

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

## SERIAL NUMBER 150372

PAGE 1 OF 2 STEEL TRENCH SHIELD

MAX SPREADER 4-PIPE "I" 20 FEET MODEL: XLD-1016 LENGTH 7" O.D. x 3/4" WALL COLLAR TYPE KNIFE-EDGE NO FOAM FILLER NO w/2 1/4" PIN HOLES DATE OF LIFT-LUG

5,832 LBS 9.200 LBS Oct-14 **MANUFACTURE** RATING MANUFACTURED REFERENCE TO OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION RULES AND REGULATIONS, 29 CFR, NO 209, PART 1926, SUBPART P

SHIELD SIZE		PSF RATING	EXAMPLES OF MAXIMUM ALLOWABLE DEPTH OF CUT (FEET) IN SOIL TYPE TO BE EXCAVATED		
HEIGHT (FEET)	LENGTH (FEET)	MAXIMUM LATERAL BARTH PRESSURE CAPACITY AT TRENCH BOTTOM IN POUNDS PER SQUARE FOOT	TYPE B-45 (II)	TYPE C-60 (III) SOFT COHESIVE TO SATURATED SOIL, 60 PSF PER FT OF DEPTH	TYPE C-80 (IV) SOFT SUBMERGED AND FLOWING SOIL, 80 PSP PER FT OF DEPTH
10	16	1320	29	22	17

#### LIMITATIONS IN USE OF TABLE

- 1, TRENCH SHIELD TO BE ASSEMBLED AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS, (SEE PAGE-2)
- 2. 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 (8)(2)(1). THE COMPETENT PERSON SHALL MAKE THE DETERMINATION FOR COMPLIANCE. SUDDEN SHIFTING OF THE SHIELD VERTICALLY SHALL BE AVOIDED.
- 3. DEPTH RATING IS BASED ON TEMPORARY LOADING, CONSULT MANUFACTURER IF SHIELD IS SUBJECT TO LONG TERM LOADING
- 4. ADDITIONAL SHIELDS MAY BE STACKED WITH NO PENALTY IN DEPTH OF CUT AS LONG AS THE RATING OF THE EACH SHIELD IS NOT EXCEEDED AT THE DEPTH IT IS USED. MANUFACTURER APPROVED STACKING METHOD MUST BE USED.
- 5. C-80 DOES NOT REPRESENT THE WORST POSSIBLE SOIL CONDITION, OBTAIN SITE-SPECIFIC ENGINEERING FOR EXTREMELY NON-STABLE CONDITIONS SUCH AS MARINE CLAY, PEAT, SOFT SUBMERGED AND FLOWING CLAYS, ETC.
- 8. ANY MODIFICATIONS OR ALTERATIONS NOT ALLOWED UNLESS APPROVED IN WRITING BY EFFICIENCY PRODUCTION, INC.
- 7. CONTRACTOR'S COMPETENT/QUALIFIED PERSON SHALL BE RESPONSIBLE FOR MONITORING SOIL CONDITIONS AND SHALL BE RESPONSIBLE FOR COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL LAWS, RULES, AND REGULATIONS.
- 8. SPREADER PINS SHALL BE 8620 COLD DRAWN 80-90 KSI MIN, YIELD AND NO MORE THAN 1/4" SMALLER THAN COLLAR AND SPREADER PIN HOLES AS MANUFACTURED BY EFFICIENCY PRODUCTION, INC.
- 9. LIFT LUG RATING IS (THE SAFE WORKING LOAD) FOR EACH INDIVIDUAL LIFT LUG. 10. WEIGHT LISTED IS FOR SHIELD ONLY. USE ASSEMBLED WEIGHT INCLUDING SPREADERS FOR RIGGING PURPOSES

### 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

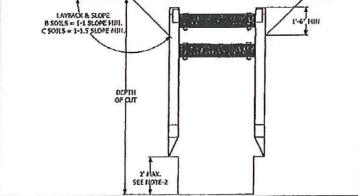
## DESCRIPTION

WEIGHT AS

SOFT COHESIVE SOIL UNCONPINED COMPRESSIVE STRENGTH GREATER THAN 0.3 TSP. **BUT LESS THAN 0.5 TSF** CLAY, SAND AND LOAMY SAND; SATURATED SOIL THAT IS STABLE, DRY SAND OR DEWATERED SOILS

# DESCRIPTION

SOFT COHESIVE SOIL UNCONFINED COMPRESSIVE STRENGTH LESS THAN 0.3 TSF. PRACTURED ROCK THAT IS NOT STABLE, OR SUBMERGED SAND AND LOAMY SAND THAT IS FLOWING. (SBB NOTE 5)



MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING U.S. PATENT NUMBERS: 4,090,365 4,114,383-4,259,028 ONE OR MORE OF THE FOLLOWING CANADIAN PATENT NUMBERS: 1,062,683-1,062,684

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CONTINUED ON REVERSE SIDE





10/31/2014

AWARNING: Any use of this product not specifically described on this certificate could cause cave-in, collapse, or structural failure, and may result in injury, or death