

8' high x 20' long, stacker section, 4" wall box, 1990 TRENCH SHIELD #7

EFFICIENCY PRODUCTION, INC.		P.O. BOX 24126 LANSING, MI 48909 PHONE 517-349-4620		EFFICIENCY TRENCH SHIELD	
MODEL 820 XLD (SS)		SERIAL NUMBER 104224			
REFERENCE TO OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION RULES AND REGULATIONS, VOL. 54, NO. 209, 10-31-89, PART 1926, SUBPART P					
SHIELD SIZE		PSF RATING	MAXIMUM ALLOWABLE DEPTH OF CUT- FEET D		
		SOIL TYPE TO BE EXCAVATED			
HEIGHT FEET	LENGTH FEET	MAXIMUM LATERAL EARTH PRESSURE CAPACITY AT TRENCH BOTTOM IN POUNDS PER SQUARE FOOT	MOIST SOIL 30 PSF PER FOOT OF DEPTH	WET MUCKY SOIL 50 PSF PER FOOT OF DEPTH	HYDROSTATIC PRESSURE- SUBMERGED SOIL 82 PSF PER FOOT OF DEPTH
8'	20'	390#	13'	7'	4'
LIMITATIONS IN USE OF TABLE			DESCRIPTION		
1. TRENCH SHIELD TO BE ASSEMBLED AND INSTALLED AS SHOWN AND IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.			MOIST FINE SAND, SAND-GRAVEL OR CLAY SOILS WITH LIQUID PRESSURE NOT EXCEEDING 30 PSF PER FOOT OF DEPTH		
2. BANK ABOVE TOP OF SHIELD TO BE LAID BACK ACCORDING TO OSHA REGULATIONS.			WET MUCKY CLAY- SILT SOILS WITH LIQUID PRESSURE NOT EXCEEDING 50 PSF PER FOOT OF DEPTH		
3. SOILS YIELDING LATERAL EARTH PRESSURES EXCEEDING THOSE TABULATED REQUIRE VERIFICATION BY A SOILS ENGINEER.			SATURATED MUCK, SILT, SAND-GRAVEL OR CLAY SOILS WITH LIQUID PRESSURE NOT EXCEEDING 82 PSF PER FOOT OF DEPTH		
4. CONSULT MANUFACTURER WHEN BOTTOM OF SHIELD IS NOT AT TRENCH BOTTOM.					
5. IF DEWATERING WITH WELLS OR WELL POINTS AND WATER TABLE IS AT OR BELOW TRENCH BOTTOM ADJUST SOILS CLASSIFICATION.					
6. ADDITIONAL SHIELDS MAY BE STACKED WITH NO PENALTY IN DEPTH OF CUT.					
7. DEPTHS OF CUTS SHOWN ARE BASED ON EXAMPLES OF VARIOUS SOIL CONDITIONS. VERIFY ACTUAL SOIL PRESSURES PRIOR TO EACH USE.					
8. ANY MODIFICATIONS OR ALTERATIONS NOT ALLOWED UNLESS APPROVED IN WRITING BY EFFICIENCY PRODUCTION, INC.					
		CERTIFIED BY: McCLURG & ASSOCIATES, INC. CONSULTING ENGINEERS FEBRUARY 15, 1990			
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		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			
USE THIS PRODUCT ONLY IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, OR LOCAL LAWS					

NOKE

Any use of this product not specifically described in the attached certification plate could cause cave-in, collapse, or structural failure resulting in death or serious injury.

LD816

Equivalent Fluid Pressure (psf/f)	Maximum Depth (f)	Maximum Allowance Horizontal Load at Shield Bottom (lb/f)
30	47.0	1470
40	35.5	1500
50	28.5	1525
60	24.0	1560
70	20.5	1575
80	18.0	1600

LD820

Equivalent Fluid Pressure (psf/f)	Maximum Depth (f)	Maximum Allowance Horizontal Load at Shield Bottom (lb/f)
30	34.5	1095
40	26.5	1140
50	21.5	1175
60	18.5	1230
70	16.0	1260
80	14.5	1320

LD824

Equivalent Fluid Pressure (psf/f)	Maximum Depth (f)	Maximum Allowance Horizontal Load at Shield Bottom (lb/f)
30	25.0	810
40	19.0	840
50	16.0	900
60	13.5	930
70	12.0	980
80	10.5	1000

Conditions For Use Of These Tables

1. Trench Shield to be installed in accordance with certified depths.
2. Tables are provided for illustrative purposes only. They are based upon static load conditions and assumed soil pressures. Safe depths can vary from design assumptions.
3. Safe trench depths are based upon trench shields being in new condition. Wear and tear, significant rust, distorted or damaged units, altered units, as well as other causes of weakening can reduce the safe depths from those shown in these tables.
4. Soil condition guidelines are provided for general reference only. Actual soil conditions must be verified by a qualified soils engineer.
5. Embankment above top of shield to be laid back at least to angle of repose.
6. Surcharge load (placement of soil or additional loads as might be caused by equipment adjacent to or in the vicinity of the installed Trench Shield) has been included in soil pressure calculations.
7. It is the contractor's responsibility to maintain the working area within the Trench Shield free of water for hydrostatic + sub soil condition.
8. Trench Shields are to protect workers. They should not be utilized as soil support systems without the consultation of a qualified engineer.
9. GME will not be liable for any usage other than specified.

GME

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Union City, Michigan 49094
Phone: 800-248-2054
(In Michigan call 517-741-4471 collect)

Additional Safety Considerations:

1. Ladders are required within 25' of men working in ditches over 4' in depth.
2. Excavated materials must be stored more than 2' from edge of the excavation.
3. Do not allow employees underneath suspended loads.
4. Hard hats must be worn by all personnel at all times when on the job site.
5. Personal protective equipment (eye shields, toe shields, etc.) must be used when a hazard exists.
6. Shoring Systems should be inspected daily by a competent person and after rainstorms or any change in conditions that might increase the possibility of a cave-in or slide.