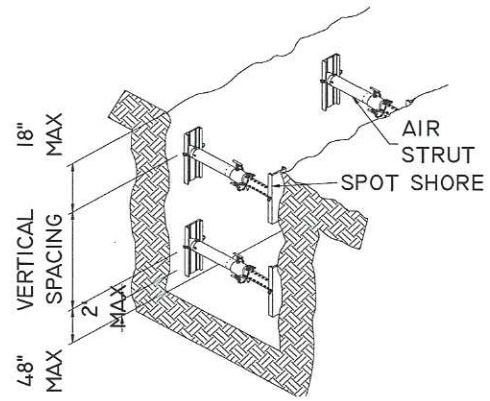
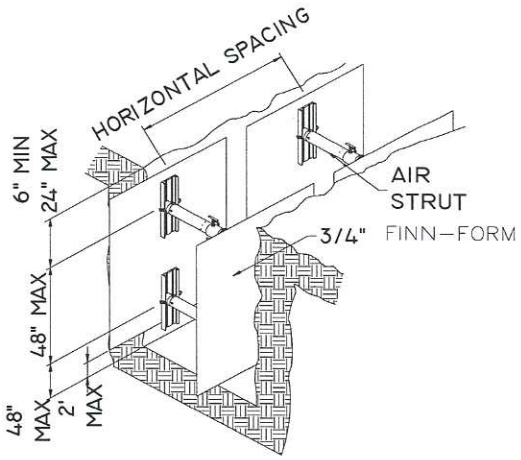
# AirShore

## Tabulated Data For Use in Excavations

## AIRSHORE W/ Spot Shore Rail




**18" SPOT RAIL w/out Plywood**




**18" SPOT RAIL w/ Plywood**

| Recommended strut pressures (min.) | | | |
|---|---|---|---|
| TYPE A & B | | TYPE C | |
| 4 to 20 ft | 116 PSI | 4 to 20ft | 116 PSI |

## TABLE 1-MAXIMUM ALLOWABLE SPACING

| Soil Type | Trench Depth (FT) | Trench Width (FT) (FT) | Horizontal Spacing (FT) | 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 | 4 | 4 |
| | 15 to 20 | to 6 | 6 | 4 |
| | | 6 to 12 | 5 | 4 |
| | | 12 to 16 | 4 | 4 |
| B-45 | 4 to 10 | to 6 | 8 | 4 |
| | | 6 to 12 | 8 | 4 |
| | | 12 to 16 | 4 | 4 |
| | 10 to 15 | to 6 | 6 | 4 |
| | | 6 to 12 | 4 | 4 |
| | | 12 to 16 | 4 | 4 |
| | 15 to 20 | to 6 | 4 | 4 |
| | | 6 to 12 | 4 | 4 |
| | | 12 to 16 | 4 | 4 |
| C-60 | 4 to 10 | to 6 | 6 | 4 |
| | | 6 to 12 | 4 | 4 |
| | | 12 to 16 | 4 | 4 |
| | 10 to 15 | to 6 | 4 | 4 |
| | | 6 to 12 | 4 | 4 |
| | | 12 to 16 | 4 | 4 |
| | 15 to 20 | to 6 | 4 | 4 |
| | | 6 to 12 | 4 | 4 |
| | | 12 to 16 | 4 | 4 |

**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) **Spot shore rails are able to bear directly against trench walls without plywood sheeting in class A-25 and B-45 soils to a depth of 20' unless sloughing or raveling occurs. In C-60 soil spot rails are able to bear directly against trench walls without plywood sheeting to a depth of 10' unless sloughing or raveling occurs.**

5) **Spot shore rails may be set horizontal or vertical.**

6) **Shores may be used with swivel heads to 30 degrees maximum.**

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STATE OF CALIFORNIA

| DATE | REVISED | JOB NO: | SHEET |
|---|---|---|---|
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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 minimum 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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