SELECTING THE RIGHT PPE FOR DISASTER RELIEF

Product selection guide for disaster cleanup workers



INTRODUCTION

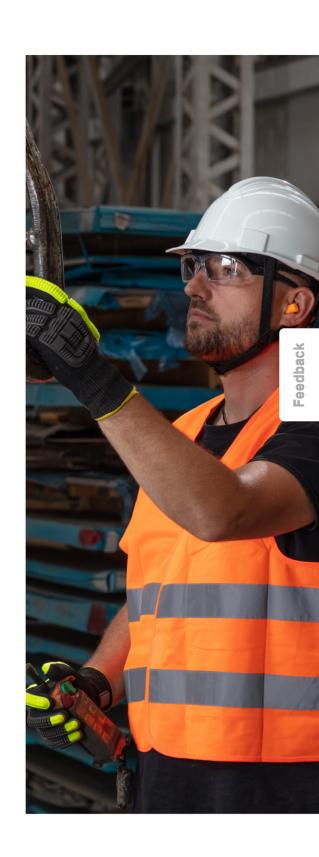
Honeywell Industrial Safety is the world's largest personal protective equipment (PPE) provider.

While any work environment can pose potential safety hazards, even veteran workers facing the extraordinary experience of a disaster cleanup effort may encounter new and different risks. Although the catastrophic event itself may have passed and the affected area approved for re-entry, the worksite itself likely, literally, remains a disaster area. Workers are advised to refer to proper governmental regulatory and corporate authorities for specific directions and mandates on work rules and procedures — as well as to employ best practices in their selection and use of personal protective equipment in their continuing support of a worksite-wide culture of safety.

WORKSITE SAFETY

In case an accident does occur, the availability of on-site CSA-compliant Honeywell First Aid Kits can assist workers with the treatment of a wide variety of worksite-related injuries.

The presence of moving vehicles and equipment in and around disaster cleanup sites can pose a myriad of hazards for workers and others. Accessories such as barricade tape, cones, flags, and traffic vests can provide added visibility to area hazards and increase safety in the management of worksite traffic.



HEAD PROTECTION

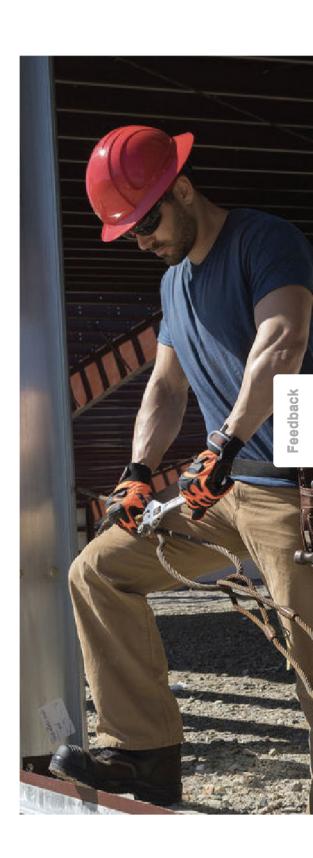
Entering a damaged structure exposes workers to a variety of overhead risks including flying or falling objects, power lines, equipment, tools, and similar hazards.

Choosing the right hard hat is key to effective head protection. Hard hat impact protection is divided into two categories: Type I and Type II. Type I hard hats are designed to reduce the force of impact from a blow to the top of the head (e.g. an object falling from above the worker). Type II hard hats are designed to reduce the effect of the lateral force exerted on the head.

The proper and consistent use of a hard hat is vital to user safety. Lightweight high-impact materials and a snug and comfortable fit are essential. A good quality suspension (the support frame) within the hard hat is important.

The more suspension points in the hard hat, the greater the comfort and the more energy from an impact that can be attenuated, or spread over the hat. Depending on the work task, compatibility with other PPE and accessories such as liners, face shields, and hearing protection, might be required. Regardless of type, however, the selected head protection should conform with the Canadian Standards Association (CSA) 94.1-15 standard. – The Honeywell North Zone™ Hard Hat sets a new standard for lightweight, day-long hard hat comfort all day long.

Features include a modern shell combined with a patented suspension design with multiple adjustment points for size, height and snugness; and are easily removable and replaceable.



EYE AND FACE PROTECTION

"Struck by" injuries encompass all areas of the body but, from an injury perspective, some of the most serious relate to the eyes, face, and head.

Where eye safety hazards exist, it is essential to provide protective eyewear that is compliant with CSA, UL, and other applicable eye protection standards that cover protective eyeglasses, goggles, and visors. In the aftermath of a disaster, work activity in a dirty, damaged structure can cause particles such as dust and soot to become airborne — and a safety risk to workers' eyes. Sealed eyewear is ideal for protection against airborne debris as well as from impact, the sun, and the wind. Sealed eyewear provides protection for wearers of prescription glasses.

Models with extended wraparound frames improve protection and peripheral vision. Flexible width sizes, an adjustable nose bridge, and ratcheting temple hinges that enable the wearer to customize the fit and lens angle increase comfort and promote usage. Anti-fog lenses help preserve vision when exertion, heat, and humidity exist.

- Uvex Hypershock is ideal for indoor/ outdoor environments including hot,humid conditions.
 The HydroShield® Anti-Fog coating exceeds ANSI 2020requirements for anti-fog. Available in various lens tints including specializedmirrors, polarized and photochromic lenses. 100% dielectric.
- Uvex Livewire sealed eyewear is engineered for an extreme environment. Canbe worn with temples or headband for a close, sealed fit to protect against dirt, dust, debris, the wind, and the sun as well as high heat and humidity. Livewiresealed eyewear also features 10X longer-lasting anti-fog performance.
- Uvex Seismic sealed eyewear can be worn with templates or headbandfor protection against impact, the sun, the wind, and debris. Ideal for highparticulate environments such as grinding, chipping and sanding.

- Uvex Tirade sealed eyewear offers protection in high particulate environmentswhere dust, dirt and debris present the risk of eye injury. Designed with a largeunilens for a wide field of unobstructed peripheral vision. Also available withtemples or headband.
- Uvex Stealth google features a lowprofile design for chemical splash andimpact, toric lens for superior optics and peripheral vision, and a quickadjust headband. Uvex Stealth OTG (over-the-glass) goggle offers premierperformance, comfort, and adjustability features. Ideal for impact, dust, chemical splash, and UV and welding radiation. Fits comfortably over mostprescription eyewear.
- Uvex V-Maxx OTG (over-the-glass)
 goggle fits a wide variety of workers and
 can be worn over prescription eyewear
 or with most half-mask respirators
 Demolition or cleanup work involving
 steel cutting and concrete sawing



increases the risk of eye injury from flying particles or hot liquid droplets. In these environments, workers will need protection in the form of full face visors. Heavy mechanical work will require polycarbonate visors, chemical contact will require acetate or propionate visors, and electrical work will require polycarbonate visors, and welding tasks will require a polycarbonate visor with an Infrared (IR/UV) level 3.0 or 5.0 lens.

- Honeywell Forestry Kit combines a hard hat and ear protection earmuffs with a metal mesh face screen to provide head, eye, face, and hearing protection with the ultimate impact shield from flying chips and debris.
- The installation of on-site emergency eyewash stations can help provide immediate remedy of eye injuries if an accident does occur. The portable Fendall Flash Flood station offers immediate, handsfree eye flushing and delivers a saline solution for three minutes.



HEARING PROTECTION

Most worksites are enveloped by the sounds of working tools, equipment, and heavy machinery — and many present the risk of permanent, noise-induced-hearing-loss.

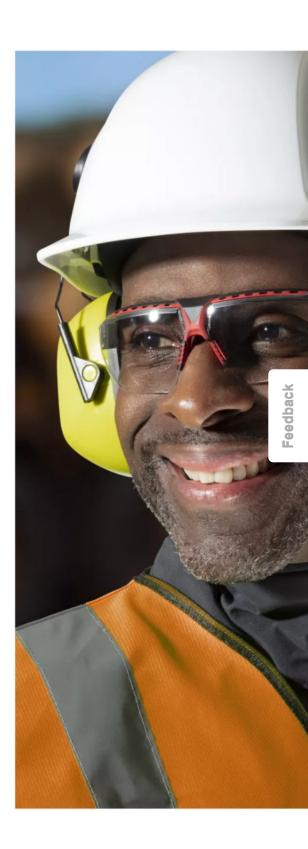
Effective hearing protection reduces the level of sound exposure to permissible limits while allowing users to maintain real-time personal communication and situation awareness for their personal efficiency and safety.

There are many options for hearing protection. Selection factors include noise exposure and desired protection levels, product type (earplug or earmuff), style (single/multiple uses, banded, etc.) and other product features (size, corded, sound management etc.). Training and testing help users ensure the proper fit of the hearing protector and the desired level of protection. Regardless of the type, the chosen hearing protection should be compliant with CSA Z1007 for hearing conservation.

Superior hearing protection is designed for optimum comfort, makes them solutions users will want to wear.

Wherever there is noise. VeriShieldTM 100 is the answer.

All VS100 models feature micro-adjustable larger dimension range, wider cup openings, memory foam ear cushions and are available in both steel-banded cushioned headbands as well as dielectric for electrical environments. A few unique featurese to these earmuffs are the Air Flow Control technology as well as a patented internal cup baffle design that offer optimum noise attenuation across all noise frequencies and reduces the weight of the earmuffs.



RESPIRATORY PROTECTION

Physical injuries are not the only hazard in a cleanup effort. It is important to protect the lungs because various gases, toxic chemicals, fumes, and particles can remain airborne long after a catastrophic event has passed or a structural fire is extinguished.

Those working on clean-up, refurbishment, and construction teams are strongly advised to wear respiratory protection. Asbestos and silica are leading respiratory hazards and cause of ill health on the job site, often inhaled as dust during demolition and refurbishment activities. Respiratory protection is also vital when drilling, painting, and cutting concrete or working with sand and concrete. Ways to reduce inhalation risks can include changing working practices, for example by adding water when cutting concrete to reduce dust. Single use, re-usable face masks, half-face or full-face respirators or ventilated hoods are available to prevent dust inhalation.

- The economical, elastomeric Honeywell North 5500 Series Half Mask features a wide contoured sealing area and great fit. The low "dead air" space limits re-breathing of exhaled air for increase comfort and worker productivity. Latex free straps stretch and move with the worker while providing optimum support.
- The Honeywell North RU6500 Full Facepiece Mask is an economical siliconefull facepiece that provides all day comfort.
- Depending on the hazard present in the environment, Honeywell's line
 ofcartridges and filters for use with both half and full facepieces are low
 profile, which means they will not catch on pipes or other objects. User
 seal checks are easy to perform, even with gas and vapor cartridges. Most
 common uses are the P100, N95 (and holder), Organic Vapor Cartridge
 and Organic Vapor Cartridge with P100 filter.
- The Saf-T-Fit Disposable Mask comes in three sizes, S, M/L and XL, and is great for use in areas where contaminants may be less potent, but respiratoryprotection is still needed.
- The Honeywell BW™ Solo is a easy to service single-gas detector with BLEconnectivity that provides real-time visibility into the status and safety ofhazardous-area workers, helping companies respond faster, more knowinglyand decisively to safety incidents.
- The Honeywell BW™ MicroClip Series is the world's most popular multi-gasportable detector, delivering long runtime (an entire shift) and reliability along with small size, low cost, and a superior user experience.

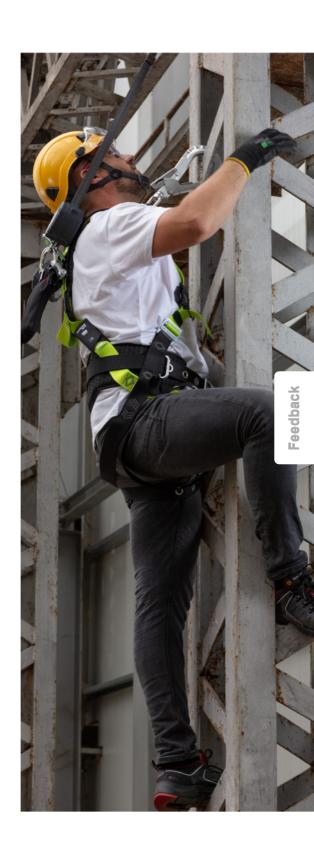


FALL PROTECTION

Falls from height represent the leading risk factor for serious injury or death at the worksite. To reduce the risk, consider the following series of options.

First, if possible, avoid work at height. Many accidents occur at low levels where the risk of a fall has not been considered. Secondly, prevent falls with the use of collective fall protection. Thirdly, specify Personal Fall Protection Equipment (PFPE) for individuals working at height to reduce the potential (restraint) and to reduce the effects of a fall (fall arrest). Selecting the right type of fall arrest equipment is vital for all three components of the PFPE system: Anchor point (permanent or temporary), body wear (harness, restraint belts) and connecting device (lanyards, rope grabs). When specifying PFPE, consider the user, the environment, and specific application. Proper training, inspections, and maintenance are always required. A rescue plan and qualified individuals should be in place at the worksite.

- Honeywell Miller® H500 Harness integrates anatomically and ergonomically designed breathable paddings, offers more freedom of movement, and introduces a variety of other new features including a new smart anti-tangle solution for a hassle-free donning experience.
- Honeywell Miller AirCore Harness for Tower Climbing provides the
 ultimate in performance, comfort, and durability even when used in the
 most challenging climbing environments. Designed for workers climbing
 cell phone, TV, radio and utility towers while building/decommissioning
 towers, changing out transmission lines/antennas, or installing/
 replacing lights.
- The cost-effective Honeywell Miller TurboLite[™] Personal Fall Limiters makes shock-absorbing lanyards obsolete. Workers will no longer need to "switch-out" equipment to maintain a safe fall distance.
- The new patent-pending Honeywell Miller Twin Turbo™ G2 Connector and patented D-Ring Connector easily adapts two Personal Fall Limiters (PFLs) forcontinuous 100% tie-off fall protection.



ELECTRICAL SAFETY

Structurally-damaged facilities pose multiple varieties of electrical hazards that require a full array of linemen PPE.

Utility and electrical workers must also protect themselves by wearing rubber insulating gloves with leather protectors, and head protection including face shields and hard hats. Temporary grounding equipment, voltage detectors, and insulating sticks are essential tools for the work zone.

The first order of business is to remove occupants and cut electrical power to the severely affected area, allowing the first responder cleanup team to sweep through and begin the assembly of the new infrastructure. Power and gas services won't be re-established until all cleanup and ground restoration work has been completed. Even when electrical equipment is turned off, however, it can become temporarily re-energized, for example during an electrical storm. Qualified workers near energized equipment or downed power lines must wear arc flash protective clothing, rubber insulating gloves, hard hats and face shields. National Safety Standards require employers to train employees regarding selection. use, and maintenance of their electrical PPE. Dielectric boots and overshoes provide essential safety protection against step potential. These overshoes and overboots have been tested to the electrical requirements of ASTM F1117.





For More Information

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Protective Equipment (PPE)

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