



Trench Safety

Whether they are deep or shallow, excavations are dangerous. Everyone has at least heard of an excavation emergency on the news, yet workers continue to take chances. One common mistake is thinking you can enter an unprotected trench for just a few minutes and be safe. The fact is, cave-ins happen very quickly. The weight of the soil is crushing. A single cubic yard of dirt can weigh more than a ton. Even if your head is above ground, the pressure of the soil on your chest can still suffocate you. Workers who don't pay attention to the dangers of trenches and who disregard trench safety can end up buried—first in the trench and later in a casket. According to NIOSH, between 50 and 100 workers die in trenches each year.

Follow these safety tips when working in trenches:

- Never enter an unprotected trench that is more than 5 feet deep.
- If the trench is more than 5 feet deep, workers inside must be protected from cave-in. Acceptable protective systems include using a trench box, shoring, sloping, and benching.
- A registered professional engineer must design protective systems for use in excavations more than 20 feet deep.
- Be sure the protective system is installed or implemented correctly. If you don't know, ask the competent person.
- You must always have a safe way to get in and out of the trench.
- A competent person must inspect the excavation, the adjacent areas, and protective systems at least daily, and whenever conditions change. If you are not sure who the competent person is, find out today.
- Keep spoils at least 2 feet away from the edge of the trench. Otherwise, the weight of the spoil pile could cause a cave-in.
- Keep heavy equipment as far from the trench as possible. Vibrations from equipment can loosen soil and cause the trench walls to collapse.
- In an emergency, call 911. Don't try to perform a trench rescue unless you are trained to do so. Your first instinct may be to help, but in doing so, you could easily become another victim.

Other hazards of trenching include:

- Striking underground utilities.
- Confined space hazards and exposure to toxic fumes.
- Falling into an open trench.
- Equipment or material sliding into the trench.





• Remember, if you are unsure about the safety of a trench, stay out. Check with the competent person before you go in.

SAFETY REMINDER

Weather can significantly affect soil conditions. Never enter a trench after rains, flooding, or snowfall until inspected by a competent person. Names of