

TRENCHING

SAFETY TOOL BOX TALK

Hazard: Trench collapses cause dozens of fatalities and hundreds of injuries each year. Trenching deaths rose in 2003.

Solutions:

- Never enter an unprotected trench.
- Always use a protective system for trenches 5 feet deep or greater.
- Employ a registered professional engineer to design a protective system for trenches 20 feet deep or greater.
- Protective Systems:
 - Sloping to protect workers by cutting back the trench wall at an angle inclined away from the excavation not steeper than a height/depth ratio of 1½:1, according to the sloping requirements for the type of soil.
 - Shoring to protect workers by installing supports to prevent soil movement for trenches that do not exceed 20 feet in depth.
 - Shielding to protect workers by using trench boxes or other types of supports to prevent soil cave-ins.
- Always provide a way to exit a trench such as a ladder, stairway or ramp-no more than 25 feet of lateral travel for employees in the trench.
- Keep spoils at least two feet back from the edge of a trench.
- Make sure that trenches are inspected by a competent person prior to entry and after any hazard-increasing event such as a rainstorm, vibrations or excessive surcharge loads.

SLOPING. Maximum allowable slopes for excavations less than 20 ft. (6.09 m) based on soil type and angle to the horizontal are as follows:

TABLE V:2-1. ALLOWABLE SLOPES

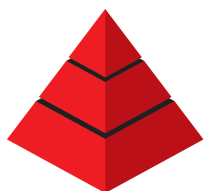
Soil Type	Height/Depth Ratio	Slope Angle
Stable Rock (granite or sandstone)	Vertical	90°
Type A (clay)	¾:1	53°
Type B (gravel, silt)	1:1	45°
Type C (sand)	1½:1	34°
Type A (short-term) (For a maximum excavation depth of 12 ft.)	½:1	63°

Source: OSHA Technical Manual, Section V, Chap. 2, Excavations: Hazard Recognition in Trenching and Shoring (Jan. 1999).

I hereby acknowledge that I was present at this meeting, that the above items were covered, and that any questions I had were asked. I will adhere to the above to the best of my ability.

EMPLOYEE NAMES

SUPERINTENDENT’S SIGNATURE: _____



MCAA
MASON CONTRACTORS ASSOCIATION OF AMERICA

www.masoncontractors.org/safety

STAIRWAYS

SAFETY TOOL BOX TALK

Hazard: Slips, trips and falls on stairways are a major source of injuries and fatalities among construction workers.

Solutions:

- Stairway treads and walkways must be free of dangerous objects, debris and materials.
- Slippery conditions on stairways and walkways must be corrected immediately.
- Make sure that treads cover the entire step and landing.
- Stairways having four or more risers or rising more than 30 inches must have at least one handrail.

I hereby acknowledge that I was present at this meeting, that the above items were covered, and that any questions I had were asked. I will adhere to the above to the best of my ability.

EMPLOYEE NAMES

SUPERINTENDENT'S SIGNATURE: _____



SCAFFOLDING

SAFETY TOOL BOX TALK

Hazard: When scaffolds are not erected or used properly, fall hazards can occur. About 2.3 million construction workers frequently work on scaffolds. Protecting these workers from scaffold-related accidents would prevent an estimated 4,500 injuries and 50 fatalities each year.

Solutions:

- Scaffold must be sound, rigid and sufficient to carry its own weight plus four times the maximum intended load without settling or displacement. It must be erected on solid footing.
- Unstable objects, such as barrels, boxes, loose bricks or concrete blocks must not be used to support scaffolds or planks.
- Scaffold must not be erected, moved, dismantled or altered except under the supervision of a competent person.
- Scaffold must be equipped with guardrails, midrails and toeboards.
- Scaffold accessories such as braces, brackets, trusses, screw legs or ladders that are damaged or weakened from any cause must be immediately repaired or replaced.
- Scaffold platforms must be tightly planked with scaffold plank grade material or equivalent.
- A “competent person” must inspect the scaffolding and, at designated intervals, reinspect it.
- Rigging on suspension scaffolds must be inspected by a competent person before each shift and after any occurrence that could affect structural integrity to ensure that all connections are tight and that no damage to the rigging has occurred since its last use.
- Synthetic and natural rope used in suspension scaffolding must be protected from heat-producing sources.
- Employees must be instructed about the hazards of using diagonal braces as fall protection.
- Scaffold can be accessed by using ladders and stairwells.
- Scaffolds must be at least 10 feet from electric power lines at all times.

I hereby acknowledge that I was present at this meeting, that the above items were covered, and that any questions I had were asked. I will adhere to the above to the best of my ability.

EMPLOYEE NAMES

SUPERINTENDENT'S SIGNATURE: _____



HEAD PROTECTION

SAFETY TOOL BOX TALK

Hazard: Serious head injuries can result from blows to the head.

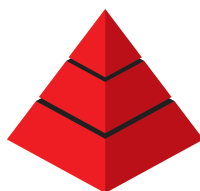
Solutions:

- Be sure that workers wear hard hats where there is a potential for objects falling from above, bumps to their heads from fixed objects, or accidental head contact with electrical hazards.

I hereby acknowledge that I was present at this meeting, that the above items were covered, and that any questions I had were asked. I will adhere to the above to the best of my ability.

EMPLOYEE NAMES

SUPERINTENDENT'S SIGNATURE: _____



MCAA

MASON CONTRACTORS ASSOCIATION OF AMERICA

www.masoncontractors.org/safety

HAZARD COMMUNICATION

SAFETY TOOL BOX TALK

Hazard:

Failure to recognize the hazards associated with chemicals can cause chemical burns, respiratory problems, fires and explosions.

Solutions:

- Maintain a Material Safety Data Sheet (MSDS) for each chemical in the facility.
- Make this information accessible to employees at all times in a language or formats that are clearly understood by all affected personnel.
- Train employees on how to read and use the MSDS.
- Follow manufacturer's MSDS instructions for handling hazardous chemicals.
- Train employees about the risks of each hazardous chemical being used.
- Provide spill clean-up kits in areas where chemicals are stored.
- Have a written spill control plan.
- Train employees to clean up spills, protect themselves and properly dispose of used materials.
- Provide proper personal protective equipment and enforce its use.
- Store chemicals safely and securely.

I hereby acknowledge that I was present at this meeting, that the above items were covered, and that any questions I had were asked. I will adhere to the above to the best of my ability.

EMPLOYEE NAMES

SUPERINTENDENT'S SIGNATURE: _____



FREQUENT HAZARD CITATIONS

SAFETY TOOL BOX TALK

For construction, the 10 OSHA standards most frequently included in the agency's citations in fiscal year 2004 were:

1. Scaffolding
2. Fall protection (scope, application, definitions)
3. Excavations (general requirements)
4. Ladders
5. Head protection
6. Excavations (requirements for protective systems)
7. Hazard communication
8. Fall protection (training, requirements)
9. Construction (general safety and health provisions)
10. Electrical (wiring methods, design and protection)

I hereby acknowledge that I was present at this meeting, that the above items were covered, and that any questions I had were asked. I will adhere to the above to the best of my ability.

EMPLOYEE NAMES

SUPERINTENDENT'S SIGNATURE: _____



FALL PROTECTION

SAFETY TOOL BOX TALK

Hazard: Each year, falls consistently account for the greatest number of fatalities in the construction industry. A number of factors are often involved in falls, including unstable working surfaces, misuse or failure to use fall protection equipment and human error. Studies have shown that using guardrails, fall arrest systems, safety nets, covers and restraint systems can prevent many deaths and injuries from falls.

Solutions:

- Consider using aerial lifts or elevated platforms to provide safer elevated working surfaces;
- Erect guardrail systems with toeboards and warning lines or install control line systems to protect workers near the edges of floors and roofs;
- Cover floor holes; and/or
- Use safety net systems or personal fall arrest systems (body harnesses).

I hereby acknowledge that I was present at this meeting, that the above items were covered, and that any questions I had were asked. I will adhere to the above to the best of my ability.

EMPLOYEE NAMES

SUPERINTENDENT’S SIGNATURE: _____



CRANES

SAFETY TOOL BOX TALK

Hazard: Significant and serious injuries may occur if cranes are not inspected before use and if they are not used properly. Often these injuries occur when a worker is struck by an overhead load or caught within the crane's swing radius. Many crane fatalities occur when the boom of a crane or its load line contact an overhead power line.

Solutions:

- Check all crane controls to insure proper operation before use.
- Inspect wire rope, chains and hook for any damage.
- Know the weight of the load that the crane is to lift.
- Ensure that the load does not exceed the crane's rated capacity.
- Raise the load a few inches to verify balance and the effectiveness of the brake system.
- Check all rigging prior to use; do not wrap hoist ropes or chains around the load.
- Fully extend outriggers.
- Do not move a load over workers.
- Barricade accessible areas within the crane's swing radius.
- Watch for overhead electrical distribution and transmission lines and maintain a safe working clearance of at least 10 feet from energized electrical lines.

I hereby acknowledge that I was present at this meeting, that the above items were covered, and that any questions I had were asked. I will adhere to the above to the best of my ability.

EMPLOYEE NAMES

SUPERINTENDENT'S SIGNATURE: _____



CONSTRUCTION

SAFETY TOOL BOX TALK

Nearly 6.5 million people work at approximately 252,000 construction sites across the nation on any given day. The fatal injury rate for the construction industry is higher than the national average in this category for all industries.

Potential hazards for workers in construction include:

- Falls (from heights)
- Trench collapse
- Scaffold collapse
- Electric shock and arc flash/arc blast
- Failure to use proper personal protective equipment
- Repetitive motion injuries

I hereby acknowledge that I was present at this meeting, that the above items were covered, and that any questions I had were asked. I will adhere to the above to the best of my ability.

EMPLOYEE NAMES

SUPERINTENDENT'S SIGNATURE: _____

