



USING THE STANDARD TO IDENTIFY COMPLIANT SHORING SOLUTIONS

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When excavation work starts, it can be tempting to focus on what shoring system will physically fit in the trench. But the better question is: what solution fits the standard, the soil, the depth, the site conditions, and the work being done? OSHA's excavation requirements under 29 CFR 1926 Subpart P give contractors a practical framework for choosing protective systems, including shoring, shielding, sloping, and benching.

WHY THE STANDARD MATTERS

Trench cave-ins are still one of the most serious hazards in construction, which is why the standard is so important. In general, workers in an excavation always need protection from cave-ins, unless the excavation is entirely in stable rock, or is less than five (5) feet deep, and a Competent Person determines there is no indication of a cave-in hazard.

The takeaway is simple: shoring decisions should not be based on habit or convenience. They should be based on what the standard requires and what the site conditions are telling you.

HOW TO IDENTIFY A COMPLIANT SHORING SOLUTION

1. **Start with the Competent Person on site.** Before anyone enters the excavation, a trained Competent Person should evaluate the site, classify the soil, and look for hazards that could potentially harm anyone working inside the trench. This person also has the authority to take corrective action immediately, if conditions change.
2. **Know the soil before choosing equipment.** Soil type matters. Whether the soil is Type A, B, or C can affect allowable slopes, shoring spacing, hydraulic pressure requirements, and whether tabulated data supports and approves the equipment being used.
3. **Confirm the depth and access needs.** Protective systems are required at a minimum of five (5) feet or deeper; access and egress are required at four (4) feet or deeper, and within 25 feet of every worker in the trench; and excavations over 20 feet deep need a site-specific design certified by a registered Professional Engineer.
4. **Make sure the shoring system is supported by the right documents.** Shoring must be based on OSHA appendices, manufacturer's tabulated data, other approved tabulated data, or a registered Professional Engineer's design.
5. **Stay within the limits.** Tabulated data only works when it is followed exactly. That means checking the maximum depth, soil assumptions, spacing, surcharge loads, water conditions, and installation requirements.
6. **Inspect before entry.** The Competent Person should inspect the excavation, surrounding area, and protective system before work begins, as needed throughout the shift, and after changes such as rain, water accumulation, vibration from equipment, atmospheric concerns, or shifting ground conditions.



COMMON COMPLIANCE GAPS

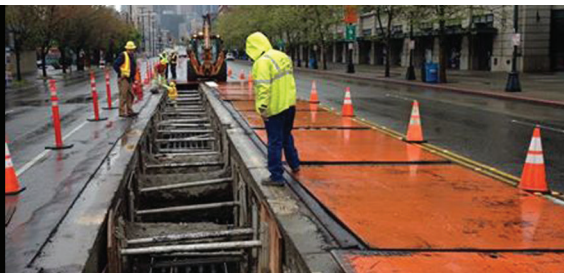
A lot of noncompliant shoring decisions start with the wrong question: “Will this fit?” A better question is: “Is this allowed for these conditions?” That small shift can prevent big problems. Common issues include using a trench box or shore outside its rated depth, relying on tabulated data without confirming soil type, overlooking surcharge loads, using damaged equipment, skipping inspections after weather changes, or assuming a setup that worked on one job will automatically work on the next.

BOTTOM LINE

A compliant shoring solution is selected, not “guessed at”. Use the standard as your guide, rely on the Competent Person to evaluate changing site conditions, and make sure the system is installed within its approved limits. If the excavation is complex, deep, affected by water, near structures, or outside the tabulated data, bring in a registered Professional Engineer before workers enter the trench.



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