



TRENCH AND EXCAVATION AWARENESS

TOOLBOX TALK SERIES – EXCAVATION SAFETY

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Trenches and excavations are commonplace in many different construction trades. However, what most employees don't realize is that the fatality rate for employees who work in and around excavation is 112% higher than the rate for general construction employees (OSHA).



What is an excavation?

OSHA defines an excavation as, "any man-made cut, cavity, trench or depression formed by earth removal." A trench is defined as, "a narrow underground excavation that is deeper than it is wide, and is no wider than 15 feet."

How do we protect ourselves?

OSHA requires protective systems for trenches that are 5 feet or deeper. If the trench is over 20 feet deep it is required that an engineer design protective systems.

Types of Protective Systems

- **Sloping (Benching).** Cutting back the trench wall at an angle inclined away from the excavation.
- **Shoring.** Installing aluminum hydraulics or other types of supports to prevent cave-ins.
- **Shielding.** Using trench boxes or other supports to prevent cave-ins.



Equipment Operators: What's the problem in this photograph? (Hint: Spoil)

Interesting Fact:

A cubic yard of soil can weight up to 3000 pounds (about the weight of small car)!