

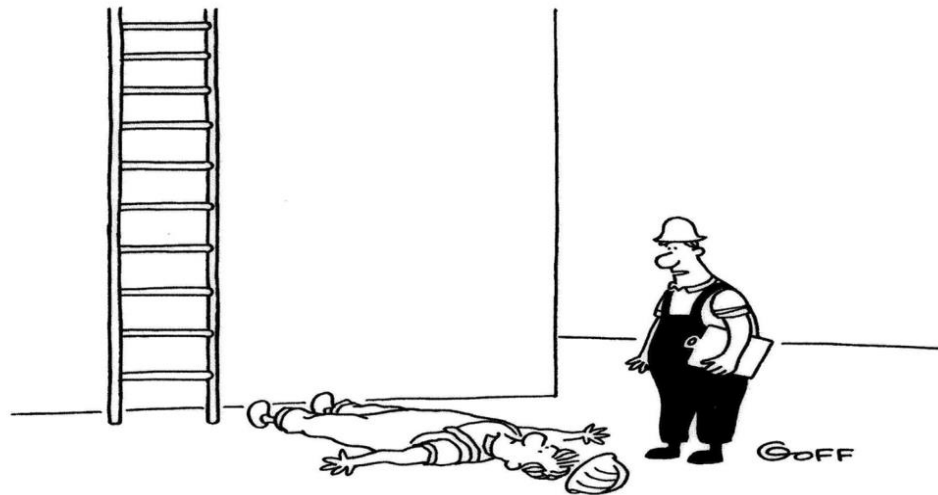
# Working at Heights

## Toolbox Talk



# What is Fall Protection?

A series of reasonable steps taken to cause elimination or control of the injurious effects of an unintentional fall while accessing or working at height



"You weren't listening. I said, 'Don't fall.'"

# Fall Protection Methods

- Fall Prevention- A system that will prevent a person from falling to a lower level.  
Example: Railings
- Work Positioning or Fall Restraint- A system that will allow the worker to approach a fall hazard and work but will not allow the worker to fall to a lower level.
- Fall Arrest- A system that will protect a person from crashing on to a lower level after a fall. Example: Fall Arrest Harness/lanyard

# Where Do Fatal Falls Occur

- In workspaces with areas at different levels: stairs, footbridges, platforms, pits, etc.
- While working at height: on roofs, high furniture, high parts of machines, manually opening a tank truck hatch, etc.
- While using ladders, step ladders, scaffolding, etc.
- While using makeshift means of elevation: chairs , stacking various objects, storage racks, etc.

# Using Fall Protection Systems

- Select fall protection systems appropriate for given situations.
- Use proper *construction* and installation of safety systems.
- Supervise employees properly.
- Use safe work procedures.
- Train workers in the proper selection, use, and maintenance of fall protection systems.
- Evaluate the effectiveness of all steps



# Personal Fall Arrest Systems

- Anchorage
- Body
- Connector



**Lanyards**



**Harnesses**



**Beam  
Wraps**



**Caribiners**



**Rope  
Grabs**



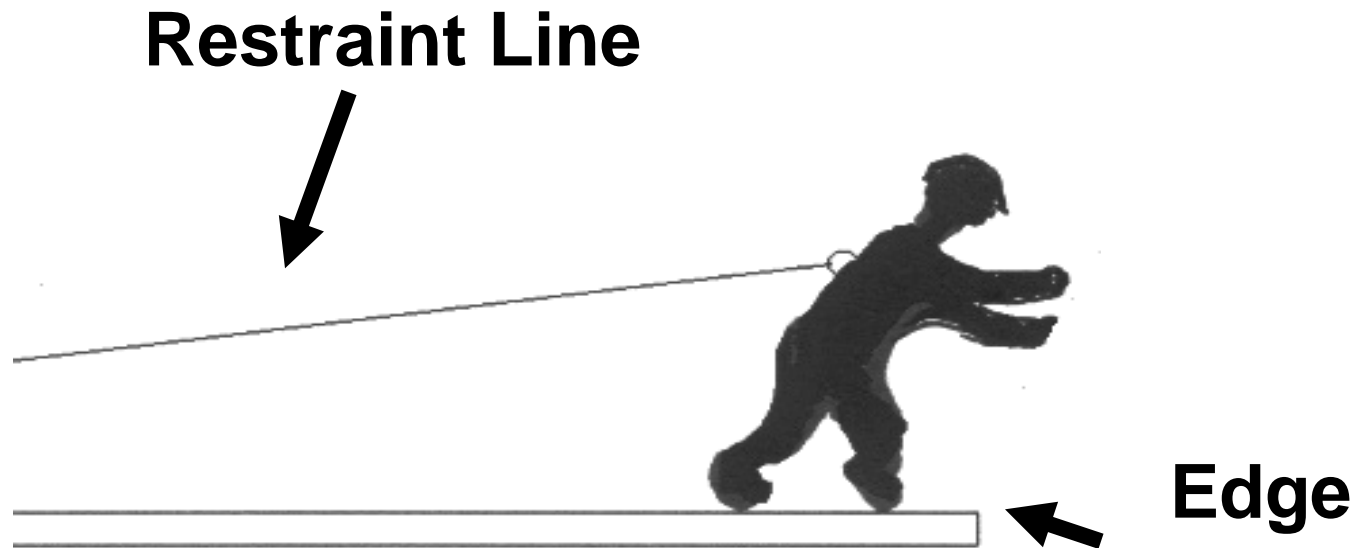
**Positioning**

# Personal Fall Arrest Systems

When using personal fall arrest systems:

- If you fall, the impact force to the body has to be less than 817 kg , achieved by using shock absorbing lanyards and a harness
- Minimize fall distance, the maximum free fall distance can only be 1.80 m
- There can not be any structures below in your falling distance
- Maximum weight of an individual w/tools is 141 Kg

# Fall Restraint



- Fall restraint assumes the employee cannot reach the edge, they are basically on a short leash.
- If the employee can fall over the edge, then a personal fall arrest system must be used.



# Planning For A Rescue

- Whenever working with the potential of hanging by a harness, a rescue plan must be in effect.
- The rescue plan must be written in the hazard analysis and employees must be trained on the plan
- The goal is to rescue the employee as soon as possible and limit the hanging time to no more than fifteen minutes.
- Plan for a worker that is unconscious.
- Ensure all the rescue equipment in the vicinity



# BIBLIOGRAPHY

- *Handbook of OSHA Construction Safety and Health second edition , CHARLES D.REEJE, JAMES VERNON EIDSON*
- *Fall from Heights-Young Workers Fact Sheet –working at heights part 1*
- *Working at heights Generic risk assessment stationery office 2009, Great Britain*
- *2001/45/EU Non-binding guide to good practice for implementing Directive 2001/45/EC*

# **Any Questions?**

# **Thanks for your participation!!!**