

Cave-in Protection

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Working inside of trenches and excavations is very dangerous. Workers die on the job every year when they are caught in an excavation or trench cave-in.

- The first rule is to **Never enter an unprotected trench or excavation!**
- All excavations and trenches must be inspected by a Competent Person before workers enter them.
- Excavations more than 5 feet deep must have cave-in protection.
- A safe way to enter the excavation or trench is required when it is 4' or deeper.

OSHA Standard 1926.652(a)(1) *Each employee in an excavation shall be protected from cave-ins by an adequate protective system designed in accordance with paragraph (b) or (c) of this section except when: (i) Excavations are made entirely in stable rock; (ii) Excavations are less than 5 feet (1.52 m) in depth and examination of the ground by a competent person provides no indication of a potential cave-in.*

Before workers enter an excavation or trench it must be inspected by a Competent Person and there must be protection from cave-in. Cave-in protection could be provided using any of the systems mentioned below:

- "Sloping (Sloping system)" excavating to form sides of an excavation that are inclined away from the excavation so as to prevent cave-ins.
- "Benching (Benching system)" excavating the sides of an excavation to form one or a series of horizontal levels or steps, usually with vertical or near-vertical surfaces between levels.
- "Shoring (Shoring system)" a structure such as a metal hydraulic, mechanical or timber shoring system that supports the sides of an excavation and which is designed to prevent cave-ins.
- "Trench box or trench shield (Shield system)" means a structure that is able to withstand a cave-in and protect workers inside the shield or box. This is an option for almost all soil conditions and excavations and must be installed by trained personnel following the manufacturer's specifications.

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