

Standard Interpretations

08/10/2000 - Trench shield must extend 18" above excavation walls when below grade.



• **Standard Number:** [1926.652\(b\)](#); [1926.650](#); [1926.651\(j\)\(2\)](#)

OSHA requirements are set by statute, standards and regulations. Our interpretation letters explain these requirements and how they apply to particular circumstances, but they cannot create additional employer obligations. This letter constitutes OSHA's interpretation of the requirements discussed. Note that our enforcement guidance may be affected by changes to OSHA rules. Also, from time to time we update our guidance in response to new information. To keep apprised of such developments, you can consult OSHA's website at <http://www.osha.gov>.

August 10, 2000

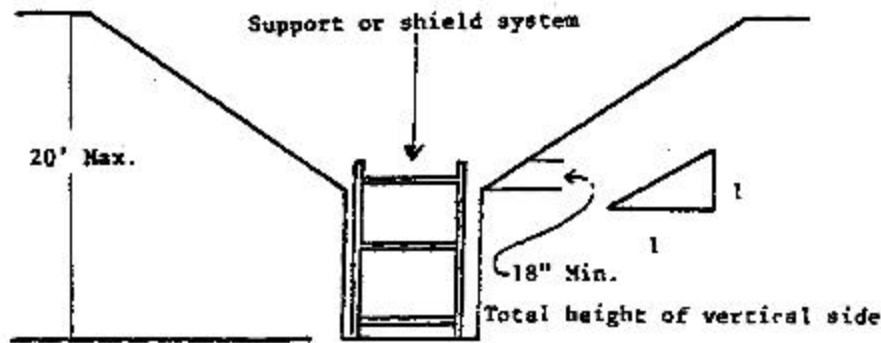
Mr. Michael W. West
Director of Engineering and Materials Management
Efficiency Production, Inc.
685 Hull Road
Mason, Michigan 48854

Dear Mr. West:

This is in response to your letter of December 7, 1999, in which you request that we provide an interpretation of the Occupational Safety and Health Administration's (OSHA) standards for excavations. We apologize for the delay in providing this response.

The excavation standard is codified in 29 CFR 1926.650 (subpart P). The standard allows several options for protecting employees in excavations. One of those options involves complying with measures depicted in Appendix B. Some of the drawings in B-1.1 through B-1.3 illustrate the placement of trench shields in soil types A through C, respectively. Three of the drawings ([\[B-1.1f\]](#), "Unsupported Vertically Sided Lower Portion -- Maximum 12 Feet in Depth"; [\[B-1.2d\]](#), "Multiple Bench"; and [\[B-1.3b\]](#), "Simple Slope") show the required use of a trench shield where the excavation walls slope down from the top and then become vertical (see sample drawing below).

Grade (Ground Level)



Each drawing shows excavations whose depth is greater than the height of the shield itself, with the tops of the shields below grade. Specifically, the trench shield extends 18 inches (0.45 m) above the vertical part of the walls, but is below the top of the trench. Therefore, where the top of the shield is below grade, it must extend a minimum of 18 inches above the vertical part of the wall. You ask if this 18 inch requirement applies where that would put the top of the shield above ground level.

The answer is no; the standard does not require trench shields to extend above grade (that is, above the top level of the excavation). Your letter refers to some of the measures to protect employees in excavations set out in subpart P, such as the requirement that spoil piles are to be maintained at least 2 feet (.61 m) from the edge of an excavation [§1926.651(j)(2)]. You note that a competent person is to be responsible for ensuring site safety for the excavation. [Our excavation standards refer to duties of a competent person in §§1926.651(c)(1)(i), (h)(2) and (3), and (k)(1) and (2) and 1926.652(a)(1)(ii) and (d)(3).] Recognizing the need for those (and other) appropriate protective measures, you assert that the 18-inch distance in figures B-1.1 through B-1.3 is "obviously intended to prevent materials from rolling into the trench" and that when the tops of trench shields "are at ground level, the 18-inch distance is not required." That is correct; OSHA's excavation standards do not require that the top of a trench shield at ground level must be at least 18 inches (0.45 m) above grade in the situation you describe.

If you have additional questions, please do not hesitate to contact the Directorate of Construction, Office of Construction Standards and Compliance Assistance, Room N3468, 200 Constitution Avenue, N.W., Washington D.C. 20210.

Sincerely,

Russell B. Swanson, Director
Directorate of Construction