

OSHA Training Toolbox Talk: Basic Excavation Safety – Safety Tips When Using Trench Boxes

[Reference 1926 Subpart P]

Trench boxes, also referred to as trench shields, are becoming increasingly common on excavation sites. This can be attributed in part to their relative ease of installation and use when compared to building a timber shoring system or other forms of protective system. But there are a few things to keep in mind when we are utilizing a trench box as our protective system, such as:

- Never enter a trench box until you are certain the Competent Person has cleared it for entry.
- Do not stand underneath, inside of, or next to a trench box that is being installed, removed, or moved vertically. The movement of the trench box can cause the soil on the sides of a trench to shift and cave in. In addition, you could be struck or crushed by the trench box as it is moved. So relocate to another protected area of the trench as the trench box is being moved, or get completely out of the trench and stand in a safe place.
- Never walk out of a trench box into an unprotected area of a trench for any reason, even if it is just for a few seconds. A cave-in can happen in a split second with little or no warning of what is about to occur.
- Always use a portable ladder or other approved means to enter and exit the trench box. Do not climb up and down the spreader pipes. When using a portable ladder to enter or exit the trench, make certain it is located inside of the trench box or other protected area of the trench. In addition, secure the ladder against unintentional displacement, and make sure the side rails extend at least three feet above the top of the ground or other landing surface so you have something to grab when getting on and off of the ladder.
- Be on the lookout for any missing parts or damage that may occur to trench boxes. Broken welds, bent spreader pipes, and missing retainer pins are but a few of the things that need to be reported as quickly as possible so they can be evaluated by the Competent Person and corrected when necessary.
- Also report other conditions that may affect the safe function of trench boxes. For example, the top of a trench box must be at least as high as the top of the trench to offer full protection for workers inside; so be on the lookout for situations where the trench box has settled in the soil and the top of the trench box drops below ground level.
- Federal OSHA standards and many trench box manufacturers do allow excavation of soil up to two feet below the bottom of a trench box, but only in certain conditions. So do not excavate soil to a level below the bottom of a trench box without first confirming with the Competent Person it is safe to do so; and if so, confirm how deep you can dig.

These are just a few tips for working safely in and around trench boxes. Can anyone think of any other tips that are pertinent to trench box safety? Please take a moment and your print your name and provide your signature on our OSHA Safety Training Certification form so you will get credit for attending today's toolbox talk.

