Arc Flash Risks and Prevention Guide

SPI
SANTÉ SÉCURITÉ ▪ HEALTH AND SAFETY

Arc flash is one of the most serious hazards in industrial environments.
To help protect workers and meet regulatory requirements, this guide brings together essential resources, a curated selection of specialized protective equipment, and our full range of engineering, training, and consulting services, delivering a comprehensive approach to arc flash protection.

Our objective: to provide you with the tools needed to reduce risk, ensure compliance, and establish a safe and sustainable work environment in settings where arc flash hazards may be present.

What Is an Arc Flash?

An arc flash is a sudden and extremely powerful release of energy that occurs when electrical current travels through air, typically as a result of a fault, short circuit, or equipment failure. It is an explosive phenomenon that generates intense heat, a pressure wave, bright light, and the projection of molten metal and debris.

How Does an Arc Flash Occur?

An arc flash occurs when electrical current finds an unintended path through air. Common causes include:

- Equipment failure
- Conductive tools or components falling or being handled too close to energized conductors
- Accumulation of dust, moisture, or corrosion
- Human error (e.g., improper handling, lack of lockout/tagout)

Understanding Arc Flash Regulations

Arc flash protection is governed by a set of regulatory requirements and standards that define the minimum performance expectations for personal protective equipment (PPE). These standards ensure that tested products provide an adequate level of protection against the thermal, electrical, and mechanical hazards workers may be exposed to.

In Canada, CSA Z462 – Workplace Electrical Safety plays a central role. It establishes guidelines for hazard analysis, PPE selection, and safe work practices. It also references several ASTM and CSA standards specific to protective equipment.

Below is an overview of the main standards applicable to PPE used during work where arc flash hazards are present:

Footwear – Dielectric Strength Test Method	ASTM F1116
Insulating Footwear	ASTM F1117
Gloves and Sleeves – Care and Maintenance	ASTM F496
Leather Protector Gloves	ASTM F696
Eye and Face Protection	CSA Z94.3
Fall Protection	CSA Z259 (Standards Series)
Head Protection – Safety Helmets	CAN/CSA -Z94.1
Arc-Rated Face Protection	ASTM F2178
Insulating Aprons	ASTM F2677
Arc-Rated Clothing	ASTM F1506
Arc-Rated Rainwear	ASTM F1891

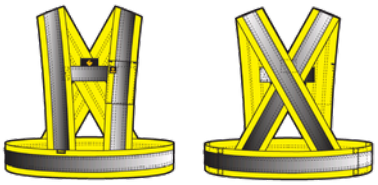
CSA Z96 Standard
High-Visibility Apparel

Arc Flash Protection Levels

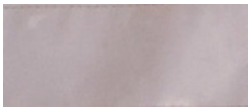
Protection levels are expressed in cal/cm², including 4, 8, 25, 40, and 75 cal/cm².

With the release of CSA Z462-24, the clothing category system has been replaced by a minimum incident energy exposure rating.

However, to support clarity and continuity, this document retains a category-based presentation aligned with the NFPA 70E nomenclature.



A. X on the back, with straps passing over the shoulders and around the waist.



B. Retroreflective strip material.

Class 1: Low Risk

A + B combined, incorporating a non–high-visibility fabric panel on the torso (e.g., black) as part of the garment shell.

Class 2: Moderate Risk

A + B combined, incorporating fluorescent elements and high-visibility or bright-coloured torso coverage, such as orange or yellow fabric on the garment shell.

Class 3: High Risk

A + B combined, with fluorescent material and a high-visibility torso panel (orange or yellow) integrated into the garment shell, along with reflective bands on the arms and legs.

Icons Used	Purpose	Standards	Description	Test Method	Description
Clothing 	Arc Flash	ASTM F1506	Certification for Flame-Resistant and Arc-Rated Fabric Protective Clothing	ASTM F1959 (ATPV xx cal/cm2)	Measures the thermal protection of the fabric against arc flash exposure. The protection level is divided into four rating categories in accordance with NFPA 70E (ATPV in cal/cm²). Categories: • Category 1: 4 cal/cm² • Category 2: 8 cal/cm² • Category 3: 25 cal/cm² • Category 4: 40 cal/cm²
Clothing 	Arc Flash	ASTM F1891	Certification for Flame-Resistant and Arc-Rated Protective Rainwear		

Garment Material Characteristics

Material Composition	Fabric Name	Category	Fibre Type	Recommended Industries
100% Cotton	Excel FR, Indura	2	Permanent Treatment	Petrochemical and Oil & Gas Industry / Mining / Foundry and Welding
88% Cotton / 12% FR Nylon	Comfor Touch, UltraSoft	2	Permanent Treatment	Petrochemical and Oil & Gas Industry / Mining / Foundry and Welding
93% Aramid, 5% Kevlar®, and 2% Antistatic Fiber	Nomex IIIA	1	Inherent Fiber	Petrochemical and Electrical Industry / Gas
47% Modacrylic, 37% Lyocell, and 16% Aramid	Cooltouch, Tecasafe	2	Inherent Fiber	Petrochemical and Electrical Industry / Gas
65% Modacrylic and 35% Nomex®	Protera	2	Permanent Treatment	Petrochemical and Electrical Industry / Gas
65% Polyester and 35% Flame-Resistant Treated Cotton	Westex G2	2	Permanent Treatment	Petrochemical and Electrical Industry / Gas

Protective Clothing

Arc Flash Resistance

WESTEX UltraSoft™

FR High-Visibility Jacket

ATPV (cal/cm²):18.6

Category: 2

Brand: Big Bill

BUY

FR Winter Parka – Westex® UltraSoft®

ATPV (cal/cm²):52

Category: 4

Brand: Big Bill

BUY

FR High-Visibility Winter Jacket

ATPV (cal/cm²):58

Category: 4

Brand: Pioneer

BUY

Protective Clothing

High-Visibility and Arc Flash Resistance

Winter Work Jacket

ATPV (cal/cm²):40

Category: 4

Brand: Kosto Dazzle

BUY

Flame-Resistant Insulated Bib Overalls

ATPV (cal/cm²):40

Category: 4

Brand: Kosto

BUY

Flame-Resistant Rain Jacket

ATPV (cal/cm²):24

Category: 2

Brand: Kosto

BUY

Protective Work Shirt for Aluminum Smelters

ATPV (cal/cm²):12

Category: 2

Brand: Kosto

BUY

High-Visibility Shirt Resistant to Molten Metal

ATPV (cal/cm²):12

Category: 2

Brand: Kosto Aluskin

BUY

Women's Work Shirt Resistant to Molten Metal

ATPV (cal/cm²):12

Category: 2

Brand: Kosto Aluskin Ellika

BUY

Protective Clothing

High-Visibility and Arc Flash Resistance

DAZZLE

100% Cotton Flame-Resistant Coveralls

ATPV (cal/cm²):9.2

Category: 2

Brand: Kosto

BUY

FR Coveralls with Welding Protection

ATPV (cal/cm²):14

Category: 2

Brand: Kosto Dazzle

BUY

Flame-Resistant Coveralls with Zippered Legs

ATPV (cal/cm²):14

Category: 2

Brand: Kosto Dazzle

BUY

Coveralls with 4" Reflective Stripes

ATPV (cal/cm²):12

Category: 2

Brand: Kosto Aluskin

BUY

Kosto Flame-Resistant Winter Coveralls

ATPV (cal/cm²):40

Category: 2

Brand: Kosto

BUY

Flame-Resistant Coveralls

ATPV (cal/cm²): 12

Category: 2

Brand: HRC2 Atlas Guardian®

BUY

SPID
SANTÉ SÉCURITÉ • HEALTH AND SAFETY

Protective Clothing

High-Visibility and Arc Flash Resistance

Flame-Resistant Coveralls

ATPV (cal/cm²):15

Category: 2

Brand: Surewerx

BUY

FR Coveralls – Bulwark ComforTouch®

ATPV (cal/cm²): 12.2

Category: 2

Brand: Surewerx

BUY

Flame-Resistant Coveralls Westex®

ATPV (cal/cm²):8.9

Category: 2

Brand: Big Bill

BUY

ComforTouch® Bib Overalls

ATPV (cal/cm²): 16

Category: 2

Brand: Bulwark

BUY

Tecasafe® Flame-Resistant Bib Overalls

ATPV (cal/cm²):8.9

Category: 2

Brand: Big Bill

BUY

Insulated Nomex® Work Bib Overalls

ATPV (cal/cm²): 69.5

Category: 4

Brand: Bulwark

BUY

Protective Clothing

Arc-Rated Pants

Work Pants

ATPV (cal/cm²):12

Category: 2

Brand: Kosto Aluskin

BUY

High-Visibility Work Pants

ATPV (cal/cm²):12

Category: 2

Brand: Kosto Aluskin

BUY

Women's Welding Pants

ATPV (cal/cm²): 12

Category: 2

Brand: Kosto Aluskin

BUY

Lightweight Flame-Resistant Pants

ATPV (cal/cm²):11

Category: 2

Brand: Bulwark

BUY

High-Visibility Flame-Resistant Pants

ATPV (cal/cm²):12.4

Category: 2

Brand: Big Bill

BUY

Westex® Flame-Resistant Cargo Pants

ATPV (cal/cm²):12.4

Category: 2

Brand: Big Bill

BUY

Protective Clothing

Arc-Rated Shirts

Men’s Work Shirt

ATPV (cal/cm²):9.1

Category: 2

Brand: Bulwark Excel

BUY

Flame-Resistant Work Shirt

ATPV (cal/cm²):9

Category: 2

Brand: Bulwark

BUY

Flame-Resistant Shirt

ATPV (cal/cm²):7.7

Category: 1

Brand: Bulwark Excel

BUY

Women’s Flame-Resistant Shirt

ATPV (cal/cm²): 9

Category: 2

Brand: Bulwark iQ Series

BUY

Lightweight Nomex® Flame-Resistant Shirt

ATPV (cal/cm²):4.4

Category: 1

Brand: Bulwark

BUY

Flame-Resistant Shirt

ATPV (cal/cm²):8.6

Category: 2

Brand: Bulwark

BUY

Protective Clothing

Arc Flash Resistance

Insulated Flame-Resistant Safety Hoodie

ATPV (cal/cm²):15

Category: 2

Brand: Big Bill

BUY

Reflective Hoodie with Removable Hood

ATPV (cal/cm²):27.7

Category: 3

Brand: Big Bill

BUY

Polartec® Thermal FR® Lining with Removable Hood

ATPV (cal/cm²):21

Category: 2

Brand: Big Bill

BUY

ComforTouch® Shirt

ATPV (cal/cm²): 9.1

Category: 2

Brand: Bulwark Excel

BUY

Westex® FR Shirt

ATPV (cal/cm²): 8.7

Category: 2

Brand: Big Bill

BUY

Work Shirt

ATPV (cal/cm²):8.5

Category: 2

Brand: Big Bill

BUY

Care and Maintenance of Arc Flash Protective Garments and Arc-Rated Clothing

The following requirements apply to the care and maintenance of arc flash protective garments and arc-rated clothing:

- **Inspection:** Arc-rated clothing must be inspected before each use. Work garments or arc flash protective clothing must not be soiled or damaged in a way that could compromise their protective properties. Protective items contaminated with grease, oil, flammable liquids, or combustible materials must not be used.
- **Manufacturer's instructions:** The manufacturer's care instructions for arc-rated clothing must be followed.
- **Storage:** Arc-rated clothing must be stored in a manner that protects it from mechanical damage, moisture, dust, or other deteriorating agents, as well as from contamination by flammable or combustible materials.
- **Cleaning, repair, and patching**: When laundering arc-rated clothing, the manufacturer's instructions must be followed to prevent any loss of protective performance. For repairs, the same arc-rated materials used in the original garment construction must be used. When patches, name badges, or identification emblems are applied to arc-rated clothing, the requirements of ASTM F1506 must be met.

Labelling requirements

Garment and equipment labeling must include the following six pieces of information:

- Identification code
- Compliance with ASTM F1506
- Manufacturer's name
- Size
- Care instructions and fibre composition
- ATPV (Arc Thermal Performance Value) or EBT (Breakopen Threshold Energy), expressed in cal/cm² (for each fabric layer)

SPI
SANTÉ SÉCURITÉ ■ HEALTH AND SAFETY

Hand and Arm Protection

Hand and arm protection must meet the following requirements:

- **Protection against electric shock:** Workers must wear rubber insulating gloves with leather protectors and rubber insulating sleeves whenever there is a risk of injury to the hands or arms from electric shock due to contact with energized conductors or other live circuit components. Rubber insulating gloves must be rated for the voltage to which they will be exposed. If rubber insulating gloves are used without leather protectors, the requirements of ASTM F496 must be met.
- **Protection against arc flash:** Hands and arms must be protected whenever there is a potential exposure to arc flash burns. Leather gloves provide this protection. When electric shock hazards are not present, arc-rated gloves may be used.
- **Care and use:** Electrical protective equipment must be maintained in a safe and reliable condition. The condition of insulating equipment must be verified at the start of each day of use and immediately after any incident that could reasonably be expected to have caused damage. Insulating gloves must be air-tested and visually inspected. Electrical protective equipment must be subjected to periodic electrical testing.

Glove Classes (Testing and Use) (Source: ASTM F496)

Class	AC/DC Voltage	AC/DC Voltage
00	2 500 / 10 000	500 / 750
0	5 000 / 20 000	1 000 / 1 500
1	10 000 / 40 000	7 500 / 11 250
2	20 000 / 50 000	17 000 / 25 500
3	30 000 / 60 000	26 500 / 39 750
4	40 000 / 70 000	36 000 / 54 000

Hand and Arm Protection

Electrical Insulating Gloves and Leather Protectors

Ansell ActivArmr® Low-Voltage Electrical Leather Protective Gloves

Class: 0/00

SPI Code: MGJ118

BUY

Salisbury 11" Rubber Lineman Gloves for Low-Voltage Work

Class: 0

SPI Code: MGM056

BUY

Minimum Leather Protector / Rubber Insulating Glove Distance (Source: ASTM F496)
Distance measured from the cuff edge of the leather protector glove to the cuff edge of the rubber insulating glove.

00, 0	0,5”
1	1”
2	2 “
3	3 “
4	4 “

Ansell ActivArmr® Rubber Electrical Gloves

Class: 0/00

SPI Code: ELEC-113811-10

BUY

Ansell ActivArmr® Low-Voltage Rubber Electrical Insulating Gloves

Class: 0

SPI Code: MGJ117

BUY

PMMI 10.5" Electrician Work Glove Set

Class: 0

SPI Code: MGK001

BUY

PMMI 14" Electrician Work Glove Set

Class: 2

SPI Code: MGK002

BUY

Testing Intervals for Rubber Insulating Equipment (Source: CSA Z462)

Gloves	Before being placed in service, and every 6 months thereafter*	ASTM F496
Covers	Before being placed in service, and every 12 months thereafter*	ASTM F479
Protectors	Whenever the insulating properties are considered questionable	ASTM F478
Sleeves	Before being placed in service, and every 12 months thereafter*	ASTM F496
Flexible Insulating Tubing	Whenever the insulating properties are considered questionable	ASTM F478

**If insulating equipment has been electrically tested but not subsequently issued, it must not be placed in service if those tests are more than 12 months old.*

Hand and Arm Protection

Arc Flash Resistance

Dexterity® Flame-Resistant Gloves

ATPV (cal/cm²): 11

Brand: Superior Glove

BUY

Endura® A4 Goatskin Leather Gloves

ATPV (cal/cm²): 34

Brand: Superior Glove

BUY

Endura® A4 MIG Welding Gloves

ATPV (cal/cm²): 41

Brand: Superior Glove

BUY

Endura Pro® A5 Gloves

ATPV (cal/cm²): 35

Brand: Superior Glove

BUY

Dexterity® A3 Gloves

ATPV (cal/cm²): 25

Brand: Superior Glove

BUY

Endura® Goatskin Leather Gloves

ATPV (cal/cm²): 33

Brand: Superior Glove

BUY

SPI SANTÉ SÉCURITÉ • HEALTH AND SAFETY

superiorglove

Hand and Arm Protection

Arc Flash Resistance

Endura® Liquid-Resistant Leather Gloves

ATPV (cal/cm²): 40

Brand: Superior Glove

BUY

Endura Pro® Cut-Resistant Winter Work Gloves

ATPV (cal/cm²): 49

Brand: Superior Glove

BUY

Endura® Cut-Resistant Driver Gloves

ATPV (cal/cm²): 36

Brand: Superior Glove

BUY

Kevlar®-Lined Gloves with 5" Cuff

ATPV (cal/cm²): 44

Brand: Kosto

BUY

A5 Cut-Resistant Goatskin Leather Gloves with Kevlar®

ATPV (cal/cm²): 44

Brand: Kosto

BUY

Van Goat Impact Protection Gloves

ATPV (cal/cm²): 32

Brand: Watson Gloves

BUY

Salisbury Low-Voltage Electrical Protective Gloves

Class: 0

SPI Code: MGM048

BUY

Tilsatec Arc Flash–Rated Cut-Resistant Leather Work Gloves

ATPV (cal/cm²): 37.5

SPI Code: MGV127

BUY

Tilsatec Arc Flash–Rated and Cut-Resistant Work Gloves with Thinsulate® Lining

ATPV (cal/cm²): 37.5

SPI Code: MGV219

Winter version of the MGV127, featuring an insulated lining.

BUY

Electrical Safety

Recognized Expertise in Risk Prevention
As a trusted partner of SPI, Intervention Prévention supports industrial and mining organizations in implementing effective safety practices. Their team of experts provides strategic and technical guidance to help reduce risks related to machinery, electrical systems, and complex work environments.

Electrical Safety

- Incident Energy (Arc Flash) Study: *Hazard analysis, incident energy calculations, system modelling, and compliant labelling.*
- Electrical Safety Program (CSA Z462): *Development or update of a comprehensive program, including procedures, worker qualification, energized work practices, and PPE.*
- Electrical Safety Audit
- Technical Support
- Electrical Safety Training and Coaching: *Practical sessions delivered on-site or online, covering electrical safety, arc flash, and safe battery handling.*

Why Choose Intervention Prévention?
✓ Recognized expertise in industrial and mining environments
✓ Customized approach tailored to your operational challenges
✓ Compliance with Canadian standards (CSA, CNESST, etc.)
✓ Practical, hands-on training for your teams

LEARN MORE

Difference Between Flame-Resistant, Arc Flash, Flash Fire, and Molten Metal

All arc-rated clothing is flame-resistant, but not all flame-resistant clothing is arc-rated.

Flame-Resistant

Source: Fire

FR garment, meaning flame-resistant clothing (self-extinguishing). This type of garment is designed to resist heat and flames; however, the level of protection can vary depending on the type of flame-resistant fabric used.

CAN/CGSB 155.20, Section 7.2 (ASTM D6413) – Flame Resistance

Arc Flash

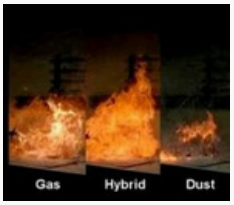
Source: Electricity

An arc flash occurs when electrical current leaves its intended path and travels from phase to phase or from phase to ground. Arc flash hazards affect anyone working on or around energized electrical equipment. Clothing categories are identified by their ATPV rating.

CAN/CGSB 155.20, Section 7.2 (ASTM D6413) – Flame resistance

- NFPA 70E (CSA Z462)
- ASTM F1959 – Arc Thermal Performance Value (ATPV, cal/cm²)
- ASTM F1506 – Fabric requirements
- ASTM F1891 – Protective rainwear

Flash Fire



Source: Flammable substance and oxygen

A flash fire is the ignition of a mixture of oxygen and a dispersed flammable substance (dust, gas, aerosols, or liquid vapours). It is characterized by high temperatures, short duration, and rapidly moving flames.

- CAN/CGSB 155.20
- NFPA 2112 – Fabric requirements
- ASTM F2733 – Protective rainwear

Molten metal

Source: Molten metals (iron or aluminum)

Molten metal splashes occur when metals transition from a solid to a liquid state. This can cause a violent reaction, ejecting molten metal and high-temperature solids from the melt. The fabric must demonstrate its ability to shed molten metal from its surface without sticking.

- Brief exposure to flame and heat, including molten material (A1, A2, B, C, D, E, F).
- Applies to protective clothing intended for welding, providing protection against small molten splashes, brief contact with flame, and radiant heat.

Foot Protection

Royer JYG Rovak Electrical Hazard Steel Toe Safety Boots

BUY

Royer Chevron Rovak Conductive, Puncture-Resistant Safety Boots

BUY

Kosto AirMet Metal-Free Work Boots

BUY

Kosto Cedrik TEK Leather Metal-Free Work Boots

BUY

Kosto Falkon Insulated Metal-Free Work Boots

BUY

Kosto AirTech Pro Metal-Free Work Boots

BUY

Foot Protection

Royer Chevron Rovak 10” Conductive Steel Toe Work Boots

BUY

Royer Waterproof Work Boots with Oil-Resistant Vibram® Rubber Outsole

BUY

Royer Rovak Full-Grain Leather Lineworker Boots with JYG Sole

BUY

Acton All Terrain Metal-Free Composite Toe PU Safety Boots

BUY

STC Hardrock 10” Work Boots with Vibram® Outsole and Internal Metatarsal Guard

BUY

Timberland PRO® Boondock 8” Insulated Composite Toe Work Boots

BUY

Baffin MONSTER 6” Composite Toe Safety Boots

BUY

Baffin ICE MONSTER Slip-Resistant Winter Boots

BUY

Baffin MONSTER 8” Composite Toe Safety Boots

BUY

Baffin DERRICK Unisex Metal-Free Composite Toe Safety Boots for Extreme Cold

BUY

Baffin TITAN Unisex Waterproof Insulated CSA-Certified Boots

BUY

Train your teams, wherever they are.
Access online OHS trainings at your own pace →

Electrical hazard awareness

English, french and spanish

30 minutes

Validity: 36 months

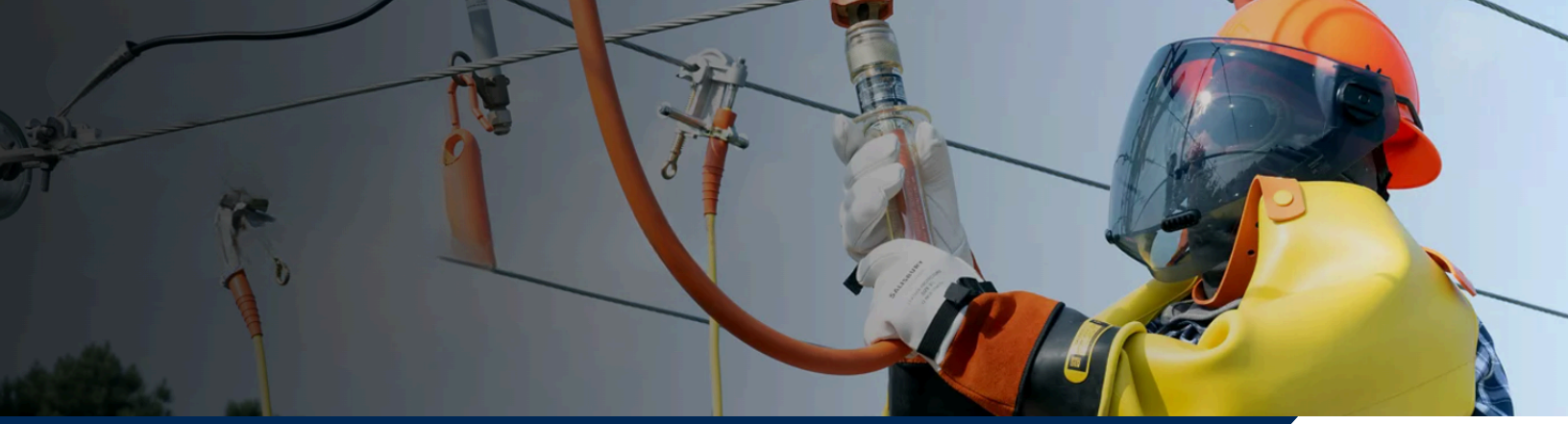
LEARN MORE →

WARNING: Live work

LEARN MORE →

Introduction to Electrical Safety

LEARN MORE →

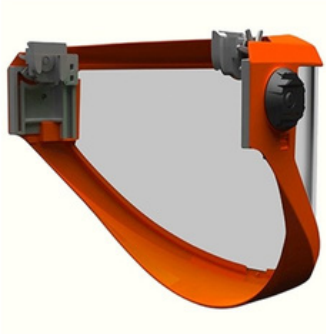


Head Protection

Salisbury 12 cal/cm² Arc Flash Face Protection Kit

Complete head and face protection rated at 12 cal/cm², featuring the PrismShield™ Plus face shield for enhanced visibility during low-energy arc flash electrical work.

BUY



Salisbury AS1000 PrismShield™ 10 cal/cm² Arc Flash Face Shield

PrismShield™ face shield rated at 10 cal/cm², providing enhanced visibility and head-and-face protection for low-energy arc flash electrical work.

BUY

Salisbury AS1000 PrismShield™ 10 cal/cm² Arc Flash Face Shield and Hard Hat

PrismShield™ face shield with integrated hard hat, rated at 10 cal/cm², featuring a balanced suspension and complete head-and-face coverage.

BUY

Head Protection

Arc Flash Resistance

Flame-Resistant Balaclava

Brand: Kosto

BUY

Flame-Resistant Neck Gaiter

Brand: Kosto

BUY

Flame-Resistant Neck Gaiter

Brand: Kosto

Available in high-visibility orange

BUY

Flame-Resistant Balaclava

Brand: Kosto

Available in high-visibility orange

BUY

Flame-Resistant Cuffed Toque

Brand: Kosto

BUY

Flame-Resistant Beanie

Brand: Kosto

BUY

Head Protection

Kosto K-PRO Type 1 Safety Helmet with Ratchet Suspension

Available in multiple colors

BUY

Kosto FR Arc Flash CAT 2 Winter Beanie

Available in high-visibility orange

BUY

Additional Resources

- Protect Yourself from Arc Flashes with Kosto

and more →

KOSTO

Lockout/Tagout and Arc Flash Prevention

An arc flash leaves no second chance.

Lockout/tagout is often the first control measure used to reduce conditions that can lead to an uncontrolled release of energy.

We support you in:

- Analyzing electrical equipment and energy sources
- Identifying critical points with arc flash risk
- Structuring and documenting tailored lockout/tagout procedures
- Supporting field implementation of these procedures
- Training affected workers and supervisors

These services help secure electrical tasks, reduce human error, and minimize arc flash risks during electrical work.

LEARN MORE

SPI Health and Safety offers OHS consulting services based on a comprehensive approach, focused on controlling risks related to confined spaces, working at heights, lockout/tagout, and respiratory protection.

Our experts support organizations across Canada through risk assessments, program development and review, audits, training, and implementation support to ensure safe, compliant, and field-adapted work practices.

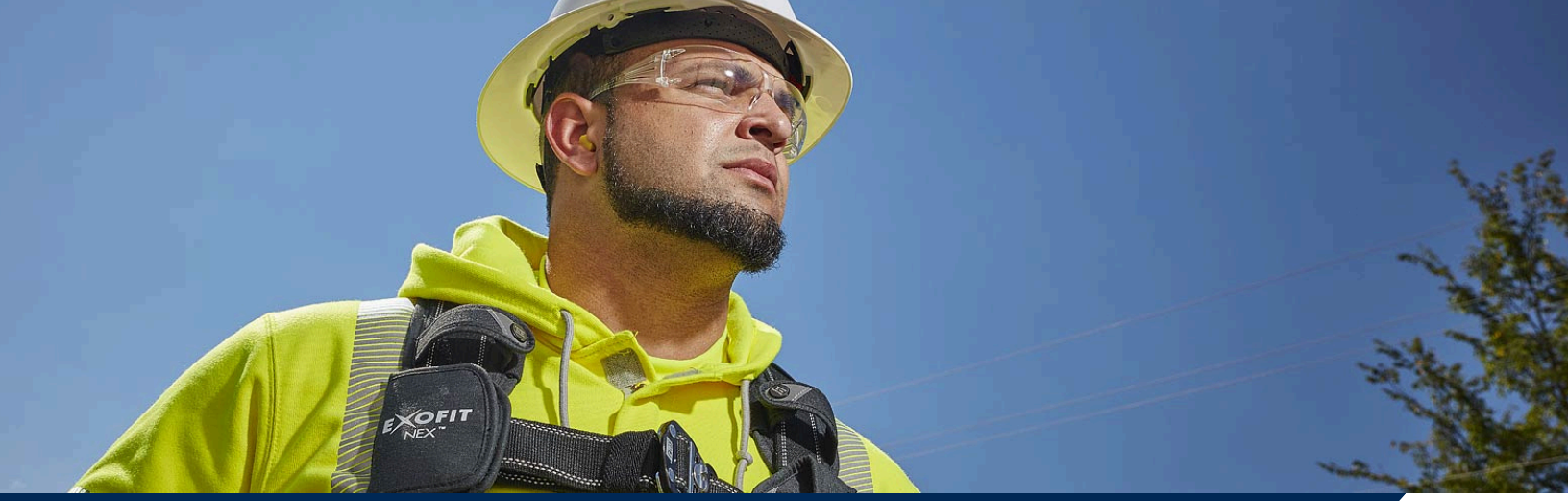
Fall Protection

MSA V-FIT® Quick-Connect Full-Body Harness with Arc Flash Protection

SPI Code: CHA355

MSA V-FIT® Arc Flash fall protection harness, designed for high-risk electrical environments, made of Kevlar®/nylon for arc flash protection. Compliant with ANSI Z359.11 and CSA Z259.10.

BUY



Fall Protection

3M™ DBI-SALA ExoFit NEX arc-flash-resistant rescue safety harness

SPI Code: CHA258

ExoFit™ NEX harness for work at height in electrical environments, combining fall protection, rescue capabilities, and arc-flash resistance. CSA and ANSI compliant.

BUY

3M™ DBI-SALA ExoFit NEX arc-flash-resistant safety harness

SPI Code: CHAE01

ExoFit™ NEX arc-flash-resistant fall protection harness for work at height. CSA and ANSI compliant.

BUY

SPI
SANTÉ SÉCURITÉ • HEALTH AND SAFETY

3M
Authorized Distributor

3M™ DBI-SALA ExoFit™ NEX arc-flash-rated harness with hip D-rings

SPI Code: CHAE05

ExoFit™ NEX arc-flash-resistant positioning harness, designed for work positioning during work at height in electrical environments. Compliant with CSA Z259 and ANSI Z359.

BUY

3M™ DBI-SALA® ExoFit™ NEX Arc-Rated Positioning and Climbing Harness

SPI Code: CHA231

Arc-Rated ExoFit™ NEX Positioning Harness designed for work positioning during work at height in electrical environments. CSA Z259 and ANSI Z359 compliant.

BUY

3M™ DBI-SALA® Delta Arc-Rated Safety Harness with Textile Dorsal Loop

SPI Code: CHAE07

Arc-rated fall protection harness featuring a textile dorsal loop to minimize metal components in electrical environments. CSA Z259 and ANSI Z359 compliant.

BUY

Fall Protection

3M™ DBI-SALA® Nano-Lok™ Quick Connect Arc Flash SRL

SPI Code: CDI120

Compact, lightweight self-retracting lifeline designed for fall protection during work at height. CSA and ANSI compliant.

BUY

3M™ DBI-SALA® Nano-Lok™ Quick Connect Arc Flash SRL (Steel Cable)

SPI Code: CDI155

Self-retracting lifeline with steel cable, designed for fall protection in more demanding or abrasive environments. CSA and ANSI compliant.

BUY

SPI
SANTÉ SÉCURITÉ • HEALTH AND SAFETY

3M
Authorized Distributor

Dynamic™ DYNA-ONE™ Arc-Rated Kevlar® Energy-Absorbing Lanyard

SPI Code: CCO127 / CCO128 / CCO908

Arc-rated Kevlar® fall arrest lanyard featuring an integrated energy absorber to reduce arrest forces in the event of a fall. CSA and ANSI compliant.

Available in single or twin-leg configurations

Anchorage connection types: rebar hook and carabiner hook

BUY

Fall Protection

Additional Resources

Articles

- [Webinar Recap] Arc Flash: What to Wear to Stay Protected at Heights
- Arc Flash Protection at Heights
- Fall Protection Equipment: Essential Maintenance and Care

and more →

A Complete 360° Solution to Control Your OHS Risks

Managing OHS means ensuring compliance, inspections, and readiness for the unexpected.

SPI's 360° offering helps you anticipate requirements and maintain compliance, without adding complexity to your day-to-day operations.

Technical Services
Your equipment. Inspected. Certified. Compliant.

Our certified technicians handle the inspection, maintenance, and certification of your critical equipment, in accordance with applicable standards and manufacturer requirements.

- Gas detection: calibration, inspection, and repair
- Fall protection: harness inspections and lifeline recertification
- Respiratory protection: SCBA testing and breathing air analysis
- Equipment management and tracking

LEARN MORE

Equipment Rental
A fast solution when you need it.

Need equipment for a planned shutdown, increased workload, or an unexpected breakdown?

SPI's rental service helps you stay compliant without tying up your operations.

- Short- or long-term rentals
- Immediate or scheduled availability
- Specialized, ready-to-use equipment:
  - Gas detection
  - Fall protection
  - Respiratory protection

LEARN MORE

Engineering Services
Practical solutions designed for real-world conditions.

When a hazard cannot be eliminated using standard equipment, our teams design and implement customized, compliant, and durable solutions.

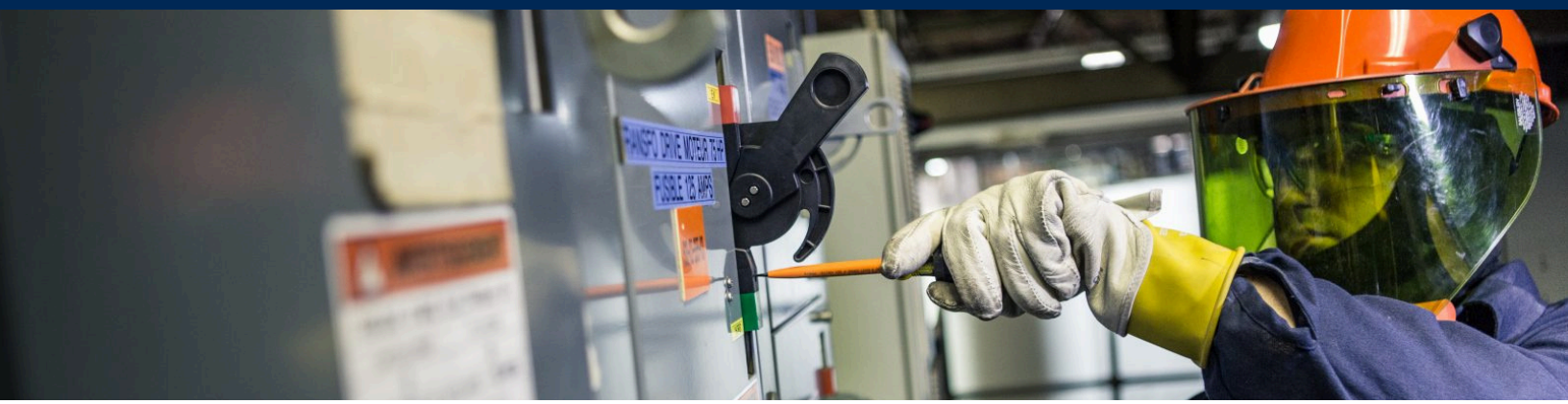
- Protective system design
- Turnkey installation
- Inspection and compliance validation
- Multi-industry expertise

LEARN MORE

Arc Flash Prevention Before Intervention

Before any work is performed on electrical equipment:

□ The task has been evaluated (energized work avoided whenever possible)
□ Energy sources have been identified
□ Lockout/tagout has been applied and verified
□ Absence of voltage has been confirmed using appropriate test equipment
□ Approach boundaries are known and respected
□ Arc-rated PPE has been selected based on the hazard level
□ Workers are qualified and authorized



Additional Resources

White Paper

- The Essential Guide to Lockout: Controlling Hazardous Energy⚡

Blog

- Eye and Head Protection
- Hearing Protection
- Lockout / Tagout
- Foot Protection

and more →