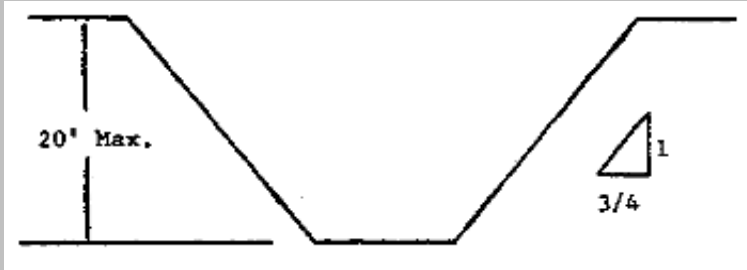


The following pictures of Excavation Examples have been taken directly from OSHA's construction standard for excavation: 1910 Subpart P Appendix B - Sloping and Benching.

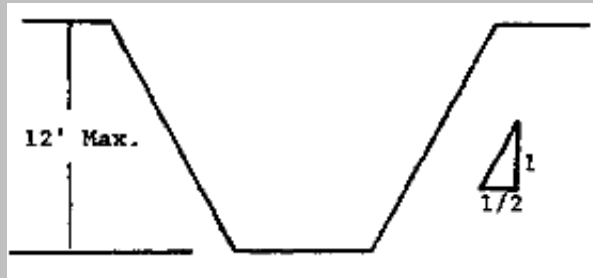
Excavations made in Type A Soils

1) All simple slope excavation 20 feet or less in depth shall have a maximum allowable slope of $\frac{3}{4}$:1.



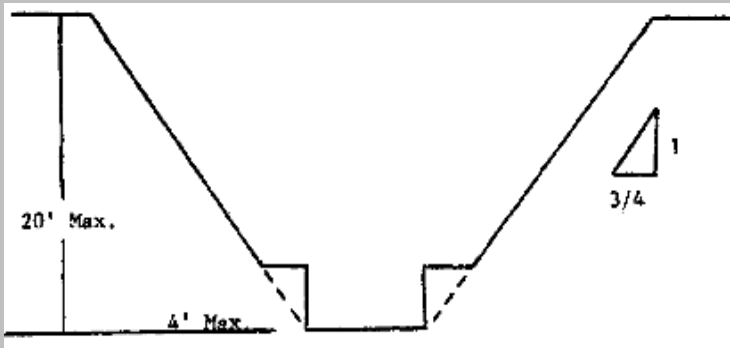
SIMPLE SLOPE - GENERAL

Exception: Simple slope excavations which are open 24 hours or less (short term) and which are 12 feet or less in depth shall have a maximum allowable slope of $\frac{1}{2}$:1.

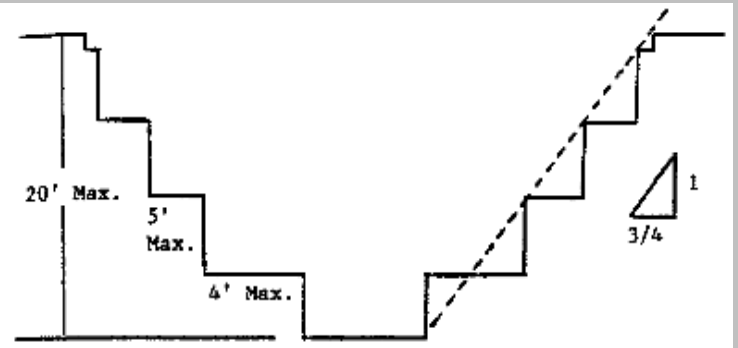


SIMPLE SLOPE - SHORT TERM

2) All benched excavations 20 feet or less in depth shall have a maximum allowable slope of $\frac{3}{4}$ to 1 and maximum bench dimensions as follows:



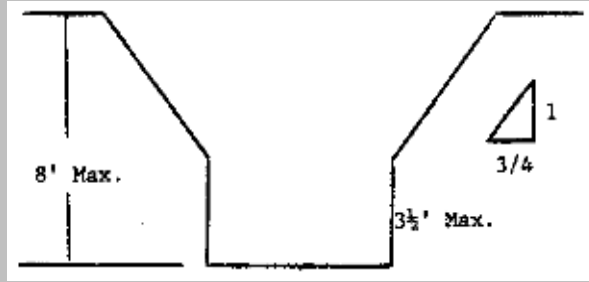
SIMPLE BENCH



MULTIPLE BENCH

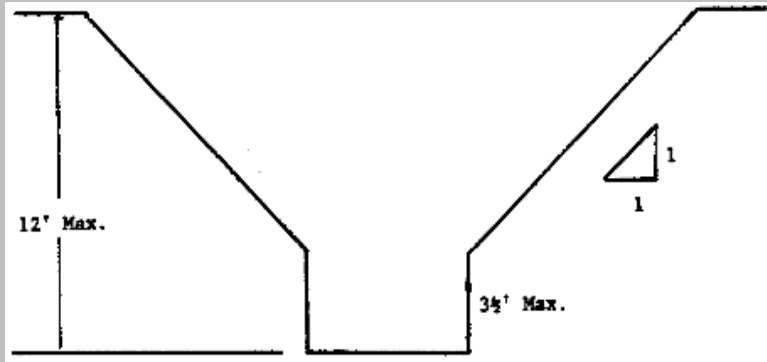
The illustrations, instructions and principles contained in the material are general in scope and, to the best of our knowledge, current at the time of publication. No attempt has been made to interpret any referenced codes, standards or regulations. Please refer to the appropriate code-, standard-, or regulation-making authority for interpretation or clarification. Provided that you always reproduce our copyright notice and any other notice of rights, disclaimers, and limitations,

3) All excavations 8 feet or less in depth which have unsupported vertically sided lower portions shall have a maximum vertical side of 3½ feet.



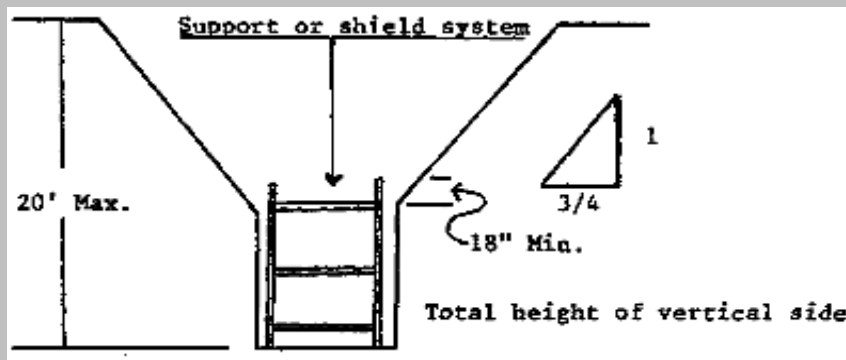
UNSUPPORTED VERTICALLY SIDED LOWER PORTION - (Maximum of 8 feet in depth)

All excavations more than 8 feet but not more than 12 feet in depth with unsupported vertically sided lower portions shall have a maximum allowable slope of 1:1 and a maximum vertical side of 3½ feet.



UNSUPPORTED VERTICALLY SIDED LOWER PORTION - (Maximum of 12 feet in depth)

All excavations 20 feet or less in depth which have vertically sided lower portions that are supported or shielded shall have a maximum allowable slope of ¾:1. The support or shield system must extend at least 18 inches above the top of the vertical side.



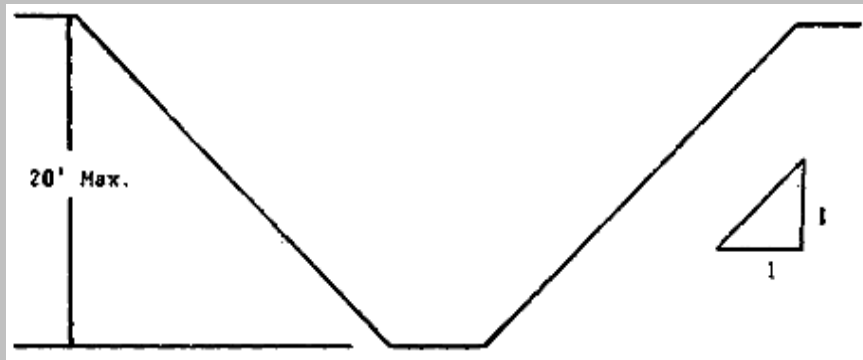
SUPPORTED OR SHIELDED VERTICALLY SIDED LOWER PORTION (Trenchbox)

4) All other simple slope, compound slope, and vertically sided lower portion excavations shall be in accordance with the other options permitted under § 1926.652(b).

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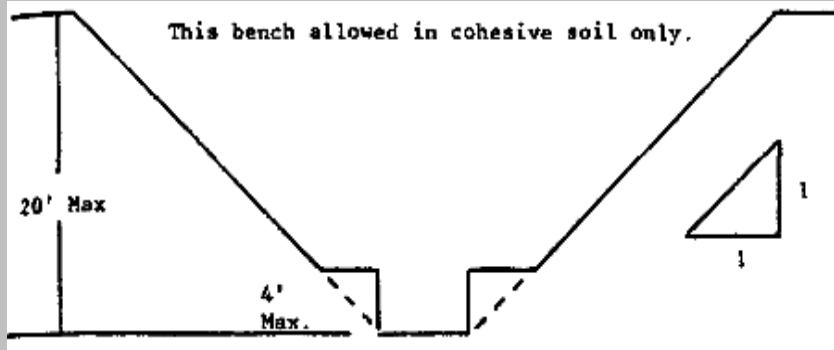
Excavations made in Type B Soils

1) All simple slope excavations 20 feet or less in depth shall have a maximum allowable slope of 1:1.

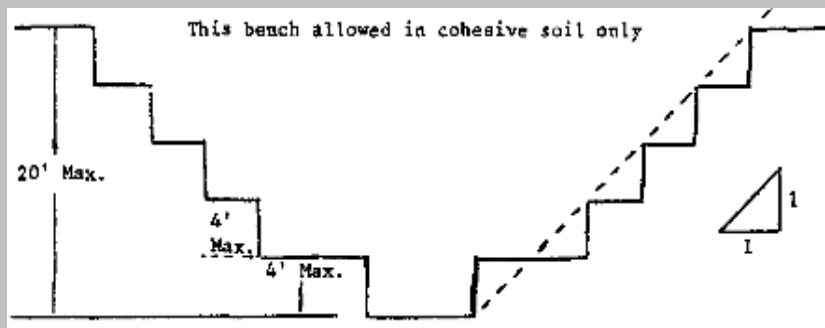


SIMPLE SLOPE

2) All benched excavations 20 feet or less in depth shall have a maximum allowable slope of 1:1 and maximum bench dimensions as follows:



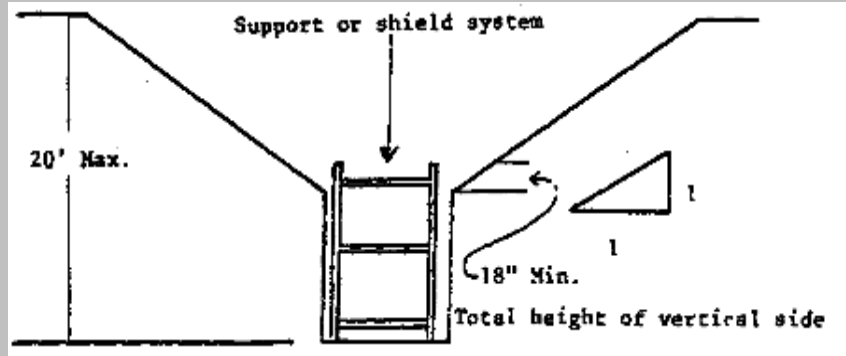
SIMPLE BENCH



MULTIPLE BENCH

3) All excavations 20 feet or less in depth which have vertically sided lower portions shall be shielded or supported to a height at least 18 inches above the top of the vertical side. All such excavations shall have a maximum allowable slope of 1:1.

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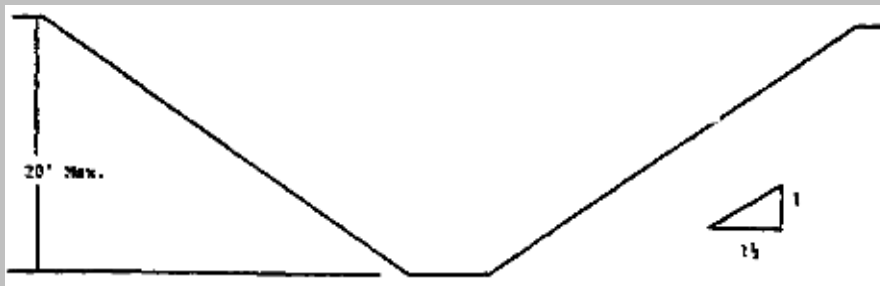


SUPPORTED OR SHIELDED VERTICALLY SIDED LOWER PORTION (Trenchbox)

4) All other simple slope, compound slope, and vertically sided lower portion excavations shall be in accordance with the other options permitted under § 1926.652(b).

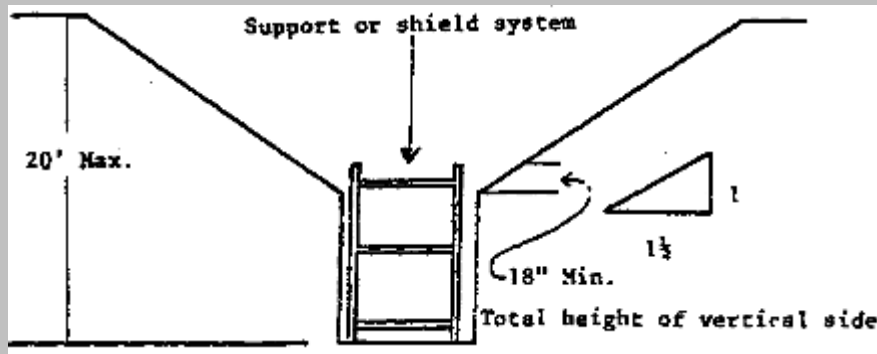
Excavations made in Type C Soils

1) All simple slope excavations 20 feet or less in depth shall have a maximum allowable slope of 1½:1.



SIMPLE SLOPE

2) All excavations 20 feet or less in depth which have vertically sided lower portions shall be shielded or supported to a height at least 18 inches above the top of the vertical side. All such excavations shall have a maximum allowable slope of 1½:1



SUPPORTED OR SHIELDED VERTICALLY SIDED LOWER PORTION (Trenchbox)

3) All other sloped excavations shall be in accordance with the other options permitted in § 1926.652(b).

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