



2019 CONSTRUCTION GUIDE TO PERSONAL PROTECTIVE EQUIPMENT

By Bryan McWhorter

SAFT-GARD®

International, Inc.
BRINGING WORKERS HOME SAFELY SINCE 1936

205 Huehl Rd. Northbrook, IL 60062 USA
800-548-GARD (4273) • www.saftgard.com • safety@saftgard.com



CONTENTS

<i>Challenges</i>	4
<i>Keeping Construction Workers Safe Is Not That Easy</i>	4
<i>Why You're Reading This Guide</i>	5
Section One: Head Protection	6
<i>The Danger</i>	6
<i>The Solution: Hard Hats</i>	6
<i>Proper Care</i>	8
Section Two: Above the Neck Protection	9
<i>Eye Safety</i>	9
<i>Hearing Conservation</i>	10
Section Three: Safety Vests and Fall Arrest Systems	12
<i>Hi-Viz Safety Vests</i>	12
<i>Fall Arrest Systems</i>	12
Section Four: Gloves	31
<i>Selecting the Right Gloves for the Job</i>	31
Section Five: Sleeves	32
<i>Cut-Resistant Sleeves</i>	32
<i>Other Considerations</i>	32
Section Six: Footwear	33
Section Seven: Special Considerations and Tasks	34
<i>Types of Construction Work and Their Associated Risks</i>	34
Conclusion	35

Construction is an industry on the comeback and we're expected to see consistent growth over the coming years. There is already a demand for workers at all levels of construction work, from temporary laborers to skilled tradesmen. As construction sites expand and take on new employees and contractors, keeping workers safe becomes a higher priority and an even more challenging task.





CHALLENGES

Ensuring the safety of construction workers has never been easy – the industry has some of the highest numbers of work-related injuries and fatalities.

According to the Bureau Labor of Statistics, there are 6,882,000 workers employed in the construction industry (as of March 2017). This number reflects only 4% of the total U.S. workforce but they take on a disproportionate amount of the risk: 21% of all work-related deaths occur in construction.

The U.S. Department of Labor has called attention to the major dangers in construction by labeling the Fatal Four, the incidents that account for the highest number of worker deaths. Together, these four incident categories account for 64% of construction-related fatalities:



Falls

364 deaths (38.8%
of total deaths)



Struck by Object

90 deaths (9.5% of
total deaths)



Electrocutions

81 deaths (8.6% of
total deaths)



Caught in or Between

67 deaths (7.2% of
total deaths)

As every safety professional knows, these statistics aren't just numbers – they represent real people. We must do everything we can to keep these workers safe.

KEEPING CONSTRUCTION WORKERS SAFE IS NOT THAT EASY

If construction workers are at higher than average risk, it's not because their safety has been neglected. In fact, there is an entire industry of safety experts working tirelessly to prevent as many construction injuries and fatalities as possible. But the nature of construction often makes this feel like an uphill battle.

Construction work is inherently hazardous, physically demanding and mentally taxing. Workers also carry out their tasks outdoors, where they deal with the hot summer sun, sudden downpours and freezing winter winds.

Workers also often feel like they're racing against time. There's always a deadline to meet and pressure to finish everything before the construction season slows to a crawl. All that extra speed means workers are less careful and injuries are more likely to happen.

With all these risks and challenges, construction firms are desperate to improve safety on their job sites. If incident numbers are too high, the company is viewed as a risk and fewer clients will do business with them. To remain competitive, they must constantly strive to meet or exceed industry standards for safety.

Proper PPE is a key part of this. While it's often called the last line of defense, it should not be the last thing you consider before rolling out your safety program. With so many inherent risks that are impossible to eliminate and difficult to control, protective gear is often the only thing standing between a construction worker and a serious or fatal work injury.

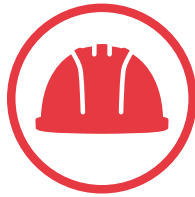
WHY YOU'RE READING THIS GUIDE

We wrote this guide to help you match the correct PPE with the hazards and potential threats your workers face.

It's not a substitute for a full hazard assessment. You will need to have competent persons perform a hazard analysis to reveal every major risk on your job site. Once you've done that, this guide can help you with the next steps.

We will explain what kind of gear is available to keep workers safe, so you can be sure they're given everything they need for their protection.

And if you're in doubt, remember that you can always reach out to us. We're experts at equipping workers for safety and we'll be glad to help.



Section One: Head Protection

THE DANGER

Let's start at the top – head protection.

According to NIOSH, construction workers are at higher risk for traumatic brain injuries than workers in any other type of workplace.

With 120,000 on-the-job head injuries annually, nearly 1,500 of which are fatal, the problem is evidently worth taking seriously. Moreover, between 2003 and 2010, a total of 2,200 workers died from traumatic brain injuries, accounting for one fourth of all construction-related fatalities.

While these risks are present throughout the construction site, they are not distributed evenly. According to statistics from the National Safety Council, workers who are around retirement age are almost four times more likely to sustain a traumatic brain injury than young adult workers. Where they work makes a difference, too. Workers at small organizations (20 or fewer employees) are more than 2.5 times more likely to die from a traumatic brain injury than those employed by larger outfits (more than 100 employees).

THE SOLUTION: HARD HATS

The threat of head injury is both real and predictable, but we can control much of the risk by equipping workers with proper PPE, such as hard hats.

Approximately 20 million Americans wear hard hats at work. When properly worn, they provide the protection needed to prevent both minor and serious head injuries.

There are two main components to a hard hat:

1. **A hard outer shell** – like a turtle shell for the head, this firm layer provides protection from impact
2. **Suspension straps** – these create a space between the head and the outer shell, reducing the force of impact

The hard shell protects workers from penetration of sharp objects and from blunt force trauma. Because of it, the hard hat, not the cranium, will take the blow.

Another style of hard hat is known as a “bump cap.” It does not provide the same protection as a standard hard hat and is used mainly to protect the wearer from lacerations and minor head bumps. Bump caps, however, do not provide sufficient protection from flying or falling objects.

OSHA REQUIREMENTS

OSHA requires that workers wear hard hats whenever there is a potential for head injury from “impacts, falling or flying objects, or electrical shock.” Employers must provide hard hats and ensure that employees wear them for protection in the following situations:

- When objects or debris might fall from above and strike workers on the head
- When there is the possibility that a worker’s head will come into contact with electrical hazards
- When employees may strike their heads against fixed objects, like supports, beams, or other equipment

ANSI STANDARDS

The American National Standards Institute (ANSI) sets the standards that hard hats must meet. The standards were created in 1997 and list two types of hard hats:

- Type I offers protection to the top of the head and is commonly used in the United States
- Type II offers protection to the top and sides of the head and is commonly used in Europe

ELECTRICAL HAZARD CLASSES

When electrical risks are present, hard hats must be designed to handle this threat as well. There are three classes of electrical hazard protection for hard hats:

- Class G (General) hard hats are rated for 2,200 volts
- Class E (Electrical) hard hats are rated for 20,000 volts
- Class C (Conductive) hard hats do not offer electrical protection

PROPER CARE

ANSI requires that all approved hard hats include instructions on proper care and how to inspect the hard hat for damage.

Even if it doesn't sustain any impact, you need assurance that a hard hat will continue to provide adequate defense against workplace hazards. Damaged, defective, or worn PPE only gives us a false sense of security, not actual protection. Regular inspections, then, are critical.

Even if they are still in good condition, hard hats should be replaced every five years, since the gradual wear and exposure to the elements can compromise their effectiveness.



Section Two: Above the Neck Protection

Protecting the face is important. That's not just vanity – your face is a very sensitive part of your body and many of your most important and vulnerable sense organs (eyes, ears, nose, tongue) are located on it, so keeping it safe is a must.

Construction work can put the face at risk through the use of sanders, grinders, saws and other equipment that produce flying dust, liquid splashes and airborne debris.

OSHA requires above the neck protection whenever there is a reasonable risk of injury. Depending on the hazard, workers will require PPE such as goggles, faceshields, earplugs and full-face respirators.

EYE SAFETY

Construction work has a higher rate of eye injury than any other industry. It's responsible for more than 10,600 occupational eye injuries each year.

Eye injuries on construction sites have many causes, the most common of which are:

- Flying objects (bits of metal, glass, wooden splinters or sawdust)
- Impact from tools
- Particles
- Chemical splashes
- Harmful radiation

Despite these various causes, on-the-job eye injuries usually boil down to one of two things:

1. *Workers not wearing eye protection (according to the Bureau of Labor Statistics, this is the case in 3 out of 5 instances of eye injury)*
2. *Workers not wearing the right protection for the job/application*

SAFETY GLASSES

Safety glasses are the premier form of eye protection, and employers must provide them whenever the threat of eye injuries is present. Each pair must meet the requirements set out in ANSI Z87.1.

SAFETY GOGGLES

While safety glasses mainly provide protection against impact and certain kinds of debris and splashes, goggles are used when the eye needs more thorough protection from exposure to harmful substances. Goggles create a seal around the eyes to protect them from dust, liquid chemicals and some gases and vapors.

FACESHIELDS

When it's not just the eyes that need protection, workers must wear a faceshield. These provide full-face protection from flying objects, liquids, sparks and other hazards.

Faceshields are critical for some types of work but they are considered secondary protection. That means they must be worn over other PPE, either safety glasses or safety goggles.

HEARING CONSERVATION

OSHA requires employers to enact a hearing conservation program in any workplaces where employees are exposed to 85 decibels of noise (8-hour time-weighted average).

As you can imagine, construction sites and the equipment used on them regularly exceed this 85 decibel limit. This level of exposure can lead to permanent hearing loss and tinnitus (a permanent ringing or buzzing in the ear) unless workers use proper hearing protection.

A hearing conservation program may involve:

- Performing a noise contour study and recording the levels of noise workers are subjected to
- Performing baseline hearing tests on workers who are required to wear hearing protection
- Performing annual follow-up hearing tests to verify that the protective measures are adequate and that no hearing loss has occurred

If engineering measures such as soundproofing or using quieter equipment can reduce the noise levels on the construction site, this is an important step to take, but it isn't sufficient. Since hearing loss is irreversible, we cannot afford to take chances: training and PPE are essential.

There are three components to the effective use of hearing PPE:

- Choose earplugs or earmuffs with an adequate noise reduction rating (NRR)
- Provide these to your workers, along with training on how to use them
- Enforce the use of hearing PPE (providing the equipment without enforcing its use can be deemed negligent on the part of the employer)





Section Three: Safety Vests and Fall Arrest Systems

HI-VIZ SAFETY VESTS

Safety vests are the unofficial logo of worker safety. Nothing says “hazards are present” like a crew of workers in bright orange and yellow vests.

In many construction environments, the Hi-Viz safety vest is standard issue – every worker has to wear one while on-site. With so much activity going on at any given site, no one is safe unless they’re seen. Safety vests ensure that workers are hard to miss.

Each worker must wear a safety vest that fits them well to prevent it from catching or snagging on anything, which in effect introduces a new hazard.

FALL ARREST SYSTEMS

Personal fall protection equipment is absolutely essential on any construction site. After all, no matter how short the building is, sooner or later workers will have to climb on top of it to work on the roof. Falls are also the leading cause of death in the construction industry, with 370 fatal falls occurring in 2016 alone (out of a total of 991 fatalities).

A complete personal fall arrest system consists of three components:

1. **Anchor** – This is what the harness and lanyard connect to. Anchors provide support for the fallen worker and ensure that they remain secure
 - Anchors must be capable of supporting 5,000 lbs of force per worker



- Anchor points must be high enough to prevent the worker from making contact with the lower level in the event of a fall
 - The anchor connector should be positioned strategically to avoid swinging hazards in the event of a fall
2. **Body harness** – Body harnesses minimize and distribute the impact and stress on the body in the event of a fall
- They are worn by the worker and connected to the anchor point via a lanyard
3. **Connecting device** – This connects the worker's body harness to the anchor and may absorb some of the impact of a fall
- Includes shock absorbing lanyards, fall limiters, self-retracting lifelines and rope grabs

PRODUCT SHOWCASE

RESPIRATORY PROTECTION

PREFERRED SAFETYNETWORK.ME MANUFACTURERS



NX952



NX952V



N95 Particulate Disposable Respirator Available with or without a Valve



The Cordova Safety Products Class N95 Particulate Respirator filters fine particulates. It is equipped with a cushioned nose pad, 2 latex-free straps, and an adjustable, aluminum nose piece. The NIOSH-Approved N95 respirator is designed to achieve a close facial fit and very efficient filtration of airborne particles. The respirator blocks at least 95% of very small (0.3 micron) test particles. Assigned Protection Factor: APF 10.

AirWave® Series N95 Particulate Disposable Respirator



AirWave® is the next wave in respiratory protection – a revolutionary step forward from today's disposable respirators. Its patent pending wave technology allows easier breathing for cool comfort, providing the protection you need all day long. Plus, it delivers on the Moldex® commitment – comfortable, durable respirators that increase compliance and decrease costs.

Features:

- Exclusive easy-breathing wave design
- Less resistance, better breathability
- Less cost than valved respirators
- Dura-Mesh® shell resists collapsing in heat and humidity
- Longer wear means less cost
- Softspun® lining for increased comfort and durability.
- Soft foam nose cushion and contour shaped for comfort
- Pinch free nose bridge
- Meets heat and flame resistance in accordance with ANSI/ISEA 110-2009
- Made in USA



4200

Safety Works® N100 Particulate Disposable Respirator



SWX00397



NIOSH-approved N100 particulate disposable respirator, designed in cup style with exhalation valve. Effective against all solid particulates.

PRODUCT SHOWCASE

LOCKOUT/TAGOUT

PREFERRED SAFETYNETWORK.ME MANUFACTURERS



150505

SlimView™ Group Lock Box



Good things come in small packages. The SlimView™ Lock Box reduces the space you need for group lockout or box storage. An innovative recessed door allows padlocks to hang straight, meaning space-saving efficiency for you.

Features:

- Rugged steel body and polycarbonate door stand up to all of your toughest jobs
- Clear door gives you clear view into everything you need during your group lockout
- Convenient storage with built-in padlock and key hangers
- Room for a dozen—storage space for up to 12 padlocks
- Easy to wall mount with button mount holes



ELOK1

Portable Lockout Kit



Contains:

- (1) 13" Rugged polypropylene carrying case
- (3) 1 1/2" Lockout hasps
- (3) 3/4" Shackle padlocks
- (16) ID labels (IDL1)
- (1) 10/pack of LOTAG10 Tags
- (3) Single pole circuit breaker lockouts
- (2) Double pole circuit breaker lockouts
- (1) Large plug lockout
- (1) Lockout handbook

PRODUCT SHOWCASE

PROTECTIVE CLOTHING

PREFERRED SAFETYNETWORK.ME MANUFACTURERS



CP



DEFENDER™ Coverall



Cordova Safety Products DEFENDER™ Coverall is constructed of tough, composite fabric that combines breathable microporous film and soft non-woven polyolefin. It provides an effective barrier against particulates, aerosols, and liquids while maintaining comfort. It is designed for work environments where hazardous and non-hazardous liquid and dry particulate contaminants may be present. This DEFENDER™, microporous, disposable coverall features serged seams, a zipper front and collar and open wrists and ankles.

TY120S



Tyvek® 400 Coverall



The lightweight, durable protection of Tyvek® keeps out workplace hazards like mold, fiberglass, lead, asbestos and aerosols—even light chemical splashes and radioactive dust. Yet it breathes to keep you comfortable all day long. Whatever the job, there's a Tyvek® garment to fit your needs.

COL428



MicroMax® NS Cool Suit™ Coverall



MicroMax® NS provides the protection you need from dirt, dust, grease, grime and light chemical splash with the addition of a breathable back panel for the most comfortable coverall around. Attached hood and elastic wrists and ankles provided added protection.



BSTJTRC2

FR Control 2.0™ Type R Class 2 Hi-Viz Base Layer Tee



NSA's FR Control 2.0™ is built to tackle both hot and cold temperatures. This flame-resistant base layer offers the most advanced fabric technology allowing it to actively respond to conditions and assist in regulating body temperature.

Standards:

- ANSI/ISEA 107 Type R Class 2
- Compliant to ASTM F1506 for Arc Flash
- Compliant to CSA Z462 for Arc Flash (Canada) Compliant to NFPA 70E for Arc Flash
- OSHA 1910.269

Fabrics:

- 5.5 oz Modacrylic Blend

Features:

- 3M™ Scotchlite™ FR Silver Segmented Material
- Anti-microbial fabric to resist odors
- Moisture Wicking and Breathable
- More stretch for a customized fit
- Reduces perspiration
- Inherently flame resistant
- Proactively regulates body temperature
- Tagless shirt collar
- Arc Rating: 4.0 cal/cm²

PRODUCT SHOWCASE

ARC PROTECTION

PREFERRED SAFETYNETWORK.ME MANUFACTURERS



ArcGuard® RevoLite™ 40 Cal/cm² Arc Flash Kit



KIT4SCLT40



NATIONAL
SAFETY APPAREL

Chock full of premium options, the RevoLite™ Arc Flash Kit is NSA's lightest weight 40 Cal/cm² arc flash PPE. Conveniently packed in 1 bag, all of the 40 cal/cm² protection you need is close at hand.

Standards:

- Compliant to CSA Z462 for Arc Flash (Canada)
- Compliant to NFPA 70E for Arc Flash
- Compliant to OSHA 1910.269
- Compliant to ASTM F1506 for Arc Flash

Fabrics:

- ArcGuard® RevoLite™

Features:

- Available with inside drawstring waist
- Breathable FR fabric
- Collar can be turned down
- FR Fabric will NOT melt, drip, or ignite
- Inherently Flame Resistant for FR protection that will NOT wash out
- Nomex® Knit Wrists
- Premium anti-fog and scratch resistant coating on faceshield
- PureView™ faceshield technology features a greater range of visibility
- Quick disconnect and easy adjustable shoulder

straps for quick entry

- Raglan Sleeve for increased mobility
- Wide-cut legs with FR hook and loop cuff closure

Kit Includes:

- 12" Leather Protectors
- Class 2 Rubber Insulating Gloves
- Glove Bag
- Hood Bag
- Large Gear Bag
- Revolite™ Bib Overall
- Revolite™ Short Coat
- Safety Glasses
- PureView™ Faceshield with hood and hard hat

FALCON™ VizAR™ AR/FR Type R Class 3 Heavy-Duty Jacket



355-2500AR



PROTECTIVE INDUSTRIAL PRODUCTS

FALCON™ VizAR™ is a Type R Class 3 heavy-duty jacket that is waterproof and breathable. Designed with water-tight "D" ring harness access, this jacket is ideal for work environments like HVAC, welding, hybrid auto mechanics, and petrochemical.

PRODUCT SHOWCASE

ERGONOMIC MATTING / ERGONOMICS

PREFERRED SAFETYNETWORK.ME MANUFACTURERS



1650

ProFlex® Economy Elastic Back Support



The ProFlex® Economy Elastic Back Support is designed to remind workers of proper lifting techniques while also enhancing the body's intra-abdominal pressure, moving the stress away from the spine for back pain relief.

Features:

- 7.5" economical, all-elastic body
- 5" single strap closure
- Non-conductive polypropylene stays
- Adjustable, detachable suspenders
- Rubber track webbing

PRODUCT SHOWCASE

HEAD PROTECTION

PREFERRED SAFETYNETWORK.ME MANUFACTURERS



H24R2V



H34R2V



Duo Safety™ Cap and Full-Brim Hard Hats



The Cordova Safety Products Duo Safety™ Hard Hats are constructed of high-density polyethylene. Available in vented cap-style and also full-brim models, they offer a sleek, low-profile. These hard hats are equipped with a 4-point ratchet suspension. They have a cushioned brow pad, vertical height adjustment, and meet ANSI/ISEA Z89.1-2014 Class E (Electrical) and G (General). They are available in several colors. Cordova Safety Products can also customize it with a high-quality, permanent pad-printed logo.



6161

Evolution® Deluxe Full-Brim Hard Hat



Evolution® Deluxe Full-Brim Hard Hat designed with Revolution™ Wheel Ratchet for secure and comfortable fit. High-Density Polyethylene (HDPE) shell and 6-point suspension system offer unrivaled comfort without compromising performance.

PRODUCT SHOWCASE

HEARING PROTECTION

PREFERRED SAFETYNETWORK.ME MANUFACTURERS



EPFU01



EPFC01



Encore™ Disposable Foam Earplugs



The Encore™ line of earplugs offer a soft, comfortable fit and optimal hearing protection with a 32 decibel noise reduction rating. These foam polyurethane (PU) earplugs expand to fit snugly within the ear canal. The tapered design allows for easy insertion/removal and the bright orange color makes compliance checks easy. The corded model has a convenient cord that keeps them safe around the neck when not in use. Encore™ PU earplugs are produced in an ISO 9001:2000 Certified Facility to ensure consistent quality and performance.

Glide® No-Roll Twist-In Disposable Foam Earplugs



Glide® Disposable Foam Earplug's unique multi-curved stem helps the plug to turn its way inside the ear canal for a quick and effortless fit. You simply push and twist to find your fit. The no-roll down design is perfect for workers with dirty hands or wearing gloves. Glide®, like all Moldex products and packaging, is 100% PVC-Free for a greener alternative. Plus, Moldex offers the convenience, increased compliance and cost savings of our popular earplug dispenser, the PlugStation® with the corded style of Glide® Foam Earplugs.

Features:

- Unique multi-curved stem rotates for a custom fit
- Large handle on curved stem for easy insertion and removal
- No-roll down design is perfect for workers with dirty hands or wearing gloves
- Cord can be attached at any desired length
- Look for the bright green color as a symbol of Moldex quality
- Independently tested to ANSI S3.19-1974
- 100% PVC-Free, like all Moldex products and packaging - for a greener alternative
- Large soft foam pod for a comfortable, snug seal
- Made in USA



6940 (UNCORDED)

6945 (CORDED)

PIP® Disposable Foam Corded Earplugs



Soft polyurethane foam disposable earplugs in bright orange color with NRR of 32 dB is amongst the highest in its class. Each pair comes individually wrapped.



265-100C

PRODUCT SHOWCASE

FIRST AID / SOAPS / CREAMS / AED

PREFERRED SAFETYNETWORK.ME MANUFACTURERS



299-15050A-M

PIP® ANSI Class A 50-Person Metal First Aid Kit



Compact and lightweight first aid kit with gasket for weatherproof protection of contents. Meets ANSI Z308.1-2015 requirements only when the required minimum fill is maintained with first aid products marked ANSI Z308.1-2015.

PRODUCT SHOWCASE

FACILITIES MANAGEMENT, MAINTENANCE, & IDENTIFICATION

PREFERRED SAFETYNETWORK.ME MANUFACTURERS



Keep Aisles Clear Walk on Floor Sign



WFS12



Specs:

- Message Type: Accident Prevention
- Message or Graphic: Message Only
- Legend: Keep Aisles Clear
- Color: Green on White
- Special Color Properties: No Special Properties
- Material: Pressure-Sensitive Vinyl
- Shape: Round
- Diameter: 17" (Size 17" x 17")
- Surface Type: Anti-Skid
- Language: English
- Mounting: Adhesive Backed
- Coating: Anti-Skid Laminate
- Special Features: Grit Coating

PRODUCT SHOWCASE

EYE PROTECTION

PREFERRED SAFETYNETWORK.ME MANUFACTURERS



Honeywell
THE POWER OF CONNECTED



EOTG10ST



CORDOVA Cordova's SLAMMER II™ Safety Glasses are designed to fit over prescription eyewear. They are slightly smaller than the SLAMMER™ Glasses, offering a sleeker, lower profile design. These provide anti-fog protection and a wrap-around style with brow guard, integrated side shields, and coated (scratch-resistant) lens. They meet ASNI Z87.1+ standards and provide 99.9% UV protection.



59003

Skullerz® Sköll Safety Glasses



Sköll is a sleek half frame “blade style” model with all the style and features you’ve come to expect from Skullerz® eye protection at an outstanding value. Flexible rubber temples and non-slip nose piece.

Features:

- Meet ANSI Z87.1+, CSA Z94.3 and MIL-PRF 32432 Ballistic Impact
- Scratch-resistant lens blocks 99.9% of harmful UV rays
- Single lens, blade-frame design provides wide field of vision and coverage
- Rubber temple tips and non-slip nose piece provides a snug, comfortable fit
- Available Fog-Off™ technology won't wash or wear off
- Patent pending



250-54-0520

Fortify™ Rimless Safety Glasses



Fortify™ Rimless Safety Glasses feature a gray frame, clear, anti-scratch lens and padding. Lightweight, comfortable foam-sealed design keeps out dust and airborne particles. Enhanced FogLess® 3Sixty™ version includes interchangeable headband.

PRODUCT SHOWCASE

HAND PROTECTION

PREFERRED SAFETYNETWORK.ME MANUFACTURERS



3732HV



COMMANDER HV™ Cut-Resistant Gloves



High-performance polyethylene (HPPE) gloves with added steel and/or glass fibers offer an increased cut resistance over gloves made with HPPE only. The Cordova COMMANDER HV™ Cut-Resistant Gloves feature a 13-gauge, Hi-Viz yellow HPPE/Glass/Steel fiber shell with a red, sandy nitrile palm coating for added gripping power. It offers an A7 cut level.

7041



ProFlex® Cut-Resistant Gloves



The ProFlex® Cut-Resistant Gloves are designed with 2 new technologies to create the most comfortable, breathable and best gripping ANSI cut level A4 gloves on the market.

Features:

- TenaLux™ yarn (13 gauge) provides A4 cut protection without fiberglass or steel for non-irritating comfort
- WSX™ dip technology provides superior grip in oily and wet conditions
- WSX™ dip combined with TenaLux™ yarn is fully breathable and cool to the touch
- Hi-Viz lime color for increased visibility
- Machine washable



ArcGuard® Class 00, 0 and 2 Rubber Insulating Gloves



Available in classes: 00, 0 and 2 and are available in colors: Black, Yellow and Red

ArcGuard® Rubber Insulating Gloves/Kits Meet:

- NFPA 70E-2015 Compliant for Arc Flash
- CSA Z462-15 Comp

NSA Offers 3 Different Levels of Protection for the ArcGuard® Rubber Insulating Gloves:

- Class 00 - Max Use Voltage 500V AC/750V DC
- Class 0 - Max Use Voltage 1000V AC/1500V DC
- Class 2 - Max Use Voltage 17000V AC/25500V DC

ArcGuard® Rubber Insulating Glove Kits:

- Available in classes: 00, 0 and 2
- Available in colors: Black, Yellow and Red
- Kit Includes: Rubber Insulating Gloves, 10" Leather Protectors, and Glove Bag

16-368



G-Tek® PolyKor® X7 General Purpose Gloves



The G-Tek® PolyKor® X7™ General Purpose Gloves are coated, seamless machine knit gloves made from PolyKor® X7™ blended shell and NeoFoam® palm coating. Touchscreen compatible.

PRODUCT SHOWCASE

FOOT PROTECTION

PREFERRED SAFETYNETWORK.ME MANUFACTURERS



PB22



PVC Steel Toe Boots



PVC boots resist solvents, animal fats, light acids, alcohols and oil-based chemicals. They feature cut-off bands for height adjustment, punch-out holes for easy hanging, and kick-off spurs for quick removal. In addition, these black Cordova PVC Steel Toe Boots provide midsole protection, are polyester/cotton lined for comfort and are equipped with EVA (ethylene vinyl acetate) insoles for excellent shock absorption.



PE440S

ProShield® 30 Boot and Shoe Covers



DuPont™ Personal Protection offers a range of shoe covers and boot covers in a variety of fabrics, sizes, colors, and slip resistance for a variety of applications. Whether you need an economical shoe cover for a dirty job, or a low-linting, sterile boot cover with enhanced durability and slip resistance for a cleanroom, DuPont™ Personal Protection has a solution for you.



6300TC

TREX™ Tungsten Carbide Ice Traction Device



1-piece device with 8 highly durable tungsten carbide studs that stretch over shoes or boots for tenacious grip and stability. These lightweight ice cleats provide unbeatable traction and are ideal for work and leisure outdoor activities in the ice and snow.

Features:

- Full-foot slip protection over shoes, boots and athletic shoes
- 8 rugged, highly durable tungsten carbide steel studs for tenacious grip and stability
- Stretchable rubber with heel tabs for perfect fit and easy on/off
- Lightweight and stays flexible in temperatures as low as -40°F (-40°C) for all day comfort
- Compact size makes them easy to store
- TREX® 6301TC Replacement Studs sold separately

PRODUCT SHOWCASE

FOOT PROTECTION

PREFERRED SAFETYNETWORK.ME MANUFACTURERS



1021324

Men's Manchester 6" Aluminum Toe Work Boots



This 6" hiking-inspired work boot is built for light construction, featuring KEEN.ReGEN midsole cushioning to carry you through the day. With waterproof leather upper, slip-resistant outsole, and aluminum toe.

Features:

- Left and Right Asymmetrical Aluminum Toes
- KEEN.DRY Waterproof, Breathable Membrane
- Waterproof Leather Upper
- TPU Shank for Midfoot Support
- KEEN.ReGEN: A Lightweight, Compression-Resisting Midsole
- Oil- and Slip-Resistant Non-Marking Rubber Outsole
- Locking Metal Lace Hooks
- Reflective Webbing for Additional Safety and Visibility
- Removable Metatomical PU Footbed
- Cleansport NXT™ for Natural Odor Protection

Safety Rating:

- Meets ASTM F1677-96 MARK II Non-Slip Testing Standards
- Meets ASTM F2412-17 and F2913-17 M I/75 C/75 EH Standards
- Meets ASTM F2913-17 SATRA Non-Slip Testing Standards



903NS

MicroMax® NS Non-Skid Boot Covers

Lakeland MicroMax® NS provides the protection you need from dirt, dust, grease, grime and light chemical splash with the added benefit of a non-skid surface to give these boot covers added grip.

PRODUCT SHOWCASE

COOLING / HEATING / HYDRATION

PREFERRED SAFETYNETWORK.ME MANUFACTURERS



6687

Chill-Its® Economy Dry Evaporative Cooling Vest



The Chill-Its® Economy Dry Evaporative Cooling Vest offers immediate and dry cooling relief that lasts up to 3 days. With its exclusive patented dry evaporative technology, this cooling vest keeps the wearer completely dry and comfortable, as opposed to other cooling vests on the market that require soaking and get you wet.

Features:

- Instant cooling relief with patented technology
- Long-lasting effect: Up to 3 days of cooling power to help maintain a healthy body temperature
- Easy activation: Fill vest with 13.5oz - 15.5oz / 400ml - 450ml of water
- Lightweight and durable made of industrial grade quality nylon
- Elastic wrap closure for personalized fit
- Machine washable
- Cooling material is treated with an anti-microbial that inhibits mold growth.
- Keep cap closed at all times to maintain vest's effectiveness.
- Do not clean the inside reservoir.

396-EZ900



EZ-Cool® Max Evaporative Cooling Towel



EZ-COOL® Max Evaporative Cooling Towel quickly reduces temperatures when soaked in water and activated to provide cooling effect. Provides UV protection and resists odors.



030870-FP

EverLyte™ Electrolyte Replenishment Drink



Don't settle. Demand more from your electrolytes. New EverLyte™ by Sqwincher® offers a convenient beverage to replenish electrolytes with no color or dye, no preservatives, and no artificial sweeteners. Simply chill and serve to enjoy a tasty electrolyte beverage. Sqwincher® EverLyte™ 8 oz pouches are a quick and convenient method to replenish your electrolytes and rehydrate with less calories and sugar than regular Sqwincher®. Simply chill and serve to enjoy a tasty 8 oz serving of electrolyte replenishment beverage.

EverLyte™ Formula Features:

- No artificial sweeteners - 100% REAL Sugar
- No High Fructose Corn Sweetener
- No artificial flavors - Naturally flavored
- No chemical preservatives
- No artificial dyes or colors to eliminate staining

EverLyte™ Pouch Features:

- Reduced product waste
- Sleek design - easy to carry, easy to consume
- Less time and space required to cool product
- Easy to distribute to employees
- Non-resealable package

PRODUCT SHOWCASE

FALL PROTECTION / CONFINED SPACE

PREFERRED SAFETYNETWORK.ME MANUFACTURERS



Honeywell
THE POWER OF CONNECTED



Squids® Hand Tool Tethering Kit - 1lb / 0.5kg



3194



The Squids® Hand Tool Tethering Kit includes a 3156 Coil Tool Lanyard with Single Carabiner and the 3740 Hand Tool Attachment Trap – Slips™ Variety 4-Pack. This tool tethering kit allows you to tether 4 different sized screwdrivers and hex key wrenches making it easy to use your tools on the job while preventing dropped objects when working at-heights.

- Approved to the ANSI/ISEA 121-2018 standard

Features:

- 1 Variety 4-Pack 3740 Hand Tool Attachment Trap – Slips™
- 1 3156 Coil Low Profile Tool Lanyard with Single Carabiner
- Tether 4 different sized screwdrivers and hex key wrenches ranging from 0.05" - 0.5" // 1.3mm - 12.5mm diameter
- Maximum tethering capacity of up to 1lb / 0.5kg
- 3740 Slips™ Features:
 - Patent-pending 1-piece design easily slides onto small hand tools without requiring additional tools to install or complicated wrapping or shrinking
- Swiveling exterior ring spins 360-degrees allowing screwdrivers and other rotating tools to be used without issue
- Flexible inner core grips tool after application securing it as an attachment point
- 3156 Coil Lanyard Features:
 - Low-profile durable plastic coil to withstand even the toughest conditions
 - Coiled lanyard design prevents snag and tangle hazards
 - Lightweight aluminum carabiner with manual locking screw gate
 - Tethering loop to securely connect to an anchor or tool attachment
 - Coiled length 12" / 30cm; extended length 48" / 122cm

PRODUCT SHOWCASE

AWARENESS SAFETY

PREFERRED SAFETYNETWORK.ME MANUFACTURERS



VB3201FR

COR-BRITE™ FR Type R Class 3 Hi-Viz Safety Vest



The Cordova Safety Products COR-BRITE™ FR Type R Class 3 Hi-Viz Safety Vest is constructed of lime, mesh, self-extinguishing fabric. It features a 5-point, breakaway design, 2-tone contrasting tape, and hook and loop closure. It provides a clear badge holder, dual mic tabs, and pockets. Class 3-rated vests offer greater visibility to workers in complex backgrounds and through a full-range of body movements.



8346Z

GloWear® 2-Tone Class 3 Hi-Viz Surveyor Safety Vest



The GloWear® 2-Tone Class 3 Hi-Viz Surveyor Safety Vest is loaded with 6 pockets and built with durable, yet breathable ANSI/ISEA compliant polyester mesh providing maximum visibility for any job in both daylight and nighttime conditions.

Features:

- Durable and breathable polyester mesh (3.3 oz/112 gsm)
- Zipper front closure for easy on/off
- 2" wide reflective tape set on 3.5" contrasting background for ultimate visibility
- Reflective trim outlines the whole vest enhancing visibility
- Quick access to mic tabs/safety glasses holder
- 6 Easy Access Pockets:
 - 1 upper left exterior dual layer flap top cell phone pocket and clear ID badge holder
 - 1 upper right exterior dual layer chest pocket with 4 pen holders and open top pocket
 - 2 large lower exterior flap top pockets
 - 2 large lower interior pockets
- Meets ANSI/ISEA 107-2015 Type R Class 3 standard

PRODUCT SHOWCASE

EYEWASH

PREFERRED SAFETYNETWORK.ME MANUFACTURERS



INSTRUMENTATION

PREFERRED SAFETYNETWORK.ME MANUFACTURERS



CALIBRATION/GAS INSTRUMENTS/CASES

PREFERRED SAFETYNETWORK.ME MANUFACTURERS



CLEANROOM WIPERS & MATS

PREFERRED SAFETYNETWORK.ME MANUFACTURERS



JANITORIAL SUPPLIES TOWELS, TISSUE & WIPERS

PREFERRED SAFETYNETWORK.ME MANUFACTURERS





Section Four: Gloves

Your workers' hands are their most important tools, and protecting them is an important responsibility for every employer.

Hands are exposed to a number of hazards on the construction site, including:

- Extremes in temperature
- Cuts and punctures
- Chemicals
- Abrasions

Once the hazards associated with each job task are identified, keeping workers' hands safe becomes primarily a matter of training workers in safely executing the job, implementing engineering controls (like installing and regularly inspecting machine guards) and, of course providing safety gloves matched to the hazards.

SELECTING THE RIGHT GLOVES FOR THE JOB

In 2016, ANSI released ANSI/ISEA 105 Standard (2016 ed.), an update to their standard for cut-resistant gloves. The changes include new classification levels, a new scale to determine cut scores and a revised method for testing gloves.

For jobs involving chemicals, follow the glove specifications that are outlined in the Safety Data Sheets (SDS) that accompany the chemical substance being used.

Industry safety standards should guide your selection when it comes to gloves for specialized work, such as hot work, electrical work and work in confined spaces.

On some occasions, gloves may need to be layered to provide optimal protection. Workers exposed to both chemical and cut hazards, for instance, may need to wear a nitrile glove underneath a pair of gloves that provides cut resistance.



Section Five: Sleeves

Do we really need a whole section on sleeves?

Yes, we certainly do. While the hands are usually closer to the hazards, the wrists and arms need protection, too. If your workers handle metals, glass, or any other materials that pose cut or burn hazards, sleeves may be required.

CUT-RESISTANT SLEEVES

Some of the most popular cut-resistant sleeve materials include:

- Kevlar fibers
- Cotton blends
- Stainless steel wire blends
- Dyneema

Like the cut-resistant gloves, sleeves are rated to ensure consistent and adequate protection.

OTHER CONSIDERATIONS

HOT WORK

Arms and shoulders need protection from both the heat and debris caused by welding, plasma cutting and other forms of hot work. Fire-retardant cotton and fabrics like Kevlar can do the job.

ELECTRICAL WORK

Electrical work requires flame-retardant clothing to protect against arc flash, sparks and fire. Sleeve materials should protect the arm while not burning or melting on contact with sparks or hot metals.

CHEMICAL PROTECTION

Review the SDS accompanying the chemicals being used. It will specify whether sleeves are required to protect the arms from chemical splashes, spray and other forms of accidental contact.



Section Six: Footwear

Proper footwear is critical in construction. Heavy dropped objects, sharp debris and implements strewn across the site and inclement weather all put workers without proper foot protection at undue risk.

Potential hazards that can be mitigated with safety footwear include:

- Slippery, slick surfaces
- Extreme cold (frostbite)
- Dropped objects
- Electrical work
- Stepping on nails or other sharp objects

Based on the hazards associated with each job, proper safety footwear may require some of the following features:

- Steel or composite toe to protect against impact from falling objects
- Anti-slip treads
- Metatarsal guard for additional protection of the upper foot
- Inner lining to keep the foot warm or wick away moisture
- Steel shank to protect against punctures from stepping on nails or other sharp items
- Good padding for comfort



Section Seven: Special Considerations and Tasks

Workplace safety always begins with a hazard assessment performed by qualified individuals. These will help you identify the risks faced by your workers and the safety measures needed to keep them safe from those risks.

Construction involves several different types of specialized work, and each of them comes with a unique set of hazards.

TYPES OF CONSTRUCTION WORK AND THEIR ASSOCIATED RISKS

- Roofing, work from elevated levels such as in lift trucks and work on scaffolding all require a proper fall arrest system for every worker
- Heavy equipment and vehicles expose workers to struck-by hazards and therefore require proper lighting along with safety vests and other Hi-Viz apparel
- Use of saws, nail guns and other power tools require cut- and puncture-resistant PPE
- Hot work such as welding and cutting carry the risk of burns and potential explosions – workers engaging in hot work should be equipped with fire-resistant clothing, proper shaded eyewear and faceshields
- Workers that may come into contact with vapors, paints, dusts and chemicals that could interfere with their breathing must be provided with adequate respirators before the work begins



Conclusion

Few workplaces are as risky as the construction site. Each construction task exposes a worker to a number of risks and each requires a set of control measures to keep them safe.

Your PPE program should ensure that your workers can be safe even during an incident. When someone accidentally knocks over a chemical container, falls from a scaffold, or drops a tool on their foot, their safety gear should be there to protect them.

Be sure to review your PPE program regularly to ensure that it continues to provide robust protection for all workers.

Remember: most work-related injuries are entirely preventable. All it takes is diligent assessment, careful planning, wholehearted execution and the right equipment.



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205 Huehl Rd. Northbrook, IL 60062 USA
800-548-GARD (4273) • www.saftgard.com • safety@saftgard.com