

Appendix to Rule 4123:1-3-13

TABLE 13-1.

APPROXIMATE ANGLE OF REPOSE
FOR SLOPING OF SIDES OF EXCAVATIONS

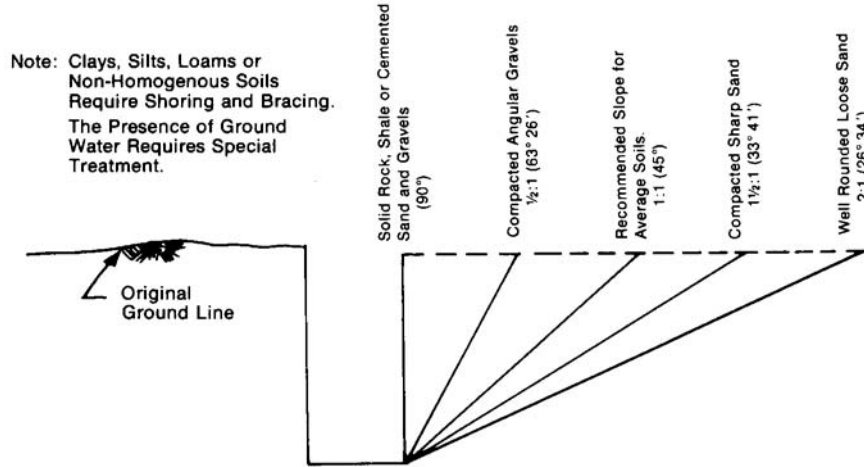


TABLE 13-2.

TRENCH SHORING—MINIMUM REQUIREMENTS

Depth of trench	Kind or condition of earth	Size and spacing of members											
		Uprights		Stringers		Cross braces ¹			Width of trench			Maximum spacing	
		Inches	Feet	Inches	Feet	Inches	Inches	Inches	feet	feet	Inches	Inches	Feet
5 to 10	Hard, compact	3 x 4 or 2 x 6	6	2 x 6	4 x 4	4 x 6	6 x 6	6 x 6	6 x 8	4	6
	Likely to crack	3 x 4 or 2 x 6	3	4 x 6	4	2 x 6	4 x 4	4 x 6	6 x 6	6 x 8	4	6	6
	Soft, sandy, or filled	3 x 4 or 2 x 6 sheeting	Close	4 x 6	4	4 x 4	4 x 6	6 x 6	6 x 8	8 x 8	4	6	6
10 to 15	Hydrostatic pressure	3 x 4 or 2 x 6 sheeting	Close	6 x 8	4	4 x 4	4 x 6	6 x 6	6 x 8	8 x 8	4	6	6
	Hard	3 x 4 or 2 x 6	4	4 x 6	4	4 x 4	4 x 6	6 x 6	6 x 8	8 x 8	4	6	6
	Likely to crack	3 x 4 or 2 x 6	2	4 x 6	4	4 x 4	4 x 6	6 x 6	6 x 8	8 x 8	4	6	6
15 to 20	Soft, sandy, or filled	3 x 4 or 2 x 6 sheeting	Close	4 x 6	4	4 x 6	6 x 6	6 x 8	8 x 8	8 x 10	4	6	6
	Hydrostatic pressure	3 x 6 sheeting	Close	8 x 10	4	4 x 6	6 x 6	6 x 8	8 x 8	8 x 10	4	6	6
Over 20	All kinds or conditions	3 x 6 sheeting	Close	4 x 12	4	4 x 12	6 x 8	8 x 8	8 x 10	10 x 10	4	6	6
	All kinds or conditions	3 x 6 sheeting	Close	6 x 8	4	4 x 12	8 x 8	8 x 10	10 x 10	10 x 12	4	6	6

¹ Trench jacks may be used in lieu of, or in combination with, cross braces. Shoring is not required in solid rock, hard shale, or hard slag. Where desirable, steel sheet piling and bracing of equal strength may be substituted for wood.