

Excavation Safety Checklist*

YES NO

- Are planks laid parallel to the length of walk and fastened together against displacement if used for raised walkways, runways or sidewalks?
- Are planks uniform in thickness?
- Are cleats on ramps provided when ramps are used in lieu of steps?
- Are all employees engaged in excavation, trenching and shoring provided with the appropriate training and personal protective equipment?
- Are employees exposed to vehicular traffic wearing warning vests marked with or made of reflectorized or high visibility material?
- Are employees prohibited from being under suspended loads handled by lifting and other heavy equipment?
- Are daily inspections made of excavations, trenching and shoring?

General Protection Requirements

- Are all walkways, runways and sidewalks clear of excavated material or other obstructions?
- Are all undermined sidewalks shored to carry a minimum live load of 125 pounds per square foot?
- If evidence of possible cave-ins or slides is apparent, does all work stop until the necessary precautions have been taken to safeguard all the employees?

Specific Excavation Requirements

- Prior to opening an excavation and/or trench, has an effort been made to determine if any underground installations will be encountered?
- Did you contact utility companies before excavating?
- Did you remove all trees, boulders and other surface encumbrances before excavating?
- Are the walls and faces of all excavations in which employees are exposed to danger from moving ground guarded by a shoring system, ground sloping or some other equivalent means?
- Are excavations inspected by a competent person after every rainstorm or other hazard-increasing occurrence to determine if additional protection against slides and cave-ins is necessary?
- Did you store or retain excavated or other materials at least 2 feet or more from the edges of the excavation?
- Do sides, slopes and faces of all excavations meet accepted engineering requirements by tiering, barricading, rock bolting, wire meshing or other equally effective means?
- When excavations are in excess of 20 feet in depth, was the support system designed by a registered professional engineer?
- Are all materials used for sheeting, piling, cribbing, bracing, shoring and underpinning in good serviceable condition?
- Is the timber used for this purpose free of large or loose knots?
- Are diversion ditches, dikes or other suitable means used to prevent surface water from entering an excavation and to provide adequate drainage to the area?
- When heavy equipment, material or objects are on a level above and near an excavation, are the sides of the excavation sheet-piled, shored and braced?
- When mobile equipment is used or is adjacent to excavations, are stop logs or barricades installed?

YES NO

- Are adequate barriers provided at all remotely located excavations? Are all wells, pits, shafts, etc., adequately covered?
- On completion of the operation, are all temporary wells, pits, shafts, etc., backfilled?
- If possible, are dust conditions kept to a minimum?
- In locations where oxygen deficiency or gaseous conditions are possible, is the air in the excavation tested?
- Where employees and/or equipment are required to cross over excavations, are walkways or bridges with standard guardrails provided?
- Do ladders used in excavation operations meet the OSHA requirements, and are ladders sufficient in number?
- Are ladders or other means of exiting the trench provided and located so as to require no more than 25 feet of lateral travel by employees to use them?

Specific Trenching Requirements

- Are all banks more than 5 feet high shored or laid back to a stable slope?
- Are the sides of trenches or embankments in Type B soil 4 feet or more in depth shored, sheeted, braced, benched, sloped or otherwise sufficiently supported?
- Are sides of trenches or embankments in Type A soil shored or otherwise supported when the excavation is 4 feet deep?
- When excavations or trenches are located near backfills or where they are subjected to vibrations from railroad or highway traffic or machinery operation, are precautions such as shoring and bracing taken to prevent slides or cave-ins?
- Is the excavation braced and shored as soon as it is opened?
- Are all crossbraces or jacks placed in true horizontal position?
- Are the vertical braces properly spaced and secured to prevent sliding, falling or kickouts?
- Where trench boxes or shields are used, are they designed and constructed in a manner that will provide protection for the employees?
- Do backfilling and removal of trench supports progress together from the bottom of the trench?
- Are jacks or braces released slowly?
- In unstable soil, are ropes used to pull out jacks or braces from above, after employees are safely away from the trench?

*Adapted from *Checklist for Trenching and Shoring*, Kentucky Occupational Safety and Health Administration (please see Suggested Readings).