



# Tool Box Safety Talk No. 6

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## Sheet Metal

There are many health and safety issues related to the handling of sheet metal. These matters are not usually included in material handling regulations. Good shop housekeeping is important, as the shop area must be kept free of metal scraps and trash. Store metal sheets on worktables to reduce the amount of bending and lifting required in the shop. Stack unused sheet metal on raised metal racks in a way to prevent them from shifting or falling. Loose fitting clothing and jewelry must not be worn when working with sheet metal fabricating equipment. A proper stocked first aid kit shall be located in the shop area at all times.

Workers must wear personal protective equipment when handling metal sheets including safety boots, thick leather gloves and eye protection. Sheet metal is awkward to carry and has extremely sharp edges and corners. Sheet metal sheets are extremely slippery and care should be exercised when walking on metal sheets to avoid injury. Metal sheets are difficult to grip as their weight cannot be centered and generally flat stock is too large for one worker to handle safely. Two (2) people are normally required to control sheets during handling and fabrication. When manually moving sheets use proper lifting procedures and get help when needed. Whenever possible move sheets by mechanical means that supports the full weight, such as pallets or other lifting device. Metal is a good conductor and becomes warm or cold extremely quickly, which may cause injury to unprotected skin.

Sheet lead and lead solder may be used in the fabrication of sheet metal flashings. Most contact with lead occurs in the fabrication shop when soldering sheet metal flashings. To prevent the accumulation of lead in the body while soldering, a small enclosure or fume hood to contain the lead fumes should be built in a separate section of the fabrication shop. The enclosure or fume hood, which will reduce lead exposure levels to other workers, should be mechanically exhausted to the out of doors. Wear an approved respirator and coveralls when lead fumes cannot be controlled by other methods. Extended exposure to lead fumes may result in high lead levels in the blood or lead poisoning.

Lead can enter the body through the mouth to the lungs, stomach and intestines and/or by being absorbed through the skin. Wear gloves when manually handling lead to prevent absorption through the skin. Wash the face and hands prior to eating or smoking after working with lead. Store and consume food away from the lead work or storage area.

The long-term effects of lead exposure may be muscle weakness, paralysis, kidney or brain damage. If lead poisoning is suspected seek medical attention immediately.