

XLAP Trench Shield

Certification Sheet

685 HULL ROAD, MASON, MI 48854 PHONE (517) 676-8800

MODEL X

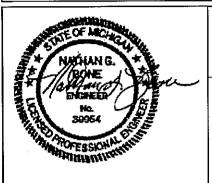
XLAP-810

SERIAL NUMBER

123508

REFERENCE TO OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION RULES AND REGULATIONS, VOL. 54, NO 209, PART 1926, SUBPART P

SOIL TYPE TO BE EXCAVATED



CERTIFIED BY: EFFICIENCY PRODUCTION INC. TYPE B
Medium cohesive to
granular soil.
45 PSF per foot
of depth.

TYPE C-60
Soft cohesive to submerged soil.
60 PSF per foot of depth

DESCRIPTION

Soft Cohesive Soil

TYPE C-80
Soft cohesive to submerged soil.
80 psf per foot of depth

PSF RATING

Maximum Lateral Earth Pressure Capacity at Trench Bottom in Pounds Per Square Foot

960

DESCRIPTIONClay, with Unconfined

Clay, with Unconfined Compressive Strength Greater than .5 TSF But Less than 1.5 TSF Cohesionless Gravel, Silt, Silt Loam or Sandy Loam.

See Note (7)

Unconfined Compressive Strength Less than .5 TSF Gravel, Sand and Loamy Sand; Submerged

Soil or Pock that is not Stable.

See Note (8 & 9)

DESCRIPTION

Soft Cohesive Soil Unconfined Compressive Strength Less than .5 TSF Gravel, Sand and Loamy Sand; Submerged Soil or Pock that is not Stable.

See Note (8 & 9)

SHIELD SIZE

HEIGHT	LENGTH
8	10

PSF

Maximum Allowable Depth of Cut

21

Maximum Allowable Depth of Cut

16

wable Maximum Allowable ut Depth of Cut

12

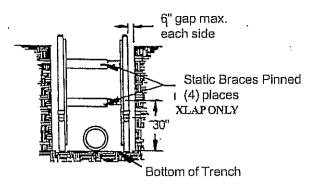
LIMITATIONS

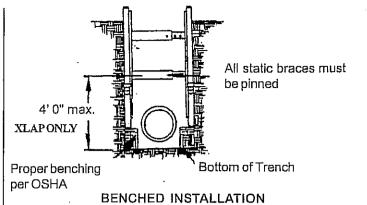
- XLAP Trench Shield to be assembled and installed as shown on the reverse side and in accordance with manufacturers instructions.
- Shield to be used with manufacturer's spreader system or approved equivalent. All spreaders must be pinned at the selected width prior to installing in the excavation.
- 3. Excavation 2 feet below bottom of shield is permitted when no loss of soil from behind or below the bottom of shield is encountered. See paragraph 1926.652 (e)(2)(i). The competent person shall make the determination for compliance. Sudden shifting of the shield vertically shall be avoided.
- 4. Additional shields may be stacked with no penalty in depth rating. Stacked shields must only be rated to depth installed. Stacked shields must be pinned in alignment with manufacturer's stacking system or approved equivalent.
- Contractor's competent/qualified person shall be responsible for monitoring soil conditions and shall be responsible for compliance with all federal, state and local rules and regulations.

- 6. Depth certification indicated, is based on the assumption that no surcharge loads from structures, equipment or stored material are adjacent to the excavation. Consult the manufacturer should such loads be present.
- 7. Previously disturbed soils may be Type B unless they would be classified Type C. (See Appendix A to Subpart P of part 1926 for soil descriptions. Type "C-60" represents a more stable condition than Type "C-80" described in Appendix A.) Soil that meets requirements for Type A, but is fissured or subject to vibration may be Type B. Dry rock that is unstable and material that is part of a layered system where layers dip into the excavation on a slope less steep than four horizontal to one vertical (4H:1V) are Type B, but only if the material would otherwise be classified Type B.
- 8. When excavations in Type C-60 soil are made with near vertical side walls, soil must be able to stand with unsupported vertical sidewalls long enough for shield installation. Otherwise it would be classified Type "C-80".

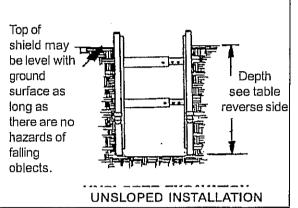
- 9. Soil in a sloped, layered system where layers dip into the excavation on a slope of four horizontal to one vertical (4H:1V) or steeper may be Type C. Submerged soil is material with water freely seeping and entering the excavation, but only part of the depth of the retained soil is submerged. Conditions more severe would require the services of a soils engineer to establish the applicable design pressure.
- 10. The use of the XLAP Trench Shield shall be in accordance with this data and the OSHA Standards. Any use of this product not specialty described on this certification could cause cave-in, collapse or structural failure resulting in death or serious injury.
- 11. Depth and PSF ratings are for lateral earth pressures only and do not take any surcharges into account.

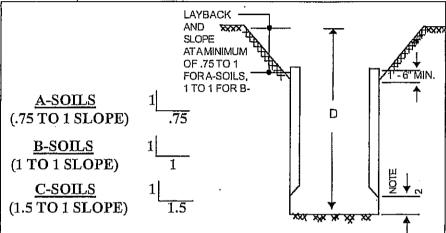
ALUM-A-SHIELD, COMPOSITE STATIC UTILITY BOX (CSUB), XLAP & XLAP5 SERIES TRENCH SHIELDS EXAMPLES OF TYPICAL INSTALLATIONS



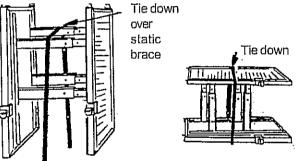


STANDARD INSTALLATION

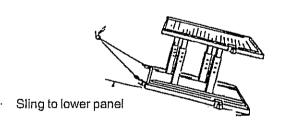




TRANSPORTING UNIT



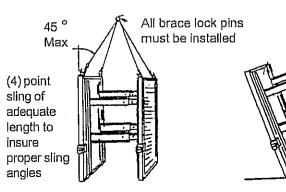
HANDLING GUIDELINES

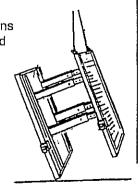


ALL BRACE LOCK PINS MUST BE INSTALLED

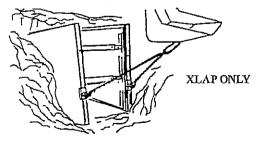
RECOMMEND BRACE LOCK PINS INSTALLED

SLINGING METHODS





MOVING SHIELD ALONG TRENCH



TIPPING UNIT

Using drag lugs, lift front end of shield approx. 6" off bottom of trench. Move to new location