Standard Number: 4013.31

Superseding: March 25, 2011 Effective Date: October 18, 2019

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Arc Flash Protection Accessories



1. Scope

This material standard covers the requirements for garment accessories related to personal arc flash protection.

This material standard applies to the following Seattle City Light (SCL) stock numbers:

Stock No.	Description
013236	Carbon Kevlar® balaclava
013237	Medium energy arc goggle
013238	Face shield
013497	Arc flash face shield storage bag

Arc flash suits are outside the scope of this standard.

2. Application

Arc flash garment accessories are worn with arc flash suits to protect employees from known arc flash hazards and maintain state and federal compliance.

Balaclavas (sock hoods), Stock No. 013236, are intended to be used in conjunction with arc flash goggle, Stock No. 013237, to result in a system that offers an Arc Thermal Performance Value (ATPV) of 27 cal/cm² (ASTM 2178 test method).

Employees must be trained prior to using arc flash suits and accessories. Contact SCL Safety & Health for details.

Detailed application and procedural information may be found in SCL Safety Standard SHW 08, Arc Flash Electrical Safety Standard.

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Arc flash accessories are considered reusable.

Arc flash suits are covered in Material Standard 4013,29.

3. Industry Standards

Arc flash accessories shall meet the applicable requirements of the following industry standards:

ANSI Z87.1 (2003) Practice for Occupational and Educational Eye and Face Protection

ASTM F2178 (2008) - Standard Test Method for Determining the Arc Rating and Standard Specification for Eye or Face Protective Products

NFPA 70E (2009) Standard for Electrical Safety in the Workplace

4. Requirements

Stock Number: 013236

Description: Carbon Kevlar balaclava (sock hood).

6 ounce, double layer balaclava made from knit material of Carbon Kevlar fiber is designed with a slightly longer bib, for additional arc protection, as well as a contoured eyehole that can be worn over or under the nose for maximum comfort, without compromising safety.



Stock Number: 013237

Description: Medium energy arc goggle

Lens: Optically correct dual layer lens. Outer polycarbonate lens is hard coated and the inner propionate lens is anti-fog treated. Tested to the requirements of ASTM F2178.

Strap: Silicone strap is comfortable and easily adjustable with gloves.

Frame: Frame manufactured from silicone and fits over most prescription safety and sun protective spectacles. Outer blue bezel designed with protective nose shield.

Color: Black frame with blue bezel

ATPV Rating: Designed to meet the performance specifications of NFPA 70E-2004 @ 38 Cal/Cm² and ANSI Z87.1. Tested under ASTM F2178.

Helmet and Accessory Compatibility: Cap style and full brim safety helmets.

Weight: 7.23 oz



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Stock Number: 013238

Description: Face shield

ArcShield kit for full brim helmets. Includes Nano Particle Arc Shield, permanently

attached chin protector, mounting bracket and instructions.

Material: Plastic/chemical alloy

Color: Light green

Arc Thermal Performance Value (ATPV): 27 cal/cm² (NFPA 70E-2004; ANSI

Z87.1-Special Application)

Weight: 13 oz

Stock Number: 013497

Description: Face Shield Storage Bag. Used for arc flash gear. Cotton fleece. Measures 10" in diameter by 20" high. Closes with pull cord tip and cord lock.

"Arc Flash Protection" on front with black lettering.





5. Tests and Test Reports

Test data that establishes compliance with the requirements of this material standard shall be provided upon request.

6. Packaging

Arc flash accessories shall be packaged to prevent damage during shipping, handling, and storage.

Each shipping container shall be marked with:

- Seattle City Light purchase order number
- Seattle City Light stock number

7. Issuance

Stock Unit: EA

8. Approved Manufacturers

Stock No.	Description	Manufacturer and Catalog No.			
		National Safety Apparel, Inc.	Paulson Mfg. Corp.	Chicago Protective Apparel	
013236	Carbon Kevlar® balaclava	H62RK	-	-	
013237	Medium energy arc goggle	-	Model 510-ARC-SN 38	-	
013238	Face shield	-	Model ARC-S ² K3-12, Part No. 2130084	-	
013497	Face shield storage bag	-	-	SW-SB	

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9. References

Seattle City Light Safety Standard SHW 08; "Arc Flash Electrical Safety Standard;" November 15, 2017

10. Sources

2010 Arc Flash Catalog; Revision 6; Paulson Manufacturing

SCL Stock Catalog page 11-48; Safety, Face Shield

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www.nsamfg.com

www.paulsonmfg.com