

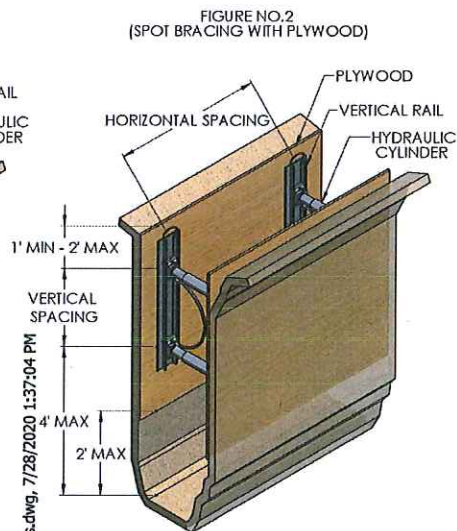
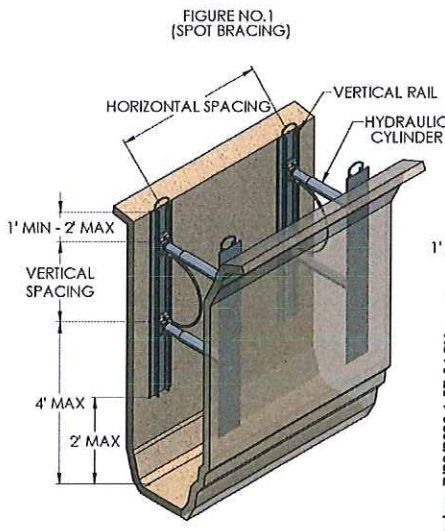
TABLE 1. VERTICAL HYDRAULIC SHORE SELECTION GUIDE ⁽¹⁾						
DEPTH OF TRENCH (FT.)	HYDRAULIC CYLINDER REQUIREMENTS ⁽⁵⁾					SHEETING ⁽²⁾
	MAX HORIZONTAL CYLINDER SPACING (FT.)	MAX VERTICAL CYLINDER SPACING (FT.)	WIDTH OF THE EXCAVATION (FT.)			
			TO 8'	8' TO 12'	12' TO 15'	
TYPE "A" SOIL						
TO 10'	8'	4'	2" ID	2" ID	2" ID ⁽⁶⁾	(2)
10' TO 15'	8'	4'	2" ID	2" ID	2" ID ⁽⁶⁾	(2)
15' TO 20'	8'	4'	2" ID	2" ID ⁽⁶⁾	2" ID ⁽⁶⁾	(2)
20' TO 25'	8'	4'	2" ID	2" ID ⁽⁶⁾	2" ID ⁽⁶⁾	(2)
TYPE "B" SOIL						
TO 10'	8'	4'	2" ID	2" ID	2" ID ⁽⁶⁾	(2)
10' TO 15'	7'	4'	2" ID	2" ID	2" ID ⁽⁶⁾	(2)
15' TO 20'	6'	4'	2" ID	2" ID ⁽⁶⁾	2" ID ⁽⁶⁾	(2)
20' TO 25'	5'	4'	2" ID	2" ID ⁽⁶⁾	2" ID ⁽⁶⁾	(3),(4)
TYPE "C-60" SOIL						
TO 10'	6'	4'	2" ID	2" ID	2" ID ⁽⁶⁾	(2)
10' TO 15'	5'	4'	2" ID	2" ID	2" ID ⁽⁶⁾	(2)
15' TO 20'	4'	4'	2" ID	2" ID ⁽⁶⁾	2" ID ⁽⁶⁾	(2)
20' TO 25'	3'	4'	2" ID	2" ID ⁽⁶⁾	N/A	(3),(4)

Table 1. Notes

- Soil shall first be classified in accordance with OSHA Appendix A Soil Classification for use with this selection guide. Type C-60 soil is OSHA Appendix A Type C soil that will stand up long enough to install the hydraulic shores.
- Sheeting is required at any depth whenever sloughing or raveling occur. If sloughing or raveling occur between sheeting decrease spacing until it is prevented. Sheeting shall be equivalent to plywood described in Table 2. Aluminum sheeting, steel plate, sheet piles, HDPE products and timber with equivalent strength are also acceptable. Sheeting may be attached to the shore jack or set into trench separately.
- Sheeting is required at this depth.
- Sheeting must extend to within 2 ft. of the bottom of the excavation. This tabulation includes lateral loading from equipment weighing 20,000 lbs or less and a maximum 2 ft high spoil pile set back a minimum of 2 ft. The competent person shall determine the effect of all other surcharge loads and reduce hydraulic shore spacing as required to resist those loads.
- Use Pacific Shoring 2" inside diameter hydraulic cylinders with 3" aluminum oversleeves and standard extension system as required for trench width. Oversleeves larger than model 88-56 are standard aluminum or steel 3.5"x3.5"x3/16" wall over 3" round standard aluminum pipe or steel 3"x3"x 3/16" full length.

Table 2. Bending Properties for OSHA Sheeting

Material	Stress Level Grade
1-1/8" - 2.4.1 Int APA Plywood	S-2
Finland Form 3/4" All-Birch	S-1



Vertical Rail Specifications

Section Properties	LD Rail	HD Rail
Material	Aluminum	Aluminum
Alloy	6061-T6	6061-T6
Area	2.45 in ²	3.47 in ²
Weight	2.94 plf	4.17 plf
Section Modulus - Top (Leg Side)	0.44 in ³	1.25 in ³
Section Modulus - Bottom (Blade Side)	1.29 in ³	2.38 in ³