Personal Safety: For the sign service electrician and sign installer.

Issue after issue we talk about how safety is important in the installation of signs, wires, conduits, transformers, neon tubing, etc, etc. We discuss codes and standards which provide us with useful information that when conformed to, make our installations and wiring systems safe.

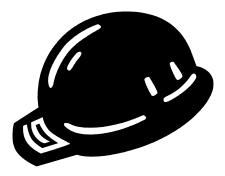
Now let's spend some time on the sign installer and their safety. For this article we shall only be concerned with the (outside) installation personnel. The company is required by State and federal regulation to provide a safe work environment and safety training for their employees. These regulations are easily accessible directly from your insurance carrier, the regulatory agencies, and safety training providers or via the internet. Someone in your organization should be assigned as the responsible person for safety. Larger organizations may need a number of personnel and divide up the responsibilities. Each company should have a written safety plan and provide it to each employee, have regular safety meetings and training in the use of the equipment and procedures required to perform their work safely. This article is not intended to replace any rules, regulations, company policies, training or safety programs, but to act as food for thought and to remind us that safety is important to all involved.

Personal Protection:

The sign installer depending on the size of the company could be responsible for loading the vehicle (Fork lift training, gantry crane operation, portable lift equipment, to name a few) and securing the load for travel to the site. During these operations; head, eye, hand and foot protection may be required. Hole drilling and bolting, welding, cable and strap type tie downs may be required. From the initial loading of the trucks to the completed installation and service completed in the field, safety equipment becomes part of our daily routine.



Eye Protection. Safety glasses need to be selected based on the work the installer is responsible to complete. Eye protection needs to be comfortable, low maintenance and be suitable either for, or with corrective lenses. In some cases, more than one type of safety glasses may be required. For example, most sign installers are required to do drilling, chipping, welding and cutting operations. Clear lenses are needed for certain operations while tinted goggles and welding helmets are needed for protection when cutting and welding. You only get one set of eyes and you need to protect them. I had the unfortunate incident while I was chipping hot slag from a weld in the field, when the piece of molten metal got behind my glasses and lodged in my eye because my glasses did not have side shields. Fortunately, an eye surgeon was able to remove the piece of metal from my eye, using a metal pick which looked like what dentist uses to clean your teeth, without any serious permanent damage to my vision. I was lucky and would not wish that event on anyone. Always wear good quality protection suited for the work you are performing.



Head Protection. Hard hats, as we call them, come in many styles, level of protection and can be provided with many accessories. Some include face shields, provisions for use in a welding helmet and with liners for cold weather comfort, to name a few. When purchasing head protection; comfort, adjustability and in some cases, style will assist in the continuous use of the equipment. Most importantly, always select a product with the level of protection required for the job and environment likely to be encountered. Hard hats are generally thought to protect you from things falling from above. In our situations we are more likely to walk into a beam or bar joist while wiring behind the wall on our lighted walkways. For those of us who has had the pleasure of walking into a structural member in the ceiling, we thank our lucky stars, viewed shortly after impact, and lack of stitches in the head, for our hard hats.

Hearing Protection. Air compressors, hammer drills, portable welding and grinding equipment may all require some level of hearing protection. Sign installers can be subjected to many different types and levels of noise from new construction sites, to existing manufacturing facilities. Be prepared and select the appropriate level of protection to protect your hearing. Most hearing loss occurs over time and affects us as we age.

Clothes - Hand Protection. Pants, shirts, coats, gloves, leathers and nomex hoods all need to be suited to the work done and environment encountered. Pants, shirts and coats should be flame retardant if welding and cutting. Gloves we use need to be suitable for heat (welding and cutting), abrasion (metal, glass, and plastic cutting and handling), dielectric (high voltage wiring) and general comfort in cold weather climates.

Shoes - Foot Protection. Shoes other than being warm and comfortable need to be selected for safety in climbing, working on ladders and in buckets, on roofs and catwalks. They may be required to have steel toes or toe guards. We work with a lot of heavy items and if they fall onto our feet we will be happy to carry the extra weight of the steel toe or toe guard. The soles will need to be oil resistant and the boots of a quality to resist the welding and cutting operations.

Ergonomics. Manual lifting, kneeling and repeated motions that could injure joints may require items such as kneeling pads or knee pads, back support belts and wrist support.

Respiratory Protection. Sign installers are subjected to all types of environments. When involved in processes like grinding, sanding, cleaning, and remote areas where you may be subjected to insulation of certain types you will need to wear respiratory protection like a mask. Most safety supply companies have a number of types and selections suited to the environment you will be subjected to.

Lockout / **Tagout Protection.** Remember when we work on neon 15,000 volts is high voltage. Line voltage (120 volts) can kill. Remote disconnects are required to be lockable, always carry a lock and tag, it may save your life.

Fall Protection. Employees required to work more than six feet (1.8 m) above ground or six feet (1.8 m) over an unprotected level below is required to have fall protection. Fall protection and lifeline attachment can be an article in itself. *Fall protection safety equipment is intended for only one fall. Once used the equipment must be replaced.* The most common fall protection used in our industry is a harness and lanyard attached to our bucket or crane boom. Attachment points are provided on the main sections of the booms and a lanyard is attached from your harness to the attachment point. We will review and discuss fall protection and life lines in the next article.

Safety is your responsibility an only you can remain safe and hopefully uninjured during your work.

As always, questions and comments are welcome. The next article we'll talk about fall protection in more detail, life lines, lanyards, crane, scaffolding and ladder safety.

Resource Information:

Office Your Insurance carrier

State: Your Home State Department of Labor and Industry

Federal: <u>www.osha.gov</u> <u>www.ansi.org</u> <u>www.dol.gov</u>

Commercial safety products and training: www.bacou-dalloz.com www.gallawaysafety.com www.sharpesafety.com