

Sheet Metal Worker Safety Meeting Kit

WHAT'S AT STAKE

Varied sheet metal tools, tasks, and shop, factory, and construction locations require specialized training in hazards, equipment, and safe work practices. Training should be provided on chemical safety, building hazards (asbestos, lead, and mold), ergonomics, good housekeeping, vehicle movement, and electrical safety.

WHAT'S THE DANGER

SHEET METAL WORK HAZARDS/DANGERS

Cuts and Severe Lacerations. One of the biggest dangers of working with sheet metal is the potential for cuts and lacerations. Running your bare hand or fingers across the edge of a piece of sheet metal can easily cut into your flesh, creating an open laceration.

Skin Burns. A potential danger of sheet metal fabrication that employees need to be aware of is the potential for skin burns. Touching a hot piece of sheet metal can burn an employee's hands or body.

Sheet metal is equally conductive to cold temperatures as it is for heat. Employees handling sheet metal outdoors during the winter may experience frostbite from touching it.

Breathing In Sheet Metal Dust. A lesser-known danger of working with sheet metal is the potential for breathing in tiny particles of dust. These particles will gather in the lungs where they increase an worker's risk of respiratory illness and disease.

Ergonomics. Back injuries are always a problem since sheets are

substantial and cumbersome to carry or move.

SUSCEPTIBLE INJURIES FOR SHEET METAL WORKERS

For welding and soldering seams and joints, use low-emission materials in a well-ventilated area. Burns are also a factor when working with fabricated metal.

Treat powered fasteners can cause serious injuries if accidentally or improperly discharged.

Duct, pipe, and tube installation as well as roofing, siding, and gutter work can all require work at heights. Determine the safest access method such as ladder, scaffold, or scissor lift, and if fall protection is needed.

HOW TO PROTECT YOURSELF

BEST SAFETY PRECAUTIONS FOR SHEET METAL

Use The Proper Equipment. Metals are good conductors of electricity and heat, and unfinished edges can be sharp to the touch. If held by unprotected hands, it can burn and cut the skin. Thus, all metalworkers are advised to use personal protective equipment to protect against these possible injuries.

Generally, workers will need to be equipped with gloves, safety glasses, and hard hats at the least when working with metal. It is also recommended that they work in steel-toe shoes, long sleeve shirts, and full-length pants.

Test Tools. It is advised that all the tools being used for sheet metal processing are regularly inspected to ensure that they work properly.

Metal manufacturing and fabrication machines need a lot of maintenance as they are subjected to a large amount of stress each time they are used. Keep a regular maintenance schedule to check if all your tools are performing well.

Use The Right Lifting Technique. Improper lifting techniques can

cause several kinds of back and neck injuries. When moving these materials, knowing the right way to lift them goes a long way.

Before attempting a manual lift, check if the weight is something that you can carry on your own, or is it heavy enough that you would need assistance. Team lifting is always a viable option for workers, and having assistance from another pair of hands is something that can make moving heavier pieces safer for everyone.

When moving the materials either on your own or with a team, remember to lift with your legs rather than your back. That means instead of bending over and then hinging upwards, you bend your knees till you can comfortably reach the sheet metal, then push up with your legs. Try to keep your back straight while carrying.

Lifting with a team requires proper communication. Make sure to count down before lifting or lowering the sheet metal to make sure everyone is coordinated when moving the weight.

Another safety practice to implement when lifting as a group is to not have anyone walking backward. Instead, hold the material on the sides and have the group walk parallel to the material.

Clean Up After Handling. Metal particles can enter the body through inhalation or ingestion, and in some cases skin penetration. Workers can bring these particles into their homes unknowingly and expose their friends and family.

These tiny fragments can accumulate in lungs, which increases the risk of respiratory illness and other diseases. Typical symptoms of overexposure are fatigue and weakness, anemia, and damage to the kidney, lungs, and brain. When it accumulates at high levels, metal particles can be fatal. Wear a dust mask or respirator to prevent inhalation of sheet metal dust.

Proper hand hygiene should always be practiced during break times at work, and when leaving the factory floor. Keep in mind that eating, drinking, or even touching your face with unwashed hands can put you at high risk of inhaling metal particles. Equipment and workwear should be regularly washed or cleaned after use.

Stay Organized/Good Housekeeping. While practicing safety procedures can greatly minimize the risk of sheet metal injuries, these procedures will be less effective if the work floor is messy and disorganized.

Leaving material and debris scattered around creates potential tripping hazards. Unorganized materials make the workflow of the operations less efficient as things are not where they should be.

Keep workstations and walkways clear of any debris or excess materials. Look out for spills. When there is a spill, make sure to clean it up immediately. If someone slips on liquid, they will lose their balance.

Keep the habit of storing unused sheet metal in between tasks to keep the workplace more organized. This prevents the material from piling up near workstations or in walkways. Keeping sheet metal properly stored helps for more efficient operations.

Health and Fitness. Maintain your overall health and fitness level because sheet metal work can require crawling into tight spaces and areas for installations. Standing, climbing, bending, and squatting may be required for long periods. Keep your work close to you and rotate your tasks as much as possible to avoid fatigue.

FINAL WORD

While working with metal materials and fabrication techniques requires you to be extra cautious, knowing the right safety tips for handling sheet metals can help you to protect yourself against the common dangers of the industry.