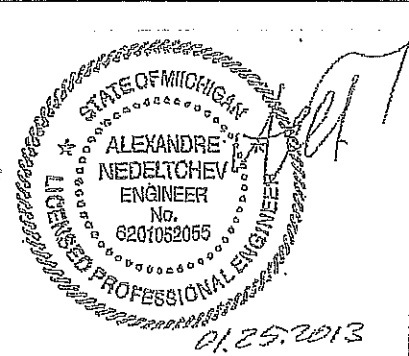


MODEL **HDXLAPSF-816-12** SERIAL NUMBER **146189**

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-COHESIVE
SOFT COHESIVE TO
SUBMERGED CLAY SOIL. 60
PSF PER FOOT OF DEPTH

TYPE C-60
SOFT NON COHESIVE TO
SUBMERGED SANDY SOIL.
60 PSF PER FOOT OF DEPTH

PSF RATING MAXIMUM
LATERAL EARTH
PRESSURE CAPACITY AT
TRENCH BOTTOM IN
POUNDS PER SQUARE
FOOT

DESCRIPTION:
CLAY, WITH
UNCONFINED
COMPRESSIVE
STRENGTH GREATER
THAN 0.5 TSF BUT LESS
THAN 1.5 TSF
COHESIONLESS GRAVEL,
SILT, SILT LOAM OR
SANDY LOAM

DESCRIPTION:
SOFT COHESIVE SOIL
UNCONFINED
COMPRESSIVE
STRENGTH EQUAL TO 0.5
TSF CLAY, SAND AND
LOAMY SAND;
SUBMERGED SOIL THAT
IS STABLE

DESCRIPTION:
SOFT COHESIONLESS
SOIL UNCONFINED
COMPRESSIVE
STRENGTH LESS THAN
0.5 TSF GRAVEL, SAND
AND LOAMY SAND;
SUBMERGED SOIL OR
FRACTURED ROCK THAT
IS NOT STABLE

SHIELD SIZE

HEIGHT

LENGTH

PSF

MAX. ALLOWABLE DEPTH
OF CUT

MAX. ALLOWABLE DEPTH
OF CUT

MAX. ALLOWABLE DEPTH
OF CUT

8

16

720

16

14

12

LIMITATIONS

1. XLAP Trench Shield to be assembled and installed as shown on the reverse side and in accordance with manufacturers instructions.
2. 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 in permitted when no loss of soil from behind or below the bottom of the 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.
5. Contractor's competent 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 excavation on a slope of four horizontal to one vertical (4H:1V) or steeper may be Type C. Submerged soil in material with water freely seeping and entering 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 specifically 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.