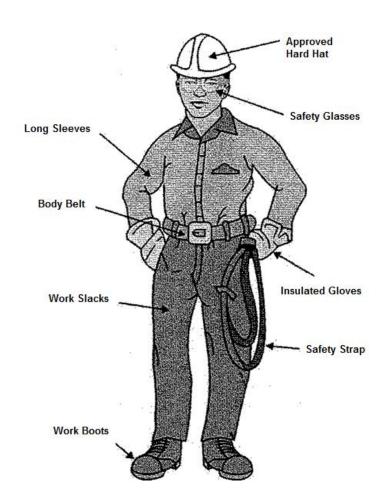
# **Personal Protective Equipment - PPE**

CATV installation requires a number of items of personal protective equipment (PPE). In addition to an ammeter and voltage detector, some common PPE items (shown in the Figure below) used during CATV installation include the following:

- Hard hat
- Eye protection (safety glasses, safety goggles and face shields)
- Long sleeves
- Body belt
- Gloves (leather work gloves, insulated gloves)
- Safety strap
- Work slacks
- Work boots



# **Use and Inspection of Personal Protective Equipment**

Connect/One will ensure that the required PPE to perform your job safely is available to you. It is your responsibility to inspect and maintain each PPE item before use to ensure that each item is in serviceable condition. Most importantly, it is your responsibility to properly use the equipment when necessary.

### **Inspection**

Daily inspections are performed to ensure that the hard hat is in good working condition. The shell is checked for cracks, soft Spots, or badly faded areas. If any defects are found, the hat must not be used and must be replaced.

The suspension cradle and headbands must also be checked daily for deterioration. Items to be checked include twisted, cut or frayed straps, and cuts or tears on the plastic clips. Check the suspension system for broken pieces, and check that all pieces are in place according to the design requirements. Only use the suspension system designed for your model hard hat. Never alter or modify the suspension system. The clearance between the suspension and the shell must be maintained in order to provide proper protection.

### **Hard Hat**

A hard hat is worn to protect your head from impact injuries or at least to reduce the seriousness of a sustained injury. A properly fitted and adjusted hard hat can absorb up to 75% of the force of a blow. A hard hat should be worn whenever there is a potential for injury due to falling objects or when working in areas such as attics, basements, or crawl spaces. A hard hat must be worn when working from a ladder or climbing a pole, when working near electrical lines or equipment to protect against electrical shock hazards.

Hard hats must be the insulated type and must meet ANSI Z-89.1 Class E & G or A & B standard. Metal hard hats are not allowed since they are not as impact resistant as plastic hard hats and are not safe around electrical hazards or lightning. A hard hat is shown in the figure below:



**Hard Hat** 

### **Proper Use**

Hard hats must be worn correctly to be effective. Never wear the hat backwards. Wearing the hat incorrectly reduces the protection afforded. The hard hat should fit snugly on the top of the head with the brim no more than 1 inch above the upper edge of the ear. Always make sure the hat fits. Never place the hood of any hooded garment over or under a hard hat. If the hood is wet, it could become a conductor of electricity if it comes in contact with a power line.

### **Maintenance and Care**

Hard hats should be cleaned regularly using mild soap and water. Never use a solvent to clean your hard hat. Solvents may make the shell brittle and more susceptible to cracks. The suspension liner and headband may be machine-washed.

Never paint, place decals on, or attach unauthorized material to the hard hat. Paints and glue may reduce the strength of the hard hat, reducing your protection. Do not bore or punch holes through any part of the hard hat to improve circulation. This again will reduce the impact resistance and the electrical insulating ability of the hard hat.

Never throw, kick, or drop a hard hat, and never use it as a seat or a support for other material. If a hard hat is dropped, the shell should be re-inspected for any cracks or soft spots prior to reuse.

### **Eye Protection**

The purpose of safety glasses is to keep debris out of your eyes and to protect your eyes from falling objects. Eye protection equipment is available as goggles, face shields, and safety glasses. All glasses must be made of impact-resistant materials and must meet ANSI standard ANSI Z-87. Field personnel wearing prescription eyeglasses should make sure the lenses and frames are rated as safety glasses, not just tempered. Cover-all goggles are required for prescription glasses that do not meet ANSI Z-87 standard.

The graphic below is an example of safety glasses:



**Safety Glasses** 

Approximately 90% of all eye injuries are preventable. It Is Connect/One's policy that eye and face protection be worn while working in the field or when exposed to an eye or face hazard, such as flying particles, liquid chemicals, or light radiation.

Specifically, eye or face protection must be worn when performing any of the following work activities:

- Hammering
- Using power tools
- Drilling
- Scraping
- Working in areas where dust is present
- Working near tree branches, shrubs, and thorn bushes
- Welding or using a propane torch
- Handling creosote material
- Working with chemicals including vehicle and power supply batteries
- Performing any activity that has the potential to result in an eye injury

#### **Gloves**

Leather-faced work gloves must be worn when handling and/or working with coarse material such as cable, wire, ropes, wood, or chemicals. Leatherwork gloves are used to protect the hand from exposure to wood and fiberglass splinters, irritating chemicals such as creosote, and hazards related to power tools and sharp instruments.

Rubber-insulated safety gloves, or hot gloves, are worn to prevent electric shock in the event you contact an energized electric line. The rubber-insulated safety gloves used by Connect/One's field operation are a low-voltage Class "00." rubber glove. The rubber-insulated safety gloves are never worn alone. A pair of leather protectors (leather outer gloves) must be worn to protect the rubber glove against excessive abrasion and tears that could degrade the insulating abilities.

Cotton inserts may be worn under the rubber glove for comfort. The leather and rubber-insulate safety gloves have an insulation value or rating of 500 volts. Always wear rubber-insulated safety gloves when there is a possibility of contacting electrical voltage. The Class "00" rubber-insulated safety gloves and protectors must be worn at the onset of any job or task that has a potential energy source. This includes all active and passive equipment such as:

- All pole work
- Grounding at house
- Drop connection at ground point
- Drop removal and disconnection
- Working on a power supply
- Working on an amplifier
- Plant maintenance (splicing feeder/trunk)
- Aerial and underground construction
- During storm restoration
- Any location where there is a difference in electrical potential

The rubber-insulated safety gloves must be worn until all potentially energized components are tested and found to be de-energized. If working on a system or component that is normally energized, rubber-insulated safety gloves must be worn through the completion of the job.

Wearing a rubber-insulated safety glove does not mean you can intentionally grab a hot wire.



### **Boots**

Proper footwear is worn to protect your feet from injury and to ensure proper footing when climbing. Boots worn for CATV fieldwork should meet the following minimum requirements:

- Must have steel or fiberglass arch support, should have safety toes; but steel toes are not required
- Must have leather tops that protect the ankle and nonconductive rubber soles.
- Must have well-defined heel (at least 1 inch is recommended)



Employees are responsible for properly maintaining and polishing their boots in order to present a professional image and extend the life of the boots.

### **Dust Mask**

Dust masks are available for all field and warehouse employees. Wearing a dust mask is voluntary. Employees are encouraged to wear a dust mask whenever working in a condition that poses a high concentration of dust. This may include drilling or disturbing insulation material. The figure below shows a dust mask:



**Dust Mask** 

## **Fall Protection Equipment**

The body belt, shown in the figure below, is an assembly of many parts. Its primary function is to connect with the safety strap and support the worker when working aloft on a pole or ladder. The safety strap connects to the body belt with spring-loaded snaps.



The body belt is inspected prior to the start of each work shift. The inspection should look for the following conditions:

- Cracks, cuts, and/or tears must not be present.
- Ensure that there are no excessive large buckle holes.
- The buckle must be properly functioning.
- Both D-rings must not be worn or deformed.
- Chemical damage from acids, flammables, and combustibles must not be present.
- Fraying (internally and externally) from normal wear.