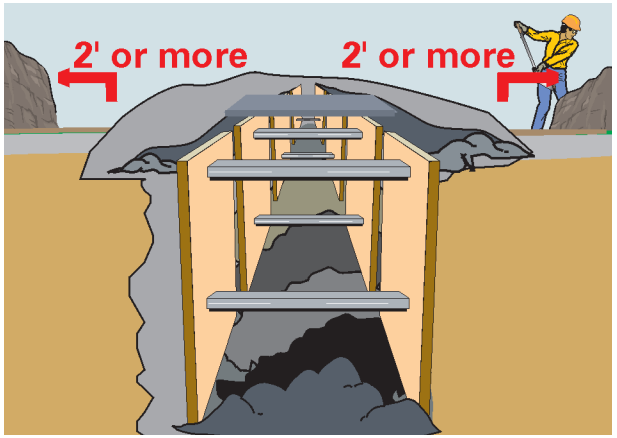
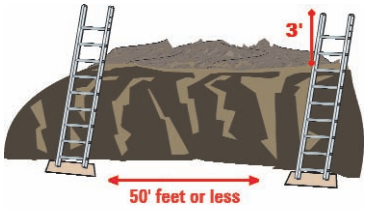


What Else Does Trenching Require?

The employer must designate a 'competent person' in every trench job. The 'competent person' must inspect:

- At least daily and at the beginning of each shift.
- After precipitation, a thaw, and other events that could increase hazard.
- For disturbed ground, water, toxics, and other hazards.
- If walls sag or crack or if the bottom bulges.
- To keep spoil and equipment at least 2 feet from trench edge.
- If there are nearby vibration sources such as railroads or piledriving.
- That no worker is more than 25 feet from an exit ladder.



The 'competent person' should stop work if a hazard exists.

Competent person means "one who is capable of identifying existing and predictable hazards in the surroundings or working conditions ... and who has authorization to take prompt corrective measures to eliminate them."

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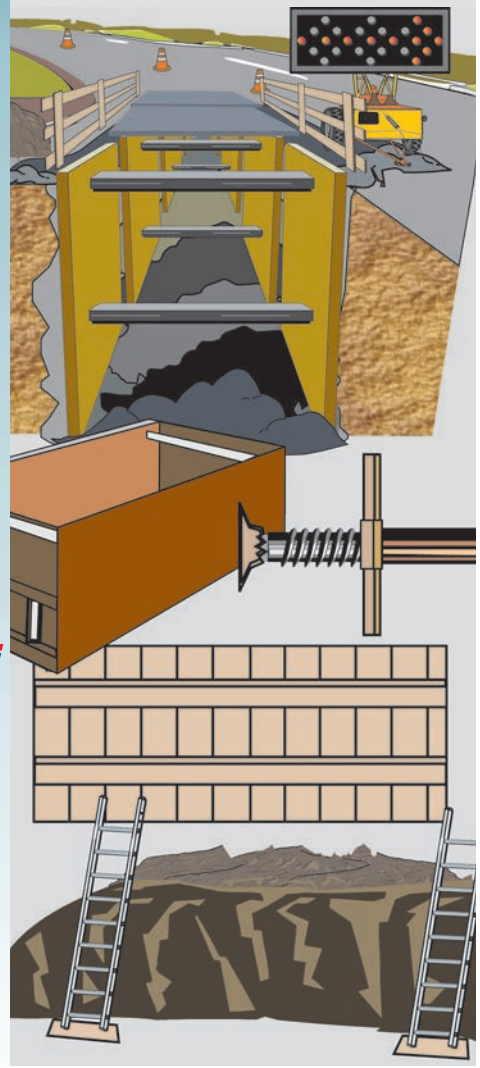
ROADWAY SAFETY+

A Road Construction Industry Consortium Awareness Program

Excavation



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Trenches more than 4' deep meet OSHA's definition of a confined space.

Why Are Trenches Dangerous?

A trench is an excavation deeper than it is wide. Trenches can kill:

- Workers can be buried alive.
- Cave-ins can result from stresses in walls, nearby moving vehicles and equipment, or spoil piles.
- Water can collect in the bottom.
- Flammable and toxic gases can build up.
- Gas from nearby sewer or gas lines can seep into the trench.

Before digging:

- Call electrical, gas, and communications utilities.
- Use extreme caution with equipment.

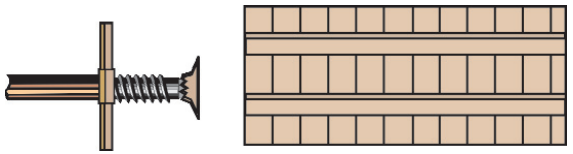
How Do We Prevent Cave-Ins?

Protective systems are the methods or structures that *protect* us from cave-ins. A *protective system* must suit the soil type, the depth of the excavation, and other site conditions. It must resist without failure all loads intended or reasonably expected to be put on it.

The primary types of protective systems are:

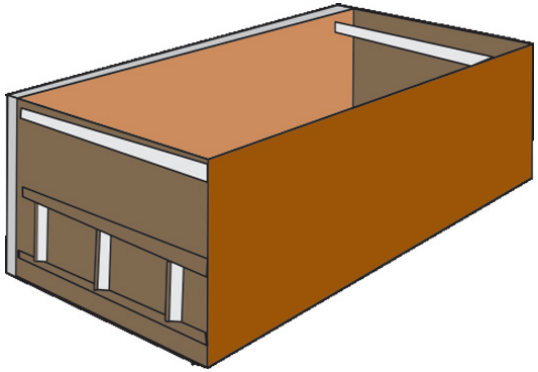
- Sloping — soil angled to increase stability.

- Benching — steps in the trench wall.



- Shoring — a support system made of posts, wales, struts, and sheeting or hydraulic shoring.

- Trench Shielding — a protective frame or box to protect rescue workers *after* a cave-in.



Trenches 5 feet or deeper require support unless they are in stable rock.