



Toolbox Talks

Spotlight on Safety



Trench Safety

Working in a trench is one of the most hazardous jobs in construction. Hundreds of people die and thousands are seriously injured each year due to cave-ins.

Soil weighs between 90 and 140 pounds per cubic foot. Therefore, one cubic yard (3 ft. by 3 ft. by 3 ft.) can weigh as much as a small pickup truck. If a person is buried, there is little chance of survival.

There are many things that can affect soil stability, such as the type of soil, water, and vibration. Soils saturated with water and previously disturbed soils are very dangerous to work in or around. But, don't be fooled, even hard soil and rock that appears stable can cave in.

Before entering a trench, the competent person at the jobsite must inspect the trench and the protection system to ensure that the trench is safe to enter. There are recorded incidents of people buried and killed in trenches 3- to 4-ft. deep, so even shallow trenches must be inspected by a competent person before entering.

Trench Safety Tips

- ▲ Locate all underground utilities before digging.
- ▲ Enter only trenches that have been sloped at the proper angle, shored, or shielded.
- ▲ Never go outside the area that has been sloped, shored, or shielded, not even for a moment.
- ▲ Eliminate or control water accumulation before entering the trench.
- ▲ Stay alert when working in or near previously disturbed soil conditions.
- ▲ Do not permit vehicles near the edge of the trench.
- ▲ Check regularly for hazardous materials and oxygen levels in the trench.
- ▲ Never allow machines to run unattended.
- ▲ Use a ladder or ramp to get in and out of the trench. Place the ladder inside the protective system.
- ▲ Never climb on shoring or shields. Never ride in equipment buckets or on crane hooks.
- ▲ Wear hard hats when working in or around trenches.
- ▲ Stay out from under raised loads.

About half of the people killed each year in trenches die trying to rescue someone else who has been buried by a cave-in. Call 911 for help. Do not attempt a rescue, unless you have been properly trained in trench-rescue techniques.

Remember, if you are buried by a cave-in, your chance of survival is very low. Therefore, always be sure that the trench walls are sloped, shored, or shielded with a trench box and that the trench is safe before you enter.