AirShore Standard/Swivel Pnuematic Struts
Tabulated Data For Use in Excavations

AIRSHORE
AIRSHORE INTERNATIONAL

AIRSHORE STANDARD PNEUMATIC STRUT		
LENGTH (FT)		CAPACITY (LBS)*
Size (in)	Size (FT)	1 PIN
21-28	2	15,000 LB
26-37	2 to 3	15,000 LB
33-49	3 to 4	15,000 LB
45-67	4 to 5.5	12,500 LB
63-97	5 to 8	12,500 LB
93-144	8 to 12	10,000 LB
114-198	10 to 12	10,000 LB
114-198	12 to 14	10,000 LB
114-198	14 to 16	2,500 LB

Factor of Safety Is 2:1

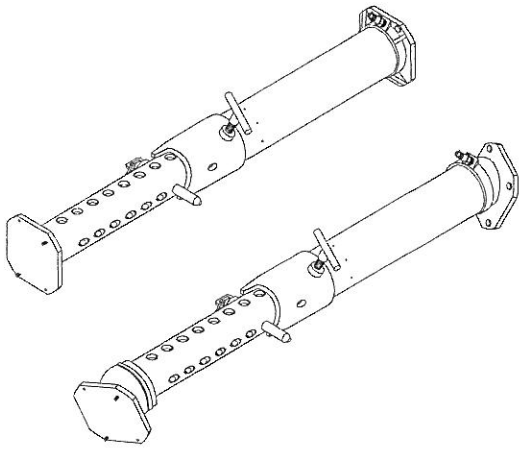

TABLE 1-MAXIMUM ALLOWABLE SPACING

Soil Type	Trench Depth (FT)	Trench Width (FT) (FT)	Horizontal Spacing (FT) 1 Pin	Vertical Spacing (FT) (FT)
A-25	4 to 10	to 6	8	4
		6 to 12	8	4
		12 to 16	5	4
	10 to 15	to 6	8	4
		6 to 12	6	4
		12 to 16	3	4
	15 to 20	to 6	6	4
		6 to 12	5	4
		12 to 16	1	4
B-45	4 to 10	to 6	8	4
		6 to 12	6	4
		12 to 16	2	4
	10 to 15	to 6	6	4
		6 to 12	4	4
		12 to 16	2	3
	15 to 20	to 6	4	4
		6 to 12	3	4
		12 to 16	1	2
C-60	4 to 10	to 6	6	4
		6 to 12	4	4
		12 to 16	2	3
	10 to 15	to 6	4	4
		6 to 12	0	4
		12 to 16	0	2
	15 to 20	to 6	0	4
		6 to 12	0	4
		12 to 16	0	0

NOTES:

1) Soil type to be determined by competent person.

2) Charts are based on soil types as defined in OSHA, CFR 29, Sub Part P, March 1996.

3) Type C-60 soil is defined as C soil that will stand long enough for shores to be installed. In C-80 soil the shores cannot be installed because the soil will fall in before it is shored.

4) The AirShore strut should be used against 3/4" Fin Form plywood, or a minimum 6" wide x 18" long spot shore.

5) In C-60 , 3/4" high density Fin Form plywood shall be used in all cases to prevent sloughing and raveling.

6) in all soils sheeting should be used to prevent sloughing or raveling if it occurs.

7) Spot shore rails may be set horizontal or vertical

8) Shores may be used with swivel heads to 30 degres maximum.

REGISTERED PROFESSIONAL ENGINEER
ADRIANUS J. VERMEULEN
No. 69082
Exp. 6/30/12
CIVIL
STATE OF CALIFORNIA

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Installation Procedure

1) Soil must first be classified by a competent person in accordance with OSHA appendix A.

2) Tabulated Data allows for a 200 PSF surcharge load. Move surcharge away from excavation or space shores closer together to allow for larger surcharge loads.

3) Inspect equipment to be sure that it is in proper working order.

4) Struts are to be placed and pressurized from outside the trench or from within a shored area. Under no circumstances is a worker allowed to enter an unshored area.

5) Pressurize struts to the min recommended pressure.

6) There should be a minimum of three columns of shoring in excavations over 10 ft long and two columns if it is less than 10 ft long. Shoring columns shall be spaced in accordance with the tabulated data.

7) Plywood or lagging is to be used to prevent sloughing and raveling. In all cases where sloughing or raveling occur it must be used. In soil types A & B the sheeting may be spaced as needed to stop the sloughing and raveling. In C-60 Soil Plywood sheeting must always be used.

REMOVAL PROCEDURE

1) Shores are to be removed from the bottom of the trench up. Workers should be outside the trench or inside shored areas when removing shoring.

2) Previously shored trenches are more prone to collapse and should be backfilled or barricaded to prevent workers or equipment from falling into the trench if it collapses.

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