

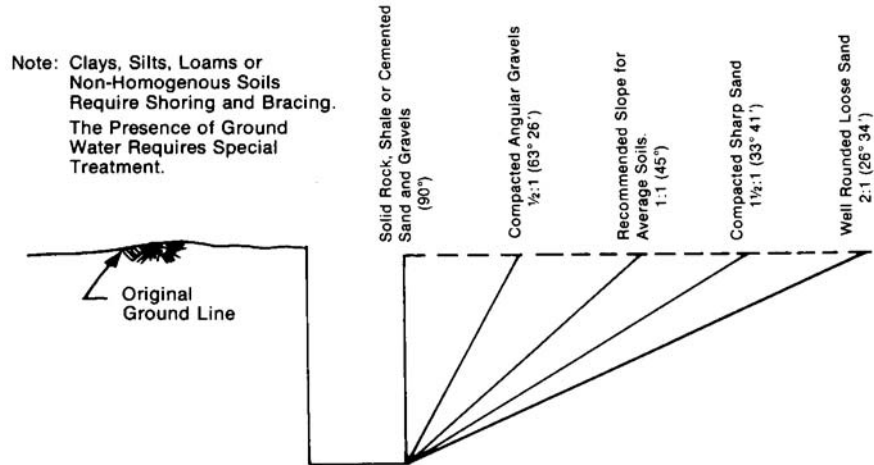
Appendix to Rule 4123:1-3-13**TABLE 13-1.****APPROXIMATE ANGLE OF REPOSE
FOR SLOPING OF SIDES OF EXCAVATIONS**

TABLE 13-2.

TRENCH SHORING-MINIMUM REQUIREMENTS

Depth of trench	Kind or condition of earth	Size and spacing of members										Maximum spacing	
		Uprights		Stringers		Cross braces•							
		Minimum dimension	Maximum spacing	Minimum dimension	Maximum spacing	Width of trench					Vertical	Horizontal	
						Up to 3 feet	3 to 6 feet.	6 to 9 feet	9 to 12 feet	12 to 15 feet			
Feet		Inches	Feet	Inches	Feet	Inches	Inches	Inches	Inches	Inches	Feet	Feet	
5 to 10	Hard, compact.....	3x 4 or 2 x 6	6		2 x 6	4 x 4	4x6	6x6	6x8	6x8	4	6	
	Likely to crack	3x 4 or 2 x 6	3	4x6	4	2x6	4x4	4x6	6x6	6x8	4	6	
	Soft, sandy, or filled	3x 4 or 2 x 6	Close sheeting	4x6	4	4x4	4x6	6x6	6x8	8 x 8	4	6	
	Hydrostatic pressure.....	3x4 or 2 x 6	Close sheeting	6x8	4	4 x 4	4x6	6x6	6x8	8x8	4	6	
10 to 15	Hard	3x4 or 2 x 6	4	4x6	4	4 x 4	4x6	6x6	6x8	8x8	4	6	
	Likely to crack.....	3 x 4 or 2 x 6	2	4x6	4	4 x 4	4x6	6x6	6x8	8x8		6	
	Soft, sandy, or filled	3x 4 or 2 x 6	Close sheeting	4x6	4	4x6	6x6	6x8	Bx 8	8 x 10	4	6	
	Hydrostatic p__ressure.....	3x6	Close sheeting	8 x 10	4	4x6	6x6	6x8	8x8	8 x 10	4	6	
15 to 20	All kinds or conditions ...	3x 6	Close sheeting	4 x 12	4	4 x 12	6x8	8x8	8 x 10	10 x 10	4	6	
Over 20	All kinds or conditions ...	3x6	Close sheeting	6 x 8	4	4 x 12	8x8	8 x 10	10 x 10	10 x 12	4	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.