

"For safety's sake—do something."

Digging In for Trenching and Excavating

A **trench** is a cut in the surface of the earth that is deeper than it is wide. **Excavation** is the removal of material on the surface of the earth where the width is greater than the depth. OSHA reference 29CFR1926.650.

Each employee in a trench or excavation must be protected from a cave-in by an adequate protective system.

- This can be accomplished by sloping, benching, shoring, or shielding.
- Employees in trenches or excavations deeper than 5 feet must be protected from collapse at all times.
 - Trenches or excavations less than 5 feet must be approved by a competent person to ensure that they will not fail.

There are 4 types of soil that help identify the protective system needed.

- Stable Rock, Type A, Type B, and Type C.
- The worst-case scenario is Type C soil.
- Anything other than these 4 types is an incorrect classification of the soil type.
- Strict requirements under these 4 types must be followed.

Daily inspections of excavations, their adjacent areas, and the protective system used shall be made by a Competent Person.

- Conducted before the start of work and as needed throughout the work shift.
- After every rainstorm or other hazard increasing occurrence, another inspection shall be performed.
- At least one visual and one manual test are required to be completed to determine the soil type.

Inspections are not necessarily required to be written down, but that is the key way to prove they were completed.

- Cracking, spalling, vibrations, water, etc are all indicators of a possible collapse.
- Material is not permitted to roll, drop, or fall onto workers in the trench or excavation.
 - Workers should not be permitted under a suspended load or a load overhead.

Excavations deeper than 20 feet shall require the protective system to be designed, and certified by a registered professional engineer, before any work is started.

A stairway, ladder, or ramp shall be used to gain access into the trench or excavations deeper than 4 feet.

- Access to these devices shall occur at intervals no greater than 25 feet of lateral travel.

Trench or excavations deeper than 6 feet require some form of fall protection to prevent falling into the open space.

Trench boxes or shields can be no greater than 2 feet from the bottom.

Employees working inside of the trench box or shield are not permitted to leave the confines for any reason.

Water freely seeping or running into a trench or excavation must be controlled and removed.

Spoilage and material must be kept a minimum of 2 feet from the edge of the trench or excavation.



Aaron, 7, was the winner in the 2020 annual safety coloring contest in the 6 to 9-year-old category. The son of an SSOE employee, Aaron wants us to remember people will have different characteristics and backgrounds.

"The way a team plays as a whole determines its success. You may have the greatest bunch of individual stars in the world, but if they don't play together, the club won't be worth a dime." - Babe Ruth

For Safety's Sake, Do Something for Unity.