



# TRENCH SHIELD MANUFACTURER'S TABULATED DATA

**T812DW**

MODEL NO.

9502160

SERIAL NO.

02/27/95

DATE SHIPPED

## SHORT TERM EXPOSURE DEPTH/CAPACITY CHART

SOIL TYPE	EFP	MAXIMUM DEPTH	SHIELD CAPACITY
A	25	23'	580
B	45	14.5'	660
C	60	12'	720

Shield capacity is in PSF per foot along the bottom of the Trench Shield

## LONG TERM EXPOSURE DEPTH/CAPACITY CHART

SOIL TYPE	EFP	MAXIMUM DEPTH	SHIELD CAPACITY
A	25	21'	520
B	45	13.5'	600
C	60	11'	660

Shield capacity is in PSF per foot along the bottom of the Trench Shield

### CONDITIONS FOR USE OF TABULATED DATA:

1. This Tabulated Data has been prepared by a registered professional engineer as required to comply with the OSHA standard 29 CFR Part 1928, Subpart P.

2. The Soil types A and B are as defined in the OSHA standard. Soil Type C is defined as follows:

Soil cohesive to saturated soil with an Equivalent Fluid Pressure (EFP) or Equivalent Weight Effect of 60 PSF per foot of depth. This type of soil is a clay with an unconfined compressive strength of .5 tons/Sq. Ft., but greater than .25 Tons/SF, saturated sand or clay, or fractured rock that is not stable.

(Note: Soil conditions more severe can be encountered with an EFP greater than 60 PSF/F. These conditions would be submerged soils, flowing mud, or muck. Such severe conditions would require the services of a soils engineer to determine the actual soil pressure. Consult GME when soil pressures exceed the tabulated values.)

3. Trench Shields shall be used in accordance with the depth/capacity charts. The maximum depth is the distance from the surface of the excavation to the bottom of the trench. Depth ratings shown are based upon examples of homogenous soil conditions. Soil pressures may vary due to: non-homogenous soils, surcharge loads, and slope of embankment (layback). Actual soil pressures should be verified to be sure that the shield capacities are not exceeded.

4. Surcharge loads are not accounted for in the maximum depths. Surcharge loads are possible due to: heavy equipment, vibrations, or spoil piles, adjacent to the trench. (Adjacent is defined as within a distance equal to the depth of the trench.)

5. Trench shields are not capable of providing stability to adjacent buildings or other structures. Refer to the OSHA standard for applicable requirements when trenching near buildings and other structures.

6. Long Term exposure is for trench shields used in one position greater than 24 hours. Short Term exposure is for shields used in one position for 24 hours or less. GME recommends that the chart for Long Term exposure be used to maximize protection. However, the chart for Short Term exposure may be used if the criteria for Short Term exposure can be met at all times.

### GENERAL NOTES FOR TRENCH SHIELD USE:

1. Trench Shields are to be assembled and installed in accordance with manufacturer's instructions.

2. Any modifications to shields or use of component parts not manufactured by GME will void the tabulated data unless otherwise specified or allowed in writing by GME.

3. GME Trench Shields may be stacked, provided that appropriate connections are made between stacked shields as specified by GME. The stacked shields need only have a depth rating equal to or greater than the actual depth at which it is used.

4. Maximum depths are based on shields being in structurally sound condition. Trench shields should be inspected prior to each use for any damage or deterioration. If a shield has sustained major damage the tabulated data is void until repairs are made as specified by a registered professional engineer.

5. The use of GME Trench Shields shall be in accordance with this tabulated data and all requirements of the OSHA standard. Trench Shield usage other than specified or required may create unsafe conditions that could cause a cave-in, structural failure, or collapse resulting in a disabling injury or even death. GME shall not be liable for shield usage other than specified or required.



Graswold Machine & Engineering, Inc.  
584 W. Highway M-60  
Union City, MI 48094  
Phone 517-741-4300