

# ARC FLASH PPE - SIZING & USER GUIDE



THE ARC FLASH  
**COMFORT**  
REVOLUTION  
IS HERE



NATIONAL  
SAFETY APPAREL®

NSA 400cal ARC FLASH

PPE KITS | OVERALLS | JACKETS | HOODS



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Quality Tools, Equipment & Line Materials for the Energy Industry.



# THE COMFORT REVOLUTION

## NSA 40 Cal Arc Flash ArcGuard® Performance



**20% LIGHTER\***

LIGHTEST WEIGHT 40 CAL ARC FLASH PROTECTION at 9.5oz

**48% THINNER\***

GORE® PYRAD® TECHNOLOGY PROVIDES 40 CAL PROTECTION IN A SINGLE LAYER

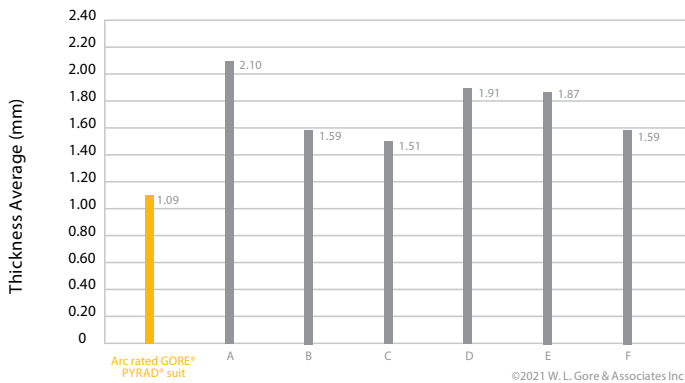
**56% MORE FLEXIBLE\***

ERGONOMICALLY DESIGNED FOR COMFORT & FREEDOM OF MOVEMENT



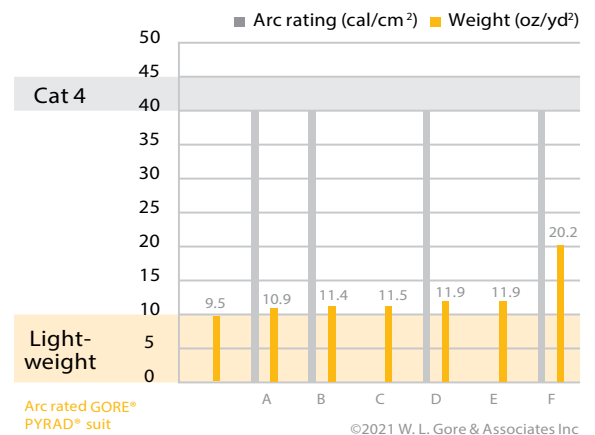
### Challenging Conditions Require Outstanding Solutions.

NSA has partnered with W. L. Gore & Associates to bring the comfort revolution to arc flash protection. You work hard enough, you shouldn't have to worry about your PPE weighing you down.



### THINNER

Bulky PPE can detract from wearer comfort and mobility. GORE® PYRAD® technology provides 40 cal protection in a thin layer, delivering a CAT 4 arc flash suit at a fraction of the thickness\*



### LIGHTER

Heavy clothing can cause worker fatigue, which may lead to mistakes and lost productivity. A lightweight garment can reduce the distraction of discomfort, allowing the wearer to focus on the task at hand.

### 40 Cal Arc Flash Hood

PureView™ face-shield specially designed lens curves in both directions to optimise field of view without distortion and reduces interior reflections

Vented clear chin cup expands downwards increasing the face-shield view

GORE® PYRAD® technology ArcGuard® Performance delivers 40 cal protection in a single layer



Indirect vents offer improved ventilated & communication even when hood lens is down

Hood available with built-in Fans for added ventilation

Streamlined design reduces bulk and weight to improve wearer comfort and reduce the risk of heat stress





# NSA 40 Cal Arc Flash ArcGuard® Performance



## Arc Flash PPE KITS - 40 Cal

GORE® PYRAD® technology delivers 40 cal protection in a single layer  
Ergonomic design for ease of movement and flexibility

- Sizes SM - 3XL
- Meets NFPA 70E

### Kit Contents

- Arc Flash ArcGuard™ Lift Front Hood with Pure View™ Face-shield & Hood Protective Bag
- Arc Flash ArcGuard™ Coat
- Arc Flash ArcGuard™ Bib Overalls
- Hard Hat
- Back Pack Bag
- Safety Glasses & Case



Part No.	Hood Style	Rating Cal/cm <sup>2</sup>	Material
ARC40KITNG *	Standard	40	GORE® PYRAD®
ARC40KITFANNG *	With Fans		

\* Add size suffix when ordering - SM = Small, MD = Medium, LG = Large, XL = X Large, 2XL = 2xLarge, 3XL = 3xLarge

## Arc-Flash Bib Overalls - 40 Cal

### Low Profile Lightweight Bib Overalls

Pleated knees, elasticized waist and 660mm leg zipper makes it easy to put on with boots



Part No.	Size *	Rating Cal/cm <sup>2</sup>	Standards
ARC40B-*	SMR, MDR, LGR, XLR, 2XLR, 3XLR	40	Meets ASTM F1506 & NFPA 70E

\* Add size suffix when ordering (e.g. ARC40B-XLR)

## Arc-Flash Jacket - 40 Cal

### Lightweight Jacket

Covered zip front closure with a large pull tab



**Arc Flash Garments also available in Hi-Vis Orange**

Part No.	Size *	Rating Cal/cm <sup>2</sup>	Standards
ARC40J-*	SMR, MDR, LGR, XLR, 2XLR, 3XLR	40	Meets ASTM F1506 & NFPA 70E

\* Add size suffix when ordering (e.g. ARC40J-XLR)

## See Over For Bib & Jacket Sizing Charts

## Lift Front Hoods - 40 Cal

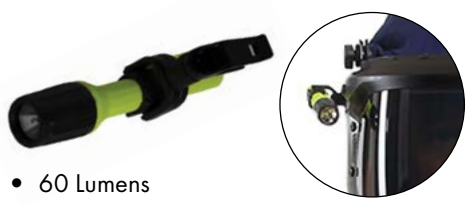
- Ergonomic design for ease of movement and flexibility
- PureView™ faceshield technology features a greater range of visibility
- Lift front shield makes it easy to obtain fresh air while out of the hazard zone

Part No.	Garment	Material
ARC40H	Hood	9.5oz GORE® PYRAD®
ARC40H1	Hood w/fans	



Lift Front Hood with Fans

## Hood Flashlight



- 60 Lumens
- Uses 2 AAA batteries (included)

Part No.	Description
HLITEKIT	Flashlight Kit for Lift Front Hoods

## Arc Flash Goggles - 12 Cal



- Goggles feature baffled top and bottom vents for increased airflow
- Anti-fog inner lens

Part No.	Description
H12GGL	12ca Arc Flash Goggles

## Ultrasoft Balaclava - 12 Cal



This single layer hood is durable, lightweight, and designed for comfort & flexibility. Made from 6 oz UltraSoft®, & rated to 12cal, it provides CAT2 protection.

Part No.	Material
H11RY	6.5 oz. Westex® UltraSoft® Rib



# NSA 40 Cal Arc Flash ArcGuard® Performance

## ARC FLASH GARMENT SIZING



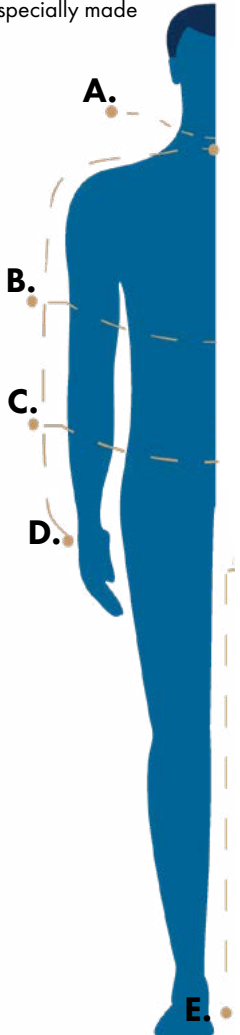
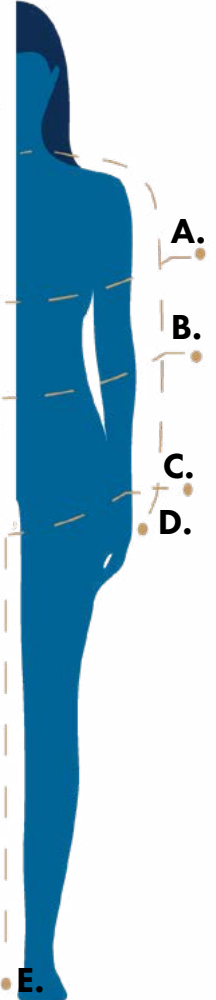
40 Cal Arc Flash ArcGuard® Performance Jacket			
Part No.	Size	Torso** cm (in")	Sleeve Length mm (in")
ARC40J-SMR	SMALL	86.4 - 94.0 (34 - 37)	87.6 (34.5)
ARC40J-MDR	MEDIUM	96.5 - 104.1 (38 - 41)	90.2 (35.5)
ARC40J-LGR	LARGE	106.7 - 114.3 (42 - 45)	92.7 (36.5)
ARC40J-XLR	EXTRA LARGE	116.8 - 224.5 (46 - 49)	95.25 (37.5)
ARC40J-2XLR	2 EXTRA LARGE	127.0 - 134.6 (50 - 53)	97.8 (38.5)
ARC40J-3XLR	3 EXTRA LARGE	137.2 - 144.8 (54 - 57)	100.3 (39.5)

\*\* Measure the widest part of the Torso, whether that is Chest or Waist.  
If your measurement fall between sizes, it is recommended you select the next size up.

40 Cal Arc Flash ArcGuard® Performance Bib			
Part No.	Size	Waist** cm (in")	Inseam mm (in")
ARC40B-SMR	SMALL	86.4 - 94.0 (34 - 37)	81.3 (32)
ARC40B-MDR	MEDIUM	96.5 - 104.1 (38 - 41)	81.3 (32)
ARC40B-LGR	LARGE	106.7 - 114.3 (42 - 45)	81.3 (32)
ARC40B-XLR	EXTRA LARGE	116.8 - 224.5 (46 - 49)	81.3 (32)
ARC40B-2XLR	2 EXTRA LARGE	127.0 - 134.6 (50 - 53)	81.3 (32)
ARC40B-3XLR	3 EXTRA LARGE	137.2 - 144.8 (54 - 57)	81.3 (32)

If your measurement fall between sizes, it is recommended you select the next size up.  
If your sizing falls outside the above charts, please submit your measurements, as garments can be specially made  
Please Note: This is a guide only, where possible physically try the garments on for size

### MEASUREMENT GUIDE



**A. BUST**  
Measure loosely around the fullest part of your bust. Keep the measuring tape as horizontal as possible.

**B. WAIST**  
**For pants:** Measure around your waist where you would like your pants waistband to sit.  
**For tops & full body garments:** Measure the fullest part of your waist.

**C. HIP**  
Measure loosely around the fullest part of your hips. Keep the measuring tape as horizontal as possible.

**D. SLEEVE**  
To measure your sleeve, start from the center of the back of your neck, over to your shoulder, down past your elbow, and to your wrist.

**E. INSIDE LEG**  
Use a pair of pants similar to the style you are ordering, which fit to your liking, Measure along the inseam from the crotch to the hem

**A. NECK**  
Measure around the base of the neck, where your collar typically lies. Measure from one button hole to the center of the button on the opposite side.

**B. CHEST**  
Measure around the fullest part of your chest. The best way to assess this is to start just under your armpit.

**C. WAIST**  
**For pants:** Measure around your waist where you would like your pants waistband to sit.  
**For tops & full body garments:** Measure the fullest part of your waist.

**D. SLEEVE**  
To measure your sleeve, start from the center of the back of your neck, over to your shoulder, down past your elbow, and to your wrist.

**E. INSIDE LEG**  
Use a pair of pants similar to the style you are ordering, which fit to your liking, Measure along the inseam from the crotch to the hem





# NSA Arc Flash Clothing - ArcGuard® Performance

## USER GUIDE

### SAFETY

- Garment must be fully fastened before entering the live working environment.
- Unrated or melting under layers should not be worn.
- It is the user's responsibility to read and understand all warnings prior to use of each product.
- A full arc flash suit requires additional suitable protective equipment, which includes protective footwear & arc rated insulated gloves.



Arc Flash Garments also available in Hi-Vis Orange



### TRAINING

- Arc flash risk assessments are required to determine incident energy, proper training of hazards and application should follow.
- Users should also be trained on care and use of arc flash PPE including but not limited to: Inspection, Laundering, Donning/Doffing & Storage

### USAGE

- Garments have been designed oversized to fit as outerwear.
- When worn as a complete suit with all closures fastened, the jacket collar should cover the neck, the jacket sleeves should come to the wrists, and gloves should be worn over sleeves.
- Jacket should be worn over pants or bibs, jacket hem should overlap the waist of the bottoms, pant legs should come down to the ankles.
- When worn with a hood or faceshield and balaclava, the hood or balaclava should drape over the shoulders covering the collar of the jacket.

### CARE & MAINTENANCE

- It is recommended to wash garments prior to wearing.
- User must follow all care and maintenance instructions on the interior label of the garment. (See Launder labels and warning below)
- In order to perform its protective function, an Arc-Flash garment must be maintained in its original condition. Garments with rips, tears and abrasion to the fabric cannot be worn and must be removed from service, as they pose a potential safety risk.

## GARMENT LAUNDER INSTRUCTION LABELS

### ArcGuard®

#### Jacket, Bib Overalls & Hood

Important:

- DO NOT use chlorine bleach or detergents containing bleach
- DO NOT use hydrogen peroxide
- DO NOT use fabric softeners or starch

Wash/Laundering Instructions:

- Dry Cleanable
- Machine wash warm (Max. 74°C/165°F)
- Detergent only

\*Wash according to the instructions above to remove any contaminants in order to maintain fabric performance when garment becomes soiled with dirt, greases, oils, etc.\*

\*If contaminants cannot be removed after laundering, it is best to discontinue use of the garment.\*

### UltraSoft®

#### Balaclavas/Knit Hoods

Important:

- DO NOT use chlorine bleach or detergents containing bleach
- DO NOT use hydrogen peroxide
- DO NOT use fabric softeners

Wash/Laundering Instructions:

- Dry Cleanable
- Turn garment inside out prior to laundering
- Machine wash warm (Max. 50°C / 120°F)
- Tumble dry warm

\*Wash according to the instructions above to remove any contaminants in order to maintain fabric performance when garment becomes soiled with dirt, greases, oils, etc.\*

\*If contaminants cannot be removed after laundering, it is best to discontinue use of the garment.\*

### PureView™

#### Face-shields. Goggles & Glasses

Important:

- DO NOT use ammonia based cleaners
- DO NOT use any abrasives or polishes
- NEVER use if cracked or broken

Wash/Laundering Instructions:

- Remove from hood if applicable
- Wash with warm soapy water - Mild soap only
- Rinse thoroughly - Pat dry with a soft cloth

\*Always transport and store your faceshield, goggles, and glasses in a soft cloth bag to minimize wear & tear\*

\*Wash according to the instructions above to remove any contaminants in order to maintain fabric performance when garment becomes soiled with dirt, greases, oils, etc.\*

\*If contaminants cannot be removed after laundering, it is best to discontinue use of garment.\*



# NSA Arc Flash Clothing - ArcGuard® Performance VISUAL INSPECTIONS

## Garments

Check for any holes, rips, tears or other damage to fabric. Remove from service if garments are damaged



Test closure systems like zippers, hook and loop, buckles, etc for dirt & wear.

## Face-Shields

Check for significant scratches, cracks, etc.



Remove from service if shields are damaged

## WARNINGS

**Warnings on the proper use of ArcGuard arc flash apparel are indicated on the inner garmented warning label. Each garment contains the following warnings:**

- This garment is flame resistant and constructed from flame resistant fabric and components. The user of this garment should read and understand all warnings printed on the reverse side of this label prior to using this product.
- This garment is not intended for fire protection, fire entry, structural or wildlands firefighting activities and provides no personal protection from chemical exposures. Remove at once if fouled with flammable material. To prevent the generation of potentially hazardous static electricity, do not don or remove in a hazardous area.
- DO NOT use this garment if it is torn, abraded or altered from its original condition. DO NOT use this garment unless it has been properly inspected and maintained by your employer.
- The user assumes all risks associated with the use of this product. The manufacturer is not liable for any loss, injury or death arising out of the use of this product.
- Failure to comply with these warnings may result in SERIOUS INJURY or DEATH



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