



8411 Villa DR, Houston, TX 77061 713-242-7700

## TRENCH SHIELD MANUFACTURER'S TABULATED DATA

**TSR-C4WT041010FB**

**MODEL NO.**

**C210721**

**SERIAL NO.**

### MAXIMUM DEPTH TABLE

| SOILTYPE | EFP | MAXIMUM DEPTH<br>(FT) |
|----------|-----|-----------------------|
| A        | 25  | 40                    |
| B        | 45  | 40                    |
| C        | 60  | 40                    |
| C        | 80  | 31                    |

**2,300 PSF**

**SHIELD CAPACITY**

**4,063 LBS**

### 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 1926, Subpart P.
2. Shields must be used in a manner consistent with safe working procedures, Federal, State and Local regulations.
3. A "competent person", who has been trained in the proper use of trench shields, safe excavation practices and soil classification methods must direct and control the use of this shield.
4. The "competent person" must be knowledgeable and capable of complying with all federal regulations, state and local laws and ordinances.
5. The Soil Types A – 25, B – 45, and C – 80 are as defined in the OSHA Standard. Soil Type C – 60 is a moist, cohesive soil or a moist dense granular soil, which is not flowing or submerged and has an Equivalent Fluid Pressure (EFP) of 60 PSF per foot of depth.
6. The "competent person" must monitor the excavation for any signs of deterioration or condition change that may alter soil classifications. Such signs are indicated by, but not limited to, freely seeping water or flowing soil entering the excavation around or below the shield.
7. This Trench Shield shall be used in accordance with the depth chart. The maximum depth is the distance from the surface of the excavation to the bottom of the trench including adjacent slopes of 1:1 in B soils and 1 ½:1 in C soils.
8. Depth ratings shown are based upon examples of homogeneous soil conditions. Soil pressures may vary due to non-homogeneous soils, surcharged loads, and slope or embankment (layback). Actual soil pressures should be monitored and verified to be sure that the shield capacity is not exceeded.
9. No surcharge load is considered in the tabulated maximum panel capacity and depth rating. Surcharge loads occur due to heavy equipment, vibrations, or soil piles adjacent to the trench where adjacent is defined as within a distance equal to the depth of the trench. State and Local Regulations and Provisions shall be followed for surcharge loading application.
10. This shield is not intended to provide stability to adjacent buildings or other structures susceptible to lateral instability of the supporting soils.
11. The spreader is a compression member and plays the most critical role for the integrity of the shield system. To prevent member buckling failure, any type of lateral load should not be applied to the spreaders.
12. 2" inch diameter pins with strength of 90 ksi shall be placed in all spreader to collar connections. Any spreader pins used on this shield that do not meet the required diameter specified above will invalidate and void this data.

### GENERAL NOTES FOR TRENCH SHIELD USE:

1. Modifications of any kind to this shield not specifically allowed by Cerda Industries. in writing will void this data.
2. Maximum depths are based on shields being in structurally sound condition. This trench shield should be inspected prior to each use for damage or deterioration. If a shield has sustained major structural damage or permanent deformation of a structural member or connection, the Tabulated Data is void until repairs are made as specified by a Registered Professional Engineer.
3. The use of Cerda Industries 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. CERDA shall not be liable for shield usage other than specified. Use of this trench shield not in accordance with Manufacturer's Tabulation Data could cause injury or death.



8/17/2021