XL, 2XL, and 3XL available from stock
 Other sizes available by special order

Jackets are 32" long and have Nomex® wristlets.
 Jackets have hook & pile front closure
 Jackets are intended to be used with OEL's High Performance
 Shield Kit

8 - 55 cal/cm2



Jacket

| Cat. No. | Description |
|-------------------|---|
| AFW 080-JH-(size) | 8 cal/cm2, jacket, orange, Indura Ultra Soft |
| AFW 017-J-(size) | 12 cal/cm2, jacket, orange, Indura Ultra Soft |
| AFW 018-J-(size) | 20 cal/cm2, jacket, orange, Indura Ultra Soft |
| AFW 085-J-(size) | 25 cal/cm2, jacket, green, Indura Ultra Soft |
| AFW 020-J-(size) | 31 cal/cm2, jacket, green, Indura Ultra Soft |
| AFW 019-J-(size) | 40 cal/cm2, jacket, blue, Indura Ultra Soft |
| AFW 016-J-(size) | 55 cal/cm2, jacket, blue, Indura Ultra Soft |



OEL ARCWEAR ARC FLASH PROTECTION HOODS ARE SIZED ONE SIZE FITS ALL.

Sizing Chart

PRODUCT: COAT 8 cal/cm2 - 20 cal/cm2 50"

| Measurements in inches/cm (minimum allowed) | | | |
|---|--------|---------|-------|
| SIZE | A | B | C |
| Small | 42/107 | 26/66 | 32/81 |
| Medium | 46/117 | 26/66 | 32/81 |
| Large | 50/127 | 28/71 | 32/81 |
| xlarge | 54/137 | 28/71 | 32/81 |
| 2xLarge | 58/147 | 28/71 | 32/81 |
| 3xLarge | 62/158 | 28/71 | 32/81 |
| 4xLarge | 66/168 | 28/71 | 32/81 |
| 5xLarge | 70/178 | 28.5/72 | 32/81 |
| 6xLarge | 74/188 | 29/74 | 32/81 |

PRODUCT: JACKET 32"

| Measurements in inches/cm (minimum allowed) | | | |
|---|--------|---------|--------|
| SIZE | A | B | C |
| Small | 48/122 | 27.5/70 | 46/117 |
| Medium | 52/132 | 28/71 | 46/117 |
| Large | 54/137 | 28/71 | 46/117 |
| xlarge | 58/147 | 28.5/72 | 48/122 |
| 2xLarge | 62/158 | 29/74 | 48/122 |
| 3xLarge | 66/168 | 29/74 | 48/122 |
| 4xLarge | 70/178 | 29.5/75 | 48/122 |
| 5xLarge | 74/188 | 30/76 | 48/122 |
| 6xLarge | 78/198 | 30/76 | 48/122 |

PRODUCT: COVERALL

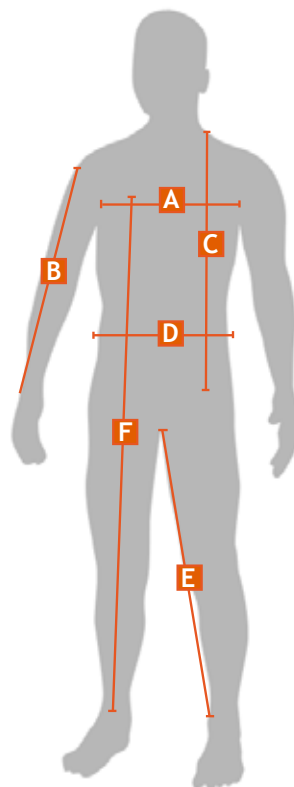
| Measurements in inches/cm (minimum allowed) | | | | |
|---|--------|--------|--------|-------|
| SIZE | A | B | D | E |
| Small | 40/102 | 34/86 | 36/91 | 29/24 |
| Medium | 44/112 | 34/86 | 40/102 | 30/76 |
| Large | 48/122 | 36/91 | 44/112 | 31/79 |
| xlarge | 52/132 | 36/91 | 48/122 | 31/79 |
| 2xLarge | 56/142 | 37/94 | 52/132 | 31/79 |
| 3xLarge | 60/152 | 37/94 | 56/142 | 31/79 |
| 4xLarge | 64/163 | 40/102 | 60/152 | 31/79 |
| 5xLarge | 68/173 | 40/102 | 64/163 | 31/79 |
| 6xLarge | 72/183 | 40/102 | 68/173 | 31/79 |

PRODUCT: COAT 25 cal/cm2 - 55 cal/cm2 50"

| Measurements in inches/cm (minimum allowed) | | | |
|---|--------|-------|-------|
| SIZE | A | B | C |
| Small | 42/107 | 26/66 | 32/81 |
| Medium | 46/117 | 26/66 | 32/81 |
| Large | 50/127 | 28/71 | 32/81 |
| xlarge | 54/137 | 28/71 | 32/81 |
| 2xLarge | 58/147 | 29/74 | 32/81 |
| 3xLarge | 62/158 | 29/74 | 32/81 |
| 4xLarge | 66/168 | 29/74 | 32/81 |
| 5xLarge | 70/178 | 29/74 | 32/81 |
| 6xLarge | 74/188 | 30/76 | 32/81 |

PRODUCT: BIB OVERALL

| Measurements in inches/cm (minimum allowed) | | | |
|---|--------|-------|--------|
| SIZE | D | E | F |
| Small | 30/76 | 28/71 | 56/142 |
| Medium | 34/86 | 29/74 | 56/142 |
| Large | 38/96 | 30/76 | 56/142 |
| xlarge | 42/107 | 30/76 | 56/142 |
| 2xLarge | 46/117 | 30/76 | 56/142 |
| 3xLarge | 50/127 | 30/76 | 56/142 |
| 4xLarge | 54/137 | 30/76 | 56/142 |
| 5xLarge | 58/147 | 30/76 | 56/142 |
| 6xLarge | 62/158 | 30/76 | 56/142 |



- A Chest - Measure across front from underarm to underarm
 B Sleeve - Measure from top shoulder seam out to end of cuff
 C Length - Measure from back of neck down to hem

- D Waist - Measure from waist side seam to side seam (flares open)
 E Inseam - Measure from mid crotch down to leg hem
 F Length - Measure from top of bib down to pant hem

Protection Clothing

Quality Guaranteed

OEL uses INDURA® Ultra Soft® and INDURA® brand flame resistant (FR) protective clothing fabrics which are guaranteed flame resistant for the life of the garment. The advanced INDURA® Ultra Soft® provides excellent protection from electric arc flash (for NFPA 70E, ASTM F1506 and OSHA 1910.269 compliance), flash fire (for NFPA 2112 and CGSB 155.20 compliance), molten ferrous metal splash and welding exposures.

This excellent protection is coupled with the soft breathable comfort of cotton and by engineering 12% high tenacity nylon in the face of the fabric, INDURA® Ultra Soft® is designed to wear at least 75% longer than all cotton, which leads to an excellent value equation. This superior balance of protection, comfort and value offers end-users with an excellent option to FR synthetic fabric such as Nomex IIIA.

Material Weights

MATERIAL WEIGHT FOR ATPV RATINGS

| ATPV Rating cal/cm2 | Material Weight oz./yd2 |
|---------------------|---|
| 8 | 7 oz./yd2 (237 g/m2) |
| 12 | 9 oz./yd2 (305 g/m2) |
| 20 | 13 oz./yd2 (441 g/m2) |
| 31 | 2 layers - 9 oz./yd2 (305 g/m2) & 7oz./yd2 (237 g/m2) |
| 40 | 2 layers - 13 oz./yd2 (441 g/m2) & 5.5 oz./yd2 (186 g/m2) |
| 55 | 2 layers - 13 oz./yd2 (441 g/m2) & 13 oz./yd2 |