



SAFETY INCENTIVE PROGRAM
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SIP-TIP: Excavations and Trenching

Firefighters were joined by rescue workers from around the county to free a 54 year old construction worker, who was caught under a collapsing dirt wall in a hole while working on a seven (7) foot sewer line along Ohio 79 on September 15, 2003. Firefighters used large planks to shore up the walls before it was determined safe enough to enter the hole and remove Durbin.



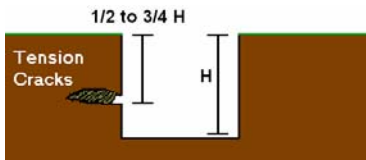
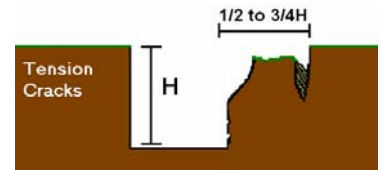
Trench and excavation collapses are the third largest cause of fatalities in construction. Close to 100 construction workers die this way each year.

The Problem with Excavations and Trenches

A cubic foot of soil (1 foot by 1 foot by 1 foot) weighs 90 to 140 pounds. A cubic yard (3 feet by 3 feet by 3 feet) weighs over 3000 pounds. That's about the weight of a small pickup truck. Even a seemingly small amount of soil can crush a person. Imagine being underneath a falling Ford Ranger.

Tension Cracks

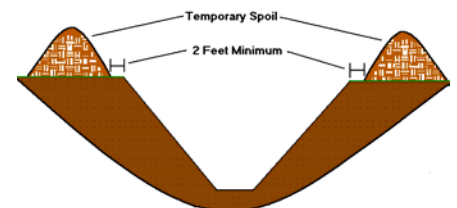
Tension cracks usually form at a horizontal distance of $\frac{1}{2}$ to $\frac{3}{4}$ of the depth of the trench, measured from the top of the vertical face of the trench.



In addition, look for cracking or movement $\frac{1}{2}$ to $\frac{3}{4}$ of the depth on the face of the trench, measured from the top of the vertical face to the bottom of the trench.

Temporary Spoil Piles

Temporary spoil must be placed no closer than 2 ft (0.61 m) from the surface edge of the excavation, measured from the nearest base of the spoil to the cut. This distance should not be measured from the crown of the spoil deposit. This distance requirement ensures that loose rock or soil from the temporary spoil will not fall on employees in the trench.



Call before you dig!!!

Before you start the project, contact the utility companies or the owners and ask them to identify the exact location of the underground utilities. The Ohio Utilities Protection Service (OUPS) is the first call at (1-800-362-2764). They may not be able or authorized to identify all utilities, but they can direct you to the person(s) that can assist you in your area. You must call 48 hours before you start the excavation project.

REMEMBER: The tolerance zone for marked lines is the width of the underground utility plus 18" on each side.